Ris T. Kaing



### **MEMORANDUM**

Date: March 23, 2015

To: Dr. Craig Parks, Chair Faculty Senate

From: Dr. Rich Koenig, Associate Dean and Director, WSU Extension

Re: Proposal to Establish a Metropolitan Applied Research and

**Extension Center in CAHNRS** 

Attached for Faculty Senate approval is a College of Agricultural, Human, and Natural Resource Sciences proposal to establish a WSU Extension research and outreach center that will be housed at WSU North Puget Sound at Everett. Details concerning the evolution of this concept are presented in the rationale statement of the proposal.

If you have any questions, or if you need additional information, please contact Dr. Brad Gaolach (whom is designated as the contact person in the proposal) and he will respond promptly. Thank you for your consideration of this proposal.

cc: Dr. Ron Mittelhammer, Dean

# PROPOSAL TO FACULTY SENATE WASHINGTON STATE UNIVERSITY

To establish the

#### WSU METROPOLITAN CENTER FOR APPLIED RESEARCH AND EXTENSION

Jointly between

WSU Extension (College of Agricultural, Human, and Natural Resource Sciences) and
WSU North Puget Sound at Everett

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### **General Information, Designation and Benefit**

#### 1. Name of Unit

The proposed name of the unit is the **WSU Metropolitan Center for Applied Research and Extension** (MCARE).

Dr. Brad Gaolach will serve as the primary contact for this proposal by Dr. Rich Koenig, Dr. Robert McDaniel and Dr. Gaolach. Emailing Dr. Gaolach at <a href="mailto:gaolach@wsu.edu">gaolach@wsu.edu</a> is the preferred method of contact.

#### 2. Rationale

Washington State University (WSU) as a land-grant institution has a threefold mission to:

- extend knowledge through education
- advance knowledge through research
- apply knowledge to address challenges facing individuals and the communities within the state they serve

WSU meets a significant part of its land-grant responsibilities through Extension programming emanating from the College of Agricultural, Human and Natural Resource Sciences (CAHNRS).

WSU Extension placed its first faculty person in a rural county office in 1914 and from there quickly established offices across State. Throughout its 100 year history WSU Extension has remained both a trusted and relevant source of science based University outreach. As the State has changed so has WSU Extension. This new proposed Center provides WSU Extension, and therefore the University, the opportunity to better organize itself to serve Washington's metropolitan areas.

WSU Extension's existing urban County Offices focus on providing long-term educational programs (e.g. 4-H Youth Education, health & nutrition and home garden/horticulture). This new Center will focus on contract and grant funded projects aimed at assisting metropolitan leaders deal with urban issues. The Center will leverage the knowledge and expertise from across the entire WSU system to address issues opportunities facing western Washington's metropolitan communities. The Center will use an approach similar how the William D. Ruckelshaus Center utilizes the knowledge and expertise of WSU faculty in collaborative policy development. Further details on the Center's approach and example projects illustrating how the Center will leverage the intellectual capital of the University are provided later in this proposal. The Center will have a combined applied research and outreach (extension) mission.

#### Washington's Metropolitan Areas

The demographic landscape of the nation and Washington State has changed dramatically since Extension's rural beginnings. Now, over 80% of U.S. residents live in urban<sup>1</sup> areas (2010 US Census) and the percentage continues to increase. Our state reflects this reality with 84.5% of Washington residents living in metropolitan<sup>2,3</sup> areas (2010 US Census); the majority of whom (4+ million) reside in five counties. Washington's largest city, Seattle, was the fastest growing major U.S. city during 2013<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> The U.S. Census bureau defines urban as "Core census block groups or blocks that have a population density of at least 1,000 people per square mile (386 per square kilometer) and surrounding census blocks that have an overall density of at least 500 people per square mile (193 per square kilometer"

<sup>&</sup>lt;sup>2</sup> According to the U.S. Census bureau, metropolitan statistical areas (MSA's) consist of the county or counties (or equivalent entities) associated with at least one urbanized area of at least 50,000 population, plus adjacent

Metropolitan areas in the West are fundamentally different from their rural communities. In the West, already densely populated cities continue to grow, while many rural areas continue to lose population. As the metropolitan population expands, tensions are created surrounding growth management and inter-jurisdictional cooperation. Furthermore, a high degree of ethnic and racial diversity both enriches and challenges metropolitan communities.

Large metropolitan areas necessitate significant and complex infrastructure investments, such as: multi-modal transportation systems; wastewater treatment facilities; and systems to manage storm water and pollutants. And, while metropolitan and rural areas share common social issues such as poverty, homelessness, public safety and health, addressing these issues in metropolitan areas require approaches that recognize the multiple jurisdictions and complex political environment of these areas.

In Washington, this complexity is most evident in the metropolitan Puget Sound. For example:

- The City of Seattle, the largest city in Washington, has 652,000 residents (more than the State's
  4th most populous county). It has 15 officially recognized neighborhood associations, 9 City
  Council Districts, and a separately elected Mayor.
- King County has 1.9 million residents, 39 incorporated cities (including Seattle) and 9 County Council Districts. Each elected County Council Member represents approximately 219,000 residents. A separately elected County Executive oversees an executive branch comprised of well over 10,000 employees.
- The Puget Sound Regional Council (PSRC) is the Metropolitan Planning Organization for the four county region of Snohomish, King, Pierce and Kitsap counties. Its membership includes 90 municipalities and governmental organizations, including the cities of Seattle, Tacoma, Everett, Bremerton, and Bellevue, who engage in regional transportation, land-use and growth management planning, as well as regional economic development analysis and planning for the region.
- 28 of Washington's 49 State Legislative Districts are completely, or partially, within the 4 county region served by PSRC.

For WSU Extension, the complex socio-political landscape of Washington's metropolitan counties, the unique character of their issues, the competition from other educational service providers, and the staffing limitations in our current metropolitan County Extension offices require a new university engagement model in the metropolitan Puget Sound. The proposed WSU Metropolitan Center for Applied Research and Extension is that model.

#### **BACKGROUND**

In 2014, WSU celebrated the 100<sup>th</sup> anniversary of Extension nationwide - a century of engaging people, organizations and communities to advance knowledge, economic well-being and quality of life. With offices in all 39 counties, WSU Extension is viewed as the front door to the University in communities

counties having a *high degree of social and economic integration* with the core as measured through commuting ties.

<sup>&</sup>lt;sup>3</sup> We use the term metropolitan over urban for two reasons: a) metropolitan encompasses a broader context both geographically and the issues faced, and b) the term urban is often associated by the media with negative issues affecting populations and communities of color.

<sup>&</sup>lt;sup>4</sup> For the time period July 1, 2012 to July 1, 2013 according to the U.S. Census as reported by Gene Balk for the Seattle Times: *Census: Seattle is the fastest-growing big city in the U.S.* May 22, 2014.

across Washington State. To further WSU's outreach mission, Extension faculty are also placed on our metropolitan campuses, at every WSU Research and Extension Center, and on the Pullman campus through joint faculty appointments with several colleges, schools, and departments.

Like its national counterparts, and in keeping with Extension's rural heritage, most of WSU Extension's programs deliver education and applied research based on a *direct* education model. In fact, in Washington's rural counties, WSU Extension is the largest provider of education in agricultural production, community development, youth development, nutrition education, and natural resource stewardship. So important is Extension in our rural counties, it is often designated as a distinct department within county government, the traditional local partner for Extension. By comparison, in metropolitan counties, the ratio of Extension staff to county residents is extremely low; opening the door for numerous non-profit, government, and for-profit entities to provide direct services within Extension's traditional program areas.

Recognizing the changing rural-urban demographics, WSU Extension has provided leadership for western regional efforts to develop a new metropolitan Extension model. These include:

- In 2006, the Western Extension Directors Association (WEDA) asked its Western Regional Program Leaders Committee (WRPLC) to identify characteristics of the metropolitan West and explore new conceptual models for metropolitan Extension work. Led by WSU Extension faculty, the WRPLC conducted a literature review and convened a meeting of regionally recognized Extension educators, metropolitan scholars, and local government personnel. The meeting resulted in a white paper (see Additional Documents: Extension in the Urban West) which contained two key recommendations:
  - 1) Develop and refine one or more models of urban Extension
  - 2) Explore the feasibility of establishing a metropolitan research and extension center
- In 2010 and again in 2013, WEDA convened an Urban Task Force to update and reassess Extension in the Urban West. The task force found that both recommendations in the original white paper were still relevant.
- In 2014, acting upon one of the original recommendations from the *Extension in the Urban West* report, WEDA established the Western Center for Metropolitan Extension and Research (WCMER, see Additional Documents: *The Western Center for Metropolitan Extension and Research*).

WCMER is comprised of six charter member land-grant university Extension services (Univ. of Alaska Fairbanks, Univ. of California, Colorado State Univ., Univ. of Idaho, Oregon State Univ., and WSU), all of whom fiscally contribute to the Center. WSU Extension hosts and provides leadership for the WCMER with its mission to:

- 1) Conduct applied research on metropolitan issues and best extension practices related to:
  - outreach and organizational models for metropolitan Extension, and
  - how land-grant universities can contribute to science based decision-making and policy development.
- 2) Develop and deliver professional development for Extension educators working in metropolitan communities.

Apart from the WEDA efforts, WSU Extension has twice tried to adapt its work in the Puget Sound area to a relevant, project oriented, applied research approach to metropolitan extension. In 2009, a King County Extension endeavor was curtailed by the economic downturn that severely impacted local and

state funding. Then, in 2011, WSU Extension created a Metropolitan Extension Team comprised of Puget Sound Extension County Directors tasked with coordinating programs to increase regional impacts. Ultimately, existing programmatic and administrative responsibilities limited their capacity to make significant progress without additional support.

The proposed WSU Metropolitan Center for Applied Research and Extension draws upon the strategic thinking and experiences of the past decade to develop a new model for WSU Extension in the Puget Sound.

#### 3. Benefit

Designating this unit as a formal center will:

- Ensure that WSU Extension remains relevant to Washington's metropolitan elected officials, businesses, non-profits, tribes and community leaders, while contributing to the socio-economic well-being of the Puget Sound region.
- Provide WSU faculty with a means to further their research and engagement interests in metropolitan issues, along with community based engagement opportunities for their students.
- Support transdisciplinary applied research, extension, and extramural fund development for WSU faculty from different departments and colleges (see *Approach* for details on the structure of the Center).
- Implement outreach goals of WSU North Puget Sound at Everett.
- Place WSU at the forefront of land-grant universities seeking to better serve metropolitan areas.

#### **EXPECTED CONTRIBUTION AND IMPACT TO INSTRUCTIONAL PROGRAMS**

Through internships, studios, and/or civic engagement, the Center will provide real-world, hands-on opportunities for students to apply classroom learning and make professional connections for future employment. As importantly, graduate students will have opportunity to gain knowledge and skills necessary to succeed in their careers. In addition, as a result of involvement in Center projects, faculty will be able to enhance their instruction by integrating lessons learned into existing courses, and potentially add new course offerings.

#### **Expected Contributions to University and State**

Through the Center, faculty can effectively contribute to the economic well-being of the metropolitan Puget Sound while helping preserve its unique character and natural environment. By integrating the Center with the University's core activities at WSU North Puget Sound at Everett, our land-grant mission will be more fully met in the North Puget Sound. With a focus on economic development, good civic governance, and natural resource stewardship in urbanized environments, Center projects will provide a vehicle for WSU faculty to compete for integrated research and extension funding opportunities.

The Center's innovative approach to working with metropolitan communities will be a model for other land-grant universities seeking to develop relevant strategies for metropolitan decision makers. As host to the multi-state Western Center for Metropolitan Extension and Research (WCMER) the Center will also promote synergy by allowing innovation and applied research to flow both ways. Through WCMER, WSU projects can be expanded and replicated by other Western states; and grant proposals and applied research projects can quickly connect to regional partners, increasing the success rate of funding requests. Conversely, projects developed in other states, and shared through WCMER, can be adapted for application in Washington.

#### **Infrastructure**

#### Mission, Purpose and Goals

#### 1. Mission and Purpose

The **WSU Metropolitan Center for Applied Research and Extension** will strengthen Puget Sound metropolitan communities through collaboration, innovation and action-oriented research and outreach by contributing to: resilient local economies; natural resources stewardship, and strengthening the region's governmental and non-profit sectors

#### 2. Goals

- Leverage the knowledge base of Washington's land-grant research university to create new opportunities for, and address critical issues facing, metropolitan regions in the Puget Sound.
- Provide opportunities for faculty and students (undergraduate and graduate) across the entire WSU system to work on tangible applied research and extension projects through project-based funding.
- Attract funding from local partners as well as federal and state agencies, non-profit entities and/or private foundations to support projects.
- Elevate the recognition and value of WSU amongst metropolitan decision makers by supporting and developing policy, systems, and environmental changes that improve the lives of residents in their communities.

#### 3. Nature and Scope

As noted earlier, the Western Extension Directors Association (WEDA) has critically examined what Extension's role should and could be in the metropolitan communities (see Additional Documents: **EXTENSION IN THE URBAN WEST**). In addition to their summary recommendations, *Extension in the Urban West* also articulated the following key points:

- Most Extension programming in Western metropolitan areas is adapted from rural experiences
  and not from an urban perspective. Moreover, Extension nationally does not include an urban
  agenda. As a result, the Extension programs of the past and even present offer few lessons for
  the development of a new urban model, particularly for the West.
- A new model for metropolitan extension should emphasize:
  - Applied research and engaged scholarship driven by the complex issues faced by urban communities.
  - Working with urban decision makers as a mechanism for increased impact.
  - A staffing approach that emphasizes flexibility and responsiveness while engaging in contractual applied research projects instead of longer-term educational programs.
  - Enhanced access to degree programs and experiential learning.

Derived directly from these conclusions, the nature and scope of the proposed WSU Center is to assist public officials, tribes, non-profit leaders, and the private sector within Washington's metropolitan communities (especially in the Puget Sound) with local economic development, environmental stewardship, and strengthening the regions organizational capacity through innovation driven by applied research.

#### Approach

Modeled after other successful WSU Extension units, the Center will have a small core staff and will assemble WSU faculty, staff, and students into short term, project-based teams to address specific,

externally-funded initiatives. This will give the Center the necessary flexibility to respond quickly to new opportunities and emerging metropolitan issues. Center staff will both manage the extramural funded projects and serve as the conduit between the metropolitan projects and the faculty and knowledge base of the University. Center staff will accomplish this by utilizing their network of community leaders (established over the past decade of working in the Puget Sound) and drawing upon existing working relationships with WSU faculty and units (e.g. Center for Environmental Research, Education, and Outreach; Division of Governmental Studies and Services; Composite Materials & Engineering Center; Institute for Sustainable Design; School of Food Science; Center for Sustaining Agriculture and Natural Resources). In providing management support for a project, Center staff will: a) undertake initial project scoping; b) develop the project team; c) help secure necessary project funding; d) develop and monitor project contracts and deliverables; e) encourage scholarly work resulting from project activities; and f) promote WSU as a leader in addressing metropolitan issues.

While not a requirement, we expect most projects will have both a strong applied research and outreach (extension) component. The Center will work closely with County Extension offices, WSU Research and Extension Centers, and academic departments to transfer projects with potential for long-term research or educational programming to these units.

#### **Applied Research**

Applied research is outcome-based as opposed to theory based; it is problem-oriented. As such, applied research is geared toward developing knowledge and place-based solutions to alleviate modern world problems.

The Center's applied research<sup>5</sup> will include action research methodologies aimed at engaging stakeholders. By applying existing knowledge to a localized setting, action research is participatory in nature – empowering and utilizing local knowledge to facilitate a learning process amongst the researchers, practitioners, and/or community members. The Center's applied research activities will range from more focused questions tied to a specific metropolitan project (e.g., developing an urban forestry plan) to broader questions focusing on long term metropolitan issues (e.g., adapting to climate change).

#### **Project Opportunities**

Center projects will be driven by local metropolitan needs and opportunities that intersect with WSU expertise. Initially, Center project areas could include:

#### Economic development:

- Community/neighborhood focused economic development feasibility studies, strategies, ecommerce
- Regional food systems and development of metropolitan agriculture systems

#### Environment, Natural Resources and Land Use:

- Urban ecosystem and metropolitan watershed modeling
- Natural resource stewardship metropolitan policy development
- Metropolitan climate change analysis, implications and adaptation strategies
- Low-impact development

#### Better Governance:

5

<sup>&</sup>lt;sup>5</sup> Applied research as defined here fits within the broader designation of action-oriented research, which also includes classic action research, participatory research, and grounded action research, see PM Toscano. Praxis Inquiry: <a href="http://home.earthlink.net/~edreforum/id1.html">http://home.earthlink.net/~edreforum/id1.html</a>

- Effective civic governance and leadership
- Collaborative metropolitan policy development
- Organizational development and effective non-profits
- Community resilience and recovery planning and assistance
- Evaluation of community policing policies

In an effort to illustrate the work of the Center, the following examples explore potential project opportunities.

#### **ECONOMIC DEVELOPMENT**

Washington communities were built upon a natural resource extractive economy, most notably timber. As the Puget Sound urbanized and diversified its economy base; conflicts have increased surrounding timber production, natural-resource stewardship and the environment. In the 1990s, these conflicts flared when the spotted owl was listed as endangered, curtailing the harvest of its old-growth forest habitat. Thus began a long economic decline for many rural western Washington communities who were dependent on timber production. Included in this unfortunate situation is the rural town of Darrington, which recently dealt with the tragedy of the Oso landslide along Highway 530 - the highway that links Darrington physically and economically to I-5 and the highly urbanized area of Marysville/Everett.

The recreational opportunities and scenic beauty of the nearby Cascade Mountains have contributed to the rapid growth of the metropolitan centers in western Washington; creating an urban-rural economic linkage through tourism and outdoor recreation. The Mountain Loop Highway (Loop) is a 95-mile loop that originates in the City of Everett, taking drivers on a spectacular tour traversing the mountainous peaks of the Mount Baker – Snoqualmie National Forest, and passing through picturesque rural towns, including Darrington. This scenic loop is paved except for a 14-mile stretch north of Barlow Pass.

Decision makers in the rural and suburban towns located along the Loop believe that paving the final stretch – at an estimated cost of \$10 million - will greatly increase tourism and recreational use, and improve local economies. While there are some indications from other parts of the country that paving roads can have a positive impact on local tourism, there has been no specific assessment of the potential for increased tourism, and accompanying economic benefits, for communities along the Loop. In previous efforts to pave the Loop's final stretch, environmental groups have raised significant opposition, ranging from concerns about re-opening logging of old-growth timber to the degradation of water quality in streams supporting salmonids. WSU expertise could help determine if paving the Loop makes economic and/or environmental sense.

#### **ENVIRONMENT, NATURAL RESOURCES, AND LAND USE**

Puget Sound residents embrace the national movement to promote sustainable agriculture and local food systems. At the same time, many remain concerned with farm practices that cause actual or perceived environmental degradation - especially practices that are seen as threatening the iconic and economically vital salmon runs traversing the population centers and agricultural lands of the Puget Sound.

King County government and the Regional Food Policy Council are exploring making direct payments to farmers for providing ecological services, and undertaking agricultural practices aimed at sustaining salmon runs. What these services would be, how they would be measured, how farmers would document them, and what taxing policies could support them, are all unknowns at this time. The

Center, drawing upon WSU faculty expertise, could inform practices and develop evaluation protocols to document the environmental and economic impacts of proposed actions, thus helping local stakeholders establish a program that sustains both salmon and local food production.

#### **BETTER GOVERNANCE**

Poverty and homelessness are enduring challenges faced by metropolitan areas. Cities attract large numbers of homeless individuals and families seeking shelter and social services. Snohomish, King, and Pierce counties have undertaken 10-year plans to end homelessness, funded by county resources, nonprofit organizations, and national philanthropic organizations. Yet to date, these efforts have had little impact on the overall level of homeless individuals in the region.

There is a growing understanding that efforts to mitigate these issues in the Puget Sound could benefit from implementing a collective impact strategy<sup>6</sup> employing adaptive management and applied research to strategically deploy the resources of government and non-governmental organizations across multiple jurisdictions. WSU is already involved in regional efforts to improve emergency and disaster response services to marginalized populations (including the homeless), and is providing organizational development assistance to government agencies and non-profits to help them better serve citizens living in poverty. The Center could further utilize WSU expertise to address this critical issue in the metropolitan Puget Sound.

#### 4. Review and Assessment Plan

As required by the Faculty Senate, this Center will conduct a five-year review. In addition, the efficacy of the Center's operations will be assessed annually as part of Dr. Gaolach's performance review as Director. The Center will be evaluated on the following Centers, Institutes, and Laboratories (CIL) criteria adapted to the specific nature of the Center. They include its ability to:

Assemble diverse groups of faculty to address applied research and extension projects of importance to metropolitan decisions makers.

#### Metrics:

- Number of WSU faculty involved in one or more Center projects
- o Number of WSU departments, schools, colleges, and campuses represented by faculty engaged in Center projects
- Number of faculty from outside WSU engaged in Center projects
- Number of municipalities and elected officials engaged in Center projects
- Assemble a critical mass of expertise in a subject area to demonstrate command of related knowledge and attract external funding.

#### Metrics:

- o Number of faculty affiliated with the Center within a core theme of the Center
- Extramural fund expenditures by :
  - WSU
  - Community partners
- Establish and operate a coherent management system for faculty from different departments and colleges engaged in interdisciplinary or multidisciplinary research, scholarly and creative activities.

#### Metrics:

Number of projects managed by the Center

Number of projects that engage faculty from two or more colleges, schools, or campus

 $<sup>^6</sup>$  Kania, J. and M. Kramer. 2011. Collective Impact. Stanford Social Innovation Review. Winter 2011.

- Number of scholarly works generated by Center projects:
  - Peer-reviewed journal articles
  - Extension publications
  - Technical reports
  - Policy briefings and papers
- Provide greater opportunities for students to study complex problems by working directly on real-world issues through Center projects.

#### Metrics:

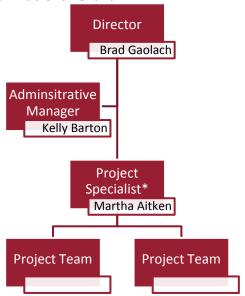
- o Number of graduate students interns engaged in Center projects
- Number of graduate students funded by Center projects
- Number of undergraduate engaged in Center projects

#### Administration and Membership

#### 1. Director selection

The Center is a high priority within WSU Extension and funding for a permanent Director is part of Extension's staffing plan. During the initial start-up phase of the Center, the Director and Associate Dean for Extension is appointing current Extension faculty member Dr. Brad Gaolach as the Center Director (CV included). Dr. Gaolach's current appointment focuses on sustainable urban communities; therefore, his appointment as Center Director will provide continuity during the Center's development phase and will greatly reduce funding needs.

2. Organizational Chart



\* The Project Specialist term indicates a position that oversees a portfolio of projects for the Center. Two such project teams are shown for illustrative purposes.

Project teams will be comprised of faculty, professional staff, and/or students assembled to address a specific project. Once the project is completed, the teams will disband or move on to another priority. As the Center grows, additional project specialists could be added around areas of specialization (e.g. organizational development, economic development, or natural resource stewardship).

#### 3. Administrative Responsibility

The Center will be managed by Extension within the College of Agriculture, Human, and Natural Resource Sciences.

#### 4. Key Faculty Members

**Brad Gaolach**, Associate Professor, Community & Economic Development, WSU Extension will serve as the Center's Director.

Martha Aitken, Senior Associate for Metropolitan Extension, Community & Economic Development, WSU Extension will serve in the project specialist role (CV attached).

The following WSU faculty will initially be affiliated with the Center. All have worked on outreach and/or applied research projects in the Puget Sound:

- Andrew Cassey, Faculty, School of Economic Sciences, CAHNRS
- Michael Gaffney, Monica Babine, Division of Governmental Studies and Services, College of Arts and Sciences.
- Karl Englund, Composite Materials and Engineering Center, College of Engineering and Architecture.

Once the Center is established, it will follow CAHNRS' protocol for faculty membership as set forward in the College's Policies for Synergistic Interactions Between Departments/Schools/Extension Program Units, Faculty, and R&E and Subject Matter Centers (exhibit attached).

#### **Financial Support and University Resources**

#### 1. Budgetary Support Requested

No new funds are being requested. Funding from Extension will be redirected to support current and future staffing, with core faculty and staff positions being added as demand increases and resources become available.

#### 2. Expected Funding Needed

Core staffing and limited operations support for the Center will come from permanent lines of funding. Project-based applied research and outreach activities will be funded through grants, contracts, and feefor-service models. Faculty from across colleges, units, and campus will be engaged to participate in grant or contract proposals and resulting funded projects.

The Center will retain all faculty accruals for Center staff (project accruals for faculty from other WSU units will be returned to those units per University policy). Additionally, the Extension Program Unit Director for Community & Economic Development has agreed for the first three years to return 100% of the Department's F&A allocation to the Center for operation needs, which may include: student stipends, and travel and/or expenses for distant faculty to participate in project scoping meetings prior to funding being secured for project activities. By year five, it is projected the Center will achieve annual expenditures in excess of \$500,000 from extramural sources.

Current and pending project related funding associated with Center staff include:

- WEDA members have committed funding for applied research and training on their behalf through the Western Center for Metropolitan Extension and Research (\$40,000 annually).
- America's Best Communities: A staged community economic development competition with a maximum award of \$3 million: guarter finalists announced 4/29/15, award of \$35,000; semifinalists announced 1/13/16, no cash award; finalists announced 4/15/16, award \$100,000; grand prize winners announced 4/26/17 awards of \$1 million, \$2 million, and \$3 million.
- Vulnerable Populations Disaster Transportation Planning: \$5,000 funded; submitted DOT grant for \$674,859.

#### 3. Space, Equipment and Supplies

The Center's core staff is already located at WSU North Puget Sound at Everett (NPSE) and WSU Seattle Offices, and will continue to work out of those locations. Additional space at NPSE may be available as

the Center grows. It is assumed that faculty from within the University who are part of a project team will use existing office space at their locations. Drop-in/project use space will be identified as needed for faculty or students working away from their home location.

Conference rooms, voice and video conferencing, and basic office infrastructure are supplied and available to Center staff and project faculty and students in both the WSU Seattle and NPSE locations.

## **University Endorsement**

#### 1. Support Letters

Richard T. Koenig, Professor; Associate Dean and Director, WSU Extension Ron Mittelhammer, Regents Professor; Dean College of Agricultural, Human and Natural Resources

Bob Drewel, Chancellor WSU North Puget Sound and Everett University Center



March 18, 2015

Craig Parks, Chair Faculty Senate, Washington State University Pullman, WA 99164-1038

Dear Dr. Parks:

Please accept this letter in support of the proposed **WSU Metropolitan Center for Applied Research and Extension** housed within Washington State University Extension and located on the WSU North Puget Sound at Everett (NPSE) campus.

Formation of this Center is the culmination of planning that began as early as 2008 (see Extension in the Urban West, 2008). This Center will play a key role in ensuring Extension remains engaged in metropolitan areas of the State and will play an integral role in Washington State University fulfilling its land grant mission in metropolitan western WA.

The Center will link applied research and extension outreach to address complex metropolitan issues and engage elected officials and decision-makers to affect policy, socio-economic, and/or environmental change. As structured, this Center will also provide a valuable conduit for faculty at other campuses to engage in Center projects by facilitating linkage between their research and outreach interests with stakeholder needs. In addition, the Center will provide valuable opportunities for graduate and undergraduate students to apply classroom knowledge to address real world issues and gain professional experience. Locating the Center on the WSU NPSE campus will allow it to integrate with the expansion of this urban campus as it builds out its teaching, engagement, and research portfolios. This approach marks an evolution in how Extension functions in urban areas and within WSU.

WSU faculty and staff are thought leaders nationally in envisioning how Extension evolves to address critical urban issues and links the greater resources of WSU to urban stakeholders. This Center is the outcome of analysis and its development will position WSU to be relevant within Washington and serve as a leader in the western U.S.

I support and endorse the establishment of the WSU Metropolitan Center for Applied Research and Extension and request that the Faculty Senate consider this proposal favorably.

Sincerely,

Richard T. Koenig, Professor

Associate Dean and Director, WSU Extension

P.O. Box 646248, Pullman, WA 99164-6248 509-335-2837 • Fax: 509-335-2926 • TDD: 1-800-833-6388 • extension@wsu.edu • http://ext.wsu.edu/

Cooperating agencies: Washington State University, U.S. Department of Agriculture, and Washington counties. Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local Extension office.



March 18, 2015

Craig Parks, Chair Faculty Senate Washington State University Pullman, WA 99164-1038

Dear Dr. Parks:

I am writing this letter to support the proposed **WSU Metropolitan Center for Applied Research and Extension** housed within Washington State University Extension and located on the WSU North Puget Sound at Everett (NPSE) campus.

I have reviewed the proposal and am confident in the overall structure of the Center and its funding model, which should support the overall success of the Center. The Center's staffing model is built around a small number of core faculty who will include other WSU faculty on a project-oriented basis. This approach will keep operational costs low and focus on revenue development. The growth model to add faculty positions as demand expands is a sound approach. The fiscal commitment by the Associate Dean and Director of Extension speaks to the potential of this Center and ensures it will have access to ongoing existing funding based on its success.

The Center provides the opportunity to link our research expertise to large metropolitan regions of the state and will help build WSU's visibility with important constituencies while allowing our faculty to enhance their research and outreach. I am especially supportive of the Center's model of engaging WSU students from across our campuses in its activities.

In sum, I support and endorse the establishment of the WSU Metropolitan Center for Applied Research and Extension and request that the Faculty Senate consider this proposal favorably.

Sincerely,

Ron Mittelhammer

Dean, CAHNRS

Regents Professor

Washington State University

on Mitethama



March 20, 2015

Craig Parks, Chair Faculty Senate Washington State University Pullman, WA 99164-1038

Dear Dr. Parks:

I am writing this letter to enthusiastically support the proposed WSU Metropolitan Center for Applied Research and Extension within Washington State University Extension and located on the WSU North Puget Sound at Everett (NPSE) campus.

As we undergo the development of WSU North Puget Sound at Everett and overall management of University Center, the opportunity to partner with WSU Extension on such a meaningful and impactful endeavor cannot be overstated. A Center designed to assist Puget Sound public officials, non-profit leaders and the private sector with local economic development, environmental stewardship and strengthening the regions organizational capacity will be in high demand. Having spent a long career working with elected and community leaders in the region, a Center that draws upon faculty expertise across the WSU system to undertake applied research, organizational development, training and outreach will provide a valuable and currently missing resource to this region. The Center's success will demonstrate the value, breadth and commitment of WSU in the region.

The Center will also provide many of our students the opportunity for their first professional experience. I want to underscore the importance of this. Creating opportunities for students to apply knowledge gained in the classroom in a professional setting will greatly enrich their education and also provide them a leg-up in a very competitive job market. Because we are an urban campus, the vast majority of our students are from the surrounding communities. Thus, students who are engaged in Center projects will be working in their own communities; again, this is a unique experience for students.

In sum, I endorse the establishment of the WSU Metropolitan Center for Applied Research and Extension and request that the Faculty Senate consider this proposal favorably.

Sincerely,

Bob Drewel, Chancellor

WSU North Puget Sound and Everett University Center

Washington State University

#### 2. Additional Documents

Extension in the Urban West

The Western Center for Metropolitan Research and Extension

Affiliated Faculty MOU

Support Letter: Economic Alliance of Snohomish County

Vita of Key Personnel

- Brad Gaolach
- Martha Aitken
- Andrew Cassey
- Karl Englund
- Michael Gaffney
- Monica Babine

# EXTENSION IN THE URBAN WEST

### Introduction

Land grant universities have the special responsibility not only to educate and conduct research, but to engage society and communities within the states they serve. As we move into the 21st Century, the model of the university engaged in addressing societal issues is as important now as it ever was. This engagement is facilitated by the *power to convene*.

As noted at a recent conference on the role of universities in the future ("Toward a Resilient Metropolis: The Role of State and Land Grant Universities in the 21st Century," Virginia Tech, 2006), this *convening power* is broad. It may be used to convene scholars and students in traditional, professional, or executive education modes leading to degrees or certificates, or used simply to expand awareness. It may convene researchers both directly and through networks, to address issues of concern to federal agencies and national institutions. Or it may convene scholars, professionals, public officials, and leaders in government, business, and special interest groups as part of its outreach function.

In no place is the power to convene more important than in the West. Every western state has at least one urban center, many of which are surrounded by vast sparsely populated "hinterlands." With that understanding, Extension leaders in the West have embarked on an initiative to position Extension as an

urban-serving institution. This paper outlines the elements required for Extension to be successful at programming in urban areas, including the underlying problems that need to be addressed. The organizational evolution to this approach will differ depending on local circumstance and state experience.

...The urban Extension programs of the past offer few lessons for the development of a new urban programming model for the West.

# In Search of an Urban Extension Model

In 2006, the Western Extension Directors
Association (WEDA) tasked the Western
Regional Program Leadership Committee
(WRPLC) to identify the characteristics of the
urban West and explore one or more conceptual models for urban Extension work.

Based upon a literature review and survey of the states, the WRPLC concluded that a common approach to urban education and issue analysis does not exist in the West. Most Extension programming in western metropolitan areas is adapted from rural experiences, not programming developed from an urban perspective. Moreover, the federal land grant

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system does not include an urban agenda. Since Extension was largely uninvolved in developing the urban-serving institutions that came to prominence in the 1960s and 1970s, there are a limited number of urban Extension programs reflective of urban values and approaches at these sites. As a result, the urban Extension programs of the past offer few lessons for the development of a new urban model for the West.

To move towards a new urban Extension model, the Directors tasked the WRPLC to examine urban issues in the West and articulate best practices for urban Extension programming. Their charges included:

- 1. To examine and validate our assumptions about characteristics and future trends of the "urban West":
- 2. To develop and refine one or more models of urban Extension; and
- 3. To explore the feasibility of establishing an urban research and extension center in the West to provide the needed research base for urban Extension programs.

The process started with an invitational meeting of regionally recognized Extension educators, urban scholars, and local government personnel to gather perspectives on urban issues prerequisite to the development of a blueprint for Extension in the urban West. The meeting, held in Las Vegas in January of 2007, was designed to initiate discussion on this agenda. Subsequent review and interaction among Extension educators and urban scholars have added definition to the initial proceedings.

This work has confirmed that the concept of the urban West does serve as a viable organizer for metropolitan Extension programs. What follows are 1) an examination of the unique qualities of the urban West and 2) identification of the elements of an urban Extension model. However, the full model development process remains ahead. Similarly, while an urban research and extension center is proposed, no attempt was made to assess the feasibility of such a center.

While urban centers across the country struggle with revitalization, cities in the West are challenged by growth management.

### The Urban West

peyond having the most densely populated metropolitan centers, the West is distinctly different from the other regions in the country. While urban centers across the country struggle with revitalization, cities in the West are challenged by growth management. This conclusion is supported by the recent work of the Brookings Institution on behalf of the consortium of Urban Serving Universities. Their work, and indeed the location of most urbanserving universities, is centered in the nation's oldest cities. The report Restoring Prosperity: The State Role in Revitalizing America's Older Industrial Cities (Brookings Institution, 2007) concludes that "older industrial cities are heavily concentrated in the Northeast and Midwest."

Over the past five decades, globalization and rapid technical change have created challenges for traditional industrialized U.S. cities. They have become trapped in a cycle of decline that includes, but is not limited to:

- The shift from a manufacturing economy to a knowledge-based one that has left many older industrial cities grappling to find their economic niche.
- Extreme economic and residential decentralization that has left the poor and minorities isolated in the urban core, spatially cut off from education and employment opportunities.
- Sixty-plus years of federal, state, and local policies that have largely stacked the deck against cities, undermining their ability to attract and retain business and residents (Brookings Institution, 2007).

The end result is urban decay and loss of population. In sharp contrast, western cities are concerned with issues of growth.

Dealing with issues of growth versus decline is a defining difference that sets western cities apart from their national cohort. Growth and its socioeconomic consequences permeate local politics, social structures, and public policy formation.

While western cities share the defining reality of rapid expansion, differences do exist among urban areas in the West. There are at least three sub-regions, which include the coastal states, the Southwest, and the Rocky Mountain States. In addition, there are a number of mega-regions of great commonality: the Cascade Corridor in the Pacific Northwest (Vancouver, BC to the San Francisco Bay Area), the Coastal Southwest (uniting Los Angeles, San Diego, Phoenix, and Las Vegas), and the Inter-mountain West (including the Boise–Salt Lake City–Colorado Springs region). During a discussion of these delineations, a Las Vegas

conference participant commented that "Fresno has more in common with New Mexico than San Francisco."

Dealing with issues of growth versus decline is the defining difference that sets western cities apart from their national cohort.

Despite their differences, the commonalities among western urban areas are dominant. Much of that commonality results from the shared sequences of western development and geographic proximity to the Pacific Rim. Western metropolitan areas developed much later than their cohorts elsewhere, resulting in different characteristics than other regions of the country. Western cities were born in the age of the automobile, or as one conferee indicated, "the West was born modern."

The West has served as the population release valve for the nation, and remains a frontier in the minds of many. The importance of federal lands cannot be overstated (for example, 87% of the state of Nevada is federally owned). Given the magnitude of federal lands and the vast distances in the West, the pattern of development may appear like city-states, where densely populated urban areas emerge like islands from a sea of undeveloped, even barren lands. Consequently and perhaps counter to conventional wisdom, the West is the most urbanized region in the country.

Another conferee noted that the West also holds "a disproportional share of high

amenity landscapes," which continues to impact the pace and quality of in-migration. In the Seattle–Portland mega-region, youth attracted to the relatively inexpensive cost of living, green demographic, and accessible culture have contributed to the area's evolution by creating their own urban magnetism.

Consistent with the phenomena of growth, the urban West is becoming more diverse. People of color are approaching a majority in many cities, income levels and educational attainment are increasing, and the poor are being displaced to suburbs while inner city household size is decreasing. Based on their views of economic opportunity, the population of 25–34 year olds is growing in urban areas. This new western melting pot represents a comparative advantage for the West in some technical fields, yet even with educational attainment rates higher than the rest of the United States, urban poverty is also increasing faster than in other regions.

The rich diversity of people and separation by great distances produce similar issues for many cities in the West. They are uniformly concerned with density, transportation, health, safety, economic development, income distribution, and maintaining a high quality of western life. On a smaller number of variables, emphasis on unique issues such as water quality, human rights, or land planning might dominate in a given metropolitan area.

...Perhaps counter to conventional wisdom, the West is the most urbanized region in the country.

At the same time, cities are legal creatures of states, which in the West typically have interests that transcend those of city subdivisions. Municipal and state interests in the earlier developed regions of the Northeast and Midwest more closely paralleled each other. In the West, however, there is often a political divide between urban and rural interests. Issues of federal land ownership, agricultural labor, immigration, and property rights are often viewed differently by rural residents in the vast regions between western cities vis-à-vis their metro counterparts.

Urban Extension programming must take this rich tapestry of diversity and commonalities into account. The elements for a new urban Extension model outlined below were formulated in response to this reality.

# The Elements of a Western Urban Extension Model

s evidenced by presentations and exhibits at recent national urban Extension conferences, there is good Extension work being conducted in urban areas. The effort here is not intended to show any absence of support for that work. Rather, it is to suggest that from those experiences, we can begin to identify the elements of a model for urban Extension that will add focus and facilitate the highest probability of success in the western region. Drawing from the literature, Extension history, and the experience of urban-serving universities, there appear to be several elements that others have found integral for success and sustainability.

<sup>4—</sup>Extension in the Urban West

These elements center around the following implications for Extension in the urban West: different demographics; issues of growth; recognition that Extension, while unique, is only one of many urban actors; and the fact that many land grant universities are not located in population centers combine to suggest the need for a new model. After studying these issues, the Las Vegas conference participants recommend the following vision statement for urban Extension:

EXTENSION CONNECTS
UNIVERSITY RESOURCES TO URBAN
AREAS THROUGH HIGH QUALITY APPLIED
RESEARCH, NON-FORMAL EDUCATION,
AND ACCESS TO CREDIT PROGRAMS.

We expect each state, their universities, and metropolitan areas to identify their own programmatic themes following the convening process. While we have purposefully avoided the identification of new urban programs, we offer several organizational elements as likely factors in the success of an urban Extension initiative. These generally revolve around collaboration and partnership, staffing models, appropriate technology, institutional centrality, and financial sustainability.

Extension should be positioned as the front door to the university in the city—the gateway to research and education.

Positioning urban Extension as the front door to the university. In states where the land grant is not located in a metropolitan

center, Extension should be positioned as the front door to the university in the city—the gateway to research and education. As with all front doors, it must have curb appeal to be considered desirable by the neighborhood.

Extension needs to be based in metropolitan functional areas that may not coincide either with political boundaries or academic disciplines. Extension may need to develop new models of collaboration and community integration where staff and programs are cohoused with non-governmental organizations, existing urban-serving universities, or other urban agencies.

Progress towards a sustainable metropolis will require interdisciplinary approaches formed by scholars from a broad spectrum of academic disciplines from the planning and policy professions moving beyond the lens of a single discipline.

Urban Extension programs need to be issuedriven. Urban issues are very complex. Their analysis and solutions do not conform to traditional university structures or academic calendars. Contributions and insights from single disciplines, while important, are not sufficient to help transform urban society. Any university response must therefore be interdisciplinary in nature. Progress towards a sustainable metropolis will require interdisciplinary approaches formed by scholars from a broad spectrum of academic disciplines from the planning and policy professions moving beyond the lens of a single discipline.

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The importance of the urban-serving role within the mission of the university is paramount. Given the realities outlined above, Extension's access to the full faculty resources of the university is essential. Once established, Extension can use this expanded capacity to make the case for managing outreach programs throughout the regions it serves.

Facilitating access to research should be a key function of any urban Extension initiative.

Access to university research. One universal concept in all recent assessments of urban stakeholders is their desire to access the research of their land grant university. While the enabling legislation for Cooperative Extension clearly positions the organization at the application end of the continuum on the creation and utilization of knowledge, there is no restriction on involvement of Extension personnel that should prevent a greater connection between research and urban issue resolution. In fact, this is consistent with the current emphasis at the federal level on integrating research, Extension, and education.

Facilitating access to research should be a key function of any urban Extension initiative. The traditional model has Extension field staff bringing the needs of various stakeholders to the attention of land grant researchers, who investigate the issues and provide research results to Extension educators to take back to stakeholders. Although this model has been effective in the past, today's stakeholders want to be more active in the research process.

Advances in technology make information from anyplace in the world immediately accessible. However, the validity of this information is often questionable. The relevance and value of Extension in this context is proactively confirming what is credible research and assisting stakeholders in interpreting and applying research results to local real-world situations. Each state will need to determine how to best enable this process within their infrastructure.

Applied research and engaged scholarship are integral to urban Extension. Engaged scholarship has been defined by a number of groups and individuals. In the report *New Times Demand New Scholarship II* (2007), a group of research universities gathered to renew the civic mission of higher education describe engaged scholarship as "research... that partners university scholarly resources with those in the public and private sectors to enrich knowledge, address and help solve critical societal issues, and contribute to the public good."

One missing and oft-requested element in the metropolitan policy arena is access to university-based engaged scholarship and applied research that can inform decision-making. In the absence of university engagement, metropolitan areas must rely on private sector consultancies for input to policy processes, often at higher cost and more uncertain reliability.

We propose that new urban Extension programming embrace engaged scholarship and the use of applied research on topics and issues of interest to urban decision-makers, including those in local government, the nonprofit sector, and community organizations.

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Applied research and engaged scholarship are not new to Extension. How this plays out will be different in various states, with some being particularly aggressive in developing an Extension-applied research emphasis to nurture the integration process described above. Cornell University, for example, has developed applied research and Extension councils and program work teams, while Kansas State University has created a position titled Associate Director of Extension and Applied Research.

Formal adoption of engaged scholarship and applied research as operating principles for urban Extension is clearly consistent with the general direction of the federal land grant system, which defines applied research as finding practical ways to advance new knowledge for the benefit of individuals and society. As discussed earlier, applied research and engaged scholarship are highly consistent with the needs of urban jurisdictions and their residents.

Formal adoption of applied research...for urban Extension is clearly consistent with the general direction of the federal land grant system.

Non-formal education remains a mainstay of Extension programming. While non-formal education is comfortable territory for Extension, it is a very crowded field in most cities, and one where Extension may not presently enjoy a competitive advantage. Given constrained resources, it is simply not feasible within the large population base of metropolitan areas to meet the needs of a significant portion of the population, even with the ex-

tensive utilization of volunteers. To reach the maximum number of end-users in these areas, we propose that the target audience be modified to include an emphasis on working with organizational intermediaries who provide direct service and program delivery.

An important target audience of urban Extension programs should be the staffs of organizations that work with the public. This is often referred to as a "train the trainer" model. The resulting educational programs will be aimed at helping urban-based organizations succeed in their work. The end product remains enhancing the public good. Much of the new training activity can likely be fee-based, contract, or grant funded. This approach provides the opportunity to use extramural funds to further expand programs and thus further increase their impact. It is in this manner that urban Extension can maximize its impact.

Access to degree programs. At the front door of the university, urban audiences are looking for access to degree programs. There is not an urban center in the West without a large number of underserved, place-bound residents. Where appropriate, Extension can partner in the delivery of degree, certificate, credit, and non-credit programs for these residents. This is not to suggest that Extension should become a teaching institution, but rather that it possesses the capacity to facilitate the delivery of degrees as well as non-formal programs.

Over the past decade, many states have expanded the role and expectations for Extension to become a part of their state-wide strategies for increasing access to post-secondary education. A 1998 example from South Dakota is illustrative of this type of redesign:

at the same time that the Regents approved a title change from County Extension Agent to County Extension Educator, they charged Extension with expanding "educational opportunities by giving local access to both credit and non-credit courses." Other states facilitate the delivery of full degree programs at Extension centers.

In states where the land grant university is remote from metropolitan centers, urban-located Extension offices should also be used to create special opportunities for service learning, externships, and internships. Urban-based youth programs could focus on workforce preparation, further education, and training.

Extension...possesses the capacity to facilitate the delivery of degrees as well as non-formal programs.

Working through others as a mechanism for increasing impact. As suggested above, there is likely an inverse relationship between population size and the impacts of a direct service model. As Extension shifts from retail service (a mass audience approach) to whole-sale delivery (working through agencies and those of influence), new organizational forms and teaching technologies will be required. An ever-increasing amount of Extension's impacts will be judged on activities conducted through intermediaries.

Because of the political complexity of metropolitan regions, care will be required to position university Extension at the appropriate level or domain in local or state government. Metropolitan programming needs to involve collaboration with agencies, other educational institutions (including both urban-serving universities and land grants), and/or nongovernmental organizations. As a result, Extension must develop tools and utilize evaluation methodologies to assure its contribution to and impact on joint projects are both understood and recognized.

#### A new urban Extension staffing approach.

The new urban Extension program tailored to more applied research activities, engaged scholarship, and non-formal education for the staffs of public and community organizations will require changes in Extension's traditional staffing model. Today, in most western metro Extension offices, the emphasis is on a few long-term programs supplemented by short-term grant-funded projects. Embracing engaged scholarship, applied research, and a new approach to non-formal education will probably reverse this balance, resulting in the need for more staff with project development and management skills rather than in-depth knowledge of subject content.

With an emphasis on flexibility and responsiveness, engaging the public in applied research and contracted non-formal education is likely to require fewer full-time, tenured, or tenure-track faculty. Instead, a project model that purchases expertise on an as-needed basis may be more appropriate.

Urban Extension staff must reflect the diversity and interests of metropolitan populations. New urban Extension educators will increasingly need to be multicultural, multilingual, suburban/urban-savvy, and able to relate cross-generationally. New urban Exten-

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sion staff will also need the support, skills, and finances to reach back into the university to obtain needed project expertise as well as into the metropolitan area s/he serves. Mechanisms must exist within the university to enable resources from the broad range of academic disciplines to be applied to urban and regional issues.

Within urban Extension, a lead individual should represent the university to the region. Such an individual must have sufficient legitimacy in both the university and the region to successfully broker resources between the two systems.

The Extension educator in this model is a project developer, communicator, broker, and information translator, not necessarily just a program manager. S/he will need to be knowledgeable of social/educational processes and have access to a complete university from which to draw resources.

New urban Extension educators will increasingly need to be multicultural, multilingual, suburban/urban-savvy, and able to relate cross-generationally.

An expanded funding model. A financial model for future urban Extension programs will recognize that urban communities are organizationally complex. County governments, traditionally important partners of Extension, will remain an important, but not always the exclusive funding partner. Non-governmental organizations, cities, and philanthropies will

be significant collaborators and should be cultivated as financial partners. Great care must be exercised to avoid the alienation of pre-existing and valued partners.

Undoubtedly, extramural grants will play an important role in funding new urban Extension activities that are short-term and require project-specific staff. At the same time, more stable, ongoing funding is needed for long-term programs and core staff. A balance is needed between these extramural and traditional funding sources.

County governments...will remain an important, but not always the exclusive funding partner.

# An Urban Research and Extension Center for the West

Extension programs are based upon and informed by research. Unfortunately, research on urban issues is not universally available to Extension organizations in the West. To overcome this deficiency, the Las Vegas conferees suggest developing an urban research and extension center for the West.

The mission of such a center would focus on the development of interdisciplinary research on issues affecting the urban West, with project identification, recruitment of researchers, and securing funding for research collaborations as important contributions. The research would be useful to Extension faculty located in and providing service to cities, and in turn,

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municipal leaders would be significantly involved in proposal development, authorization, and implementation.

An urban research and extension center could be patterned after the four USDA rural development centers. However, given the present focus of the USDA on agriculture and rural communities, it would be unrealistic to expect financial support from that agency for urban issues. Instead, start-up support from a national foundation in preparation for an overture to Congress and/or an urban-based federal agency might be more appropriate.

### **Summary Framework**

The WRPLC identified the following elements as requisite to the successful implementation of an urban Extension model. Not every state or region will be able to employ all 10 of these components at inception, but we believe that success is more likely with adoption of as many as possible.

- 1. Mechanisms must exist within land grant universities to enable resources from the broad range of academic disciplines to be applied to urban and regional issues.
- 2. Urban Extension programs must reflect the diversity and interests of metropolitan populations, which may differ from other areas of each state.
- 3. Given the arbitrariness of political boundaries, urban Extension delivery areas may need to be cross-jurisdictional in order to

- assemble appropriate resources. County Extension autonomy, if applicable, should not be negatively impacted by the designation of these urban delivery areas.
- 4. Funding for Extension urban partnerships should include public and/or private entities in addition to county governments.
- 5. Programming should be issue/problem-based.
- Urban Extension educators must recognize that the staffs of nonprofit organizations and public entities are important audiences.
- 7. A lead individual (or office) should be designated to represent the university to the region. Such an individual (or office) must have sufficient legitimacy in both the university and region to successfully broker resources between the two systems.
- 8. Stable, ongoing funding is necessary for long-term, core activities. Extramural support may be required for startup and specific programs.
- 9. A successful urban Extension model must include staff who not only have relevant disciplinary credentials, but also the competencies needed to effectively work in an urban environment.
- 10. Urban program development and administration must remain within the regular state Cooperative Extension organization, which will continue to provide program oversight. Nothing in the development of an urban model should be construed to suggest a separate management system.

# Caveats, Cautions, and Closing Comments

Not all states will choose, nor will all urban Extension programming be able to employ the full range of elements suggested above. However, to maximize the probability of being able to "grow the pie" rather than reallocating among existing resources, we suggest the largest number of these elements as possible be implemented.

While the Las Vegas conferees and the writers of this document embraced the urban challenge as a transformational opportunity for Extension, everyone understands it will not be an easy task. With major programmatic shifts come perceived winners and losers. There must be strategies to deal with changes in the urban programming mix and careful advocacy within the organization and among traditional partners. Partnership development with other providers of urban education and research will also help to overcome actual and perceived barriers.

One potential barrier is the historical emphasis on tenure appointments in western states. Tenured county faculty in particular are found most frequently in the West. This is understood to be a more significant demarcation—and challenge—in the western region than elsewhere.

In closing, we want to emphasize that in order to embrace a new metropolitan model, Extension need not abandon state-wide agendas; rather, they must incorporate the needs of urban areas and understand that those needs often differ from the other areas they serve. In this way, the growth management issues of Portland and Las Vegas may be viewed as similar in a way that the environmental agenda of Oregon and development agenda of Nevada might not. It is this conceptualization that will allow Extension in the West to successfully implement an urban model.

### Acknowledgements

This paper was prepared at the request of the Western Extension Directors Association (WEDA) by a subcommittee of the Western Region Program Leadership Committee (WRPLC). The WRPLC subcommittee consisted of Judith Barth (Colorado State University), John Burton (University of Nevada), Chuck Gay (Utah State University), Karen Hinton (University of Nevada), Dallas Holmes (Utah State University), Lyla Houglum (Oregon State University), and Rob McDaniel (Washington State University), who also served as the subcommittee convener.

To generate and compile the ideas recorded here, the WRPLC sponsored an invitation-only conference involving 30 urban scholars, governmental leaders, and Extension staff from throughout the West. Providing valuable content for the conference were John Allen (Utah State University), Buddy Borden (University of Nevada), Beth Emshoff and Lyla Houglum (Oregon State University), Kenneth Reardon (Cornell University), Ethan Seltzer (Portland State University), and Paul Sommers (Seattle University).

The WEDA and WRPLC would like to especially thank William Gray (Washington State University) for organizing the invitational conference, providing resources to the subcommittee, and authoring this paper; Dora Rollins, Gerald Steffen, and Bob Hoffman in the WSU Extension Communications and Educational Support unit for editing, formatting, and publishing this document on behalf of WEDA; and Debra Akhbari (Washington State University) for the logistical support to the WRPLC subcommittee.

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# The Western Center for Metropolitan Extension and Research

## Prepared for the Western Extension Directors Association Meeting - January 2014

#### The West is urban

The American West is a region marked by large metropolitan cities surrounded by vast rural areas. Most Western states have large metropolitan populations, <sup>1</sup> of which nine states have 80+% of their residents in metropolitan areas and four of these nine states have over 90% of their populations residing in urban centers (2010 U.S. Census). Western cities are distinctly different from their national cohort. These cities arose in the age of the automobile, and therefore to some extent Western cities were 'born modern'. <sup>2</sup> While metropolitan centers across the country struggle with revitalization, it is growth management that challenges cities in the West. <sup>3</sup>

#### Extension must embrace this reality

Most Extension programming in Western metropolitan areas is adapted from rural experiences, not programming developed from an urban perspective. Moreover, the federal land-grant system does not include an urban agenda. As a result, the urban Extension programs of the past offer few lessons for the development of a new urban model for the West.<sup>4</sup>

To remain relevant in metropolitan areas, land-grant university based Extension programs need to embrace this reality when deciding which programs they support, how these programs are delivered, and what the composition of their staff should be. Strong Extension programs are informed by research and based upon best practices. Unfortunately, there is little to no research on best practices for university outreach or faculty development to guide Extension organizations in the West.

To overcome this deficiency the WEDA Urban Task Group proposes to establish a Western Center for Metropolitan Extension and Research (Center). This *regional* Center will: a) increase the internal capacity of Western Extension programs to address metropolitan issues, and b) elevate the stature and value of Cooperative Extension to external metropolitan audiences. The proposed Center is based on a three-year start-up plan and is comprised of a small core staff and an advisory board (see Figure 1). The overarching goal of the Center will be to help Extension better align programs with the needs, issues and interests of their metropolitan constituency.

#### A Regional Center to help us meet our future

The Center will operate under the guidance of the Western Extension Directors Association (WEDA). As such, WEDA will appoint an Advisory Board and designate a State Extension Director as the Association's

<sup>&</sup>lt;sup>1</sup> The terms "urban" and "metropolitan" are used interchangeably in this document. However, the authors selected the term "metropolitan" for the name of the Center, since "urban" is often associated by the media with negative issues affecting populations of color.

 $<sup>^{2,3,\</sup>bar{4}}$  "Extension in the Urban West," Western Extension Directors Association, 2008.

liaison (see Figure 1). The eventual size of the Center will depend on the activities that drive its growth. It is important that the operations of the Center be both flexible and nimble so that the Center can adapt to evolving conditions and influences in metropolitan areas.

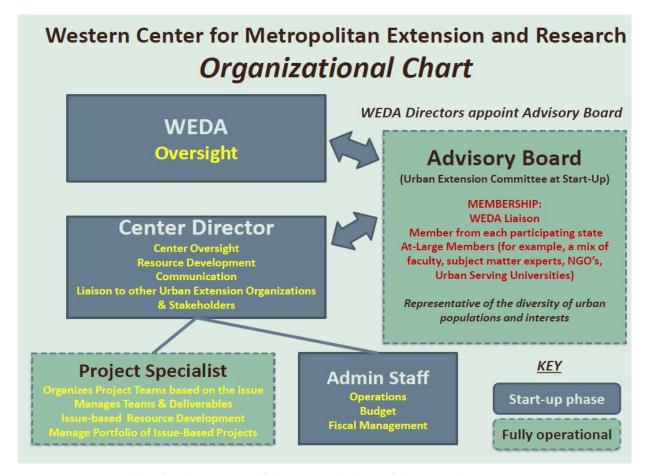


Figure 1. Organizational chart for the start-up and fully operational phases of the proposed Center

The Center will work on two major foci: **applied research** on issues and best Extension practices and **professional development for Extension educators**. Operationally, the Center's activities will integrate these two core functions such that the applied research, whether it is on best practices, new organizational models, or emerging metropolitan issues, will inform the professional development activities the Center will lead. The basic approach to Center projects is shown in Figure 2 whereby addressing a specific issue (e.g. waste water management) can achieve scholarship outputs and outcomes which then would lead to professional development outputs and outcomes.

The Center will be hosted by a Western Extension program chosen by WEDA. Washington State University Extension has offered to host the Center during its initial start-up phase and will provide a part-time Center Director and support staff. WEDA members will also support the Center's activities through contributed staff, with mutually agreed upon effort, activities, and outcomes. The Extension Director from the host institution and the WEDA liaison will jointly conduct performance evaluations for Center staff. The Center will promote equity and inclusion of diverse stakeholders.

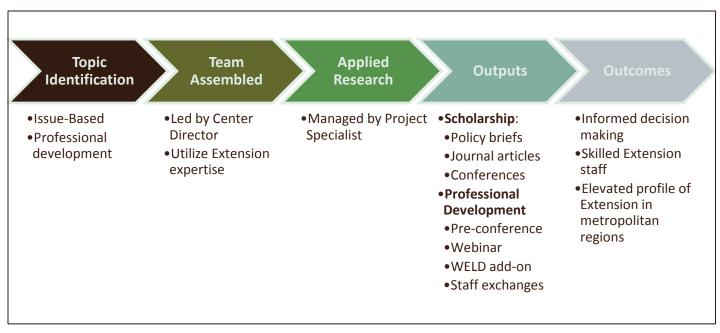


Figure 2. Schematic representation of how Center projects are developed and how applied research supports professional development activities and impacts.

#### **Applied Research**

In 2006, WEDA tasked the Western Regional Program Leadership Committee (WRPLC) to identify the characteristics of the metropolitan West and explore one or more conceptual models for metropolitan Extension work. Based upon a literature review and an informal survey of state Extension programs, the WRPLC concluded:

- A common approach to metropolitan Extension education and issue analysis does not exist in the West.
- In fact, woefully little has been published on metropolitan Extension models or how to operationalize them.<sup>1</sup>

To overcome this deficiency, the proposed Center will have a two-pronged research agenda:

- 1. **Identify best practices and organizational models for metropolitan Extension.** Applied research on effective metropolitan organizational and staffing models and best practices in metropolitan program development, delivery, and evaluation will increase the opportunity for Extension professionals to be visible and valued partners who inform and address local concerns.
- 2. Exploration of emerging metropolitan issues where land-grant universities can contribute to decision making and policy development. Metropolitan issues are complex, impact multiple entities, and are often politically influenced. Objective research and recommendations will provide communities with a basis for informed decision-making. Initial identification of emerging metropolitan issues will be done by the Center's advisory board in cooperation with metropolitan decision-makers from the public, non-profit and private sectors. In addition, the Center will periodically query Extension educators in the West and others using on-line surveys, focus groups and other means to refine issues and approaches.

<sup>&</sup>lt;sup>1</sup> "Extension in the Urban West," Western Extension Directors Association, 2008.

The Center will apply the following criteria to select projects or topics for research and development:

- the significance of the issue across Western States;
- decision-makers' stated readiness to address the issue and to use research based information in the process;
- the potential for Extension and the land-grant university system to add value to the project, and
- the possibility that the project may attract outside funding resources.

Most often, the Center's applied research will be undertaken by transdisciplinary teams of experts drawn from Extension programs in the West. As such, the staffs' role will be to:

- identify the research scope of work and appropriate team composition/members;
- support these teams in their work;
- help obtain sufficient extramural funding to underwrite the research; and
- assure the quality and timeliness of the team's research products.

Within each research project, the Center will also identify potential responses or next steps that individual Extension programs can take to advance the issue under study or to share the outcomes. These responses could range from development of potential new programs to professional development opportunities for Extension staff to policy briefs used to inform local, state or regional policy and decision-making.

#### **Professional development for Extension educators**

Extension faculty and staff working in Western metropolitan areas need a unique combination of knowledge, skills and attitudes to address the needs of metropolitan constituents, including:<sup>2</sup>

- project development and management skills;
- multicultural, multilingual capabilities;
- ability to work through intermediary organizations;
- ability to relate cross-generationally, especially with 25-34 year olds; and
- ability to evaluate program impacts within the context of multi-stakeholder collaborations

To assist metropolitan extension educators acquire these abilities and skills, the Center will facilitate the following range of professional development activities<sup>3</sup>.

#### Webinars (year 1)

Webinars will take a holistic approach. For example, if the issue were metropolitan food systems, the webinar would address how various Extension expertise such as agriculture/ horticulture, youth development, community economic development, and nutrition play a role in catalyzing and sustaining the food system and individual components. Webinars could be offered quarterly, recorded, and archived on the Center's webpage. By engaging in these conversations, metropolitan Extension professional groups may emerge.

<sup>&</sup>lt;sup>1</sup> The Washington University School of Medicine in St. Louis defines *Transdisciplinary research* as, essentially, team science. In a transdisciplinary research endeavor, scientists contribute their unique expertise but work entirely outside their own discipline. They strive to understand the complexities of the whole project, rather than one part of it. Transdisciplinary research allows investigators to transcend their own disciplines to inform one another's work, capture complexity, and create new intellectual  $spaces.\ \underline{http://www.obesity-cancer.wustl.edu/en/About/What-ls-Transdisciplinary-Research}$ 

<sup>&</sup>lt;sup>2</sup> "Extension in the Urban West," Western Extension Directors Association, 2008.

<sup>&</sup>lt;sup>3</sup> Following each professional development activity is the year the Center will provide this service.

#### Staff exchange (year 1)

One-to-one learning remains a powerful tool. As such, staff exchanges will allow Extension faculty to observe and understand successful metropolitan Extension programs and operational models first hand, thereby gaining relevant knowledge and skills. These exchanges would be coordinated by each state as appropriate.

#### Build on WELD (year 2)

The Western Extension Leadership Development (WELD) program seeks to strengthen the leadership skills of Extension faculty. An extra day of specialized metropolitan training could be added to one of their in-person meetings. Additionally, the required projects, which all participants must complete, could include a staff exchange with an established metropolitan program.

#### Western Metropolitan Conference (years 3-5)

Center supported conferences will be single-issue focused. The Advisory Board will determine the topic for each conference. These conferences will catalyze thought and action around the issue. Prior to a conference, the Center will convene a 'think tank' to develop background policy papers related to the conference topic. The conferences will bring together applied researchers, outreach / engagement professionals, and decision makers to further analyze the issue and initiate action. Post-conference session could focus on identifying potential responses or next steps that Extension might take to advance the issue.

#### Metropolitan extension agent core competencies (on-going)

Currently several groups are discussing an approach to catalog the skills and expertise of metropolitan faculty. The Center will participate in these activities and draw from its own research with the goals of:

- identifying a core set of competencies for metropolitan extension professionals;
- guiding the professional development activities of the Center;
- supporting the training needs of Extension faculty and staff to attain these core competencies;
- providing model language for position descriptions and job searches.

#### Center budget and timeline

To ensure success, it is important that the capacity of the Center and its infrastructure be adequately capitalized. In the beginning, WEDA members will be asked to support the Center's operations through new or repurposed funds. While modest ongoing funding is suggested, the long-term approach to Center funding will be to acquire new federal, private, and foundation dollars and Center grants and contracts. The start-up budget (below) represents the minimum amount necessary to successfully launch the Center and operate it until it can become sustainable. The number of Center staff and the nature of their responsibilities will be periodically evaluated to ensure that the Center is right-sized and remains flexible to address current issues.

#### **Startup Budget**

| Item                               | Amount*     | Source                      |
|------------------------------------|-------------|-----------------------------|
| Center Director ( approx. 0.5 FTE) | \$40-60,000 | Contributed by WSU          |
| Support Staff (approx. 0.15 FTE)   | \$10-15,000 | Contributed by WSU          |
| Faculty time (content based)       | Variable    | Contributed by WEDA members |
| Operations (office, G&S, Travel)   | \$35-40,000 | Contributed by WEDA members |

<sup>\*</sup>Salary figures are only estimates, vary upon the host Extension program, and exclude employee benefits.

## **Timeline for Implementation**

Upon WEDA approval, startup activities would proceed according to the following timeline:

#### Year 1

- Identify initial Center research and professional priorities
- Create a website and establish a repository of relevant information
- Develop webinars and staff exchanges
- Center guiding documents, policies, and procedures developed
- Initial Center infrastructure and communication systems in place

- External funding development groundwork in place
- **Expansion of Center services**
- Determine feasibility of incorporating a metropolitan component to WELD
- Finalize host state (designated by WEDA) and transition Center operations

#### Years 3-5

- Issue-based metropolitan conference hosted in the West
- Endowment funding in place
- Center operations costs substantially offset by grants and contracts
- Nationally recognized for work transforming Extension practices in the West

The WSU Metropolitan Center for Applied Research and Extension (MCARE) offers affiliated faculty a venue for multidisciplinary collaboration to assist them in pursuing common interests and achieving both individual and MCARE goals. To facilitate this collaboration, the following responsibilities of affiliated faculty have been established.

Each affiliated faculty is required to actively contribute to the MCARE mission by:

- Leading or serving as a core member of a MCARE team proposal at least once yearly.
- Helping identify department and / or campus based faculty for projects.
- Participating in project and stakeholder engagement events.

#### MCARE will:

- Organize and/or facilitate trans-disciplinary research and grant proposal development.
- Help secure necessary project funding.
- Develop and monitor project contracts and deliverables.
- Provide opportunities for graduate and undergraduate student participation on projects and scholarly products.
- Provide administrative support as applies to MAREC.

| Affiliate Name                   | Signature                 | Date | _ |
|----------------------------------|---------------------------|------|---|
| Department                       |                           |      |   |
| Chair                            | Signature                 | Date |   |
| Department                       |                           |      |   |
| R&E Center Director              | Signature                 | Date |   |
| (If faculty member is physically | located at an R&E Center) |      |   |
| Brad Gaolach MCARE Directo       | ır                        | Date |   |

March 19, 2015





Craig Parks, Chair Faculty Senate Washington State University Pullman, WA 99164-1038

Re: Support for WSU Metropolitan Center for Applied Research and Extension

Dear Dr. Parks:

I am writing this letter to support the proposed WSU Metropolitan Center for Applied Research and Extension within Washington State University Extension and located on the WSU North Puget Sound at Everett (NPSE) campus.

As a regional leader, Economic Alliance Snohomish County exists to be a catalyst for economic vitality resulting in stronger communities, increased job creation, expanded educational opportunities, and improved infrastructure. We accomplish this through our core lines of business: Advocate, Develop, and Connect. We advocate for hard and soft infrastructure to spur economic growth by working with private and public sectors and engaging stakeholders. We develop and support key economic sectors through leveraging our partnerships and connecting industry, government, labor, and nonprofits.

While we knew the value of the programs from WSU Snohomish County Extension's office, the additional resources provided to help our community respond to the tragedy along SR 530 has demonstrated the value that WSU can provide to our communities beyond the traditional Extension programming. Having a point of entry to access the breadth of expertise within WSU would be a valuable asset to our organization, our community, and the residents who live here. While our focus is on economic development, we also value the Center's focus in addressing organizational development to build the effectiveness of our public and private organizations along with maintaining the quality of life in this region through environmental stewardship.

Locating this Center at the University Center of North Puget Sound will provide valuable workforce experiences for the students who pursue two and four year degrees through either Everett Community College or one of the four-year institutions making up the University Center. These opportunities will not only provide valuable work experiences, but they will also provide a way for local students to invest / give back to the communities they live in through the applied research projects the Center will undertake.

In sum, I support the establishment of the WSU Metropolitan Center for Applied Research and Extension and its location at the University Center as it will be another jewel WSU brings to our community. In addition, with Snohomish County's role as the densest advanced manufacturing region in the Northwest, we believe this Center will be beneficial for WSU as it will enhance its educational and partnership opportunities with world class manufacturing businesses in Snohomish County and reflect positively for other businesses looking to locate into Washington State.

Sincerely,

**Troy McClelland** President & CEO



## VITA

## **Brad Gaolach**

## **Extension Community Sustainability Specialist, Associate Professor**

WSU North Puget Sound at Everett, 2000 Tower Street – MS 45, Everett, WA 98201-1390

425.405.1734 (O) 425.405.1601 (F) gaolach@wsu.edu http://metroextension.wsu.edu

#### **EDUCATION**

## A. Degrees Earned

**Doctor of Philosophy in Zoology**, University of Washington.

Dissertation: The effect of vegetational diversity and crop patterns on insect damage in

small-scale organic agriculture.

Advisors: Dr. Joel Kingsolver, Dr. Peter Kareiva

1995 *Master of Science in Entomology*, North Carolina State University.

Thesis: Effects of population structure on spread of resistance genes in Heliothis virescens

(Lepidoptera: Noctuidae) populations.

Advisor: Dr. Fred Gould

1992 Bachelor of Science in Zoology, University of Washington. Cum Laude

1992 Bachelor of Arts in Political Science, University of Washington. Cum Laude

## **EMPLOYMENT**

| A. | <b>University Related</b> |   |
|----|---------------------------|---|
|    | Jun 2013 – present        | <b>Extension Regional Specialist,</b> Washington State University, Community Economic Development |
|    |                           | 2104 – current. Director, Western Center for Metropolitan Extension and Research.                 |
|    | Jan. 2010 – 2013          | <b>County Director</b> , Washington State University Pierce and King County Extension             |
|    | Nov. 2003 – Dec. 2009     | County Director, Washington State University King County Extension                                |
|    | June 2004 – Present       | <b>Affiliate Faculty</b> , University of Washington College of Forest Resources.                  |
|    | 2002 – present            | <b>Affiliate Faculty</b> , Washington State University Department of Entomology.                  |
|    | 2001 – 2003               | Agriculture and Natural Resources Area Extension Agent, Washington                                |
|    |                           | State University King and Pierce County Extension   |
|    | 1995                      | Visiting Scientist, International Rice Research Institute, Los Banos,                             |

Philippines. (3-month appointment).

## B. Other

| 8/2012 - 5/2013 | Special Projects Manager, Pierce County, Department of Community     |
|-----------------|--|
|                 | Connections.   |
| 1990 – 1991     | Systems Programmer, subcontractor to Chambers Group, Inc. for US     |
|                 | Army Corps of Engineers.   |
| 1988 – 1989     | Legislative Assistant, Minnesota State Representative Jerry Bauerly. |

## **HONORS AND AWARDS**

| National | Zimmerman, T., A. Grotta, and B. Gaolach. 2007. Gold Award for Computerized Graphic Presentation/Slide Set as a co-author of "Training Environmental Stewards |
|----------|---|
|          | from Mountains to Ocean: A Water Quality Curriculum". 2007 National   |
|          | Educational Materials Awards from the Association of Natural Resource Extension   |
|          | Professionals (ANREP).  |
| National | Zimmerman, T., A. Grotta, and B. Gaolach. 2007. Awarded the Silver Award for Mixed  |
|          | Materials as a co-author of "Training Environmental Stewards from Mountains to  |
|          | Ocean: A Water Quality Curriculum". 2007 National Educational Materials   |
|          | Awards from the Association of Natural Resource Extension Professionals   |
|          | (ANREP)   |
| Local    | Charlotte Cornell Crary Award for Excellence in Teaching Introductory Biology (University of Washington), 2000.   |
|          | (University of washington), 2000.   |

# **GRANTS, CONTRACTS, AND FUND GENERATION**<sup>1</sup>

## A. Grants and Contracts

SAgE Collaborative: Sustainable Agriculture Education for the Puget Sound Biogegion. Advanced Technology Education, NSF. \$899,897. PI: J. Niebler and CoPIs: T. Hohn, G. Sparks, C. Svendsen and B. Gaolach (7/12-6/15) (3,4,5, \$33,220)

Healthy Gardens, Healthy Youth: A People's Garden School Pilot Program. Food and Nutritional Services, US Department of Agriculture. \$1,000,000. PI: B. Gaolach and CoPIs: K. Barale and M. Aitken (4/11 - 09/14) (1,2,3,4,5, \$271,126).

Vulnerable Populations Emergency Preparedness. King County, Department of Health and Human Services. \$5,000. PI: **B. Gaolach** (2/14 – 6/14) **(1,2,3,4,5 \$5,000).** 

12,000 Rain Gardens. Russell Family Foundation. \$119,000. PI: C. Moulton and CoPIs: D. Burger, R. Simmons, S. Blake, D. McMoran, T. Schultz, T. Lawrence, C. Rome, L. Lewis, A. Bergstrom, and B. Gaolach (1/11 - 4/13) (5, \$10,000).

King County Food and Fitness Initiative. Seattle King County Public Health / Safe Routes to School. \$150,000. P.I**: B. Gaolach** and CoPI: M. Aitken (1/10-6/11) **(1,2,3,4,5).** 

King County Food and Fitness Initiative – Implementation Phase. W.K. Kellogg Foundation. \$1,200,000. P.I: **B. Gaolach** (2009-2011) **(1,2,3,4,5).** 

Food \$ense, King County. Food Stamp Nutrition Education Program (FSNEP). \$668,468. PI: M. Aitken and coPI: **B. Gaolach** (1/09-12/09) (4,5).

Carbon Coaches Pilot Program. City of Seattle. \$14,950 PI: B. Gaolach (1/09 – 12/09) (1,2,3.4.5).

<sup>&</sup>lt;sup>1</sup>Key to indicators or description of contributions to Grants, Contracts and Fund Generation: 1 = Provided the initial idea; 2 = Developed research/program design and hypotheses; 3 = Authored or co-authored grant application; 4 = Developed and/or managed budget; 5 = Managed personnel, partnerships, and project activities.

- Integrated Weed Control Project. U.S. Forest Service. \$6,000. Pl: B. Gaolach and CoPI: J. Andreas (1/09-12/09) (3,4,5).
- Transitioning Acting Food Policy Council for Seattle and King County. City of Seattle. \$11,800. PI: B. Gaolach (1/09 - 12/09) (1,2,3,4,5).
- Youth Environmental Leadership Institute, King County Dept. of Natural Resources and Parks. \$19,250. PI: A. Grotta and CoPI: **B. Gaolach** (1/09-12/09) (3,4,5).
- Youth Environmental Leadership Institute. King County Noxious Weed Control Board. \$2,250. PI: A. Grotta and CoPI: **B. Gaolach** (1/09-12/09) (3,4,5).
- King County Food and Fitness Initiative Extended Planning Phase, W.K. Kellogg Foundation. \$130,000. P.I: **B. Gaolach** (2009, 5 months) (1,2,3,4,5).
- Integrated Weed Control Project. U.S. Forest Service. \$165,000. Pl: B. Gaolach and CoPI: J. Andreas (1/08-12/08) (3,4,5).
- Kent Century 21 Afterschool Program. Washington Alliance for Better Schools. \$20,381. PI: S. Lerner and CoPI: **B. Gaolach** (1/08-12/08) (3,4,5).
- Summer Youth Forestry Institute. King County Dept. of Natural Resources and Parks. \$19,250. PI: A. Grotta and CoPI: **B. Gaolach** (1/08-12/08) (3,4,5).
- Summer Youth Forestry Institute. Society of American Foresters. \$1,200. PI: A. Grotta and CoPI: B. Gaolach (1/09-12/09) (3,4,5).
- Food \$ense, King County. Food Stamp Nutrition Education Program (FSNEP). \$668,071. Pl: M. Aitken and coPI: **B. Gaolach** (1/08-12/08) (4,5).
- Foam ban outreach in Delridge and White Center Neighborhoods. City of Seattle. \$5,000. PI: D. Batura and coPI: **B. Gaolach** (1/08 - 12/08) **(1,2,3.4.5).**
- King County Food and Fitness Initiative Planning Phase. W.K. Kellogg Foundation. \$500,000. PI: S.Kantor and coPI: **B. Gaolach** (1/07-12/09) **(1,2,3,4,5, \$94,325).**
- King County Food and Fitness Initiative. Seattle Foundation. \$50,000. PI: S.Kantor and coPI: B. Gaolach (1/07-12/08) (1,2,3,4,5).
- Studies of the gall mite, Aceria genistae, as a Potential Biological Control of Scotch Broom, U.S. Forest Service. \$55,455. PI: J. Andreas and CoPI: B. Gaolach (1/07-12/08) (3,4,5).
- Integrated Weed Control Project. U.S. Forest Service. \$165,000. PI: B. Gaolach and CoPI: J. Andreas (1/07-12/07) (3,4,5).
- Acting Food Policy Council for Seattle and King County. Carolyn Foundation. \$4,102. PI: S.Kantor and CoPI: **B. Gaolach** (1/07-12/07) **(2,3,4,5).**
- Kent Century 21 Afterschool Program, Washington Alliance for Better Schools. \$5,797. PI: S. Lerner and CoPI: **B. Gaolach** (1/07-12/07) (3,4,5).
- Summer High School Forestry Program. King County Dept. of Natural Resources and Parks. \$13,880. PI: A. Grotta and CoPI: **B. Gaolach** (1/07-12/07) **(3,4,5).**
- Food \$ense, King County. Food Stamp Nutrition Education Program (FSNEP). \$610,532. PI: M. Aitken and coPI: **B. Gaolach** (1/07-12/07) (4,5).
- Digging Deeper: Cultivating Youth and Cultural Links of the King County Food and Fitness Initiative. Seattle Foundation. \$50,000. PI: S. Kantor and CoPI: B. Gaolach (1/07-12/07) (2,3,4,5).
- Noxious Weed Biological Control. Pierce County Noxious Weed Control Board. \$3,000. PI: J. Andreas and CoPI: T. Zimmerman and B. Gaolach (1/06-12/06) (3,4,5).
- Noxious Weed Biological Control. King County Noxious Weed Control Board. \$5,000. Pl: J. Andreas and CoPI: T. Zimmerman and B. Gaolach (1/06-12/06) (3,4,5).
- Noxious Weed Biological Control. Clark County Noxious Weed Control Board. \$6,000. PI: J. Andreas and CoPI: T. Zimmerman and B. Gaolach (1/06-12/06) (3,4,5).
- Noxious Weed Biological Control. WSU Extension Northwest District. \$9,400. PI: J. Andreas and CoPI: T. Zimmerman and **B. Gaolach** (1/06-12/06) **(3,4,5).**

- Noxious Weed Biological Control. WSU Extension Southwest District. \$2,000. PI: J. Andreas and CoPI: T. Zimmerman and **B. Gaolach** (1/06-12/06) (3,4,5).
- Food \$ense, King County. Food Stamp Nutrition Education Program (FSNEP). \$253,152. PI: M. Aitken and coPI: **B. Gaolach** (1/06-12/06) **(4,5).**
- Food \$ense, King County. Food Stamp Nutrition Education Program (FSNEP). \$341,032. PI: H. Freishtat and coPI: T. Kunzi-Clark, S. Kantor, and B. Gaolach (1/05-12/05) (4,5).
- Bioagents for Invasive Weed Species Project. USFS. \$206,000. PI: D. Fagerlie and CoPI: B. Gaolach, D. Palmer, D. Whaley, T. Zimmerman, & G. Piper (1/05-12/05) (3,4,5).
- Noxious Weed Biological Control. Pierce County Noxious Weed Control Board. \$3,000. PI: B. Gaolach and CoPI: T. Zimmerman (1/05-12/05) (3,4,5).
- Noxious Weed Biological Control. King County Noxious Weed Control Board. \$5,000. Pl: B. Gaolach and CoPI: T. Zimmerman (1/05-12/05) (3,4,5).
- Food \$ense, King County. Food Stamp Nutrition Education Program (FSNEP). \$369,414. PI: H. Freishtat and coPI: T. Kunzi-Clark, S. Kantor, and B. Gaolach (1/04-12/04) (4,5).
- Bioagents for Invasive Weed Species Project. USFS. \$56,615. PI: D. Fagerlie and CoPI: B. Gaolach, D. Palmer, D. Whaley, T. Zimmerman, & G. Piper (1/04-12/04) (3,4,5).
- Noxious Weed Biological Control. Pierce County Noxious Weed Control Board. \$2,000. PI: B. Gaolach and CoPI: T. Zimmerman (1/04-12/04) (3,4,5).
- Noxious Weed Biological Control. King County Noxious Weed Control Board. \$5,000. Pl: B. Gaolach and CoPI: T. Zimmerman (1/04-12/04) (3,4,5).
- Farming for the Future: Bringing the next generation of farmers to the land. WSARE. \$145,800. PI: B. Gaolach and CoPI: M. Ostrom (1/03-12/05) (1,2,3,4,5).
- Integrating Biological Control into Cole Crop Production in the Pacific Northwest. WSARE. \$63,841. PI: W. Snyder and CoPI: R. Prasad, J. Stark, B. Gaolach, D. Havens, E. Haakenson, D. Hedlin, M. Lyons, and N. O'Neal (1/03-12/05) (1,2).
- Organic control options for flea beetles on arugula. WSARE. \$7,500. PI: B. Gaolach and CoPI: A. Stout (1/03-12/03) **(1,2,3,4,5)**.
- Food \$ense, King County. Food Stamp Nutrition Education Program (FSNEP). \$666,282. PI: H. Freishtat and coPI: S. Adams, J. Royster, C. Booker, and B. Gaolach (1/03-12/03) (4,5).
- Conservation Tools for Landowners. WA Dept. of Ecology. \$44,000. PI: Racette, P and CoPI: B. Gaolach (1/03-12/03) (3,4,5).
- Bioagents for Invasive Weed Species Project. USFS. \$56,615. PI: D. Fagerlie and CoPI: B. Gaolach, D. Palmer, D. Whaley, & G. Piper (1/03-12/03) (3,4,5).
- Training Environmental Stewards: Integrating Water Quality & Quantity Education from Mountain to Ocean. USDA Water Quality Improvement Program. \$286,000. PI: B. Gaolach and CoPI: S. Kantor (1/02-12/04) **(1,2,3,4,5)**.
- Bioagents for Invasive Weed Species Project. USFS. \$56,615. PI: D. Fagerlie and CoPI: B. Gaolach, D. Palmer, D. Whaley, & G. Piper (1/02-12/02) (3,4,5).
- Conservation Tools Education Program. Puget Sound Water Quality Action Team: Public Involvement and Education (PIE). \$7,000. PI: S. Kantor and CoPIs: B. Gaolach and P. Racette (1/02-12/02) (4,5).
- King County Agricultural Drainage Maintenance. King County. \$888,884. PI: S. Chen and CoPIs: B. Gaolach, C. Feise, M. Barber, J. Dobrowolski (1/01-12/05) (1,3,4,5).
- Food \$ense, King County. Food Stamp Nutrition Education Program (FSNEP). \$303,000. PI: P. Gutierrez and coPI: S. Adams and **B. Gaolach** (1/01-12/01) (4,5).
- Use of Cover Crops to Control Insect Pests in Brassicaceae crop production. Organic Farming Research Foundation. \$8,650. PI: **B. Gaolach** (1/00-12/00) **(1,2,3,4,5).**

Use of Cover Crops to Control Insect Pests in Brassicaceae crop production. Washington State Commission on Pesticide Registration. \$8,770. Pl: B. Gaolach (1/00-12/00) (1,2,3,4,5).

#### B. Gifts and Awards

(1,2,3,4,5).

The YWCA Learning Center at Greenbridge. Gates Foundation funded through YWCA of Seattle, King and Snohomish Counties. \$440,000. PI: S. Sherbrooke and CoPIs: M. Reibe and B. Gaolach (capital construction award towards joint building project) (3).

## C. Program Revenue Generation and Sponsorships

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Cascadia Grains Conference. $16,760. Pl: L. Patzik and CoPI B. Gaolach (2013) (1,2,3,4,5).
Urban Agriculture Summit. $41.000. PI: B. Gaolach and CoPI: S. Reichard (2012) (1,2,3,4,5).
Harvest Celebration. $35,890. PI: B. Gaolach (2009) (1,2,3,4,5).
Harvest Celebration. $34,750. PI: B. Gaolach (2008) (1,2,3,4,5).
Harvest Celebration. $33,900. PI: B. Gaolach (2007) (1,2,3,4,5).
Small Farm Expo. $9,655. PI: B. Gaolach (2007) (1,2,3,4,5).
Harvest Celebration. $39,453. PI: B. Gaolach (2006) (1,2,3,4,5).
Small Farm Expo. $8,357. PI: B. Gaolach (2006) (1,2,3,4,5).
Harvest Celebration. $23,718. PI: B. Gaolach (2005) (1,2,3,4,5).
Small Farm Expo. $7,642. PI: B. Gaolach (2005) (1,2,3,4,5).
Harvest Celebration. $11,150. PI: B. Gaolach (2004) (1,2,3,4,5).
Small Farms Expo. $5,126. Pl: B. Gaolach (2004) (1,2,3,4,5).
Harvest Celebration. $3,200. PI: B. Gaolach (2003) (1,2,3,4,5).
Small Farm Expo. $12,025. B. Gaolach (2003) (1,2,3,4,5).
Harvest Celebration. $2,400. Pl: B. Gaolach (2002) (1,2,3,4,5).
Living on the Land. $1,102. PI: B. Gaolach (2002) (1,2,3,4,5).
Youth Education Program. WSU Food & Farm Connection Team. $1,000. PI: B. Gaolach (2002)
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Harvest Celebration. King County Agricultural Commission. \$2,500. PI: B. Gaolach (2001) (1,2,3,4,5).

## D. MOA's and funding secured from Public, Non-profit, and Private entities

Pierce County Extension MOA. Pierce County. \$353,450. P.I. B. Gaolach and CoPIs: K. Barale and M. Aitken (1/13 – 12/13) (1,2,3,4,5).

Pierce County Extension MOA. Pierce County. \$338,346. P.I. B. Gaolach (1/12 – 12/12) (1,2,3,4,5).

King County Extension MOA. King County. \$174,676. P.I. B. Gaolach (1/11 – 12/11) (1,2,3,4,5).

Pierce County Extension MOA. Pierce County. \$312,030. P.I. B. Gaolach (1/11 – 12/11) (1,2,3,4,5).

Pierce County Extension MOA. Pierce County. \$306,000. P.I. B. Gaolach (1/10 – 12/10) (1,2,3,4,5).

King County Extension MOA. King County. \$124,000. P.I. B. Gaolach (1/10 – 12/10) (1,2,3,4,5).

WSU King County Extension Sustainable Agriculture Program. King Conservation District. \$104,510.

P.I. B. Gaolach and CoP.I.: T. Murray, S. Kantor, and D. Batura. (1/09 – 12/09) (1,2.3.4.5).

King County Extension MOA. King County. \$696,872. P.I. B. Gaolach (1/09 – 12/09) (1,2,3,4,5).

Early Head Start Program. Children's Home Society of Washington. \$14,445. PI: B. Gaolach and CoPI: G. Alleman (1/09-12/09) (3,4,5).

King County Extension MOA. King County. \$773,589. P.I. B. Gaolach (1/08 – 12/08) (1,2,3,4,5).

WSU King County Extension Sustainable Agriculture Program. King Conservation District. \$142,000.

P.I. **B. Gaolach** and CoP.I.: T. Murray, S. Kantor.(1/08 – 12/08) **(1,2.3.4.5).** 

Early Head Start Program. Children's Home Society of Washington. \$14,445. PI: B. Gaolach and CoPI: G. Alleman (1/08-12/08) (3,4,5).

- King County Extension MOA. King County. \$795,086. P.I. B. Gaolach (1/07 12/07) (1,2,3,4,5).
- WSU King County Extension Sustainable Agriculture Program. King Conservation District. \$152,500. P.I. B. Gaolach and CoP.I.: T. Murray, S. Kantor (1/07 – 12/07) (1,2.3.4.5).
- Early Head Start Program. Children's Home Society of Washington. \$14,445. PI: B. Gaolach and CoPI: G. Alleman (1/07-12/07) (3,4,5).
- King County 4-H Urban Program Capacity Building Proposal. Paul G. Allen Family Foundation funded through the 4-H Foundation. \$50,000. PI: M. Reibe and CoPI: S. Lerner and B. Gaolach (1/06-12/07) **(2,3,4,5)**.
- King County Extension MOA. King County. \$892,041. P.I. B. Gaolach (1/06 12/06) (1,2,3,4,5).
- Additional funding for King County 4-H, King County Council. \$25,000. Pl: S. Lerner and CoPI: B. Gaolach (1/06-12/06) (3,4,5).
- Harvest Celebration. King Conservation District. \$20,000. P.I. B. Gaolach and CoP.I.: S. Kantor and H. Cavendish-Palmer.(1/06 - 12/06) (1,2.3.4.5).
- King County Extension MOA. King County. \$748,907. P.I. B. Gaolach (1/05 12/05) (1,2,3,4,5).
- King County Extension MOA. King County. \$794,213. P.I. B. Gaolach (1/04 12/04) (1,2,3,4,5).

## E. Fellowship and Training Support

- Washington State SARE Professional Development Program: Hosting Educational Events Related Agricultural Sustainability. \$800. PI: B. Gaolach (2003) (1,2,3,4,5).
- Washington State SARE Professional Development Program: Attending Educational Events Related Agricultural Sustainability. \$400. PI: B. Gaolach (2003) (1,2,3,4,5).
- Western SARE Travel Scholarship for Professional Training. \$200. PI: B. Gaolach (2001) (1,2,3,4,5). Achievement Rewards for College Scientist (ARCS) Fellowship. \$15,000. B. Gaolach (1/96-12/98)
  - Awarded.
- Pre-doctoral Fellowship. National Science Foundation. Three years tuition and fees + \$5,000. B. Gaolach (10/93-6/97) (1,2,3,4,5).
- Research Assistantship. North Carolina Agricultural Research Service / College of Agriculture & Life Sciences. One year tuition and fees. (1992) Awarded.

# PUBLICATIONS AND CREATIVE WORK<sup>2</sup>

(Published under last name Klepetka until 2000)

## A. Peer-reviewed Journal Articles.

- Horst, M. and B. Gaolach. The potential of local food systems in North America: A review of foodshed analyses. Renewable Agriculture and Food Systems, available on CJO2014. DOI:10.1017/S1742170514000271. (4,6)
- Charbonneau, D., Cheadle, A., Orbe, C., Frey, M., & Gaolach, B. 2014. FEEST on this: Youth engagement for community change in the King County Food and Fitness Initiative. Community Development 45: 240-251. DOI: 10.1080/15575330.2014.901399 (1,2,6)
- Schoenly, K. G., M. B. Cohen, A. T. Barrion, W. Zhang, B. Gaolach, and V. D. Viajante. 2003. Effects of Bacillus thuringiensis on non-target herbivore and natural enemy assemblages in tropical irrigated rice. Environ. Biosafety Res. 3: 181-206. (3,4,6)

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<sup>&</sup>lt;sup>2</sup>Key to indicators or description of contributions to Publications and Creative Work: 1 = Developed the initial idea; 2 = Obtained or provided funds or other resources; 3 = Collected data; 4 = Analyzed data; 5 = Wrote/created product; 6 = Edited product.

- Klepetka, B. and F. L. Gould. 1996. Effects of age and size on mating in Heliothis virescens (Lepidoptera: Noctuidae): implications for resistance management. Environ. Entomol 25: 993-1001. **(1,2,3,4,5,6)**
- Doak, D. and B. Klepetka. 1994. Modeling population viability for the desert tortoise in the Western Mojave desert. Ecological Applications 4(3): 446-460. (3,4,5,6)
- Grevstad, Fritzi S., and B. Klepetka. 1992. The influence of plant architecture on the foraging efficiencies of a suite of Ladybird Beetles feeding on aphids. Oecologia, 92: 399-404. (1,2,3,4,5,6)
- Morris, W.F., S.D. Wiser, and B. Klepetka. 1992. Causes and consequences of spatial aggregation in the phytophagous beetle Altica tombacina. J. of Animal Ecology, 61: 49-58. (3,5,6)

## B. Creative Scholarship in Juried Events.

- Moulton, C., M. Aitken, B. Gaolach, S. Lerner, and A. Holzer. 2014. STEM Mentor Training Learning to Inspire the Next Generation. University of New Mexico Annual Mentoring Conference, proceedings. (1,2,5,6)
- Barale, K., Gaolach, B., Wells, N.M., Myers, B.M., Ferenz, G., Aitken, M., Gao, J.C., Todd, L.E., Wilkins, J.L., Tse, C.C. 2014. Healthy gardens, healthy youth: school garden pilot project educational toolkit. Society for Nutrition Education and Behavior (SNEB) annual meeting. Milwaukee, WI June 2014. (1,2,6)
- Aitken, M., Gaolach, B., Wells, N. Barale, K. Myers, B. Ferenz, G., Tse, C., Toering, J., Carson, L., Connerly, L., and Falk, L. 2014. Healthy Gardens, Healthy Youth - People's Garden School Pilot Project. National Association of Community Development Extension Professionals. Grand Rapids, MI, June 2014. (1,2,5,6)
- Gaolach, B., M. Aitken, G. Ferenz, K. Barale, N. Wells, B. Myers, C. Henderson, J. Wilkins, C. Tse, J. Toering, L. Naeve, J. Carson, L Connerly, and L. Falk. 2012. Healthy gardens, healthy youth: People's garden school pilot project. Sustainable Food, Agriculture and Natural Resources Symposium. Pullman, WA. Dec 2012. (1,2,5,6)
- Andreas, J.E., Zimmerman, T.J., Fagerlie, D.L., Gaolach, B.W., Whaley, D.K., Wilson, T.W. 2007. Successful biological control of invasive plant species in Washington. In: Harrington, T.B., Reichard, S.H. (eds). Meeting the Challenge: Invasive Plants in Pacific Northwest Ecosystems. USDA-FS General Technical Report PNW-GTR-694, Portland OR, pp 51-52. (2,6)
- Fagerlie, D.L., Andreas, J.E., Zimmerman, T.J., Gaolach, B.W., Whaley, D.K., Wilson, T.W. 2007. The Integrated Noxious Weed Invasive Species Project (INWISP) of Washington State. In: Harrington, T.B., Reichard, S.H. (eds). Meeting the Challenge: Invasive Plants in Pacific Northwest Ecosystems. USDA-FS General Technical Report PNW-GTR-694, Portland OR, pp139-141. (2,6)
- Aitken M., B. Gaolach, M. Darrow. 2007. Food Sense CHANGE. Poster presented at All Extension Conference, WSU; 7-8 March 2007; Spokane, WA. (2,6)
- Gaolach, B., T. Zimmerman, A. Grotta, P. Racette, and S. Kantor. 2006. Training Environmental Stewards from Mountains to Ocean: A Water Quality Training Curriculum. Poster presentation at 5<sup>th</sup> Natural Resource Extension Professionals Conference: Finding the 'ability' in sustainability, May 14-17, 2006, Park City, Utah. (1,2,5,6)
- Gaolach, B., S. Kantor, P. Racette, T. Zimmerman, A. Grotta, D. Batura, and G. Cook. 2006. Training Environmental Stewards: Integrating Water Quality and Quantity Education from Mountains to Ocean. Poster presentation at CSREES National Water Quality Conference: Research, Extension, and Education for Clean Water, February 2006, San Antonio, TX. (1,2,5,6)
- Gaolach, B., S. Kantor, P. Racette, T. Zimmerman, A. Grotta, D. Batura, and G. Cook. 2005. Training Environmental Stewards: Integrating Water Quality and Quantity Education from Mountains to

- Ocean. Poster presentation at CSREES National Water Quality Conference: Research, Extension, and Education for Clean Water, February 2005, La Jolla, CA. (1,2,5,6)
- Gaolach, B. 2005. Flea beetles: biology & control options. Proceedings of the 95<sup>th</sup> Annual Western Washington Horticultural Association, January 11-13, 2005 SeaTac, WA. (1,2,3,4,5,6)
- Fagerlie, D.L., Gaolach, B.W., Andreas, J.E., Whaley, D.K., Wilson, T. and Zimmerman, T.J. 2005. The purple loosestrife problem: A biological control approach in western Washington. Poster presented at Western IPM Center Symposium - Water, Wildlife and Pesticides in the West: Pest Management's Contribution to Solving Environmental Problems. Aug 31-Sept 1 2005, Portland, Oregon. (2,6)
- Fagerlie, D.L., Gaolach, B.W., Andreas, J.E., Whaley, D.K., Wilson, T. and Zimmerman, T.J. 2005. The purple loosestrife problem: A biological control approach in western Washington. Poster presented at 55th Annual Weed Conference - Washington State Weed Association, November 2-4 2005, Yakima, WA. **(2,6)**
- Fagerlie, D.L., B. Gaolach, D.G. Palmer, D.K. Whaley, and T. Zimmerman. 2004. Washington State Invasive Species Bioagent Enhancement Program. Poster presentation at Washington Tilth Producers Annual Conference Portland OR. (2,6)
- Gaolach, B. and A. Stout. 2004. Organic control options for flea beetles in Arugula. Poster presentation at Washington Tilth Producers Annual Conference Portland OR. (1,2,3,4,5,6)
- Gaolach, B. 2004. Dirty cropping and insect community structure: Can relaxed weed control benefit pest control in Brassicaceae crops. Poster presentation at Washington Tilth Producers Annual Conference Portland OR. (1,2,3,4,5,6)
- Gaolach, B., M. Barber, S. Chen, J. Dobrowolski, T. Cichosz, D. Shepard, L. Seebacker. 2004. Protecting salmonid habitat in agricultural drainage watercourses with the evaluation and development of best management practices. Poster presentation at Washington Tilth Producers Annual Conference Portland OR. (1,2,6)
- Gaolach, B., M. Barber, S. Chen, J. Dobrowolski, T. Cichosz, D. Shepard, L. Seebacker. 2004 Protecting salmonid habitat in agricultural drainage watercourses with the evaluation and development of best management practices. Water Resources Extension/Research Colloquia. April 23, 2004, Washington State University, Pullman, WA. (1,2,6)
- Kantor, S, Gutierez, P, Freishtat, H, and Gaolach, B. 2003. Creating a Healthy Foodshed: Closing the gap between health/hunger and food production. Poster presentation at Innovations in Food Systems Education Conference, September 25-27, 2003, Washington State University, Pullman, WA. **(1,2,6)**
- Gaolach, B. 2004. Dirty Cropping and Insect Community Structure: Can relaxed weed control benefit pest control in Brassicaceae crops? Poster presentation at XXII International Congress of Entomology: Strength in Diversity, August 15-21, 2004, Brisbane, Australia. (1,2,3,4,5,6)
- Fagerlie, D.L., B. Gaolach, D.G. Palmer, D.K. Whaley, and T. Zimmerman. 2004. Washington State Invasive Species Bioagent Enhancement Program. Poster presentation at XXII International Congress of Entomology: Strength in Diversity, August 15-21, 2004, Brisbane, Australia. (2,6)
- Fagerlie, D.L., B. Gaolach, D.G. Palmer, D.K. Whaley, and T. Zimmerman. 2004. Washington State Invasive Species Bioagent Enhancement Program. In, Snyder, W., and C. Miles (eds.). 2004. Making the bugs work for you: Biological control in organic agriculture. Symposium proceedings. Washington State University Center for Sustaining Agriculture and Natural Resources, Portland OR. **(2,6)**
- Gaolach, B. and A. Stout. 2004. Organic control options for flea beetles in Arugula. In, Snyder, W., and C. Miles (eds.) Making the bugs work for you: Biological control in organic agriculture. Symposium proceedings. Washington State University Center for Sustaining Agriculture and Natural Resources, Portland OR. (1,2,3,4,5,6)

- Gaolach, B. 2004. Dirty cropping and insect community structure: Can relaxed weed control benefit pest control in Brassicaceae crops. In, Snyder, W., and C. Miles (eds.). 2004. Making the bugs work for you: Biological control in organic agriculture. Symposium proceedings. Washington State University Center for Sustaining Agriculture and Natural Resources, Portland OR. (1,2,3,4,5,6)
- Gaolach, B., M. Barber, S. Chen, J. Dobrowolski, T. Cichosz, D. Shepard, L. Seebacker. 2004. Protecting salmonid habitat in agricultural drainage watercourses with the evaluation and development of best management practices. In, Snyder, W., and C. Miles (eds.). 2004. Making the bugs work for you: Biological control in organic agriculture. Symposium proceedings. Washington State University Center for Sustaining Agriculture and Natural Resources, Portland OR. **(1,2,6)**
- Gaolach, B. 2004. Training Environmental Stewards: Integrating Water Quality & Quantity Education from Mountain to Ocean. USDA-CSREES National Water Quality Conference: Integrating Research, Extension and Education January 11-14, 2004 Clearwater, Florida. (1,2,3,4,5,6)
- Kantor, S, Gutierrez, P, Freishtat, H, and Gaolach, B. 2003. Creating a Health Foodshed: Closing the gap between health/hunger and food production. Poster presentation at Growing the Movement: New Opportunities and Challenges for Community Food Security, 7th Annual Conference of the Community Food Security Coalition, November 1-5, 2003, Boston, MA. (2,6)
- Gaolach, B. 2001. Utilizing Polycultures and Cover Crops to Control Insect Pests in Brassicaceae Crops. Proceedings of the 2001 Pacific Northwest Vegetable Association, Pasco, WA. (1,2,3,4,5,6)
- Klepetka, B. and F. Gould. 1994. Assortative Mating in Heliothis virescens: Impact on Resistance Management. Poster presentation at Entomological Society of America National Meeting, December, 1994. (1,2,3,4,5,6)
- Winterer, J., B. Klepetka, J. Banks, and P. Kareiva. 1992. Crop intensification and increased pest problems: strategies for minimizing the vulnerability of rice to pest epidemics. Proceedings of the 1992 International Rice Research Conference, IRRI, Manila, edited by P. Pingali. (3,4,5,6)
- Kareiva, P., J. Winterer, and B. Klepetka. 1992. Overcoming pest and pathogen adaptability using insights from evolutionary biology. Sixth International Symposium on Molecular Plant-Microbe Interactions, edited by Howard Clark. (3,4,5,6)

## C. Educational Digital Media

- Western Center for Metropolitan Extension and Research: http://metroextension.wsu.edu. (1,2,5,6) Healthy Gardens, Healthy Youth: http://peoplesgarden.wsu.edu. (1,2,5,6).
- Lerner, S.J., Aitken, M.E., Moulton, C.J., Gaolach, B., Holzer, A.D., & Peckinpaugh, S. (in progress). WSU Mentoring Training Program. (1,2,6)
- Barale, K.V., Toering, J., Ferenz, G., Falk, L., Eames-Sheavly, M., & Gaolach, B. 2013. Healthy Gardens, Healthy Youth Educational Toolkit. http://peoplesgarden.wsu.edu. (1,2,6)
- Gaolach, B., T. Zimmerman, A. Grottta, and P. Racette. 2006. Training Environmental Stewards from Mountains to Ocean: A Water Quality Curriculum. CSREES/USDA No. 2002-51130-01940. (1,2,5,6)
- Gaolach, B. 2006. Agriculture and the Health of Your watershed. Module-4 pp. 1-130 In Gaolach, B., T. Zimmerman, A. Grotta, and P. Racette. Training Environmental Stewards from Mountains to Ocean: A Water Qaulity Curriculum. CSREES/USDA No. 2002-51130-01940. (1,2,5,6)
- Meehan, D, S.A Braithwaite, K.F. Duncan, B. Gaolach, S. Kantor, P. Racette, C. Roos. 2003. Volunteer Hours System -- a Web-Database for Entering Volunteer Hours. (http://ext.wsu.edu/Volunteers/). (1,6)

- Computer simulation models used in Dr. Fred Gould's "Insect Ecology" course taught at North Carolina State University for at least eight years (developed 1993). (1,2,3,4,5,6)
- Pedigo, L. P. and M. R. Zeiss. 1996. Analyses in Insect Ecology and Management, Iowa State University Press, Ames, IA program and lab exercise to the program package, ENSTAT, used in ENT 671, "Insect Population Ecology" at Iowa State University (1,2,3,4,5,6)
- Tortoise, Spatial and Non-spatial Models. Developed for the US Army Corps of Engineers and Bureau of Land Management for minimum viable population analysis of the Desert Tortoise (Gopherus agassazii), 1991. (3,4,5,6)

#### D. Other Publications and Creative Works

- Gaolach, B., M. Aitken, K. Barale, and NW Wells. 2014. People's Garden School Pilot Project: Healthy Gardens, Healthy Youth Final Technical Report. USDA: FNS Project Number CN-CGP-11-0047.
- Gaolach, B and G. Cook. King County Extension Livestock Advisor Training Manual. (1,2,5,6)
- Kruger, C.E., Yorgey, G., & Gaolach, B. 2008. Biodiesel Use in King County: Gathering Information about Greenhouse Gas Impacts, Production Potential in Washington State, and Alternative Fuel Options. A Report to the King County Executive Office. (1,2,6)
- Andreas J., B. Gaolach. 2007. Integrated Weed Control Project FY2008 Progress Report. USFS Region 6. (2,6)
- Gaolach, B. and T. Zimmerman. 2007. "Training Environmental Stewards from Mountains to Ocean: a Water Quality Curriculum", USDA-CSREES National Integrated Water Quality Program Impact Report (pg 16). (1,2,5,6)
- Murray T., B. Gaolach, D. Muehleisen, M. Ostrom. 2007. Farming for the Future: Cultivating the Next Generation of Farmers. SARE Education and Research project SW03-016. (1,2,5,6)
- Fagerlie D., B. Gaolach, G. Piper, D. Whaley, T. Wilson, T. Zimmerman, J. Andreas. Washington State Bioagent News. 2007 Feb. online newsletter. (2,6)
- Murray T., B. Cha, B. Gaolach, D. Muehleisen, M. Ostrom. 2006. Farming for the Future: Cultivating the Next Generation of Farmers. SARE Education and Research project SW03-016. (1,2,5,6)
- Gaolach, B. 2005. Abomination: Flea Beetles. In Tilth Producers Quarterly, A Publication of Organic and Sustainable Agriculture, Vol. 14, Number 2. (1,2,5,6)
- Gaolach, B., D. Muehleisen, M. Ostrom. 2005. Farming for the Future: Cultivating the Next Generation of Farmers. SARE Education and Research project SW03-016. (1,2,5,6)
- Gaolach, B., D. Muehleisen, M. Ostrom. 2004. Farming for the Future: Cultivating the Next Generation of Farmers. SARE Education and Research project SW03-016. (1,2,5,6)
- Gaolach, B. and G. Cook. 2001-2004. State of the Stock. Bi-annual publication for our Extension Livestock Advisors. (1,2,6)
- Gaolach, B, and S. Kantor. 2001-2004. Agricultural Happenings. Published monthly to an audience of 600. **(2,6)**
- Gaolach, B. Year-End King County Extension Report; 2004-2009 (1,2,5,6)
- Gaolach, B. Mid-Year King County Extension Report; 2004-2009 (1,2,5,6)
- Gaolach, B. and H. Cavendish-Palmer. 2006. "Small Farm Expo 2006." In 2006 Year-End Report. (1,2,3,4,5,6)
- Gaolach, B., and T. Zimmerman. 2006 "Training Environmental Stewards: Integrated Water Quality & Quantity Education From Mountain to Ocean." In 2006 Mid-Year Report. (1,2,5,6)
- Gaolach, B. 2005. Leveraging resources: DNRP and Washington State University (WSU) King County Extension (KCE). Measuring for Results: King County Department of Natural Resources and Parks Third Annual Performance Measure Report – 2004. (1,2,5,6)

- Kantor, S., Gaolach, B. and H. Cavendish-Palmer. 2005. Washington State University Extension's King County Harvest Celebration Farm Tour: Summary Report of Seven Years of Growth and Impact. WSU King County Extension. Renton, WA. (1,2,3,4,5,6)
- Gaolach, B. and H. Cavendish-Palmer. 2005. "Small Farm Expo 2005." In 2005 Year-End Report. (1,2,3,4,5,6)
- Gaolach, B. and H. Cavendish-Palmer. 2005. "Small Farm Expo 2005." In 2005 Mid-Year Report. (1,2,3,4,5,6)
- Gaolach, B., and P. Racette . 2005. "Training Environmental Stewards: Integrated Water Quality & Quantity Education From Mountain to Ocean." In 2005 Mid-Year Report. (1,2,6)
- Gaolach, B. 2005. Celebrating the Bounty of King County. Pg. 3, Harvest Celebration Farm Tour insert in Seattle Weekly, Vol. 30, Number 37. (1,5,6)
- Gaolach, B. 2004. Farm fresh food It's closer than you think. Pg. 3, Harvest Celebration Farm Tour insert in Seattle Weekly, Vol. 29, Number 37. (1,5,6)
- Gaolach, B. 2004. "Expo Trots Out the Goods for Gardens and Small Farms." The Seattle Times, March 24, pg. F6. (Written under byline of Mary Robson.) (1,5,6)
- Gaolach, B. 2004. "Stewardship and Conservation Tools Education Program." In 2004 Year-End Report (1,2,6)
- Gaolach, B., and P. Racette. 2004. "Extension Watershed Stewardship." In 2004 Year-End Report.
- Gaolach, B., and P. Racette. 2004. "Stewardship and Conservation Tools Education Program." In 2004 Year-End Report **(1,2,6)**
- Gaolach, B. 2003. Living on the Land, in Farms and Woodlands on the Urban Fringe. A newsletter from King County Extension Water, Land, Farms and Food program. (1,2,6)
- Gaolach, B. 2003. Agricultural Census 2002, in Farms and Woodlands on the Urban Fringe. A newsletter from King County Extension Water, Land, Farms and Food program. (1,2,6)
- Gaolach, B. 2004. "2003 Harvest Celebration Farm Tour." In 2004 Mid-Year Report. (1,2,3,4,5,6)
- Gaolach, B., and P. Racette. 2004. "Conservation Tools Education Program." In 2004 Mid-Year Report. (1,2,6)
- Gaolach, B. 2004. "Farming for the Future." In 2004 Mid-Year Report. (1,2,5,6)
- Gaolach, B. 2004. "Small Farm Expo, 2004." In 2004 Mid-Year Report. (1,2,3,4,5,6)
- Gaolach, B. 2004. "Training Environmental Stewards: Integrated Water Quality & Quantity Education From Mountain to Ocean." In 2004 Mid-Year Report. (1,2,5,6)
- Gaolach, B. 2004. "Ditch Maintenance Research Project." In 2004 Mid-Year Report. (1,2,5,6)
- Gaolach, B. and H. Freishtat. 2004. "Food \$ense CHANGE Cultivating Health and Nutrition Through Gardening Education." In 2004 Mid-Year Report. (1,2,5,6)
- Gaolach, B. 2003. "Ditch Maintenance Research Project." (1,2,5,6)
- Gaolach, B. 2003. "Small Farm Expo." Gardening in Western Washington: Weekly Regional Garden Column, March 3, 2003. Available at: http://gardening.wsu.edu/column/03-02-03.htm(1,5,6)
- Gaolach, B. 2003. "Small Farm Expo scheduled for March 29 at King County Fairgrounds." Tacoma News Tribune, March 1, pg. E3. (1,5,6)
- Gaolach, B. 2002. "Alert! Hay contaminated with Toxic Weeds" in Conservation News. Published by Pierce Conservation District, Winter 2002. (1,5,6)
- Gaolach, B. 2002. Strategies for Livestock Manure Management. King County Agriculture and Natural Resource Fact Sheet # 539. (1,2,5,6)
- Gaolach, B. 2002. Clopyralid Herbicide and Compost. King County Agriculture and Natural Resource Fact Sheet # 538, available at: http://www.metrokc.gov/wsuce/agriculture/PDFs/Clopyralid.pdf. (1,2,5,6)
- Gaolach, B. 2002. Harvest Celebration. (Results of 2002 Harvest Celebration). (1,2,5,6)

Population viability models and analysis of the Desert Tortoise (Gopherus agassazii) in the Western Mojave Desert. Prepared for: US Army Corps of Engineers Los Angeles District. Prepared by: Chambers Group, Inc. (co-author). (3,4,5,6)

## **PRESENTATIONS**

## A. International

Wells, N.M., Myers, B.M., Gaolach, B., Henderson, C., Aitken, M., Ferenz, G., Tse, C., Barale, K., Toering, J., Naeve, L., Carson, J., Connerly, L., Todd, L., Wilkins, J., Falk, L. 2014. Do school gardens affect physical activity and diet? A randomized controlled trial in low-income schools. International Society for Behavioral Nutrition and Physical Activity. San Diego, CA, May 2014

## B. National

- Gaolach, B., L. Swanson, R. Koenig, and R. McDaniel. 2015. Regional Plan- Western Regional Vision and Plan. National Urban Extension Conference. Moderator of panel. Atlanta, GA. May 2015. **Invited Presentation**
- Gaolach, B. and P. Proden. 2015. Tales of Woe and Timing is Everything. National Urban Extension Conference. Atlanta, GA. May 2015. Invited Presentation
- Fox. J. and B. Gaolach. 2015. Leadership in the city, the history and future of urban Extension. Joint Council of Extension Professionals (JCEP). Annual Leadership Conference, Las Vegas, NV, Feb. 2015. Designated as a JCEP Select Presentation
- Gaolach, B., M. Aitken, K. Barale, N. Wells, E. Myers, G. Ferenz, C. Tse, J. Toering, J. Carson, L. Connerly, and L. Falk. 2014. Healthy Gardens, Healthy Youth - People's Garden School Pilot Project. Farm to Cafeteria Conference. Austin, TX. Apr 15-18, 2014.
- Gaolach, B., M. Aitken, K. Barale, N. Wells, E. Myers, G. Ferenz, C. Tse, J. Toering, J. Carson, L. Connerly, and L. Falk. 2013. Healthy Gardens, Healthy Youth – People's Garden School Pilot Project. Galaxy IV Conference. Pittsburgh, PA. Sept 16-20, 2013.
- Gaolach, B., K. Wilson, C. Kiang, and D. Thurness. 2013. People's garden school pilot program. American Community Gardening Association annual conference. Seattle, WA. Aug 8-10, 2013.
- Wells, N.M., Myers, E.M. Gaolach, B., Henderson, C., Wilkins, J., Ferenz, G., Aitken, M., Tse, C., Barale, K., Toering, J., Naeve, L., Carson, J., Connerly, L., Falk, E. 2013. Examining the effects of school gardens on children's diet and physical activity: A randomized controlled trial. Environmental Design Research Association annual meeting. Providence RI. May 2013 (1,2)
- Gaolach, B., Aitken, M.E., & Ferenz, G. 2013. Healthy Gardens, Healthy Youth; Part 1 Program and Research Overview. National Urban Extension Conference, Overland Park, KS.
- Barale, K.V., Ferenz, G., Gaolach, B., & Aitken, M.E. 2013. Healthy Gardens, Healthy Youth; Part 2 -Educational Toolkit and Distance Education. National Urban Extension Conference, Overland Park, KS.
- Aitken, M.E., Gaolach, B., & Orbe, C. 2013. King County Food & Fitness Initiative Collaborative Leadership to Support Health. National Urban Extension Conference, Overland Park, KS.
- Born, B., G. Gaolach, C. Garrido, O. Robinson, and P. Shulman. 2011. The Puget Sound's Food Policy Councils: From City to State. Food Policy from Neighborhood to Nation presented by Community Food Security Coalition, May 19-21, 2011, Portland, OR. (Authors alphabetical).
- Gaolach, B. 2007. Newer, Early Career Extension Professionals. Mid-Managers Conference, Jackson Hole WY **Invited Panel member**.
- Gaolach, B. 2005. *Utilizing Vegetational Diversity to Manipulate Insect Populations*, 89<sup>th</sup> Annual meeting, Pacific Branch, Entomological Society of America, Pacific Grove CA. Invited Presentation

## C. State

- Gaolach, B., F. Kirschenmann, M. Solomon, and V. Colman. 2014. Regionalizing our Food: Strengthening Washington's Food Systems: Challenges and opportunities – Panel Presentation. Focus on Farming, Monroe, WA November 2014. Invited Presentation.
- Gaolach, B. 2014. People's Garden School Pilot Program. Project Food, Land, and People. Annual conference, Denver, CO, October 2014. Invited Presentation.
- Gaolach, B. 2014. Issues & Development of Urban Extension In the West. UF/IFAS Extension Urban Extension Workshop. St. Pete, FL. June 2014. Invited Presentation.
- Gaolach, B., D. Canty, S. Daniels, C. Garrido, and R. Maskin. 2014. Addressing food policy in planning. Planning Association of Washington. Annual conference, Lynnwood, WA April 2014.
- Gaolach, B. 2005. Flea Beetles: Biology & Control Options, Western Washington Horticulture Association Annual Meeting, SeaTac WA. Invited Presentation
- Gaolach, B. 2004. Utilizing Polycultures and Cover Crops to Control Insect Pests in Brassicaceae Crops, Western Washington Horticultural Association Annual Meeting: SeaTac, WA. Invited Presentation
- Gaolach, B. 2003. Entomology: Learn to Identify Insect Orders; Organic Controls for Flea Beetles on Mustard Greens, Washington Tilth Producers Annual Conference: Bellingham, WA. Invited Presentation
- Gaolach, B. 2003. Research Update: Controlling Cole Crop Pests through Vegetative Management, Western Washington Horticultural Association Annual Meeting: Seatac, WA. Invited Presentation
- Gaolach, B. 2002. Insects: The Good, The Bad, The Indifferent, Washington Tilth Producers Annual Conference: Yakima, WA. Invited Presentation
- Gaolach, B. 2001. Utilizing polycultures and cover crops to control insect pests in Brassicaceae crops, Pacific Northwest Vegetable Association Annual Convention: Yakima, WA. Invited Presentation
- Gaolach, B. 2001. Insects: The Good, The Bad, The Indifferent, Washington Tilth Producers Annual Conference: Olympia, WA. Invited Presentation
- Gaolach, B. 1999. Cultural control options in brassicas for flea beetles and other pests, Washington Tilth Producers Annual Conference: Port Townsend, WA. Invited Presentation

## D. Local

- Gaolach, B. 2006. Overview of WSU King County Extension. King County Agriculture Commission, January, 2006, Issaguah, WA.
- Gaolach, B. 2005. WSU King County Extension. King County Council Farms and Agriculture Town Hall Meeting, July, 2005, Enumclaw, WA.
- Gaolach, B. 2004. Beneficial Insects. Lake Washington School District (Lecture and Lab)., June, 2004.
- Gaolach, B. 2004. Water quality: from the mountains to the ocean. Pierce County Master Gardeners, January, 2004, Puyallup, WA.
- Gaolach, B. 2004. Water quality: from the mountains to the ocean. King County Master Gardeners, January, 2004, Seattle, WA.
- Gaolach, B. 2003. Beneficial insects: what they are and how to sample in the field. EarthCorps apprentice field school, April, 2003, Seattle, WA.
- Gaolach, B. 2003. Insects: the good, the bad, the indifferent Integrated Pest Management: A Special Workshop for Home Gardeners, March 2003, Yakima, WA.
- Gaolach, B. 2003. Beneficial insects 101. King County Small Farm Expo, March, 2003, Enumclaw, WA.

## UNIVERSITY INSTRUCTION

## A. Credit Courses Taught

Plants and People: The science of food production. TESC 336 (5 cr.): University of Washington – Tacoma, 2003.

## **B.** Additional Teaching

Integrated Pest Management in Principles of Agroecology: An introduction to sustainable agriculture. North Seattle Community College, 2009.

Urban Agriculture: A look at King County's Food System from production to consumption in Urban Horticulture Seminar. University of Washington – Seattle, 2008.

Agroecology in Principles of Ecology. University of Washington – Tacoma, 2002.

Introductory Biology: Ecology, Evolution, and Plant Biology. BIOL 203 (5 cr.): University of Washington – Seattle, lab instructor for 4 quarters (9 sections) 1996 – 2001.

Elementary Physiology Lab. BIOL 119 (1 cr.): University of Washington – Seattle, lab instructor for 2 quarters (4 sections) 2000.

Resistance Management Strategies and Genetically Engineered Crops in History of American Agriculture. University of Washington – Seattle, 2000.

Herbivory in Introductory Biology. University of Washington – Seattle, 1998.

Political and economic aspects of large-scale food production in Conservation Biology. University of Washington - Seattle, 1998.

Conservation Biology. BIOL 476 (5 cr.): University of Washington – Seattle, 1998.

Animal Physiology and Lab. BIOL 484/486 (3 + 3 cr.): University of Washington – Seattle, course assistant and lab instructor 1997.

Development and use of matrix models in population ecology in Insect Ecology. North Carolina State University, 1992.

Insect Ecology. ENT 512 (5 cr.): North Carolina State University, course assistant, guest lecturer, and developed lab materials 1992.

Introductory Biology for non-majors. BIOL 100 (5 cr.): University of Washington – Seattle, lab instructor for 2 sessions 1988.

## C. Advising (Graduate Students and Student Interns)

- Current Megan Horst. Ph.D. Urban Planning and Design; College of Built Environments, University of Washington. Regional foodsheds and their relationship with ecological governance and sustainable localization.
- 2013 Matt Maria. M.S. School of the Environment and Forest Resources, University of Washington.

The effect of agricultural riparian bugger width on generalist natural enemy diversity.

2008 Lizbeth Seebacher. Ph.D. College of Forest Resources, University of Washington. Phalaris arundinacea control and riparian restoration within agricultural watercourses in King County, Washington.

## PROFESSIONAL SERVICE

## A. University

2012 - Current Faculty Senate, CAHNRS/ Extension Community Economic Development Promotion and Tenure Career Guidance Committee: Laura Lewis. 2012 - Current

| 2013 - Current | Career Guidance Committee: Christopher Paige, Chair.                              |
|----------------|---|
| 2014 - Current | Promotion and Tenure Career Guidance Committee: Clea Rome.                        |
| 2014 - Current | Career Guidance Committee: Amanda Murphy.   |
| 2014           | Faculty Search Committee, Kitsap County Extension Community Economic              |
|                | Development.  |
| 2011           | Faculty Search Committee, Thurston County Extension Director, Chair.              |
| 2007 - 2013    | Promotion and Tenure Career Guidance Committee: Kevin Zobrist, Chair.             |
| 2010 - 2012    | Promotion and Tenure Career Guidance Committee: Andrew Corbin                     |
| 2008           | Faculty Search Committee, King County Extension 4-H.                              |
| 2007           | WSU Extension Energy Task Force.  |
| 2007           | Faculty Search Committee, King County Extension Agriculture and Community         |
|                | Horticulture.   |
| 2007           | Faculty Search Committee, Integrated Weed Control Regional Specialist.            |
| 2007           | Center for Environmental Research, Education, and Outreach Committee.             |
| 2005           | Program and Civil Rights Compliance Review Team for Thurston County.              |
| 2001           | WSU Small Farms Outreach Extension Coordinator selection committee.               |
| 2001           | WSU Buffers Research Group.   |
| 1993-1994      | NCSU Entomology Graduate Student Association, treasurer.                          |
| 1993-1994      | North Carolina Entomological Society Primary/Secondary Teacher Recognition Award. |
|                | Awaiu.  |

## **D.** Professional Society

| 2014 - Current<br>2015<br>2013 | National Urban Extension Leadership network, Steering Committee co-chair.  National Urban Extension Conference, Administrative track planning committee.  External Promotion & Tenure Review, University of Arizona. |
|--------------------------------|--|
| 2013                           | Western Extension Directors Association: Urban Task Group.   |
| 2013                           | National Urban Extension Conference, Keynote Speakers subcommittee; Preconference subcommittee; luncheon speaker introduction; pre-conference diversity session facilitator.   |
| 2007                           | Extension in the Urban West, planning meeting (invited).   |
| 2004 – 2006                    | 2006 National IPM Conference: Steering Committee and Local Arrangements Subcommittee.  |
| 2002 - 2004                    | Western Washington Horticulture Association Board and Annual Conference planning committee.  |
| 2002 - 2006                    | Cultivating Success Advisory Team.   |
| 2006                           | COACHE project, Harvard Graduate School of Education, surveying Junior Faculty Job Satisfaction.   |
| 2005                           | Federal Demonstration Partnership Survey.  |

## C. Community

| 2010 – Current | Puget Sound Regional Council's Regional Food Policy Council, co-chair 2010-   |
|----------------|---|
|                | 2014.   |
| 2007 – Current | Seattle CityClub, Environmental Program Planning Committee.                   |
| 2009 – Current | Sustainable Agriculture Education Program Technical Advisory Board, Seattle   |
|                | Central Community College.  |
| 2010 – Current | EarthCorps Science Advisory Committee.  |
| 2009 - 2011    | King Conservation District Advisory Committee, 2009 co-chair of Working lands |
|                | and the Urban Nexus sub-committee; 2010 vice-chair.                           |

| 2008 – 2010 | Technical Advisory Committee for Cascade Community College's Environmental        |
|-------------|---|
|             | Technology program, President.  |
| 2008        | Healthy Eating Active Living (HEAL) grant review panel for Public Health Seattle- |
|             | King County's Communities Putting Prevention to Work (CPPW) program funding       |
|             | by Center for Disease Control, \$6.8 million distributed.                         |
| 2007 – 2009 | Renton Chamber of Commerce, Business Development Committee.                       |
| 2003 – 2011 | SOAR Partnership Council and Coordinating Committee.                              |
| 2006 – 2007 | 21 Acres Advisory Board.  |
| 2005 – 2007 | Greenbridge Community Services Council.   |
| 2004 – 2006 | King County Fairgrounds Advisory Board, president 2005 – 2006.                    |
| 2005        | Auburn Environmental Park Technical Advisory Committee.                           |
| 2005        | Community Meeting on rezoning of rural lands, Thurston County, facilitator.       |
| 2004        | Focus on Farming Conference, Monroe WA., co-facilitator.                          |
| 2004        | STEPS (King County Public Health) Leadership Team.                                |
| 2002 - 2004 | King County Noxious Weed Board Advisory Committee.                                |
| 2002        | Washington State Department of Agriculture Competitive Grant Program              |
|             | proposal review team - \$202,000 awarded.   |
| 2002        | The Food Alliance, new Food Alliance standards for certification.                 |
|             |   |

#### D. Review Activities

WSU Extension Fast Track 2014: 1; 2013: 1; 2011: 2 Review

## **ADMINSTRATIVE RESPONSIBILITY**

**County Director**, Washington State University Pierce County Extension
Responsible for developing and implementing the vision for WSU Extension across all program areas in the two most populous county in the state, including:

- Direct program oversight and administrative responsibilities; advocating for and managing the funding relationships; and working with elected officials.
- Supervisory authority and responsibility for over 40 staff, including 11 faculty members, 10 professional staff and union represented positions.
- Responsibility for Affirmative Action, Civil Rights and EEO compliance.
- Responsibility/authority to assign employees and allocate resources to address changing needs and priorities.

## **PROFESSIONAL & SCHOLARLY ORGANIZATION AFFILIATIONS**

| 2015 – current | National Association of Community Development Extension Professionals |
|----------------|---|
| 1999 – 2010    | Washington Sustainable Food and Farming Network                       |
| 1999 – 2010    | Washington Tilth Association  |
| 1994 – 2007    | Entomological Society of America                                      |
| 1992 – 2003    | Phi Beta Kappa National Honor Society                                 |
| 1986 - 2003    | Phi Sigma Biological Honor Society                                    |
|                |   |

## PROFESSIONAL DEVELOPMENT

2007 **LEAD 21: Leadership for the 21<sup>st</sup> Century**: Leadership development & training targeted





## Martha E. Aitken

# Senior Associate for Urban Extension / Program Administrative Manager 901 Fifth Avenue, Suite 2900, Seattle, WA 98164 206.219.2429 aitkenm@wsu.edu

## **EDUCATION**

#### **DEGREE EARNED**

1978 Bachelor of Arts in Social Welfare, University of Washington, Seattle, WA

## **EMPLOYMENT**

A. University Related – Washington State University Extension

## **Senior Associate for Urban Extension**

September 2012 - Present

Work with a broad spectrum of WSU colleagues and external constituents in urban communities throughout Western Washington to develop and implement programs that advance economic vitality, social equity and environmental quality in accordance with community priorities.

## **Interim County Director, Pierce County Extension**

June 2013 - July 2014

Provided interim leadership to Pierce County Extension including management and oversight of the Memorandum of Agreement with Pierce County. Provided direct oversight of the Master Gardener Program Coordinator, and support all Pierce County Extension staff and programs. Served as a liaison between the University system, faculty and staff, county finance and administrative personnel, community partners and other external audiences.

## Youth and Healthy Living Programs, King County Extension

January 2010 – September 2012

Provided leadership, comprehensive oversight and support for all King County Extension programs, faculty and staff, and financial and administrative operations across 4-H and Healthy Living Programs (Food \$ense, King County Food and Fitness Initiative, Strengthening Families, People's Garden). Served as a liaison between the University system, faculty and

staff, county finance and administrative personnel, community partners and other external audiences. Acted as Principal Investigator or Co-PI for SNAP-Ed, King County Food and Fitness Initiative, Communities Putting Prevention to Work, the People's Garden School Pilot Project.

## Assistant Director, Finance and Administration, King County Extension

April 2009 – Dec 2009

Implemented a proactive, service oriented, administrative vision office-wide to provide information and guidance to faculty and staff in the areas of budgeting, financial management, human resources, general administration and management. Worked closely with County Director to provide leadership and balance during a year of transition for King County Extension. Represented County Director to community partners as needed. Collaborated with County Director and key colleagues to craft a strategic framework and plan operations for the Urban Center.

## Food \$ense Program Manager (SNAP-Ed), King County Extension

Sept 2005 - March 2009

Provided leadership and oversight for programming, financial and administrative operations, 17 staff members and community outreach. Implemented swift and stable growth of the program, resulting in greater fiscal and programmatic stability and more efficient use of management resources. Expanded curriculum offerings to be more responsive to clients' needs. Piloted new delivery models to better integrate Food \$ense educators into schools and respond to emerging trends of a more coordinated approach health education. Contributed to statewide Food \$ense efforts including Financial Management, Supplemental Activities and conference planning committees; and was one of two CEO's selected to pilot internal reviews of incoming Food \$ense annual budgets

## B. Other

# Marketing Program Manager, Beecher's Handmade Cheese, Seattle, WA 2004-2005

Developed and implemented educational programs, developed, sourced, wrote and edited initial content for Beecher's website. Developed and coordinated all aspects of cookbook project. Helped to establish the Washington State Cheesemakers Association.

# Culinary Program Manager, Sur La Table, Seattle, WA

1994 -2003

Implemented growth of the Sur La Table nationwide culinary program for the home chef from its inception to 16 locations and a \$4.5 million budget. Managed operations, quality control, leadership and content for all culinary programs.

**Production Director,** Spectrum Dance Theatre, Seattle, WA **Managing Director,** Allegro! Dance Festival, Seattle, WA 1986-1992

Managed all aspects of performance production, front of house and box office operations, promotions and marketing, budgeting and labor contracting for over 100 public performances.

Secured first funding from the National Endowment for the Arts, as well as annual grants from local arts commissions and non-profit agencies.

## GRANTS, CONTRACTS, AND FUND GENERATION1

## A. Grants and Contracts

King County SNAP-Ed FY 2013. Department of Social and Health Services-USDA-FNS. \$571,785. P.I.: M. Aitken, and Co-P.I: M. Grate. (10/12-9/13) (2, 3,4, \$571,785).

King County SNAP-Ed FY 2012. Department of Social and Health Services-USDA-FNS. \$560,689. P.I.: M. Aitken, and Co-P.I: M. Grate. (10/11-9/12) (2, 3, 4, 5, \$560,689).

Providing oversight for nutrition programming and staff education at two Children's Home Society locations. Children's Home Society of Washington, King County Early Head Start Program. \$16,193. P.I.: M. Aitken. (9/11-8/12) (2, 3, 4, 5, \$16,193).

Healthy Gardens, Healthy Youth - The People's Garden School Pilot Project. USDA, FNS. \$1,000,000. P.I.: B. Gaolach, and Co-P.I.'s: K. Barale, M. Aitken. (4/11-9/14) (3, 4, 5, \$1,000,000).

Training community based agency employees to facilitate the Strengthening Families 10-14 Program in English and Spanish. King County Division of Behavioral Health and Recovery. \$16,289. P. I.: M. Aitken, and Co-P.I.: I. Overath. (3/11-6/11) (3, 4, \$16,289).

King County SNAP-Ed FY 2011. Department of Social and Health Services-USDA-FNS, \$550,878. P.I.: M. Aitken, and Co-P.I.: M. Grate. (10/10-9/11) (2, 3,4,5,\$550,878).

Communities Putting Prevention to Work; Healthy Eating Active Living. Public Health Seattle & King County, Center for Disease Control. \$150,000. P.I: M. Aitken (7/10-3/12) (2, 3, 4, \$150,000).

Training community based agency employees to facilitate the Strengthening Families 10-14 Program. King County Division of Behavioral Health and Recovery. \$4,000. P. I.: **M. Aitken**, and Co-P.I.: I. Overath. (9/10-10/10), **(3, 4, \$4,000)**.

Providing oversight for nutrition programming and staff education of Children's Home Society of North King County. Children's Home Society of Washington, King County Early Head Start Program. \$3,929. P.I.: M. Aitken. (9/10-9/11) (2, 3, 4, 5, \$3,929).

<sup>&</sup>lt;sup>1</sup>Key to indicators or description of contributions to Grants, Contracts and Fund Generation: 1 = Provided the initial idea; 2 = Developed research/program design and hypotheses; 3 = Authored or co-authored grant application; 4 = Developed and/or managed budget; 5 = Managed personnel, partnerships, and project activities.

Providing oversight for nutrition programming and staff education at two Children's Home Society locations. Children's Home Society of Washington, King County Early Head Start Program. \$14,228. P.I.: M. Aitken. (9/09-9/10) (2, 3, 4, 5, \$14,228).

King County SNAP-Ed FY 2010. Department of Social and Health Services-USDA-FNS, \$616,854. P.I.: M. Aitken, and Co-P.I.: V. Vu. (10/09-9/10) (2, 3, 4, 5, \$616,854).

King County Food and Fitness Initiative. WK Kellogg Foundation. \$1,200,000. P.I.: B. Gaolach, and Co-P.I.: M. Aitken. (Note: M. Aitken became sole P.I. in 2010)(2008-2/2013) (3, 4, 5, \$1,200,000).

King County SNAP-Ed FY 2009. Department of Social and Health Services-USDA-FNS. \$668,468. P.I.: M. Aitken. (10/08-9/09) (2, 3, 4, 5, \$668,468).

King County SNAP-Ed FY 2008. Department of Social and Health Services-USDA-FNS, \$603,403. P.I.: B. Gaolach and Co-P.I: M. Aitken. (10/07-9/08) (2, 3, 4, 5, \$603,403).

King County SNAP-Ed FY 2007. Department of Social and Health Services-USDA-FNS, \$383,000. P.I.: B. Gaolach and Co-P.I: M. Aitken. (10/06-9/07) (2, 3, 4, 5, \$383,000).

## B. Gifts and Awards

The Next Curve Award. Renton Community Foundation awarded to King County SNAP-Ed. P.I: **M. Aitken**, and Co-P.I: M. Grate, **2012**, \$100.

The Next Curve Award. Renton Community Foundation awarded to King County SNAP-Ed. P.I: **M. Aitken**, and Co-P.I: M. Grate, **2011**, \$500.

## C. Program Revenue Generation and Sponsorships

Poverty Immersion Workshops 2014. \$5,250. M. Aitken.

2nd Cascadia Grains Conference, 2014. \$30,798. L. Patzek, **M. Aitken**, C Benedict, R. Burke, A. Corbin, P, Hayes, S. Jones, S. Kerr.

Poverty Immersion Workshops 2013. \$500. M. Aitken.

1<sup>st</sup> Cascadia Grains Conference, 2013. \$16,760. L. Patzek, **M. Aitken**, C Benedict, R. Burke, A. Corbin, S. Jones, B. Gaolach.

## D. MOA's and funding secured from Public, Non-profit, and Private entities

Pierce County Extension Memorandum of Agreement 2015. P.I.: B. Bodah \$358,440 (2, 3, 4 \$358,440).

Pierce County Extension Memorandum of Agreement 2014. P.I.: M Aitken (1/14-7/14) and B. Bodah (8/14-12/14). \$345,040 (3, 4, 5 \$345,040).

Pierce County Extension Memorandum of Agreement 2013. P.I.: K. Barale 1/13-5/13) and M. Aitken (6/13-12/13). \$353,450 (4, 5 \$353,450).

King County Memorandum of Agreement 2011. \$50,676. P.I.: B. Gaolach, and Co-P.I.: M. Aitken. (1/11-12/11). (2, 3, 4, 5, \$50,676).

King County Memorandum of Agreement. King County 2010. P.I.: B. Gaolach, and Co-P.I.: M. Aitken. (1/10-12/10) (2, 3, 4, 5, \$92,120).

## PUBLICATIONS AND CREATIVE WORK<sup>2</sup>

#### A. Peer-reviewed Journal Articles.

Moulton, C. and Aitken, M., B. Gaolach, S. Lerner, A. Holzer. 2014. STEM Mentor Training -Learning to Inspire the Next Generation. University of New Mexico Annual Mentoring Conference, proceedings. (2, 5, 6)

## B. Creative Scholarship in Juried Events.

Aitken, M., C. Moulton, S. Lerner, A. Holzer, A. Patrick. 2014. STEM Mentors Training. Pierce County Aerospace Summit. Tacoma, WA. Poster

Aitken, M., Gaolach, B., Wells, N. Barale, K. Myers, B. Ferenz, G., Tse, C., Toering, J., Carson, L., Connerly, L., and Falk, L. 2014. Healthy Gardens, Healthy Youth – People's Garden School Pilot Project. National Association of Community Development Extension Professionals. Grand Rapids, MI, June 22-25. Poster. (2, 5, 6)

Gaolach, B., Aitken, M., G. Ferenz, K. Barale, N. Wells, B. Myers, C. Henderson, J. Wilkins, C. Tse, J. Toering, L. Naeve, J. Carson, L Connerly, and L. Falk. 2012. Healthy Gardens, Healthy Youth: People's Garden School Pilot Project. Sustainable Food, Agriculture and Natural Resources Symposium. Pullman, WA. Poster. (2, 6)

 $<sup>^{2}</sup>$ Key to indicators or description of contributions to Publications and Creative Work: 1 = Developed the initial idea; 2 = Obtained or provided funds or other resources; 3 = Collected data; 4 = Analyzed data; 5 = Wrote/created product; 6 = Edited product.

Grate, M, C. Lee, M. Aitken. 2011. Nutrition Education Embracing the School Community. Global to Local, A University Engaged; WSU CAHNRS and Extension Conference, Pullman, WA. Poster. (1, 2, 5, 6)

Aitken, M., Darrow, M., Gaolach, B. 2007. Food \$ense CHANGE (Cultivating Health and Nutrition through Garden Education). All Extension Conference, Spokane, WA. Poster. (1, 2, 5, 6)

## C. Educational Digital Media

Aitken, M., Gaolach, B., & Tse, C. 2013. RISE Volunteers Mentor Young Gardeners. USDA Blog http://blogs.usda.gov/2013/10/31/rise-volunteers-mentor-younggardeners/. (1, 5, 6)

Gaolach, B., & Aitken, M. 2013. Making a Big Difference Through the Simple Act of Gardening. USDA Blog http://blogs.usda.gov/2013/04/23/making-a-big-difference-through-the-simpleact-of-gardening/. (1, 5)

Aitken, M. 2012 Students Get Involved: In Arkansas, a Healthy Garden Means a Healthy School. USDA Blog http://blogs.usda.gov/category/peoples-garden/. (1, 5)

Aitken, M. 2012. Healthy Gardens, Healthy Youth School Pilot Program: Training Teachers Coast to Coast. USDA Blog http://blogs.usda.gov/category/peoples-garden/. (1, 5)

## D. Other Publications and Creative Works

Aitken, M. and Darrow, M. 2008. CHANGE parent newsletters for King County Food \$ense. 10 issues. All issues translated into Spanish. (1, 2, 5, 6)

## **PRESENTATIONS**

## A. National

Gaolach, B., Aitken, M., K. Barale, N. Wells, E. Myers, G. Ferenz, C. Tse, J. Toering, J. Carson, L. Connerly, and L. Falk. 2013. Healthy Gardens, Healthy Youth – People's Garden School Pilot Project. Galaxy IV Conference, Pittsburgh, PA.

Gaolach, B., K. Wilson, C. Kiang, and D. Thurness, Aitken, M. 2013. Healthy Gardens, Healthy Youth - People's Garden School Pilot Project. American Community Gardening Association Annual Conference, Seattle, WA.

Gaolach, B., **Aitken M.**, and G. Ferenz. **2013**. *Healthy Gardens, Healthy Youth Part 1- Program and Research Overview. National Urban Extension Conference, Overland Park, KS.* 

**Aitken, M**., Gaolach, B., Orbe C. **2013**. *King County Food & Fitness Initiative – Collaborative Leadership to Support Health. National Urban Extension Conference, Overland Park, Kansas.* 

Grate M, Lee C, **Aitken M. 2013.** Welcoming All Learners - Integrating ELL Strategies with Nutrition Lessons. National Urban Extension Conference, Overland Park, KS.

## B. State

Aitken, M. 2014. Poverty Immersion Workshops:

Washington State Prevention Summit, Yakima, WA.
Washington State Food and Nutrition Council Annual Meeting, Renton, WA.
Central Washington University. Ellensburg, WA.

**Aitken, M** and A. Park. **2011**. *KCFFI Overview; Global to Local, A University Engaged. WSU CAHNRS and Extension Conference, Pullman, WA.* 

**Aitken, M**, Sigman, A, Evans, D. **2011**. Supplemental Activity Criteria. Food \$ense / 4-H Spring Training, Spokane, WA.

**Aitken, M. 2008**. Customer Service and Branding for Food \$ense. *Food \$ense Conference, Vancouver, WA.* 

**Aitken, M. 2006**. Opening Session – Food \$ense Across the State. *Food \$ense CEO Management Meeting, Yakima, WA.* 

**Aitken, M. 2006.** How Far Should I Toss the Salad, and Other Tips for Successful Demos. Food \$ense State Conference, Everett, WA.

## C. Local

Aitken, M. 2014. Poverty Immersion Workshops:

Healthy King County Coalition, Seattle, WA. King County Emergency Management, Renton, WA. Pacific Lutheran University, Tacoma. WA.

Aitken, M. 2014. Introduction to Food Systems. Tacoma School of the Arts, Tacoma, WA.

Aitken, M. 2014. Customer Service and Branding. Master Gardener Training, Puyallup, WA.

**Aitken, M. 2014.** Leadership and Community Building. Master Gardener Community Garden Specialist Training, Tacoma, WA.

Aitken, M. 2013. Poverty Immersion Workshop. Pacific Lutheran University, Tacoma, WA.

**Aitken, M**. and A. Park. **2011**. *KCFFI Overview. Delridge Neighborhoods District Council, Seattle, WA*.

**Aitken, M**. and A. Park. **2011.** *KCFFI Overview. City of Seattle Office for Civil Rights Race and Social Justice Initiative Sub-Cabinet Meeting, Seattle, WA*.

**Aitken, M.**, Gaolach, B, Jones, S. **2011**. *City Club Gala Luncheon, Nourishing Community: the Business & Pleasure of Food in Washington, Seattle, WA*.

**Aitken, M**. **2011.** People's Garden Overview. Puget Sound School Gardens Committee, Seattle, WA.

**Aitken, M**., Darrow, M., Gaolach, B. **2007**. *WSU at Benaroya Hall: In Concert with Communities, Seattle, WA*.

**Aitken, M**. **2006**. Food \$ense CHANGE and Harvest of the Season Overview. Conference of State Legislators, Seattle, WA.

**Aitken, M. Food 2005-2006.** \$ense CHANGE Classes, 30 sessions. Tukwila School District, Tukwila, WA.

## UNIVERSITY INSTRUCTION

## A. Additional Teaching

Nutrition TR4126. Community Nutrition. **2009**. Guest Speaker. Bastyr University. Family Consumer Science 4352. Community Nutrition. **2008**. Guest Speaker. Seattle Pacific University.

Nutrition TR4126. Community Nutrition. **2008**. Guest Speaker. Bastyr University.

Family Consumer Science 4352. Community Nutrition. **2007**. Guest Speaker. Seattle Pacific University.

Family Consumer Science 4352. Community Nutrition. **2006**. Guest Speaker. Seattle Pacific University.

## **PROFESSIONAL SERVICE**

## A. University

| 2014         | Mason County Director Search Committee, Member Centennial Committee, Celebrating 100 Years of Extension, Member Pierce County Director Search Committee, Member Pierce County Extension Acting Director 11/18-21 Cascadia Grains Conference 2014 Steering Committee, Member              |
|--------------|--|
| 2013         | Centennial Committee, Celebrating 100 Years of Extension, Member Pierce County Director Search Committee, Member Acting Director, Pierce County Extension 2/4-3/1, 4/8-9 Cascadia Grains Conference 2013 Steering Committee, Member  |
| 2012         | Strengthening Families/Parenting Strategic Planning Committee, Member Food \$ense Community Workgroup, Member Acting Director, Pierce County Extension 10/4-5, 12/4-6  |
| 2011         | Food \$ense Future Vision Ad Hoc Committee, Member   |
| C. Community |  |
| 2014         | Tacoma Pierce Growth Partnership, Median Income and Higher Education<br>Committees, Member<br>Snohomish County Race Conference Planning Committee, Member<br>Regional Food Policy Council, Alternate Member (2011 to present)<br>King County Fair, Judge, 4-H Fashion Review             |
| 2013         | Communities Putting Prevention to Work, Healthy King County Coalition, Member (2010-2013) King County Food and Fitness Initiative Leadership Council Member, Retail Strategy Action Team Member, School Food and Fitness Strategy Action Team Member, Operations Team Member (2008-2013) |
| 2012         | Washington State Fair. Judge, 4-H Fashion Review   |

2010 - 2011 King County Fair, Judge, 4-H Fashion Review

Highline School District; Coordinated School Health Committee (2008-2009) 2009

Steps to Health King County, Leadership Team, Member (2005-2009)

2005 - 2008 STEPS School Health Council, Member, Champions grant reviewer (2005-

2008)

2000 - 2006 International Association of Culinary Professionals (IACP) Cookbook Awards,

Chairman (2006) Executive Committee (2003-2006), Judge (2000-2006)

#### ADMINSTRATIVE RESPONSIBILITY

Interim Director, Pierce County Extension 6/2013 – 7/2014. Responsible for all aspects of leadership and management of the County Extension office, including budget management, employee supervision and training, civil rights compliance, liaison to WSU administration, and representing WSU Extension to Pierce County and local agencies. Mentored new Master Gardener Program Manager. Post 7/14 duties included leadership of Pierce County Extension MOA budget process and mentorship of the newly hired County Director.

King County Youth and Healthy Living Programs leadership 1/2010 – 9/2012. Responsible for all aspects of leadership and management of the County Extension office, including budget management, civil rights compliance, liaison to WSU administration and employee supervision. Duties included supervision of three office moves.

## PROFESSIONAL & SCHOLARLY ORGANIZATION AFFILIATIONS

2013-present National Association of Community Development Extension Professionals

2007-2008 Washington State Food and Nutrition Council

## PROFESSIONAL DEVELOPMENT

2014 National Association of Community Development Extension Professionals Conference, Grand Rapids, Michigan Ripple Effects Mapping Training, Tacoma, WA Facilitation with Purpose, Public Conversations Project, Seattle, WA Engaging Latino Audiences, Everett, WA WSU Joint Unit Summer Meeting, Spokane, WA Washington State STEM Summit, Redmond, WA Pierce County Aerospace Summit, Tacoma, WA WordPress Training, Everett, WA

2013 National Urban Extension Conference, Kansas City, KS Increasing Impact; Engaging Girls in STEM by Building Capacity, Seattle, WA Public Value and Program Success Stories, WSU Youth and Families Unit Meeting, Ellensburg, WA Galaxy Conference, Pittsburgh, PA Missouri Association for Community Action Poverty Simulation Training, St. Louis, MO Pierce County Aerospace Summit, Tacoma, WA; July 17

2012 WSU Food Safety and Preservation Certification Training, Pullman, WA Food Sense CEO Meeting, Ocean Shores, WA Food \$ense Professional Development Days, Ellensburg, WA 2011 People's Garden School Pilot Project National Team Training, Co-Organizer, Seattle, WA Communities Putting Prevention to Work Video Documentation Workshop, SeaTac, WSU Content Management System Training, Puyallup, WA Food \$ense Spring Professional Development Days, Everett, WA 2010 Strengthening Families Facilitator Certification Training, Seattle, WA Undoing Institutionalized Racism, The People's Institute, Seattle, WA Cultivating Regional Food Security: Recent Research in Urban – Rural Food Systems Conference, Seattle, WA Cross Cultural Communications, Seattle, WA; 3 workshops Washington State Food and Nutrition Council Conference, Renton, WA Food \$ense CEO Management Meeting, Walla Walla, WA Food \$ense / 4-H Spring Training, Spokane, WA 2009 WSU All-Extension Conference, Puyallup, WA 2008 Food \$ense CEO Management Meeting, Newport, WA WSU Extension Engaged Webcast, Brand Identity Navigating Difference, WSU Cultural Competency Training, Federal Way, WA United Way Hunger Summit, Seattle, WA WSU Extension Engaged Webcast, Internal Review Board Food \$ense State Conference, Vancouver, WA 2007 Organizational Leadership training - WSU Extension, Puyallup, WA Food \$ense CEO Management Meeting, Olympia, WA Media Smart Youth Curriculum Training, Everett, WA Seattle Public Schools Nutrition Retreat, Seattle, WA CSREES National Diversity Conference, Seattle, WA International Association of Culinary Professionals, Chicago, IL WSU All-Extension Conference, Spokane, WA Robert Wood Johnson Nutrition Retreat, Leavenworth, WA Farm Bill Education Forum, Seattle, WA King County Overweight Prevention Initiative Forum, Seattle, WA 2006 Food \$ense CEO Management Meeting, Yakima, WA WSU Write Winning Grants Seminar, Seattle, WA OGRD Responsible Conduct of Research Education, Seattle, WA King County Overweight Prevention Initiative Forum, Federal Way, WA

International Association of Culinary Professionals Conference, Seattle, WA

Food \$ense State Conference, Everett, WA Communications Planning; Harris & Smith Public Relations, Seattle, WA

2005 Food \$ense CEO Management Meeting, Bellingham, WA
King County Health Initiative Obesity Forum, Tukwila, WA
MyPyramid Training, Renton, WA
International Association of Culinary Professionals, Dallas, TX



# Andrew J. Cassey

## **Curriculum Vitae**

## November 2014

**Address:** School of Economic Sciences **Phone:** (509) 335 8334 (office)

Washington State University (509) 335 5555 (department)

101 Hulbert Hall Fax: (509) 335 1173 (department)

P.O. Box 646210 Email: cassey@wsu.edu
Pullman, WA 99164-6210 Webpage: http://cahnrs-

cms.wsu.edu/ses/people/Cassey

#### **DEGREES EARNED:**

Ph.D. Economics University of Minnesota 2008
Dissertation: State Export Behavior and Policy

Advisors: Samuel S. Kortum, Yale U. and Thomas J. Holmes, U. Minnesota

M.A. Economics University of Minnesota 2005

B.S. Economics The Ohio State University 2002 Summa cum laude

Minors: Mathematics and linguistics

#### **EXPERIENCE:**

Washington State University, School of Economic Sciences

Associate Professor: Aug. 2014–present.

Assistant Professor and Extension Economist: Aug. 2008-Aug. 2014.

Federal Reserve Bank of Dallas, Globalization and Monetary Policy Institute

Visiting Scholar: Jun. 2010–Jul. 2010.

University of Minnesota, Department of Economics

Instructor: Aug. 2003-May 2008.

## **HONORS & AWARDS:**

- 1. Distinguished Teaching Award Less Than 10 Years Experience, 2013, Nominated, Agricultural and Applied Economics Association.
- 2. Springer Award for best paper by an early career scholar at the Western Regional Science Association's 51<sup>st</sup> annual meeting, Feb. 10, 2012.
- 3. Faculty Excellence in Extension Award, finalist, 2011–2012, Washington State University.
- 4. Walter W. Heller Outstanding Teaching Award, 2007, University of Minnesota.
- 5. Distinguished Teaching Award, 2005, University of Minnesota.
- 6. Panhellenic Community Teaching Recognition, 2005, University of Minnesota.
- 7. Distinguished Teaching Assistant Award, 2003, University of Minnesota.

#### PROFESSIONAL ARTICLES, REFEREED

- 1. Cassey, Andrew J. and Ben O. Smith 2014. "Simulating Confidence for the Ellison-Glaeser Index" Journal of Urban Economics 81 (1): 85–103, doi: 10.1016/j.jue.2014.02.005.
- 2. Cassey, Andrew J. 2014. "The Location of U.S. States Overseas Offices" Review of International Economics 22 (2): 310–325, doi: 10.1111/roie.12109.
- 3. Cassey, Andrew J. and Katherine N. Schmeiser 2013. "Multilateral Export Decompositions" Open Economies Review 24 (5): 901–918, doi: 10.1007/s11079-013-9273-9.
- 4. Cassey, Andrew J. and Katherine N. Schmeiser 2013. "The Agglomeration of Exporters by Destination" Annals of Regional Science 51 (2): 495-513, doi: 10.1007/s00168-012-0538-9.
- 5. Cassey, Andrew J. and Katherine N. Schmeiser 2013. "The Agglomeration by Destination of U.S. State Exports" Economics Bulletin 33 (2): 1504–1510.
- 6. Cassey, Andrew J. and Katherine N. Schmeiser 2013. "Six Comparisons of Firm-level and Product-level Data" Applied Economics Letters 20 (4): 382–385, doi:10.1080/13504851.2012.707764.
- 7. Cassey, Andrew J. 2012. "California's Exports and the 2004 Overseas Office Closures" Economic Inquiry 50 (3): 641–651, doi: 10.1111/j.1465-7295.2010.00337.x.
- 8. Cassey, Andrew J., Suzette P. Galinato, and Justin L. Taylor. 2012. "Environmental Regulation and Regional Economy: Economic Impacts of the Elimination of Azinphosmethyl on the Apple Industry and Washington State" Journal of Food Distribution Research, 43 (2): 14–35.
- 9. Cassey, Andrew J. 2012. "An Application of the Ricardian Trade Model with Trade Costs" Applied Economics Letters 19 (13): 1227–1230, doi: 10.1080/13504851.2011.6179871.
- 10. Cassey, Andrew J., David W. Holland and Abdul Razack. 2011. "Comparing the Economic Impact of an Export Shock in Two Modeling Frameworks" Applied Economic Perspectives and Policy, 33 (4): 623-638, doi: 10.1093/aepp/PPR033.
- 11. Cassey, Andrew J. 2011. "State Foreign Export Patterns" Southern Economic Journal, 78 (2): 308-329, doi: 10.4284/0038-4038-78.2.308.
- 12. Cassey, Andrew J. 2011. "Does the Type of Exports Affect the Odds an Overseas Office Exists?" American Journal of Agricultural Economics, 93 (2): 457–462, doi: 10.1093/ajae/aaq163, refereed conference symposium paper.
- 13. Cassey, Andrew J. 2010. "Accounting for the Export Flow from Texas to Mexico" Federal Reserve Bank of Dallas Staff Papers, 11 (October).
- 14. Cassey, Andrew J. 2009. "State Export Data: Origin of Movement vs. Origin of Production" Journal of Economic and Social Measurement, 34 (4): 241-268, doi: 10.3233/JEM-2009-0323.

## **FUNDED GRANTS** (\$273,324 awarded):

- 1. Cassey, Andrew J. (PI), Jeremy L Sage, and Peter R. Tozer. "Assessing the Impact of Labor Shortages As a Marketing Barrier" USDA-AMS, 09/30/2013-09/29/2015, \$50,699.
- 2. Cassey, Andrew J. (PI) and Spencer Cohen (PI). "Analysis of Washington State's Export Assistance Programs" Washington Economic Development Commission, 08/01/2012-06/30/2013, \$25,543, and associated data sharing agreement with Washington's Employment Security Division.
- 3. Cassey, Andrew J. (PI), Michael Brady, Benjamin Cowan, R. Karina Gallardo, and Jonathan Yoder, "Expansion of SES Seminar Series" ADVANCE at WSU, 08/01/2012-06/30/2013,
- 4. Cassey, Andrew J. (PI) and Thomas L. Marsh (PI). Export Assistance Program, Washington Community Economic Revitalization Board, 01/03/2011–01/02/2013, \$160,786, sub-grant under Washington Small Business Development Center, "Export Assistance Program-

- Growing the Culture of Exporting: Reaching Potential Exporters and New-to-Export Business" \$1,281,969.
- 5. Cassey, Andrew J. (PI), New Faculty Seed Grant, Washington State University, "An Evidence-Based Understanding of Export Promotion & the Number of Exported Goods," 05/15/2010-08/15/2014, \$14,796.
- 6. Marsh, Thomas L. (PI), David W. Holland, Suzette P. Galinato, Andrew J. Cassey, and Justin Taylor, USDA-CSREES Special Grants Program, "Impacts of Organophosphate Pesticides Phaseout in the Apple Industry," sub-project from IMPACT Center, Washington State University "Enhancing Competitiveness of Washington Agriculture," 08/01/2008-07/31/2010, \$14,000.

#### **DATA SHARING AGREEMENTS:**

- 1. Cassey, Andrew J. (PI) "Interagency Agreement Between Washington State Employment Security Department and Washington State University" 11/1/2014-6/30/2017.
- 2. Cassey, Andrew J. (PI). "Understanding Informational Barriers to Trade Using the Scope of Exported Products and U.S. State Exporting Promotion Programs" Center for Economic Studies, U.S. Census Bureau, Special Sworn Status, Seattle Research Data Center, 2012-2015.
- 3. Cassey, Andrew J. (PI) "Proposal to Analyze Washington Export Promotion Programs" agreement with Washington Employment Security Department, 6/20/2012–12/31/2012.
- 4. Cassey, Andrew J. (PI) "Washington's Commodity Supplier Database" data sharing agreement with Washington State Department of Agriculture, 06/06/2011–05/31/2013.
- 5. Cassey, Andrew J. (PI), R. Karina Gallardo (PI), Bidisha Mandal, and Robert Rosenman. "Proposal for Access to Nielsen HomeScan Data as Consultant to the USDA: Demand Analysis and Economic Impacts of Nutraceutical-Enriched Food Products" sub-award under Jeffrey LaFrance, Mark Denbaly, and Laurian Unnevehr, WSU and United States Department of Agriculture, 03/3/2009–present.

## **EXTENSION MANUALS & FACTSHEETS, REFEREED:**

- 1. Cassey, Andrew J. 2014. "Export Trends in Washington State, Vol. 6" Washington State University Extension fact Sheet FS148E, Sep., http://cru.cahe.wsu.edu/CEPublications/FS148E/FS148E.pdf.
- 2. Cassey, Andrew J. and Pavan Dhanireddy 2013. "The New Free Trade Agreements and Washington State Exports" Washington State University Extension fact sheet FS114E, Aug., http://cru.cahe.wsu.edu/CEPublications/FS114E/FS114E.pdf.
- 3. Cassey, Andrew J. and Yunfei Zhao 2013. "An Investigation Into Manufacturing and Agricultural Exports to China" Washington State University Extension manual EM065E, Mar. 1, http://cru.cahe.wsu.edu/CEPublications/EM065E/EM065E.pdf.
- 4. Cassey, Andrew J. and Yunfei Zhao 2013. "Export Trends in Washington State, Vol. 5" Washington State University Extension fact Sheet FS105E, Jan. 1, http://cru.cahe.wsu.edu/CEPublications/FS105E/FS105E.pdf.
- 5. Cassey, Andrew J. and Yunfei Zhao 2012. "Export Trends in Washington State, Vol. 4" Washington State University Extension fact Sheet FS076E, Jun. 1, http://cru.cahe.wsu.edu/CEPublications/FS076E/FS076E.pdf.
- 6. Cassey, Andrew J. and Yunfei Zhao. 2012. "Export Process Quickstart: Step-by-step to Agricultural Exporting" Washington State University Extension fact sheet FS071E, Mar. 1, http://cru.cahe.wsu.edu/CEPublications/FS071E/FS071E.pdf.
- 7. Cassey, Andrew J. and Pavan Dhanireddy. 2011. "A Primer on Exchange Rates and Exporting" Washington State University Extension manual EM041E, Oct. 1, http://cru.cahe.wsu.edu/CEPublications/EM041E/EM041E.pdf.

- 8. Cassey, Andrew J. 2011. "Export Trends in Washington State, Vol. 3" Washington State University Extension fact Sheet FS036E, Jul. 1, http://cru.cahe.wsu.edu/CEPublications/FS036E/FS036E.pdf.
- 9. Cassey, Andrew J. 2010. "Export Trends in Washington State, Vol. 2" Washington State University Extension fact Sheet FS023E, Nov. 1, http://cru.cahe.wsu.edu/CEPublications/FS023E/FS023E.pdf.
- 10. Cassey, Andrew J., Suzette P. Galinato, and Justin Taylor. 2010. "Impacts of the Azinphosmethyl Ban in the Apple Industry & Economy of Washington State" Washington State University Extension fact sheet FS024E, Oct. 1, http://cru.cahe.wsu.edu/CEPublications/FS024E/FS024E.pdf.
- 11. Cassey, Andrew J. 2010. "Export Trends in Washington State" Washington State University Extension fact sheet FS007E, Jan. 1, http://cru.cahe.wsu.edu/CEPublications/FS007E/FS007E.pdf.
- 12. Cassey, Andrew J. 2010. "The Collection and Description of Washington's State Export Data" Washington State University Extension fact sheet FS006E, Jan. 1, http://cru.cahe.wsu.edu/CEPublications/FS006E/FS006E.pdf.
- 13. Cassey, Andrew J. 2009. "California's Overseas Trade Office Closures: Lessons for Washington State" Washington State University Extension manual EM017, Aug. 1, http://cru.cahe.wsu.edu/CEPublications/em017/em017.pdf.

## PROFESSIONAL ARTICLES, NONREFEREED:

- 1. Cassey, Andrew J. and Jeremy L. Sage 2013. "Transportation and International Trade" Choose Washington State Trade Update, October, http://choosewashingtonstate.com/media-center/blogs/trade-update/trade-update-fall-2013/.
- 2. Cassey, Andrew J. 2013. "New Opportunities for Washington Firms Because of Free Trade Agreements" Choose Washington State Trade Update, July, http://choosewashingtonstate.com/media-center/blogs/trade-update/trade-data-updatesummer-2013/.
- 3. Cassey, Andrew J. and Spencer Cohen. 2012. "Analysis of Washington State's Export Promotion Program" commissioned by State of Washington, Washington Economic Development Commission. Summarized results published in "Economic Development Programs and Investments—Review of Evaluation Practices in Washington State" Washington Economic Development Commission 2012.
- 4. Cassey, Andrew J. 2011. "Processed Agricultural Exports in the Global Economy" Washington State Department of Commerce Quarterly Trade Bulletin, July.
- 5. Cassey, Andrew J. and Daniel Friesner. 2010–2012. "Greater Seattle Economic Outlook Survey." Quarterly reports, IMPACT Center, Washington State University, http://www.impact.wsu.edu/survey/EconomicOutlook.html.

#### **COMPUTER PROGRAMS:**

- 1. Cassey, Andrew J. and Ben O. Smith 2012. "EGSimulation-Compute Ellison & Glaeser Critical Regions by Simulation, freeware, http://goo.gl/n1N06, freeware.
- 2. Cassey, Andrew J. 2010. BibTex file for Federal Reserve Bank of Dallas Staff Papers, reviewed, proprietary.

## **SEMINARS & PRESENTATIONS:**

2014:

Econometric Society, Minneapolis; University of Nevada-Reno; Pacific Northwest Regional Economic Conference, Portland; West Virginia University; Washington State University.

#### 2013:

Bureau of Economic Analysis; Western Economics Association International Annual Meeting, Seattle; Washington State University; Pacific Northwest Regional Economic Conference, Spokane.

## 2012:

Claremont McKenna College; Claremont Graduate University; University of Hawaii; University of Washington; 9<sup>th</sup> Midwest International Development Conference, Minneapolis; Fordham University; Montclair State University; Western Regional Science Association 51<sup>st</sup> Annual Meeting; Florida International University International Trade Workshop; Washington State University; Washington State Microenterprise Association Annual Meeting, Tacoma; Pacific NW Association of Rail Shippers semiannual meeting, Portland.

#### 2011:

2011 Pacific Northwest Regional Economic Conference, Victoria; Bowdoin College; Rowan University; Kansas State University; University of Richmond; University of Scranton; 17<sup>th</sup> Annual Washington State Economic Symposium, Tumwater WA.

#### 2010:

Allied Social Sciences Association Annual Meeting, Atlanta; University of Delaware; Washington State University; Federal Reserve Bank of Dallas; Mt. Holyoke College; University of New Mexico; Drexel University; Temple University; 2010 Pacific Northwest Regional Economic Conference, Missoula.

#### 2009:

Macalester College; Federal Reserve Bank of Philadelphia; Western Regional Science Association 48<sup>th</sup> Annual Meeting, Napa; Eastern Economics Association 2009 Meetings, New York; Washington State University; 2009 Washington Association of Counties Annual Meeting, SeaTac; Western Economic Association International 84<sup>th</sup> Annual Conference, Vancouver.

#### 2008:

Kansas State University; Washington State University; Hendrix College; Center for Economic Studies, U.S. Bureau of the Census; Board of Governors of the Federal Reserve System; U.S. International Trade Commission.

#### 2007:

University of Minnesota; Southern Economics Association 77<sup>th</sup> Annual Meeting, New Orleans; Western Regional Science Association 46<sup>th</sup> Annual Meeting, Newport Beach; Midwest Economic Theory Spring Meeting, University of Minnesota.

#### 2006:

Midwest International Trade Fall Meeting, Purdue University; Guanajuato Workshop for Young Economists, Universidad de Guanajuato; Missouri Valley Economics Association 43<sup>rd</sup> Annual Meeting, Minneapolis.

## WEBINARS & WORKSHOPS:

- 1. Cassey, Andrew J. "Export Quick Start Guide" 2013. May 28, 2013 http://breeze.wsu.edu/p6w4nnmjnr1/, in conjunction with U.S. Veteran's Administration.
- 2. Cassey, Andrew J. and Yunfei Zhao "Trends in Washington Exports" 2012. Aug. 20, 2012 http://breeze.wsu.edu/p3fct2ptjzm.

Andrew J. Cassey Curriculum Vitae

- 3. Cassey, Andrew J. "Stronger Economies Together" Session 2, Module 6. Chewelah WA, Apr. 19, 2012 with Debra Hansen, Monica Babine, Paul Johnson, Krisan LeHew, and Maury Forman.
- 4. Cassey, Andrew J. 2011. "Export Data & Trends" Mar. 23. Webinar, http://faculty.ses.wsu.edu/video/webinar WAExportTrends/index.htm.
- 5. Cassey, Andrew J. 2011. "Trends in Washington Exports" Feb. 2. Webinar, http://breeze.wsu.edu/p72164726/.
- 6. Cassey, Andrew J. "What the Depreciation of the Dollar Means for Washington Exporters" 2010. Workshop presentation delivered via webpage, http://www.ses.wsu.edu/Extension/ Casseyexports/ProcessedAgExports/Xrates Ext colville.pdf.

#### **POPULAR PRESS INTERVIEWS:**

#### TELEVISION:

Washington State Public Affairs Network TVW, November 2011; Access Minnesota, Jul. 2008; KARE 11 News at 10:00 (NBC-Minneapolis), Oct. 16, 2007.

#### RADIO:

Olympia WA NPR, Oct. 2011; Illinois Public Radio, Feb. 2011; "Our Northwest" special four part series on economics on Northwest Public Radio, Nov. 2009; "Art Matters" KFAI 91.3FM Minneapolis, Apr. 2008.

#### **NEWSPAPERS:**

Baltimore Daily Record; China Daily (USA); Detroit News; Ellensburg Daily Record; Idaho Business Review; Kitsap Peninsula Business Journal; Moscow/Pullman Daily News; NW Ag Information Net; Pacific Northwest Inlander; Puget Sound Business Journal; Seattle Times; Wenatchee World; WSU Daily Evergreen; WSU Today; UMNews; Yakima Herald-Republic.

#### MAGAZINES:

Washington State Magazine, Fall 2012; WSU Alumni & Research Magazine, Apr. 2012; The Wake Magazine, Apr. 2008.

## **STUDENTS SUPERVISED** (role, first placement):

## POSTDOCTORAL FELLOW:

Yunfei Zhao 2011-12 (supervisor, CitiBank)

#### PH.D. COMMITTEES:

Kwanyoung Lee 2012–16 (chair)

Paul Ervin 2013–15 (member)

Pavan Dhanireddy 2010–15 (chair)

Ben Smith 2011–14 (member, University of Nebraska–Omaha)

Qianqian Wang 2009–13 (co-chair, Henan University)

Scott Colby 2010–11 (member, Penn State University)

Timothy Graciano 2010–11 (member, USDA)

## M.S. COMMITTEES:

Kuan-Ming Huang 2013–14 (co-chair, Washington State University Ph.D. program) Yilin Li 2011–12 (chair)

#### **VISITING STUDENTS:**

Min He 2010–11 (sponsor, Chinese Agricultural University)

Andrew J. Cassey Curriculum Vitae

#### **COURSES TAUGHT:**

- 1. International Trade (Graduate): FA11, FA12, FA13, FA14.
- 2. Special Topics in Neuroscience (Graduate): Neuroeconomics / Neuroethics: FA12—One of 8 faculty who taught one or two weeks each from their field.
- 3. Fundamentals (Principles) of Microeconomics: FA03, SM04, FA04, SP05, SU05, SU06, SU07, SP09, FA09, SP11.
- 4. Principles of Macroeconomics: SP06, FA06, SP07, FA07, SP08.
- 5. Honors Principles of Microeconomics: SP04.
- 6. Principles of Microeconomics with Calculus: FA05.

#### **PROFESSIONAL SERVICE:**

#### JOURNAL REFEREE:

Applied Economics Perspectives and Policy; American Journal of Agricultural Economics (x 3); CESifo Economic Studies; Economic Inquiry (x 2); Journal of Agricultural and Resource Economics; Journal of International Economics; Journal of Political Economy; Open Economies Review; Région et Développement; World Trade Review.

#### CONFERENCE SESSION ORGANIZER:

Allied Social Sciences Association Annual Meeting, Agricultural and Applied Economics Association, "Session Title: Entry Fixed Costs to Trade: Estimates, Dynamics, and Policy" Atlanta GA, Jan. 3-5, 2010.

#### PROGRAM REVIEWER:

- Western Agricultural Economics Association annual meeting, 2012, "Trade Agreement Impact on Trade Flows, Trade Creation, and Trade Diversion, The Determinants of International Wheat Trade."
- 2. American Agricultural Economics Association 2010 Annual Meeting, International Trade Section.

## GRANT REVIEWER:

Oesterreichische National Bank Anniversary Fund, Austrian Central Bank, 2014. USDA Small Business Innovation Research (SBIR) Program, Phase I, 2010–11 & 2011–12.

#### TEXTBOOK REVIEWER:

- 1. Frank, Robert and Ben Bernanke 2007. *Principles of Macroeconomics*. 3<sup>rd</sup> ed. McGraw-Hill Irwin: New York.
- 2. Hubbard, R. Glenn and Anthony Patrick O'Brien 2010. *Microeconomics* 3e. Prentice Hall: New York.
- 3. Karlan, Dean and Jonathan Morduch 2013. *Principles of Microeconomics*. McGraw-Hill Irwin: New York.
- 4. Krugman, Paul and Robin Wells 2006. *Macroeconomics*. Worth Publishers: New York.
- 5. ——. 2008. *Microeconomics* 2e. Worth Publishers: New York.
- 6. Mankiw, N. Gregory 2009. Economics. 5<sup>th</sup> ed. South Western Cengage Learning: New York.
- 7. Slavin, Stephen L. 2008. *Macroeconomics*. 8<sup>th</sup> ed. McGraw-Hill Irwin: New York.

#### iOS APP REVIEWER:

EconGrapher: Solve, Graph, and Touch Economics by Pip and Quill, LLC.

#### AWARD ADJUDICATOR:

Western Agricultural Economics Association 2013 Outstanding Masters Thesis Award.

Andrew J. Cassey Curriculum Vitae

## **Karl Englund**

Department of Civil and Environmental Engineering, and
Composite Materials and Engineering Center
Washington State University
P.O. Box 641806 Pullman, WA 99164-1806
(509) 335-6259 (phone) • (509) 335-5077 (fax) • englund@wsu.edu

## **Expertise**

My expertise lies within the processing and performance of natural fiber composite materials, concentrating on applied research, material characterization, product development, and commercialization either with industrial clients, government and trade associations, or through federal and state funded projects. The path I have taken has provided me with a valuable skill set that fosters a bridge between academic fundamentals and real-world applications.

Much of my research and outreach efforts have been within the field of wood plastic composites. Eighty percent of the over 200 industrial trials and 40% of my sponsored research through state and federal grants has been involved with WPC research and development. This body of work includes research in the development of processing methods, formulation design, and performance evaluation. Other natural fiber composite work has included research and development on traditional wood composites such as particleboard and medium density fiberboard and innovative methods of pultruding wood into a composite structure.

More recently my research and extension operations have focused on the utilization of waste materials as feedstocks for composites and biofuels. My work in the field of recycling has me involved local/state government agencies, non-profit associations, and commercial industry solving problems with regard to markets, processing options, contamination, policies and procedures and education. My efforts in the area of wood-derived biofuels has included the use of waste wood products as a feedstock, development of value-added products from the waste or non-fuel residuals, and working with stakeholders throughout the biofuel supply chain.

## Education

Ph.D. Civil Engineering, Washington State University, 2001

Dissertation Title: Consolidation and Friction Mechanisms of Wood Composites and Their Influence on Pultrusion Processing.

M.S. Wood Science, West Virginia University, 1991

Thesis Title: A Study of Appalachian Hardwoods Treated with Waterborne Preservatives.

B.S. Forestry, West Virginia University, 1988

Wood Industries Emphasis

# Work Experience

**Assistant Research Professor and Extension Specialist**, Department of Civil and Environmental Engineering, and Composite Materials and Engineering Center, Washington State University, Pullman, WA. 2007- present.

Responsibilities: Fundamental and applied research interest in composite processing and the use of waste and recycled materials. Maintaining funded research through state and federal grants and industrial service center contracts. Supporting and advising graduate students and providing employment for technical staff and undergraduate research assistants. Appointment is 50% Extension and 50% Research.

Research Engineer, Composite Materials and Engineering Center, Washington State University, Pullman, WA. 2003-2007.

Responsibilities: Commercialization of extruded wood/thermoplastic composites, bio and synthetic composite research with industrial clients, supervising undergraduate and international intern research associates.

Post Doctorate Fellow, Composite Materials and Engineering Center, Washington State University, Pullman, WA. 2001-2003.

Responsibilities: Research projects with wood-plastic composites, biofibers, and biopolymer composites.

Graduate Research Assistant, Department of Civil and Environmental Engineering, Washington State University, Pullman, WA 1996-2001.

Responsibilities: Performed a variety of research projects with wood-based composites such as; creep of wood/plastic lumber, thermoplastic modifiers in OSB and pultrusion of wood-based composites.

Research Assistant, Department of Wood Science and Technology West Virginia University, Morgantown, WV 1994-1995.

Responsibilities: Oversaw research projects utilizing nondestructive evaluation, timber bridge manufacturing and inorganic/wood fiber composites.

Plant Technical Director/Quality Control Supervisor, Trus Joist MacMillan – Parallam Plant, Colbert, GA 1992-1994.

Responsibilities: Supervised the QC lab, established code approval for new products, supervised and performed mill trials, and provided technical assistance to everyday plant operations.

# **Professional Highlights**

## Research

- Responsible for more than \$3M expenditures on sponsored research projects
- PI or co-PI on 19 competitive grants with 8 different funding agencies, with my personal expenditures exceeding \$1.6M, and PI on \$1.4M in industrial research projects.
- Authored/co-authored 26 refereed articles in 16 different journals, plus 11 non-refereed papers and one book chapter.
- Presented 23 invited talks at 16 different symposia and co-authored 10 additional

presentations

- Served as a chair/co-chair for 8 MS students (7 graduated) and 3 PhD students and serving on 14 other graduate student committees.
- Mentored 16 international students and undergraduate researchers, and supervised 27 undergraduate research assistants.

## **Extension/Outreach**

- Served on Advisory Board for the King County Carpet Recovery Program to develop
  marketing and processing strategies for utilizing carpet wastes. This project is targeted to
  re-purpose over 130,000 tons annually from WA landfills. Acted as a technical consultant
  to King County and WA-based companies to develop innovative products that utilize
  recycled carpet feedstocks.
- Served as technical advisor to *ByProduct Synergy Northwest* (BPSNW) assisting waste-to-profit concepts for NW companies. I currently work with BPSNW as a materials expert to evaluate wastes from WA-based companies (including Chevron, Boeing, SeaTac Airport) and to identify value-added markets.
- Developed and presented 4-H workshops for K-12 students on recycling materials. These workshops have had over 175 student attendees where I show them how materials are recycled and processed into new products.
- Provided industrial extension support to over **100 US and international companies** with projects totaling over **\$1.4 million**. As an example, I am currently assisting two WA-based companies (*Forest Concepts* and *Mount Baker Bio*) in their efforts to develop biobased products in high-value niche markets. These projects not only lead to new jobs and economic development in the State, but also provide training and experiential learning opportunities for WSU students to meet the demands for a highly trained workforce.
- Currently serve on the Education Committee for the Washington State Recycling
  Association. My work in this committee reaches out to K-12 and undergraduate students
  who are interested in making a career in recycling. Efforts include a yearly conference
  that engages over 150 attendees on recycling concepts.

#### **Professional Service**

- Served on 6 NSF competitive grant review panels
- Served as conference organizer and session organizer for symposia/conferences sponsored by five different professional organizations
- Adjunct faculty member in the Mechanical and Materials Engineering School and the Materials Science and Engineering Program at WSU
- Sponsored two visiting faculty from Jordan and Iran

## **Publications**

(\* Indicates graduate student supervised by Dr. Englund)

## Refereed

- Pelaez-Samaniego MR, Yadama, V, Garcia-Perez M, Lowell E, Zhu R, and KR Englund. 2014. Interrelationship between lignin-rich hot water extracts of wood fiber and thermoplastic resin. Holzforschung (accepted).
- Lekobou WL\*, Englund KR, Laborie MP, and PD Pedrow. 2014. Influence of atmospheric pressure plasma treatments on the surface properties of ligno-cellulosic substrates. Holzforschung (accepted).
- Ogah, AO, Afiukwa, JN and KR Englund. 2014. Characterization and comparison of thermal stability of agro wastes fibers in bio-composites application. J. of Chemical Eng, and Chemistry Research 1(2):84-93.
- Englund, KR and LW Chen\*. 2014. The rheology and extrusion processing performance of wood/melamine composites. J. of Applied Polymer Science 131(3).
- Chi, H.\* and KR Englund. 2013. Interfacial properties of magnesium phosphate ceramics and sugar maple (Acer saccharum). Holzforschung (accepted 2013 DOI 10.1515/hf-2013-0113)
- Sahaf\*, A, MP Laborie, KR Englund, M Garcia-Perez, and AG McDonald. 2013. Rheological properties and tunable thermoplasticity of phenolic rich fraction of pyrolysis bio-oil. Biomacromolecules 14(4):1132-1139.
- Kazemi-Najafi, S. and **KR Englund**. 2013. Effect of highly degraded high density polyethylene (HDPE) on processing and mechanical properties of wood flour-HDPE composites. J Applied Poly. Sci. 129(6):3404-3410.
- Alam, AM, Yadama, V, Cofer, WC and KR Englund. 2012. Analysis and evaluation of a fruit bin for apples. J. of Food Sci. and Tech. DOI:10.1007/s13197-012-0889-3.
- Gindl-Altmutter, W. Keckes, J. Plackner, J. Liebner, F. Englund, KR. Laborie, MP. 2012. Allcellulose composites prepared from flax and lyocell fibres compared to epoxy-matrix composites. Composites Sci and Tech. 72:1304-1309.
- Sahaf\* A, K.R. Englund, and MP Laborie 2011. Tack and shear strength of hybrid adhesive systems made of phenol formaldehyde, dextrin and fish glue, and acrylic pressure-sensitive adhesive. Holzforschung 66(1):73-78.
- Migneault S., A.Koubaa, F.Erchiqui, A.Chaala, Englund, KR. C.Krause, M.P.Wolcott 2011. Application of micromechanical models to tensile properties of wood-plastic composites. Wood Sci. and Tech. 45(3):521-532.
- Dumerose, R.K., J. Heiskanen, K.R. Englund, and A. Tervahauta. 2011. Pelleted biochar: chemical and physical properties show potential use as a substrate in container nurseries. Biomass and Bioenergy 35:2018-2027.
- Kaboorani, A. and K.R Englund. 2011. Water sorption and mechanical performance of preheated wood/thermoplastic composites. Journal of Composite Materials 45(13):1423-1433.
- Englund, K.R. and V. Villechevrolle\*. 2010. Flexure and water sorption properties of wood thermoplastic composites (WPCs) made with polymer blends. J. of Applied Polymer Science. 120(2):1034-1039.

- Chang, F.C, F. Lam, and **K.R. Englund**. 2010. Feasibility of using mountain pine beetle attacked wood to produce wood-plastic composites. Wood and Fiber Science 42(3):388-397.
- Migneault S., A.Koubaa, F.Erchiqui, A.Chaala, K.R.Englund, C.Krause, M.P.Wolcott 2008. Effect of fiber length on processing and properties of extruded wood fiber/ HDPE composites. J. Applied Polymer Sci. 110(2):1085-1092
- Migneault S., A.Koubaa, F.Erchiqui, A.Chaala, **K.R.Englund**, C.Krause, M.P.Wolcott 2009. Effect of Processing Method and Fiber Size on the Microstructure and Properties of Wood-Plastic Composites. Composites Part A-Applied Science and Manufacturing. 40(1):80-85.
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- Migneault S., A.Koubaa, F.Erchiqui, A.Chaala, K.R.Englund, C.Krause, M.P.Wolcott 2008. Effect of Fiber Length on Processing and Properties of Extruded Wood-Fiber/ HDPE Composites. J. Applied Polymer Science. 110(2):1085-1092.
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- **Englund, K.R.** and M.P. Wolcott. 2005. Friction of non-woven wood/polypropylene fiber mats on heated steel platens. Journal of Thermoplastic Composite Materials, vol. 18(2): 95-105.
- Englund, K.R., M.P. Wolcott and J.C Hermanson. 2004. The compression of wood/thermoplastic fiber mats during consolidation. Composites Part A: Applied Science and Manufacturing. 35 (2): 273-279.
- Wang, X.P., R.J. Ross, D.W. Green, B. Brashaw, K.R. Englund and M. Wolcott. 2004. Stress wave sorting of red maple logs for structural quality. Wood Science and Technology. 37(6):531-537.

## **Book Chapters**

Englund, K.R. and M.P Wolcott. 2008. Extrusion processing of WPC's. *In*: Wood Polymer Composites. Woodhead Publishing Limited. Cambridge, UK

## Proceedings/Non-Refereed

P. Pedrow, W. Lekobou, E. Wemlinger, K. Englund, and M. P. Laborie, Cold atmospheric pressure plasma polymerization of hexamethyldisiloxane for improved wood plastics composites. Bulletin of the American Physical Society, vol. 55, 2010.

- Yadama V., **Englund K.R.**, Taylor, A., Harper, D.P. and J.Kim. 2009. Wood Plastic Composites A Primer. University of Tennessee Extension Publication
- **Englund, K.R.** and B.D. Olson. 2007. Extrusion rate influences on the mechanical and physical properties of WPC's. Proceedings for the 9<sup>th</sup> International Conference on Wood and Biofiber Composites. Madison, WI. May 2004.
- Harper D.P., T. Rials, W. Griffith, **K.R. Englund**, and M. P. Wolcott. Electron-beam curable additives for WPC's. Proceedings for the 9<sup>th</sup> International Conference on Wood and Biofiber Composites. Madison, WI. May 2007.
- Wolcott, M.P., P.M. Smith and **K.R. Englund**. 2006. Technology and market issues driving wood-plastic product development. Wood Design Focus Journal of Contemporary Wood Engineering 16(3):3-5.
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- Fabiyi, J.S., A.G. McDonald, M.P. Wolcott and **K.R. Englund**. 2006. Understanding the Chemistry of Wood Plastic Composites Weathering. In: Proceedings of Progress in Woodfibre-Plastic Composites Conference 2006, Toronto, Canada, May 1-2. 10pp.
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- **Englund, K.R.** and M.P. Wolcott. 2002. Pultrusion manufacturing for the wood composites industry. Small Diameter Timber: Resource Management, Manufacturing and Markets. Washington State University Cooperative Extension. Pullman, WA. pp 227-230.
- Wolcott, M.P and **K.R. Englund**. 1999. Wood thermoplastic composites. Proceedings of the International Particleboard/Composite Materials Symposium. Washington State University, Pullman, WA. 103-112pp.
- **Englund, K.R.** and D.J. Gardner 1993. A study of chromated copper arsenate preservative treatment in selected Appalachian hardwoods. Chromium containing waterborne preservatives: Fixation and environmental issues. J. Winandy and M. Barnes eds. Forest Products Society, Madison, WI. pp36-40.

#### **Presentations** (\*presenter)

- \*Englund, KR, Wolcott, MP, and Cavelier, R. NARA Overview. Western Development Committee Forestry. Richland, WA August 20, 2014.
- Lekobou, W. \*Englund, KR, MP Laborie and PD Pedrow. Changing the surface of wood with atmospheric plasma polymerization. 10<sup>th</sup> Congress for Biobased Materials, Natural Fibers and WPC. Stuttgart, Germany. June 24 2014.
- \*Englund, KR. 2013. Waste Wood and Plastics: Where does/can it all go? UI President's Sustainability Symposium. North Idaho College Coeur d'Alene, ID March 20.

- \*Englund, KR. 2012. CMEC Carpet Research. Washington State Recycling Association Meeting In the Loop: The NW Carpet Recycling Value Chain. Kent, WA. June 21, 2012.
- Sahaf A, \*Englund KR, Laborie, MP, Garcia-Perez M, and A. McDonald. 2012. Pyrolytic Lignins as a Thermoplastic Resin for Wood Composites. 47<sup>th</sup> International Wood Composite Symposium. Seattle, WA. April 11-12.
- \*Sahaf A, **Englund, KR**, Laborie, MP, Garcia-Perez M, and A. McDonald. Thermoplastics from pyrolytic lignin. 243rd ACS National Meeting & Exposition, March 2011. San Diego, CA.
- \*Laborie MP, Sahaf A, **Englund, KR**, Garcia-Perez M, and A McDonald. Pyrolytic Lignin with tunable Thermoplasticity. International Conference on Bio-based Materials and Composites (ICBMC'12), Feb. 22-24, 2012. Marrakech-Morocco.
- \*Lekobou, W., **Englund, KR**, Pedrow, PD, & Scudiero, L. 2011. Atmospheric pressure cold plasma treatment of cellulose based fillers for wood plastic composites. Gaseous Electronics Conference, Salt lake City, UT.
- Englund, KR and LW Chen. 2011. The Use of Thermoplastic Processing Methods for Wood-Thermoset Composites. WSU MME Symposium Series, Pullman, WA April 28.
- \*Dumroese RK, Pinto JR, Heiskanen J, **Englund KR.** 2010. Potential for using biochar in container media used to grow native plants. Fifth Western Native Plant Conference. December 7-9. Western Forestry and Conservation Association. Portland, Oregon.
- \*Englund, KR, M Garcia-Perez, MP Laborie. 2010. A forest-based pyrolysis biorefinery. Western Sun Grant Annual Meeting. Vancouver, WA October 13.
- \*Yadama, V. and \***K.R. Englund**, 2010. Adding value to Washington's biomass. WSU Webinar Series. 8/3/2010.
- Cameron, T.C., \*K.R. Englund, V. Yadama, and V. Barber. 2010. Combined temperature and UV influences on the mechanical performance of WPCs 11<sup>th</sup> International Conference on Biocomposites: Transition to Green Materials. Toronto, CA May 2-4.
- \*Englund K.R. and Z. Rininger. 2009. Profiled wood composites using pultrusion processing. 63<sup>rd</sup> International Forest Products Society Annual Meeting. Boise, ID June 21-23.
- Kaboorani A, Cloutier A, \*Englund KR, and MP Wolcott. 2009. Characterizing Water Sorption and Diffusion Properties of Wood/Plastic Composites as a Function of Formulation Design. 10th International Conference on Wood & Biofiber Plastic Composites May 11–12, Madison, Wi
- \*Englund KR. 2008. Magnesium-phosphate binders for wood fiber composites. 9<sup>th</sup> Pacific Rim Bio-Based Composite Symposium. Rotorua, NZ Nov. 8-10.
- \*Englund KR and PM Smith. 2008. Trends in the WPC Market. American Wood Preservers Association Annual Meeting. Portland, OR May 19-20.
- \*Englund KR. 2008. Alternative fibers for wood plastic composites. Smallwood 2008 and Bioenergy & Wood Products. Madison, WI May 13-15.
- \*Englund KR. and Z Rininger. 2008. Novel pultrusion processing for wood composites. International Wood Composite Symposium Technical Workshop. Seattle, WA. March 31, 2008.

- \*Englund KR. and BD Olson. 2007. Extrusion rate influences on the mechanical and physical properties of WPC's. 9<sup>th</sup> International Conference on Wood and Biofiber Composites. Madison, WI. May 21-22.
- \*Harper DP, T Rials, W Griffith, **KR Englund**, and MP Wolcott. 2007. Electron-beam curable additives for WPC's. 9th International Conference on Wood and Biofiber Composites. Madison, WI. May 21-22.
- \*Tichy R and KR Englund. 2006. Product Performance Assessment of Wood and Natural Fiber-Polymer Composites. Durability in Wood Plastic and Natural Fiber Composites. San Antonio, TX . December 4-5.
- \*Fabiyi JS, A McDonald, MP Wolcott, and **KR Englund.** 2006. Understanding the Chemistry of Wood Plastic Composites Weathering. Progress in Wood and Bio Fibre Plastic Composites. Toronto, Canada. May 1-2.
- Yadama, V,\* KR Englund and R Vagaan. 2006. Sawmill Residues for Wood-Plastic Composites. Progress in Wood and Bio Fibre Plastic Composites. Toronto, Canada. May 1-2.
- \*Englund, KR and Michael P. Wolcott. 2005 WPC Processing and Formulations. International Wood Composite Symposium. Pullman, WA. April.
- \*Englund, KR and Michael P. Wolcott. 2004. Wood Thermoplastic Composites Manufacturing and Performance. UC Cooperative Extension – Durability Seminar Series Durable Decks: Construction, Degradation, and Inspection. November 10.
- \*Englund, KR. 2004. Wheat straw residues as a fibers source for thermoplastic composites. Progress in Wood and Bio Fibre Plastic Composites Conference. Toronto, CA. May 10-11.
- \*Coats, E., \*KR Englund, F Loge and MP Wolcott. 2003. Wood fiber-PHB composites. AIChE Annual Meeting, San Francisco, CA, November.
- \*Wolcott, MP, KR Englund, DP Harper and TQ Li. 2003. Influence of additives on the viscoelastic and rheological behavior of wood-polypropylene composites. AIChE Annual Meeting, San Francisco, CA, November 16-21
- \*Harper, DP, MP Wolcott and **KR Englund**. 2003. Molecular relaxations contributing to phase transition creep in thermoplastic wood composites. 7th International Conference on Woodfiber-Plastic Composites. Madison, WI, May 19-20.
- \*KR Englund and MP Wolcott. 2002. The pultrusion of wood-based composites. Small Diameter Timber Symposium. Spokane, WA. February 25-27.
- \*Wolcott, MP and KR Englund. 1999. A technology review for wood-plastic composites. 33rd International Particleboard/Composite Materials Symposium Proceedings. Washington State University, Pullman, WA, April 13-15.
- \*Englund, KR and MP Wolcott. 1996. The use of synthetic gypsum as an inorganic binder in waste-paper fiberboard. 50th Annual Meeting of the Forest Products Society. Minneapolis, MN.

## **Posters**

Pelaez-Samaniego MR, and KR Englund. 2014. Characterization of waste wood materials for the production of biofuels. NARA Annual Meeting. September 16. Seattle WA.

Zhu, R., Yadama, V. and KR Englund. 2013. From Wood to Wing: NARA Works to Harness Woody Biomass for Aviation Biofuel. Small Log Conference. Coeur d'Alene, ID 3/13-15

Lekobou, W. KR Englund, and P Pedrow. 2013. Atmospheric Pressure Plasma Treatment of Cellulose Based Fillers for Improved Plastic Composites. International Wood Composite Symposium. Seattle, WA April 3-4.

Sahaf, A. and KR **Englund**. 2013. Characterization of Thermoplastic Blends of Phenolic Rich Fraction of Wood Pyrolysis Oil and Biopolymers for Adhesive Application. International Wood Composite Symposium. Seattle, WA April 3-4.

Schneider, GA and KR Englund 2013. Wood Waste Assessment within the Construction and Demolition Industry. International Wood Composite Symposium. Seattle, WA April 3-4.

Islam, R. W Lekobou, E Wemlinger, **KR Englund**, and P Pedrow. 2013. Transport of Neutral Radicals to Substrate Surfaces Located Downstream from an Atmospheric Pressure Weakly Ionized Plasma Reactor. WSU Academic Showcase Pullman, WA. March 29.

Chi, H. and **KR Englund**. 2012. Interfacial Properties of Chemically Bonded Phosphate Ceramics and Wood. International Wood Composite Symposium. Seattle, WA April 11-12.

Sahaf, A. and **KR Englund**. 2011. Thermoplastic Behavior in Phenolic Rich Phase Derived from Pyrolytic Bio-Oil, WSU Academic Showcase, March 25, Washington State University.

Gray, R, Lekobou W, Pedrow, P and **KR Englund**. 2011. Plasma Polymerization Deposition Rate Study within an Atomospheric Pressure Cold Plasma Reactor. NSF REU Poster Presentation. Aug 5. Pullman, WA.

Sahaf, A., MP Laborie and KR Englund. 2010. A study of PF based hybrid adhesives for valueadded wood composites. 44<sup>th</sup> International Wood Composite Symposium. Seattle, WA Mar. 29-31.

Cameron, T.C., \* V. Yadama, **KR Englund**, and V. Barber. 2010. Coupled weathering effects on strength, stiffness, and creep behavior of wood-plastic composites. 64th Annual Conference of the Forest Products Society.

Benjamin, MJ, KR Englund, and D.F. Bahr. 2010. Material properties of chemically bonded phosphate ceramic/wood interfaces. Research Experience for Undergraduates Poster Session Washington State University NSF REU Program. Aug. 6, 2010.

Migneault S, Koubaa A, Erchiqui F, Chaala A, Englund KR, and MP Wolcott. 2010. Modeling the tensile properties of wood-plastic composites made from CTMP hardwood fibers. 11th International Conference on Biocomposites: Transition to Green Materials, Toronto, CA May 2-4, 2010.

Englund, KR and V Yadama. 2009. CMEC Wood and Natural Fiber Research. 2<sup>nd</sup> Annual Family Forest Expo. Auburn, WA Feb. 13, 2010.

Lekobou, W, Pedrow, Englund, KR and MP Laborie. 2009. Cold-atmospheric pressure plasma polymerization of acetylene on wood flour for improved wood plastics composites. 62<sup>nd</sup> Gaseous Electronics Conference. Saratoga Springs, NY Oct. 20-23, 2009.

Rininger, ZR, and KR Englund. 2008. Pultrusion of Wood Strand Composites. Northwest Forest Products Academic Forum. Tacoma, WA May 16, 2008.

Chen, LW and **KR Englund**. 2008. Extrudable melamine resins for WPC's. 43<sup>rd</sup> International Wood Composite Symposium. Seattle, WA Mar. 31-April 1.

## Industrial Outreach and Engagement

(\$1,400,000+ in research and development projects from the following selected list of clients)

**AERT** Johns Manville Edeniq Rio Tinto Minerals Elk Composites **Arch Chemicals** Kescon Sartomer **Equistar Chemicals** Louisiana-Pacific Corp. ScreenTight Arclin Armstrong Global Epoch Composites Lubrizol Setzer Forest Products Industries **Evergreen Engineering** Masonite Corp Simplot **BASF** Fiberon McFarland Cascade Strandex MeadWestvaco Straw Xchange BioFrontiers Inc. FiberTech Boise Cascade Inc. Fusoni Milacron Styrolution America LLC C.F. Martin Guitar Georgia-Pacific Corp Momentive **Traision Corp** Canyon Creek Cabinetry Geo Chemicals **Neville Chemicals** Trex Ciba Specialty Chemicals Global EcoVentures New Page Inc. Tricon Timber Chemtura Chemicals Hearthstone NewWood **Troy Chemicals** Hollow Road Farms Office Max **USFS** Ceramic Cement Corp Creafil Fibers Honeywell Osmose Vagaan Bros. Lumber Huntsman Polyurethanes WAPS - Korea Deceunick Pacific Tool Polymer Engineering Co. Waste-Not Recycling Dow Chemical **ICMI** Jeldwen **Dow Corning** Polyone Weyerhaeuser Corp. **Dupont Corporation** JER Environtech Rexam Zemex

## Sponsored Research

\*Personally expended in ()

Holzer A,...(4 other co-PIs).. **KR Englund**. Mid Columbian Economic Development District. Investing in Manufacturing Community Partnerships. 2013-2015. \$80,000 (\$10,075)

**Englund KR.** Styrolution Inc. Wood modified styrenics. 2014-2015. (\$79,784)

**Englund KR.** JCATI. Recycling of Carbon Fiber Reinforced Thermoplastic Composite Wastes for the Aerospace Industry. (\$72,540)

**Englund KR.** Terra Power. Biochar pellets. 2014. (\$15,000)

Anderson, N (11 other co-PIs)... **KR Englund**. USDA. Integration of biofuels and bioproducts production into forest products supply chains using modular biomass gasification and carbon activation. 2011-2015. \$6,946,631(\$244,328)

Wolcott MP (18 other WSU co-PIs)... **KR Englund**. USDA: PMU: Northwest Advanced Renewables Alliance (NARA): A New Vista for Green Fuels, Chemicals, and Environmentally Preferred Products (EPPs). 2011-2013. \$23,600,000 (\$412,795).

**Englund, KR.**, Laborie, MP, and M. Garcia-Perez. Sun Grant – OSU. *A Forest Residue-Based Pyrolysis Biorefinery*. 2009-2012. \$179,547 (\$101,936)

Bender D, Yadama V, **Englund, KR**. USDA CSREES-Wood Utilization Research Program. *Panelized wood assemblies*. USDA Wood Utilization Research Program 2009 – 2011 \$190,000 (\$60,000) Yadama, V. and **KR Englund.** U. Alaska – Fairbanks. Wood-Plastic Composites from Low-value Alaskan Biomass and Blends of Recycled Thermoplastics. \$50,461 (\$25,230)

Dumerose, D. Dumerose, K., and **KR Englund**. USDA-FS *Using Fast-pyrolysis Biochar to Develop Pellets for Application to Forest Soils*. 2009-2011. (\$25,000) Sub-contract award.

Laborie, MP. and **KR Englund**. Boeing. *Eco-Friendly Epoxy Resins Using Cellulose Nanocrystals*. 2009. \$49,000.

Bender, Donald (PI); **Englund, KR**; Yadama, V.; Laborie, M., Zhang, J. USDA CSREES-Wood Utilization Research Program. *Value-Added Wood-Strand Composites*. USDA CSREES-Wood Utilization Research Program 2008-2010 \$195,190 (\$48,798)

Yadama, V. and K.R. Englund. Univ. of Alaska-Fairbanks. *Alaskan timber resources for wood-plastic composites: a feasibility study.* 2007-2009. \$47,386 (\$15,795)

**Englund, K.R.** Washington Technology Center. *Modified wood fillers for improving wood plastic composites*. 2005-2006; \$120,849.

**Englund, K.R.** and V. Yadama. USDA CSREES-Wood Utilization Research Program. *Small diameter trees for long strand composites*. 2006-2008; \$194,996.

Yadama, V., **K.R. Englund**, and R.J. Tichy. Washington Technology Center. *Business expansion for an eastern Washington sawmill – environmentally appropriate wood plastic composites*. 2006; \$98,950 (Co)PI. (\$22,104)

**K.R. Englund**. USDA CSREES-Wood Utilization Research Program. *Wood Thermoplastic Composites for Bridge Decking*. 2004-2006; \$48,000.

Yadama, V. and **K.R. Englund**. Washington Technology Center. *Sawmill residues for wood plastic composites*. 2004-2005; \$48,365. (Co)PI. (\$24,157 personally expended)

**Englund, K.R.** and M.P. Wolcott. Washington Technology Center. *Extrusion of foamed polyvinyl chloride/wood flour composites.* 2005; \$43,174.

# Student Advising and Mentoring

Chair or Co-Chair

**Thomas Tarlton** MS 2016(*projected*) Mechanical and Materials Engineering. Topic: Processing wood-filled styrenics.

**Zhang, Hanwen** PhD 2015(*projected*). Material Science and Engineering Program. Topic: Modeling the pelletization of biochar.

**William Lekobou** Ph.D. 2013 (*projected*). Material Science and Engineering Program. Topic: Atmospheric pressure plasma polymerization of wood veneer and particles.

- <u>Journal article</u> Lekobou WL\*, **Englund KR**, Laborie MP, and PD Pedrow. 2014. Influence of atmospheric pressure plasma treatments on the surface properties of lignocellulosic substrates. Holzforschung (accepted).
- <u>Proceedings</u> P. Pedrow, W. Lekobou, E. Wemlinger, **K. Englund**, and M. P. Laborie, Cold atmospheric pressure plasma polymerization of hexamethyldisiloxane for improved wood plastics composites. *Bulletin of the American Physical Society*, vol. 55, 2010.

## Presentation –

- Lekobou, W., Englund, KR, Pedrow, PD, & Scudiero, L. Atmospheric pressure cold plasma treatment of cellulose based fillers for wood plastic composites.
   Gaseous Electronics Conference, Salt lake City, UT. 2011
- Lekobou, W. Englund, KR, MP Laborie and PD Pedrow. Changing the surface of wood with atmospheric plasma polymerization. 10<sup>th</sup> Congress for Biobased Materials, Natural Fibers and WPC. Stuttgart, Germany. June 24 2014.
- <u>Employment</u> Process Research Engineer, Intel, Portland, OR.

**Amir Sahaf** Ph.D. 2013 (*projected*). Material Science and Engineering Program. Topic: Phenolic fractions of pyrolytic bio-oil for use as thermo-responsive adhesives

## Journal articles –

- o Sahaf A, **K.R. Englund**, and MP Laborie 2011. Tack and shear strength of hybrid adhesive systems made of phenol formaldehyde, dextrin and fish glue, and acrylic pressure-sensitive adhesive. Holzforschung 66(1):73-78.
- Sahaf, A, MP Laborie, KR Englund, M Garcia-Perez, and AG McDonald. 2013.
   Rheological properties and tunable thermoplasticity of phenolic rich fraction of pyrolysis bio-oil. Biomacromolecules 14(4):1132-1139.

## Presentations

- Sahaf A, Englund KR, Laborie, MP, Garcia-Perez M, and A. McDonald. 2012.
   Pyrolytic Lignins as a Thermoplastic Resin for Wood Composites. 47<sup>th</sup> International Wood Composite Symposium. Seattle, WA. April 11-12.
- Sahaf A, Englund, KR, Laborie, MP, Garcia-Perez M, and A. McDonald.
   Thermoplastics from pyrolytic lignin. 243rd ACS National Meeting & Exposition, March 2011. San Diego, CA.
- Laborie MP, Sahaf A, Englund, KR, Garcia-Perez M, and A McDonald. Pyrolytic Lignin with tunable Thermoplasticity. International Conference on Bio-based Materials and Composites (ICBMC'12), Feb. 22-24, 2012. Marrakech-Morocco.
- Employment Bechtel Houston, TX

**Schneider, Gerald** MS, 2013. Civil and Environmental Engineering. Thesis: *Construction and demolition wood waste assessment for the Northwest US*.

• Employment - Nautilus Building Consultants, San Diego, CA

**Chi, Hengxuan** MS, 2012. Mechanical and Materials Engineering. Thesis: *Interfacial properties of chemical bonded phosphates ceramics and sugar maple (Acer saccharum)*.

- <u>Journal article</u> Hengxaun, C. and KR Englund. Interfacial properties of magnesium phosphate ceramics and sugar maple (Acer saccharum). Holzforschung accepted
- Employment Materials Engineer at Ran Business LLC Rowling Heights, CA

**Xiaoming Wen** MS 2012. Civil and Environmental Engineering. Project: *Performance of extruded wood plastic composites from fire-killed black spruce and blends of virgin and recycled polyolefins*.

**Tony Cameron** MS 2009. Civil and Environmental Engineering. Thesis: Alaskan timber resources for wood plastic composites.

- <u>Presentation</u> Cameron, T.C., \*K.R. Englund, V. Yadama, and V. Barber. 2010.
   Combined temperature and UV influences on the mechanical performance of WPCs 11<sup>th</sup>
   International Conference on Biocomposites: Transition to Green Materials. Toronto, CA May 2-4.
- Employment Naval Shipyards, Everett, WA

**Leewen Chen** MS 2009. Civil and Environmental Engineering. Thesis: *Extrudable melamine resin for wood plastic composites*.

- <u>Journal Article</u> Englund, KR and LW Chen. 2013. The rheology and extrusion processing performance of wood/melamine composites. J. of Applied Polymer Science 131(3).
- <u>Presentation</u> Englund, KR and LW Chen. 2011. The Use of Thermoplastic Processing Methods for Wood-Thermoset Composites. WSU MME Symposium Series, Pullman, WA April 28.

**Viviane Villechevrolle** MS 2008. Civil and Environmental Engineering. Thesis: *Polymer Blends for multi-extruded wood plastic composites*.

- <u>Journal Article</u> Englund, K.R. and V. Villechevrolle. 2010. Flexure and water sorption properties of wood thermoplastic composites (WPCs) made with polymer blends. J. of Applied Polymer Science. 120(2):1034-1039.
- <u>Employment</u> Structural Engineer at Eiffage Construction Haute Normandie Le Petit Quevilly, France

**Zachary Rininger** MS 2008. Civil and Environmental Engineering. Thesis: *The utilization of small diameter timbers in pultruded long strand composites*.

- Presentations
  - Englund K.R. and Z. Rininger. 2008. Novel pultrusion processing for wood composites. International Wood Composite Symposium - Technical Workshop. Seattle, WA. March 31, 2008.
  - Englund K.R. and Z. Rininger. 2009. Profiled wood composites using pultrusion processing. 63<sup>rd</sup> International Forest Products Society Annual Meeting. Boise, ID June 21-23.
- Employment Structural Engineer at Nelson Engineering Kenai, Aslaska

#### Other Graduate student advisory committees served:

Jian Geng (MS in MSE '11-"13)

Shan Li (MS in MME '11-'13)

Shuai Zhou (PhD in BSE '10-'13)

Anselm Ogah (PhD Polymer Science Ebonyi State University – Nigeria '12)

Rhui Zhang (PhD in CE ('11-'14)

Nils Peterson (M.S. in CE) ('07-'08)

Jason O'Dell (MS in CE) ('06-'08)

Christopher Voth (MS in CE) ('07-'09)

Yang Cao (MS in CE) ('08-'10)

Gregory Estep (MS in CE) ('09-'10)

Kevin Simmons (PhD in MSP ('08-'11)

Meng Hsin Tsai (PhD in CE '08-'12)

## **Undergraduate Mentoring**

**Research Interns** 

Calvin Silas (MME) ('13) – NARA Student Undergraduate Research Experience (SURE) Mary Blevins (Ch E) ('12) – WSU Cougar Undergraduate Research Experience (CURE)

Roderick Gray (MS – Alabama Tech) ('11) – NSF Research Experience for Undergraduates (REU)

Anthony Timms (CE) ('08-'09) – WSU CURE

Michael Benjamin (CE) ('10) – NSF REU

Edward Spicer (CE) ('09-'10) – Entrepreneurial Program

#### **Senior Thesis**

Milosh Mededovic (MSE '12-'13) David MacDonald (MSE '08-'09)

Erik Walker (AS '11-12)

Euginia Lo (AS '11-12)

## International interns supervised:

Johannes Plackner (05/09 -08/09)

Harish Kumar (05/09 - 08/09)

Emmanuel Stapfer (05/06-08/06)

Laurant Cossart (05/06-08/06)

Rajaneerom Bannavittayakit (3/04-7/04)

Rutchanop Pojanavaraphan (3/04-7/04)

## Undergraduate research assistants supervised (27):

Zachary AndrewsChristian KureEdward SpicerMichael BenjaminAndrew LangdonJesse TaylorMary BlevinsMilosh MededovicNathan TrollTony CameronDavid MacDonaldElliot Troll

Brian Entman Stephanie Pitts Jonathon Waldrip Karl Frazier Ben Rhodes James Van Wingerden

John Fuerstein Zachary Rininger

Benjamin Grimes Ryan Roberts Michael Voth
Caleb Knudsen Sarah Schwab Zachary Wright

Chad Kuntz Michael Smith

# Professional Society Memberships

Society of Wood Science and Technology

Washington State Recycling Association Washington Extension Agents and Specialist Association NW By-Product Synergy King County Carpet Recovery Program Forest Products Society Society of Plastics Engineering **Building Materials Reuse Association** ASTM

## Professional Service

## Advisory Board Member

- King County Solid Waste Carpet Recovery Program 2012-2013
- Composites Advisory Committee, Peninsula College 2013

## Conference Session Planning

 American Chemical Society, Building Materials Reuse Association, Forest products Society, WSU-International Wood Composite Symposium

## Committee Assignments

- WSU Budget Advisory Council 2010-2011
- Washington State Recycling Association Education Committee 2012-present
- Ferry County Extension Search Committee 2013
- Technical Research Associate- Composites Search Committee 2007

## Panel Reviewer

- National Science Foundation
  - o Small Business Innovative Research (4x's)
  - Materials Processing and Manufacturing

## **Adjunct Faculty Position**

- WSU Mechanical and Materials Engineering
- WSU Material Science Program

## Visiting Sponsorship

- Faculty
  - o Ibrahim Al-Hamarneh, Al-Balga Applied University, Jordan
  - o Saeed Kazemi Najafi Tarbiat Modares University Noor, Iran
- Graduate Student
  - Anselm Ogah (PhD Polymer Science Ebonyi State University Nigeria '12)

## Conference Session Moderator

American Chemical Society, Building Materials Reuse Association, Forest products Society, WSU-International Wood Composite Symposium

## Technical Consultant/Advisor

- Network for Business Innovation and Sustainability. 2010-present
- King County Solid Waste Carpet Recovery Program 2009-present

## Technical Reviewer

Journals

- Forest Products J, Composites Part A, J of Applied Polymer Sci, J of Thermoplastic Composite Materials, Wood and Fiber Science, J of Zhejiang University – Science B, Materials Today, J of Polymers and the Environment, Bioresources, Maderas, Thermochimica Acta, Tribiology Transactions, J Wood Chemistry and Technology, European Polymer J, Fuel Processing Technology, J of Biobased Materials and Bioenergy, J of Composite Materials
- Granting Agency
  - Ontario Research Fund, National Science Foundation, USDA, The World Academy of Sciences

## WSU Service

- Judge/Reviewer
  - Imagine Tomorrow
  - WSU Academic Showcase
  - Auvil Scholarships
- Teaching
  - CE 580 Graduate Seminar 2012
  - CE 547 Natural Fiber Thermoplastic Composites 2007
  - Engineering Entrepreneurship Program, College of Engineering and Architecture.
     2004 -2009
    - 1-day workshop
  - o Presented workshops for 4-H K-12 students on recycling materials
  - o CE 466 FE Review course Materials 2013-preent



#### **CURICULUM VITAE**

NAME: MICHAEL J. GAFFNEY

TITLE & RANK: Director, Division of Governmental Studies and Services

**Executive Director, Washington State Institute for Criminal Justice** 

**Emergency Management Coordinator** 

**Clinical (non-Tenure) Faculty** 

OFFICE LOCATION: 301 Bryan Hall, PO Box 645131, Pullman, WA 99164-5131

OFFICE PHONE: 509 335-4611 EMAIL: mjgaffney@wsu.edu

FAX: 509 335-2362 WEB: www.dgss.wsu.edu

DATE OF FIRST EMPLOYMENT AT WSU: Sept. 1996

TENURED? No

DATE OF PRESENT RANK OR TITLE: May 2010?

#### **EDUCATION**

## A. Degrees Earned

Bachelor of Science, Political Science – University of Idaho, 1979

Bachelor of Science, Economics – University of Idaho, 1979

Juris Doctor – University of Idaho College of Law, 1982

ABD, Political Science/Applied Justice and Policy Studies – WSU

## **EMPLOYMENT**

## A. University Related

August 1996 to Present: Numerous and overlapping positions at Washington State University. These include:

- Director, Division of Governmental Studies and Services. (July '11 to present)
- Acting & Interim Director, Division of Governmental Studies and Services July '10 to June, '11)
- Associate Director, Division of Governmental Studies and Services (03 07/10)
- Acting Director, Division of Governmental Studies and Services, (07/04 01/05)
- Assistant Director, Division of Governmental Studies and Services (2001-3)
- Research Coordinator, Division of Governmental Studies and Services (2000-01).
- Adjunct Instructor, Washington State University Tri-Cities.

- Enhanced 911 Addressing Project Coordinator, DGSS.
- Contract Evaluator or Researcher (through DGSS) for the Washington State Patrol, the Spokane Police Department, Moscow, Idaho School District, and the Western Regional Institute for Community Oriented Public Safety (WRICOPS).
- Instructor and Independent Teaching Assistant, Pullman Campus

May 1994 to August 1995: Mediation Project Assistant, Martin Institute for Peace Studies and Conflict Resolution, University of Idaho.

December 1993 to May 1996: Graduate degree candidate (MA), University of Idaho. Employed as a Teaching Assistant from August, 1994 to May, 1996, teaching *Introduction to American Politics*.

#### B. Other

April 1990 through June 1993: Assistant Staff Judge Advocate, USAF.

May 1982 through April 1990: Private Practice of Law, Boise Idaho.

#### HONORS AND AWARDS

WSU College of Liberal Arts, Administrative Professional of the Year, 2011

#### GRANTS, CONTRACTS, AND FUND GENERATION

- A. Select Grants and Awards (PI, Co-PI or Significant Participation)
  - 2014 Columbia River Salmon Recovery Assessment \$70,715
  - 2014 Voluntary Stewardship Project Watershed Workgroup Support \$98,310
  - 2013 **WA Fire Marshal Task Order #1** General Technical Assistance, Evaluation Survey Development and Instructional Standards Design \$29,111
  - 2013 Columbia River Salmon Recovery Assessment \$56,124
  - 2013 Columbia River Gorge Urban Area Convening Assessment \$2,958
  - 2013 Tri Cities Alternative Governance Phase Two \$51,466
  - 2013 Columbia River Salmon Recovery \$35,358
  - 2012 Montana Highway Patrol Traffic Stop Data Study \$22,722
  - 2012 Master Agreement: Fire Academy General Technical Assistance
  - 2012 Thurston Sustainable Communities Planning Amendment #1 \$2,000
  - 2011 Stronger Economies Together \$39,400
  - 2011 Thurston Sustainable Communities Regional Planning Grant \$25,000
  - 2011 Thurston County Diving Stakeholder Process \$12,200
  - 2011 Pullman Smart Policing Initiative \$104,349

- 2010 Snohomish County Pet Waste Program Effectiveness Study \$23,725
- 2010 PMU: Collaborative Research: WSC-Category 1. Sustainability Dynamics for Water Resources in a Rapidly Urbanizing and Climatically Sensitive Region \$74,729
- 2010 Whatcom County Commodity Flow Study \$4,965
- 2009 Columbia County Hazardous Material Commodity Flow Study \$6,220
- 2009 King Conservation District Client Satisfaction Survey Project \$9,784
- 2009 Longitudinal Comparative Study of Basic Police Training Academy
- 2009 Thurston Community Cafes Evaluation Project \$6,286
- 2009 Ada County Traffic Stop Data Project \$42,814
- 2008 CJTC BLEA Longitudinal Efficacy Study \$20,334
- 2008 Whitman County Effectiveness Study \$8,645
- 2008 Natural Resources Leadership Academy NOAA Fisheries Training \$10,593
- 2008 Rural Resources Needs Assessment and Training \$14,975
- 2008 Curriculum Development for WomenSpirit Coalition \$8,559
- 2008 Pend Oreille Hazard Materials Flow Study \$2,463
- 2008 Washington Auto Theft Prevention Authority Study \$44,998
- 2007 WA Department of Licensing Training \$5,001
- 2007 Douglas & Chelan County Department of Emergency Management \$12,703
- 2007 Grant County Department of Emergency Management \$6,559
- 2007 Data Analysis Work with the City of North Bonneville \$2,888
- 2007 Evaluating Washington State's SAVIN Program \$9,000
- 2007 Phase IV: Washington State Patrol Racial Profiling Research \$96,663
- 2006 Pend Oreille County Department of Emergency Management \$6,559
- 2006 Evaluating Washington State's SAVIN Program \$60,000
- 2006 WSU-CTED Drug Task Force Study \$33,209
- 2006 Stevens County Hazardous Materials Gap Analysis \$5,416
- 2006 WA Department of Licensing Training \$7,413
- 2005 NRLA Training for NAFWS \$1,516
- 2005 NRLA NOAA Personnel Training \$30,000
- 2006 WRICOPS Advancing Community Policing RCPI Network \$300,000
- 2005 Hazardous Materials Commodity Flow Study for the Tulalip Tribe \$6,684
- 2005 Okanogan County Hazardous Materials Flow Study \$4,560
- 2005 Hazardous Materials Commodity Study for Lummi Reservation \$4,815

- 2006 WSU Statewide Hazard Mitigation Planning Project \$377,619
- 2005 WRICOPS Advanced Community Policing \$585,714
- 2005 Statewide Fire Agency Funding, Priorities and Support Study \$46,802
- 2005 Hotspots Follow Up Analysis for Project Safe Neighborhoods \$39,665
- 2004 Stevens County Emergency Services Hazmat Flow Study \$3,800
- 2004 NRLA Collaborative Resource Management Training \$83,453
- 2004 Department of Labor & Industries \$7,132
- 2004 Audit of WSP Trooper Coding Accuracy in Traffic Stops \$904
- 2004 Stevens County Emergency Services HazMat Flow \$3,500
- 2004 Department of Labor & Industries \$35,565
- 2004 Data Collection Supplemental Project for Safe Neighborhoods \$95,028
- 2004 Washington State Patrol Racial Profiling Research \$118,637
- 2003 Water Acquisition Program Assessment Project \$46,190
- 2003 Extension NRLA Evaluation of Citizen Percep6tions of ESA \$35,000
- 2004 WRICOPS Advancing Community Policing \$350,000
- 2004 WRICOPS Police Integrity \$400,000
- 2003 Young Victims of Sexual Assault Forensic Interview Taping \$10,011
- 2003 WA Traffic Safety Commission Booster Seat Utilization \$39,725
- 2003 Applied Research Work with the Spokane Police Department \$45,558
- 2002 NMFS Natural Resources Leadership Training Institute \$153,767
- 2003 WRICOPS Community Policing Development \$500,000
- D. MOA's and funding secured from Public, Non-profit and Private entities

Washington Association of Sheriffs and Police Chiefs (MOU, 2013) provides in-

kind office support and jointly pursues opportunities for research and grants.

Criminal Justice Training Commission (MOU, 2014) pursues joint interests,

maintains a joint video-conferencing facility, engages in evaluation research.

Washington State Fire Marshal (Master Agreement, 2012) joint work on fire

Training issues pursuant to multiple Task Orders. Potential full partnership.

## E. Grant Proposals – Select Pending and Unfunded

2014 Indigent Defense: A Four-state Study to Assess Efficacy and Client Satisfaction

OGRD Number: 122889-001

2013 Puget Sound Vulnerable Populations All-Hazards Emergency Response Project

OGRD Number: 122717-001

2012 PMU: IGERT: Transforming water resource management through integrated

training in social and biophysical sciences for collective action

solutions.

OGRD Number: 118957-002

2011 PMU: IGERT: Collective Action in Complex Human-Environmental Systems

(CACHES)

OGRD Number: 116626-003

2011 Digitization and Analysis of DRE Program Archival Records

OGRD Number: 117257-001

2010 Lakewood Weed and Seed Program Evaluation

OGRD Number: 113801-002

2009 Lakewood Weed and Seed Program Evaluation

OGRD Number: 113801-001

2007 Washington County Training Program

OGRD Number: 109337-001

2006 Collaborative Networking to Create Resilient Regional Disaster Response

OGRD Number: 106684-002

2005 Center for the Study of High Consequence Even Preparedness and Response

OGRD Number: 104468-001

2004 The Enhancement of Community Policing Through the Use of DNA Evidence

OGRD Number: 103230-001

2004 Developing a Community Policing Implementation Assessment Tool

OGRD Number: 103334-001

#### PUBLICATIONS AND CREATIVE WORK

## A. Books and Chapters in Books, Monographs

*Tri-Cities Governance: Capacity for Action.* (With Kern M.A) Submitted after solicitation for inclusion in work-in-progress: **Collaborative Governance Regimes**, Kirk Emerson, ed. Georgetown University Press, 2013.

The Executive Branch in Washington State Government (Chapter) in Governing Washington (with Stehr, Steven), WSU Press, 2011.

National Forensic DNA Study Report. (With Lovrich, Pratt, and Johnson in collaboration with Smith Alling Lane, PS) Prepared for the Attorney General of the United States, 2004.

## B. Professional Articles, Refereed or Peer Reviewed

The William D. Ruckelshaus Center: Fostering Collaborative Solutions to Planning and Other Policy Challenges. Submitted to Administration and Society. (with Kern M.A., A.G.Murphy, and J.Kramer). 2013.

Are Block Watch Volunteers Different than Volunteers in Community-oriented Policing Programs? Findings form a Mature COPS Setting. (Randol, Blake & Michael J. Gaffney) Police Practice and Research: An International Journal.

Search and Seizure, Racial Profiling, and Traffic Stops: A Disparate Impact Framework. (With Pickerill, M., Pratt, T.C., and Mosher, C.) **LAW AND POLICY**. (Accepted for publication)

The Importance of Context in Understanding Biased Policing: State Patrol Traffic Citations in Washington State. (With Pratt, T.C., Lovrich, N. P., and Mosher, C.) **POLICE PRACTICE AND RESEARCH: AN INTERNATIONAL JOURNAL**. Vol. 9, No. 1, 2008.

Assessing Collaborative Capacity in a Multi-Dimensional World. (Weber, Ed, Nicholas Lovrich & Michael Gaffney) **ADMINISTRATION AND SOCIETY**. Vol. 39, No. 2, 2007.

Inter- Agency Collaborative Approaches to Endangered Species Act Compliance and Salmon Recovery in the Pacific Northwest. (With Lovrich, Weber, Bireley, Matthews and Bjork) **THE HANDBOOK OF GLOBALIZATION AND THE ENVIRON-MENT**. Rahm and Coggburn, eds. Boca Taton, FL: CRC Press, 2006.

Participating in Community Crime Prevention: Who Volunteers for Police Work. Ren, Ling, Jihong Zhao, Nicholas Lovrich and Michael Gaffney, POLICING: AN INTERNATIONAL JOURNAL OF POLICE STRATEGIES & MANAGEMENT. Vol. 29, No. 1, 2006.

This Isn't CSI: Estimating the National Backlog of Forensic DNA Cases and the Barriers Associated With Case Processing. (Pratt, Travis, Michael Gaffney, Nicholas Lovrich and Charles Johnson), **CRIMINAL JUSTICE POLICY REVIEW**. Vol. 17, No. 1, 2006.

Collaboration, Enforcement and Endangered Species: A Framework for Assessing Collaborative Problem Solving Capacity (With Edward Weber and Nicholas Lovrich) **SOCIETY AND NATURAL RESOURCES**. Vol. 18, No. 8, 2005.

Inter-Agency Collaborative Approaches to Endangered Species Act Compliance and Salmon Recovery in the Pacific Northwest. (With Nicholas Lovrich, Edward Weber, Michael Bireley, Dayna Matthews, and Bruce Bjork) INTERNATIONAL JOURNAL OF ORGANIZATION THEORY AND BEHAVIOR. Vol. 8, No. 2, 2005.

Participation in Community Crime Prevention: Are Volunteers More or Less Fearful of Crime Than Other Citizens? (With Jihong Zhao, Chris Gibson and Nicholas Lovrich) **JOURNAL OF CRIME AND JUSTICE**, Vol. 25, No. 1, 2002.

Social Integration, Individual Perceptions of Collective Efficacy, and Fear of Crime: An Empirical Assessment Across Three Cities. (With Jihong Zhao, Chris Gibson and Nicholas Lovrich) **JUSTICE QUARTERLY**, Vol. 19, No. 3, September 2002.

A Clash of Values: Public Ethics and the Business of Government. (With Meredith Newman) INTERNATIONAL REVIEW OF PUBLIC ADMINISTRATION, Vol. 7, No. 1, July 2002.

Assessing a Neighborhood Watch Program, with Ariane Schmidt and Christianne DeMarco, in **CRIME MAPPING CASE STUDIES: SUCCESSES IN THE FIELD**, Washington, DC: Police Executive Research Forum, 1999.

Book Review of *The American Legal System*, Toni M. Fine, published in the **REVIEW OF PUBLIC PERSONNEL ADMINISTRATION**, Winter 1998.

- C. Abstracts and Proceedings
- D. Extension Publications, Peer Reviewed
- E. Curriculum Development

## F. Educational Digital Media

Surveys as an Element of Evaluation Research. A professional development webinar presented for WSU Extension. November, 2009.

Concealed Carry Permit Trends in Washington. Expert interview with KXLY TV, Spokane.

Understanding Informed Stakeholder Perceptions: Assessment Criteria for Biomass-to-Bioject Supply Chain Siting. (With Moroney J., K.Gagnon, T.Laninga, P.Smith, and S.A.Hoard) Poster presented at the Society of Wood Science and Technology Annual Conference, 2013.

## G. Other Publications

Washington Fire Training Academy: Marine Course Evaluation. (With Christina Sanders, Season Hoard and Roger Shaefer) Prepared for the Washington State Fire Marshal. 2013.

King County Juvenile Bed Space Forecast. (With Christopher Campbell) Prepared for the King County Division of Adult and Juvenile Detention, 2013.

*Tri-Cities Governance Study Phase II Report.* (With Christina Sanders, Mikko McFeely) Prepared for the Tri-Cities Evolution section of the Joint Chamber of Commerce, 1013.

Montana Highway Patrol Traffic Stop Data Analysis Report. (With Season Hoard and Christina Sanders) Prepared for the Montana Highway Patrol, 2013.

Sustainable Thurston Program Evaluation Report. (With Christina Sanders) Prepared for the Thurston County Regional Planning Council, 2013.

Columbia River Basin Salmon and Steelhead Long-Term Recovery Situation Assessment. (With Michel Kern, A. Murphy, C. Sanders, T. Odell, P. Harkema, E. Bates, J. Conover, L. Singer, E. Hallmark, G. Cormick, D. Nudelman, B. Cosens, J. McKay, L. Higgins) Prepared for National Marine Fisheries Service, 2013.

Collaborative Engagement Assessment Report. (With Michael Kern, Laurel Singer, Gail McEwan, Christina Sanders, Turner Odell and William W. Budd) Prepared for the Columbia Gorge National Scenic Area Commission, 2012.

Tri-Cities Governance Study: Phase 1. (With William W. Budd, Christina M. Sanders and Justin Marlowe) Prepared for the Tri-Cities Evolution, 2012.

Untaxed Goods in Commerce: Tax Evasion in the State of Washington. (With Gregory Russell, Nicholas Lovrich, and Arthur McCurdy) Prepared for the Washington State Patrol, 1997.

Report of Survey Results: Three-Wave Mail Survey of 803 Citizens of the City of Billings. (With Nicholas Lovrich) Prepared for the Billings, Montana Police Department, 2000.

Summary Report of the Sixth Periodic Survey of Public Attitudes Toward the Washington State Patrol. (With Nicholas Lovrich and Ruth Self) Prepared for the Washington State Patrol, 2000.

Report of Survey Results: Three-Wave Mail Survey of 580 Citizens of the City of Pasco. (With Nicholas Lovrich and John Neiswender) Prepared for the Pasco, Washington Police Department, 2001.

Report of Survey Results: Survey of 956 Citizens of the School District. (With Nicholas Lovrich) Prepared for School District 281, Moscow, Idaho, 2001.

Public Perceptions of Endangered Species Protection. (With Lovrich, Weber, Bireley, Matthews and Bjork) Prepared for National Oceanic and Atmospheric Administration, Fisheries Division, 2003.

WSP Traffic Stop Data Analysis Project Report. (With Lovrich, Pickerill, Smith, and Mosher) Prepared for the Washington State Patrol, 2003 and 2005.

## **PRESENTATIONS**

## A. International

Democratization in Panama and Costa Rica, National War College, Washington, DC, 1995 Democratization in Panama and Costa Rica,

## **B.** National

EDEN "In-Box Exercise" Pilot Project Summary Report. (With C.M.Sanders, others) Presentation to the national EDEN Conference, 2013.

The William D. Ruckelshaus Center: Fostering Collaborative Solutions to Planning and Other Policy Challenges. Presentation to the American Planners Association with Kern M.A., A.G.Murphy, and J.Kramer. 2013.

Evaluation of Communication Strategies to Reduce Stormwater Pollution Impacts. Paper presented to the Western States Communication Association annual conference, March, 2012.

Lessons in Community Oriented Policing from the 2005 Hurricanes. Academy of Criminal Justice Sciences annual conference, March 15, 2007 (with Mike Erp).

Breath Test Result Validity as an Indicator of Biased Policing. Academy of Criminal Justice Sciences annual conference, March 15, 2007 (with Brady Horn).

Teaching Collaboration: Observations from Two Programs. American Society of Public Administration annual conference, 2007 (with Lee Lamb).

Traffic Stop Data, Contextual Analysis and Biased Policing. Presentation to the IACP (International Association of Chiefs of Police) Pacific Region conference (with Lovrich and Mosher), 2005.

Social Capital and Community Development, A series of presentations and community workshops presented in conjunction with the Northwest Area Foundation in Washington, 2005.

Perceptions of Crime: Differential Citizen Views of Problems of Public Order at the City and Neighborhood Level, (Co-presenter: Jennifer Albright), and

This Isn't CSI: Estimating the National Backlog of Forensic DNA Cases and the Barriers Associated With Case Processing, (Co-presenter: Travis Pratt) presented at the Academy of Criminal Justice Sciences (ACJS) annual conference, March, 2004

Public Perceptions of the Endangered Species Act, and the New 'Natural Resources Leadership Academy,' Co-presented to the annual meeting of the Western Rural Development Center board, September, 2003. (Co-presenter: Nicholas Lovrich)

Public Perceptions of the Endangered Species Act, and the New Natural Resources Leadership Academy, Co-presented to the annual meeting of the Western Association of Fish and Wildlife Agencies, June, 2003. (Co-presenters: Lovrich, Bireley, Matthews, Bjork)

- Public Perceptions of Endangered Species Act Enforcement, Co-presented at Department of the Interior Conference on the Environment, May, 2003. (Co-presenters: Lovrich, Weber, Bireley, Matthews and Bjork)
- *Integrity in Police Organizations*, Eight-hour training presented for Wyoming Peace Officer Standards & Training. April, 2003.
- Introduction to Collaborative Decision-making, Series of 11 half-day to three-day NRLA training sessions co-presented with the NRLA trainer cadre to Washington Department of Fish and Wildlife, tribal resource managers and NOAA Fisheries, 2004 and 2005.
- *Police Integrity*, 16-hour training presented for the Idaho Peace Officer Standards and Training Academy. August, 2003.
- Ethics and Integrity in Policing, One-day training presented for the South Dakota Law Enforcement Training Academy, November, 2001.
- Citizen Attitudes Toward the Washington State Patrol,
  Western Pacific Association of Criminal Justice Educators, Sacramento, 2000.
- Citizen Attitudes Toward Police: The Relative Importance of Demographic, Contextual and Experiential Factors (with N. P. Lovrich). and
- Perceptions of Crime: Differential Citizen Views of Problems of Public Order at the City and Neighborhood Level (with N. P. Lovrich), and
- The Role of Location in Citizen Perceptions of Police and Crime: Do Local Community Oriented Policing Sites Have an Impact on Their Neighborhoods? (with N. P. Lovrich) Academy of Criminal Justice Sciences, New Orleans, 2000
- Volunteers as an Element of Community Oriented Policing (with A. Kelleher), Academy of Criminal Justice Sciences, Orlando, 1999.
- Factors Influencing Participation in Community Oriented Policing Outreach Activities, Academy of Criminal Justice Sciences, Orlando, 1999. (with A. Kelleher)

#### C. State

*Introduction to Public Policy*. An invited professional development presentation to the Washington AgForestry Program. November, 2012

*Ethics in Government Service*. A seven hour training presented for the Washington County Training Institute. February, 2010.

Disaster Preparedness and Collaboration: Lessons from the 2005 Hurricanes. Presentation to the 2007 Washington Community Preparedness Summit.

*Program Evaluation Research.* Four-hour training presented to the WSU Extension personnel of the Northeast District counties. June 12, 2007 (with Nicholas Lovrich).

Ethics for Public Service Professionals. Six hour training presented to county employees via multi-location video link as a part of the Washington Certified Public Officials Program. (August 14, 2007) and in-person (5/17/05 & 12/12/05).

Ethics and Decision-making in the Political Environment. Two-day training provided to the Washington Department of Licensing internal leadership academy. Nov. 1&2 2006 (with Matt Mitchell) and Oct. 9&10,2007 (with Kelsey Gray)

Lessons Learned from Hurricanes Katrina and Rita. Presentations of observations from research in the Gulf Coast area were made to the Washington State Emergency Management Association (Sept 19, 2006) and Washington Local Emergency Planning Committee Conference (May 10, 2006).

WSU's Hazard Mitigation Planning Project. Extension Engaged Statewide Broadcast (with Chris Tapfer) presentation to a statewide audience of extension professionals via compressed video. March, 2006.

Ethical Dilemmas: A Tool for Decision-Makers, One-day training presented for the Washington Certified Public Officials Program, 2003, 2004, 2005 and 2006.

Ethics for Public Administrators, One-day training presented for the Washington Certified Public Officials Program, January 2002.

## D. Local

*Ethics in Government,* Two half-day workshops presented to the City of Grants Pass, Oregon, 2014.

*Ethics in Law Enforcement*, Three full-day workshops presented to the Yakima Police Department. 2013.

*Integrity in Public Agencies*, Two half-day workshops presented to Thurston County Elected and Senior officials, December, 2005.

Ethics in Public Service, Four half-day training sessions presented for the Thurston County, Washington, Health District. January 2003.

#### UNIVERSITY INSTRUCTION

## A. Credit Courses Taught

Evaluation Research (Team taught – WSU 2003, 2004, 2005, 2008 & 2009)

Media and the Political Process, (WSU 2002)

Public Administration, Extended Degree Program (WSU 1998-99)

State and Local Government, EDP (WSU 1998-99)

Crime Control Policy (WSU Tri-Cities [WHETS] 1998)

Evidence and Criminal Procedure (WSU Tri-Cities 1997)

Introduction to American Politics (WSU 1996-97)

Introduction to American Government (UI 1994-96) American Judicial System (NOVA 1993) Legal Research and Writing (NOVA 1993)

## C. Advising

2013 – Christy Curtis (MA complete, 2013) Mikko McFeely (BA complete, 2013)

2012 – Cara Gish (MA complete, 2012)

#### PROFESSIONAL SERVICE

## A. University

Affiliate, Plateau Center for Tribal Education, WSU (2004 to present)
Statewide Extension Liaison, WSAC Affiliate Extension Committee (2006 to present)
WSU Risk Management Committee (2011 to present)
Emergency Management Committee (Currently Chair, 2008 to present)

## **B.** Community

- Chair, Law Enforcement Education and Training Committee, Washington Association of Sheriffs and Police Chiefs (November 2010 to present).
- Washington Point of Contact and State Chair, Extension Disaster Education Network (2010 to present).
- Member, Board for Latah Community Charitable Foundation, Moscow, Idaho (March, 2006—to present). Currently Vice President.
- Member, Board for Law Enforcement Training, Standards and Education, Washington Criminal Justice Training Commission (2006 to 2010). Vice Chair 2009/10.
- Interim Section Chair, American Society of Public Administration section on Criminal Justice (2006 to present).
- Member, Safe and Drug Free Schools Advisory Committee, Moscow (Idaho) School District (2001 to present)
- Member, Subcommittee on Political Interference, National Commission on Law Enforcement Integrity (2001 to 2004)
- Member and Steering Committee Member, Citizens for a Quality Education, Moscow, Idaho (2002 to 2006)

#### C. Review Activities

## ADMINISTRATIVE RESPONSIBILITY

- 1. **Division of Governmental Studies and Services**: I Provide overall project and program direction, supervise budgets, grant administration and grant proposal preparation, participate in grant proposal and contract development and writing, attend college leadership meetings. I supervise, directly or indirectly, three faculty, two A/P and one classified staff member, as well as between 4 and 10 graduate students and undergraduate interns each semester.
- 2. **Office of Emergency Management**: I direct all activities of the office, and am personally responsible for interaction with all levels of leadership across WSU. I provide direct 24/7 on-call capability and have the primary responsibility for emergency notification, management of the Crisis Communication system, and all phases of assessment and recommendation connected to the University weather policy.
- 3. Washington State Institute for Criminal Justice: I co-manage WSICJ with DGSS, providing similar administrative services. In addition, I manage the partnership for joint operation of the Institute with the Department of Criminal Justice and Criminology.
- 4. **Extension Disaster Education Network**: I am the designated state Point of Contact, serve on two national committees, and manage in-state communication, planning and budgeting.

## PROFESSIONAL & SCHOLARLY ORGANIZATIONS

William Edgar Borah Foundation for the Outlawry of War (1995-1997)

Academy of Criminal Justice Sciences

American Society of Public Administration

Phi Sigma Alpha

Affiliated Tribes of Northwest Indians (Affiliate member)

National Native American Law Enforcement Association (Affiliate member)

**Extension Disaster Education Network** 

Washington Association of Sheriffs and Police Chiefs (Affiliate member)

International Association of Chiefs of Police (Affiliate member)

#### PROFESSIONAL DEVELOPMENT

- 1. Federal Law Enforcement Training Center Certified Trainer (LE Ethics)
- 2. Western Regional Institute for Community Oriented Public Safety Community Assessor
- 3. Western Community Policing Institute Resilient Community Trainer
- 4. EDEN Strengthening Community Agro-Security Planning Trainer
- 5. FEMA Community Emergency Response Team Trainer



## **VITA**

**NAME:** Monica Babine

**TITLE and RANK:** Senior Associate

OFFICE LOCATION, CITY, STATE, ZIP: Kirkland, WA 98033

**OFFICE PHONE:** 425.827.8015 **EMAIL:** babinem@wsu.edu

FAX: N/A WEB: http://dgss.wsu.edu/DigInit.html

## **EDUCATION**

BA, Eastern Washington University, 1979
AA, Spokane Falls Community College, 1978
Certificates—Year 1 and 2, Northwest Community Development Institute, June 2007 and 2008

#### **EMPLOYMENT**

Washington State University Extension 1998 – present Productivity Enhancement Consulting, 1993 – 1998 Qwest Communications, 1979 – 1993

#### **HONORS AND AWARDS**

Telework Exchange Tele-Vision Award for Telework Leadership in Higher Learning, 2011

## **GRANTS, CONTRACTS, AND FUND GENERATION**

Assisting leaders and telecommunications providers to increase broadband awareness, access and adoption in Klickitat and Skamania counties, Washington State Department of Commerce. Round 2, \$60,000. P.I.: M.L. Babine. (8/1/2013-6/30/2014) (1, 3, 4, 5, \$16,820).

Assisting Lincoln County to address educational challenges and economic development opportunities in Lincoln County by increasing broadband access and use, Washington State Department of Commerce and Lincoln County, \$36,880. P.I.: M.L. Babine. (7/1/2013-6/30/2014) (1, 3, 4, 5, \$27,367).

Providing technical expertise to develop broadband for rural and tribal communities of the western Clallam and Jefferson counties region, Washington Department of Commerce. \$56,000. P.I.: L.J. Lewis and Co-PI: **M.L. Babine** (7/18/2013-6/30/2013) **(1, 5, \$8000)**.

Assisted leaders and telecommunications providers to increase broadband awareness, access and adoption in Klickitat and Skamania counties, Washington State Department of Commerce. Round 1, \$60,000. P.I: M.L.Babine. (8/13/2012-6/13/2013) (1, 3, 4, 5, \$24,814).

Provided technical assistance to Thurston Regional Planning Council to reduce transportation-related fossil fuel consumption and emissions through use of rural and urban telework, US Department of Energy. \$2.1 million. P.I.: M.L. Babine. Co-PIs: M.J. Gaffney and C.M. Sanders (10/1/2010-7/21/2013) (4, 5, \$98,500).

Developing an innovative small business technical assistance and training program for rural businesses, WSU CAHNRS. \$50,000. P.I.: **M.L Babine**. Co-PI: D.A. Hansen (1/1/2013-12/31/2014) (1, 2, 3, 4, 5, \$50,000).

Pilot testing a training program to develop "whole community" emergency planning protocol and produce a coordinated, consolidated emergency management plan, Southern Rural Development Center. P.I.: M.L Babine. Co-PIs: M.J. Gaffney, C.S. Sanders, J.L. Schmidt (1/2/2013-1/7/2014) (5, \$10,000).

Led WSU efforts on the Stronger Economies Together, a national Extension and USDA Rural Development partnership to develop rural, regional economic plans in two regions of the Pacific Northwest. USDA Rural Development and the Southern Rural Development Center. P.I.: M.L. Babine. Co-PI: M.J. Gaffney (9/21/2011-8/31/2013) (4, 5, \$39,400).

Provided resources to help local businesses implement e-commerce strategies to strengthen economic health and stability, improve market share and efficiencies in products and services. Southern Rural Development Center. P.I.: M.L. Babine. (2/1/2011-12/31/2012) (4, 5, \$6250).

## **Unfunded Grant Proposals**

| Year | Total Grants | Total Dollars |
|------|--------------|---------------|
| 2013 | 2            | 62,460        |
| 2012 | 5            | 148,140       |
| 2011 | 5            | 344,595       |

## **PUBLICATIONS AND CREATIVE WORK**

#### **Creative Scholarship in Juried Events**

**Babine, M.L.,** D.A. Hansen, S.R. Kerr, K.M. LeHew, T.A. Murray and L.J. Williams. 2013. Stronger Economies Together, regional, rural economic development planning results and outcomes. WSU Academic Showcase poster. (2, 3, 5, 6)

**Babine, M.L.,** C.M. Sanders, M.J. Gaffney. 2012. *Telework as a Continuity of Operations Strategy* white paper. EDEN conference proceedings. **(1, 3, 5, 6)** 

#### **Educational Digital Media**

**Babine, M.L.** 2013. *Naming and Taming the Telework Dragons,* explored telework benefits and challenges. Webcast. **(1, 2, 3, 4, 5, 6)** 

**Babine, M.L.** and B. Hamilton. 2013. *Taming Telework Dragons: Washington State Department of Transportation Telework Case Study*, presented results of state agency telework pilot program. Webcast. **(1, 2, 4, 5)** 

**Babine, M.L.**, A. B. Lewis and W.C. Shuffstall. 2011. *Connecting Communities*, presented critical elements needed to assist communities increase broadband availability and use. Webcast. (3, 5)

#### Other Publications and Creative Works

**M.L. Babine** and M. Hall. 2013. *Lincoln County Technology Planning Team Business Assessments Findings*, presented results of a business survey about broadband use and needs in Lincoln County, Washington. Report to Washington State Department of Commerce. **(1, 4, 5, 6)** 

**M.L. Babine** and D.A. Hansen. 2013. *Action Teams and Ripple Effects*, presented outcomes from the Stronger Economies Together (SET) project in Ferry, Stevens and Pend Oreille counties in Washington. Report to USDA Rural Development. **(2, 3, 4, 5, 6)** 

**M.L. Babine**, D.A. Hansen and C.M. Sanders. 2013. *Ready, Set, Grow a Business: One Year Progress Report* presented results of multi-regional, rural, small business technical assistance pilot in Washington State. Report to WSU Extension leadership. **(1, 2, 3, 4, 5, 6)** 

**M.L. Babine** and D.A. Hansen. 2013. *Community Broadband Report: Stevens County Local Technology Planning Team* summarized year-long activities in Stevens County Washington to increase broadband access and use. Report to Washington State Department of Commerce. **(1, 2, 3, 4, 5, 6)** 

- **M.L. Babine** and S.A. Hoard. 2013. *Stevens County Local Technology Planning Team Community High Speed Internet Survey Report*, presented findings from an online survey to assess the current use and future needs of broadband for residents of Stevens County Washington. Report to Washington State Department of Commerce. **(1, 2, 3, 4, 5, 6)**
- **M.L. Babine** and L.J. Williams, C. Pipinich, A. Hoey and B. Wanless. 2013. *Community Broadband Klickitat-Skamania Counties*, provided results of a year-long project to increase broadband awareness, access and adoption in the Columbia Gorge region of Washington State. Report to Washington State Department of Commerce. **(1, 3, 4, 5, 6)**
- **M.L. Babine** and C.M. Sanders. 2013. *Rural Telework Center Feasibility Study for South Thurston County*, results of research to determine telework interest in rural Thurston County Washington. Report to Thurston Regional Planning Council. **(1, 2, 3, 4, 5, 6)**
- **M.L. Babine** and C.M. Sanders. 2012. *The State of Telework in State Governments*, researched the use, challenges and opportunities for state agencies across the United States. Report to Thurston Regional Planning Council. **(1, 2, 3, 4, 5, 6)**
- **M.L. Babine** and S.A. Hoard. (2012) *Klickitat-Skamania Community High Speed Internet Survey Report*, developed, distributed and analyzed results of a survey about high speed internet use and interest in the Columbia Gorge region of Washington. Report to Washington State Department of Commerce. **(1, 2, 3, 4, 5, 6)**
- **M. L. Babine**. (2011) *Small Community Gets Big Broadband*, an article about the steps taken to secure broadband in the small, rural, remote community of Glenwood, Washington. Western Rural Development Center Rural Connections, 6(1), September edition (1, 3, 4, 5)
- **M.L. Babine**, W.C. Shuffstall and A.H. Lewis, *Connected Communities*. 2011. Updated this guide and curriculum for rural communities interested in enhancing the use and adoption of information technology tools and infrastructure. National e-Commerce website. **(3, 4, 5, 6)**

## **PRESENTATIONS**

#### **National**

**Babine, M.L.** and W.C. Shuffstall. 2012. What are Connected Communities?, a pre-conference workshop on steps to assist communities increase information technology infrastructure and use. NACDEP Conference: Capitalizing on our Assets. Park City, UT.

**Babine, M.L.** and C.M. Sanders. 2012. *Telework as a Continuity of Operations Strategy* presentation about benefits and opportunities for telework to help keep business operational during emergency situations. EDEN Annual Meeting. Tunica, MS.

**Babine, M.L.** 2011. Invited. *No More Tiptoeing Around: Telework Takes a Giant Leap Forward,* a presentation about need for government to lead in telework support and implementation. Government Customer Service Annual Conference. Alexandria, VA.

**Babine, M.L.** 2011. Invited: *The Digital Revolution Includes the Entire Nation!* presentations regarding the importance of independent telecommunications providers offering broadband services in rural communities. National Telecommunications Cooperative Association Annual Conference, Seattle, WA.

#### State

**Babine, M.L.** 2013. Invited: *The Pulse of the Future* keynote panel presentation focused on rural broadband needs and opportunities. Oregon Connections Conference. Hood River, OR.

**Babine, M.L.**, B. Hamilton and K. Parkhurst. 2013. Invited: *Changing the Way we Travel – Telework Progress and Next Steps in Washington*, presented results of telework project research and implementation at state agencies. Washington State Commute Trip Reduction Board Quarterly Meeting. Olympia, WA.

**Babine, M.L.** 2012. Invited: *Maximizing Telework for TDM*, presentation about the role of telework in reducing vehicle miles traveled and associated emissions. Washington State Department of Transportation Annual Conference. Bellevue, WA.

**Babine, M.L.**, K. Lister, R. Bews and G. Gordon. 2011. Invited: *Building a Mobility Business Case*, a panel presentation about the benefits and challenges for statewide government telework expansion. California State Work Anywhere Symposium. Sacramento, CA.

**Babine, M.L.** 2011. *Got Broadband? Want Broadband? Let's Talk!,* a presentation about the broadband challenges and opportunity in rural Washington. Rural Washington State Conference: Pathways to Prosperity. Moses Lake, WA.

**Babine, M.L.**, C.M. Sanders and P. Roberts. 2011. *e-Commerce: It's Not Just for Big City Businesses*, a panel presentation about e-commerce success stories and resources to assist rural communities and businesses engage in the digital economy. Rural Washington State Conference: Pathways to Prosperity. Moses Lake, WA.

#### **Local** (selected)

**Babine, M.L.** 2013. Invited: *Lincoln County Broadband Planning Workshop*, presentation and facilitation of session with key stakeholders in Lincoln County Washington which led to successful broadband grant application. Davenport, WA.

**Babine, M.L.**, D.A. Hansen and A. Hoey. 2012. Invited: *Stronger Economies Together* panel presentation of results from rural, regional economic development efforts in six counties in

the Pacific Northwest. Washington State Public Work Board Southwest Regional Academy. Vancouver, WA.

**Babine, M.L.** 2011. Invited: *Telework Reality Checkpoint*, a presentation about the benefits, challenges and opportunities for telework to strengthen customer service operations. Customer Service and Support Professionals Winter Meeting. Bellevue, WA.

## **PROFESSIONAL SERVICE**

- A. University
- B. Professional Society
- C. Community
- D. Review Activities (journal article reviews and editorial service)

Western Rural Development Council Community Development Extension Conference Planning Committee. 2014.

Washington EDEN Delegate 2012 - present.

Pathways to Prosperity Statewide Rural Conference Planning Committee. 2010, 2011 and 2013.

## **ADMINSTRATIVE RESPONSIBILITY**

Limited engagement of undergraduate students in telework and rural economic development projects.

## **PROFESSIONAL & SCHOLARLY ORGANIZATION AFFILIATIONS**

Washington State Broadband Advisory Council

Washington State Library Digital Literacy Council

National Broadband Extension and Partners Team

National Telework Exchange Visionary Committee and National Telework Week partner

Association for Commuter Transportation Telework Council/Public Policy Council

**Telework Coalition** 

Worldatwork Work-Life Group

Council on Digital Inclusion-Communities Connect Network

Washington ICT Sector Policy Advisory Council

Washington Mobile Government Working Group

Inland NW Partners Vice-Chair

## PROFESSIONAL DEVELOPMENT

Inland NW Partners – ongoing
Partners in Emergency Preparedness Conference – 2013
Digital Inclusion Summit – 2013
Pacific NW Digital Government Conference – 2012 and 2013
EDEN Annual Meeting – 2012

NACDEP Annual Conference – 2012 ReadyCommunity training – 2012

|  | Position | FTE Fiscal Year |    |         |
|--|----------|-----------------|----|---------|
| Expenditures                             |          |                 |    | _       |
| Staffing                                 |          |                 |    |         |
| Personnel                                |          |                 |    |         |
| Director -12 months                      | 115872   | 1.00            | \$ | 105,064 |
| Project Manager (AP) 12 months           | 90531    | 1.00            | \$ | 59,511  |
| Administrative Manager - 12 months       | 84893    | 0.25            | \$ | 14,805  |
| Total Personnel                          |          | 2.25            | \$ | 179,381 |
| Benefits                                 | rate     |                 |    |         |
| Director -12 months                      | 26.49%   |                 | \$ | 27,831  |
| Project Manager (AP) 12 months           | 37.29%   |                 | \$ | 22,192  |
| Administrative Manager - 12 months       | 34.89%   |                 | \$ | 5,166   |
| Total Benefits                           |          |                 | \$ | 55,189  |
| Total Staffing                           |          |                 | \$ | 234,570 |
| Operations                               |          |                 |    |         |
| Goods and Services                       |          |                 |    |         |
| General Supplies                         |          |                 | \$ | 3,000   |
| temporary/timeslip personnel (hourly)    | \$ 25.00 | 120             | \$ | 3,270   |
| faculty honoriaria                       |          |                 | \$ | 2,000   |
| Total Goods and Services                 |          |                 | \$ | 8,270   |
| Travel                                   |          |                 | \$ | 12,000  |
| Space                                    |          |                 | \$ | 8,600   |
| Equipment                                |          |                 | \$ | 2,000   |
| Total Operations                         |          |                 | \$ | 30,870  |
| Total Expenditures                       |          |                 | \$ | 265,440 |
| Revenue                                  |          |                 |    |         |
| Allocation                               |          |                 |    |         |
| WSU Extension - State Funds              |          |                 | \$ | 265,440 |
| Estimated Revenue                        |          |                 |    |         |
| Center Faculty Accruals - estimated Yr 1 | 10.00%   |                 | \$ | 16,458  |
| Center F&A allocation - estimated Yr 1   | 15%      |                 | \$ | 5,850   |
| Total Revenue                            |          |                 | \$ | 287,747 |

## WSU Metropolitan Center for Applied Research and Extension

## **Budget Narrative**

WSU Extension will reallocate existing funding to underwrite the Center's core staff and operations. In addition, project-based salary accruals and extramural F&A generated by the Center's staff will be returned to the Center and are shown as Center revenue below (see Revenue section). Examples of current project generated revenues are provided in the formal proposal (see Expected Funding Needed).

## **Expenditures**

## Staffing

It is the intent of WSU Extension to fund *core* staffing and operating expenses for the **WSU Metropolitan Center for Applied Research and Extension** for the foreseeable future. When at full operational level, the Center will support five positions – 3 core staff and additionally two extramurally funded positions. The Center's staffing plan includes; the Center director, three program faculty/APs and an administrative manager (AP).

The attached budget is for the start-up phase of the Center. The Center will launch operations with Dr. Brad Gaolach, Director (funded at 1.0 FTE), Martha Aitken, Project Manager (AP funded at 1.0 FTE) and Kelly Barton, Administrative Manager (AP funded at .25FTE). An additional two faculty are in the staffing plan, but will only be hired based on the volume of extramural funds the Center generates.

#### **Goods and Services**

General supplies include office supplies and printing of marketing materials for the Center. At times, it is expected that project workload will exceed the capacity of Center support staff. To deal with this issue the budget includes funds for 120 hours (at \$25/hr plus payroll tax) for temporary / time-slip help on an annual basis. Also included is \$2000 annually for faculty time (honoraria) to offset project-scoping activities that cannot be covered by other funding sources.

#### Travel costs

Funding to cover faculty/AP for travel costs associated with Center projects and activities. Extramural project funding will include project related travel along with scholarly presentation travel costs.

## Space

The budget allocated for space costs cover current charges for Center staff positions and working space for project personnel at WSU Seattle and WSU North Puget Sound at Everett (NPSE). These expenses include access to meeting rooms, facility maintenance, and IT infrastructure and support.

#### **Equipment**

The budget provides \$2000 annually to cover any required computer or related expenses, including computers for newly hired Center staff.

#### Revenue

#### Allocations to the Center

WSU Extension will allocate \$265,440 of State funds to the Center. This covers the salaries and benefits for the core staff (2.25 FTE, \$234,570) and \$23,600 for operations. Additional funding will be provided to cover salary increases for core staff.

#### Estimated Revenue

The Center will retain all faculty accruals for Center staff (project accruals for faculty from other WSU units will be returned to those units per University policy). Additionally, the Extension Community & Economic Development Unit Director has agreed to return 100% of the Unit's F&A allocation per University Policy (currently set at 15% of gross F&revenue) for the first three years of the Center's operation. The budget uses an example of both the Director and Project Manager generating 10% salary accruals during the first year of operations and \$150,000 of extramural grant funding (returned F&A is calculated on \$50,000 MDC, a 26% F&A rate for Extension/off –campus research and the 15% gross revenue department allocation). These revenues (faculty accruals and returned F&A) will be incorporated into the Center's budget to establish a reserve fund to support increased expenses, including establishing funds for student stipends to work on Center projects.

We project that by year five, the Center will have annual expenditures in excess of \$500,000 generated from extramural sources.