Supporting Undergraduate Researchers: The Future of Our State, Nation, World

The Showcase for Undergraduate Research and Creative Activities (SURCA) is the only WSU-wide venue where all students can share their research, scholarship, and creative activities publicly. SURCA also reinforces WSU’s national status as a top-tier research university. This annual event prepares confident and skilled employees for the Washington workforce and beyond.

With your investment in SURCA, numbers of participants and awards will increase. You will support student excellence and provide more transformative educational experiences.

SURCA Participants:

- Refine and organize knowledge gleaned from their research
- Prepare and practice presentations for lay and expert audiences
- Visit other students at their posters and see that exploration is a vital part of life
- Gain confidence in their field of study
- Invest time and energy exploring subjects side-by-side with industry-leading research mentors
- Enhance critical thinking, communication, and leadership skills
- Report that SURCA deepened their understanding of the scope of their work and commitment to research

225 presenters:
54 awards
61 students

Participants from 6 campuses:
Pullman, Vancouver, Tri-Cities, Spokane, Global/Extension, N. Puget Sound/Everett
Students involved in undergraduate research, scholarship, and creative activities take great pride in their work. They began by identifying an area of interest and a mentor. They may have won a competitive Undergraduate Research Award from the WSU Office of Undergraduate Research to support their work, requiring them to accept the responsibility to “disseminate results,” a well-accepted requirement for researchers, particularly for those in science disciplines.

By the time students apply to participate in SURCA, they have spent months or even years investigating a topic hands-on, in preparation for their future careers. SURCA provides WSU’s only on-campus venue available to all students from all disciplines from all campuses. Being accepted and preparing for SURCA are accomplishments in themselves. Presenting at the competition is a unique and transformational experience.

Future professor Bryce Henderson says his research pathway is “accelerating.” It began in a class lab studying the genomics of bacteriophage. A WSU scholarship and state funding supported his research into major bioterrorism agents: Nipah and Hendra viruses. His award-winning SURCA experience taught him how to explain his research to others. He interned at the Howard Hughes Medical Institute’s EXceptional Research Opportunities Program (EXROP) exploring genome engineering in malaria.

“SURCA was the point on my research pathway that really pulled everything together for me.”
— Bryce Henderson, biochemistry senior

**SURCA Participation by Category**

Undergraduate researchers submit abstracts of their work in one of eight SURCA categories. Awards go to top presenters and include awards for experienced, intermediate, and beginning researchers.

- Social Sciences (21%)
- Humanities (7%)
- Arts and Design (9%)
- Applied Sciences (8%)
- Computer Science, Mathematics, Statistics, and Information Sciences (2%)
- Engineering and Physical Sciences (17%)
- Molecular, Cellular, and Chemical Biology (23%)
- Organismal, Population, Ecological, and Evolutionary Biology (14%)

**6 Years of SURCA**
1,095+ Participants
293+ Awards

**56% Female**
49% First-Generation
36% Low Income
The Employer’s Perspective

SURCA at WSU offers—by design and by impact—a multitude of benefits to the state and its employers.

The WSU Strategic Plan includes developing strengths and opportunities for research, innovation, and creativity, and providing a transformative student experience that prepares “graduates to lead and excel in a diverse U.S. and global society.”

The WSU Strategic Plan (2014-2019) calls for increasing the number of student presentations at SURCA.

Your top new employees will have skills they honed through research and their SURCA experience.

Examples of Winning Projects

Titles from seven of the many award-winning research projects presented at SURCA by undergraduates:

“Effect of the Gpc-B1 Allele on Grain Protein Concentration in Hard Red Winter Wheat in the Pacific Northwest”

“Pop-up Gallery: Jobs that Don’t Exist Yet”

“The Effect of External Radiation on DNA-Enzyme Complexes”

“Improving Aircraft Safety with an Airfoil Airspeed Sensor”

“The Marked Narrative: A Rhetorical Analysis of Immigrant Narratives and Their Sociopolitical Implications”

“The Interactive Effects of Phosphorus and Planktonic Grazers on Harmful Algal Blooms in Vancouver Lake, Wash.”

“Investigating the Optimal Choice Load for Online Stores”

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<tr>
<th>In-demand skills for the workplace</th>
<th>Gained through undergraduate research and SURCA participation?</th>
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<tbody>
<tr>
<td>Critical and creative thinking</td>
<td>✔</td>
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<tr>
<td>Communication (written, oral, presentation)</td>
<td>✔</td>
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<tr>
<td>Quantitative reasoning</td>
<td>✔</td>
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<tr>
<td>Scientific literacy</td>
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<td>Integration of learning</td>
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<td>Professional development</td>
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<td>Team and leadership experience</td>
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<td>Big-picture thinking</td>
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<td>Risk-taking</td>
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Past SURCA judges

WSU experts were joined by those representing businesses such as: Alturas Analytics, Inc.; Anatek Labs, Inc.; Avista Utilities; The Boeing Company; Clearwater Paper Corp.; Meter Group, Inc.; Nez Perce Tribe Water Resources Division; Metriguard, Inc.; Moscow Forestry Sciences Laboratory/USDA Forestry Service - Rocky Mountain Research Station; Palouse Discovery Science Center; Strata, Inc.; SumTech Business Solutions, LLC.; TerraGraphics Environmental Engineering, Inc.; and the Washington State Governor’s Office.
SURCA 2018 Sponsorship
(Through Annual Gifts)

**TITLE SPONSOR** $25,000
Supports both awards and event costs.
- Designation as title sponsor and co-branding with SURCA
- Full-page profile in SURCA abstract book
- Named award and/or undergraduate research fellowship
- Table/display area at the event
- Logo placement in key promotions
- Recognition on SURCA entrance display
- Recognition at SURCA Awards Ceremony

**CREATE SPONSORS** $10,000
Supports both awards and event costs.
- Half-page profile in SURCA abstract book
- Named award and/or undergraduate research fellowship
- Table/display area at the event
- Logo placement in key promotions
- Recognition on SURCA entrance display
- Recognition at SURCA Awards Ceremony

**DESIGN SPONSORS** $5,000
May support awards and/or event costs.
- Table/display area at event
- Logo placement in key promotions
- Recognition on SURCA entrance display
- Recognition at SURCA Awards Ceremony

**DISCOVER SPONSORS** $1,500
May support awards and/or event costs.
- Logo placement in key promotions
- Recognition on SURCA entrance display
- Recognition at SURCA Awards Ceremony

**CONTRIBUTING SPONSORS** $500
May support awards and/or event costs.
- Recognition on SURCA entrance display
- Recognition at SURCA Awards Ceremony

**JUDGING OPPORTUNITIES** NO COST
- Judging opportunities for employees
- All welcome!

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**You Can Make a Difference!**
As with any top-quality event, SURCA has costs associated with it. Your investment in SURCA will help to ensure that it will continue to serve increasing numbers of students and provide awards for top presenters. This top-quality and valuable event is possible thanks to the generous and continuing support of our alumni, donors, and friends.

**SURCA and Undergraduate Research supporters have included:**
- The Boeing Company
- The Stubblefield Trust
- Alturas Analytics, Inc.
- Meter Group, Inc.
- The Washington State Opportunity Scholarship (WSOS)
- The WSU Emeritus Society
- Norma C. Fuentes and Gary M. Kirk
- Robert H. and Mary L. Rieck
- Matching awards for participants in the Louis Stokes Alliance for Minority Participation (LSAMP)

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**Additional Ways to Support Researchers**
While SURCA is the highlight event for WSU undergraduate researchers each year, there are many ways to support the efforts of these exceptional students engaged in research, scholarship, and creative activities.

For information about funding fellowships, scholarships, internships, travel grants for presentations, and more, please contact Mary Sánchez Lanier, Shelley Pressley, or Rise McGill.

The Office of Undergraduate Research is a program in the WSU Office of Undergraduate Education.