WSU Institutional Transformation through Innovative Leadership

## ADVANCE ing EXCEL in SE Inclusive Faculty Excellence in Science and Engineering

**External Mentor** 

Funding Program:



## Funding Recommendation and Authorization (Internal Use Only)

Program Coordinator (Signature) Zucalt
Recommendation from Program Coordinator:  I strongly support Dr. Appleyard's proposal to pursue a mentoring relationship with Dr. Martin Myers (U of MI). Dr. Appleyard (Assistant Prof, VCAPP) seeks mentoring from Dr. Myers for several well-considered reasons: first, to learn how to better manage a lab and research collaborations; second, to obtain guidance on a newly developed area of research from an established expert in that area; and third, to collaborate on a joint research project. Dr. Myers is a well-established and highly successful investigator who studies leptin signaling in weight regulation and diabetes. Dr. Appleyard intends to develop a collaborative project on leptin signaling in synaptic development and hippocampal function. Dr. Myers expresses enthusiasm for the proposed interactions, and the plan for exchanges over the next year between Drs. Appleyard & Myers is likely to be productive. The budget is appropriate.
Fund:XYesNo Amount:\$2500 travel + \$750 honorarium_
NSF ADVANCE Budget Authority Signature/Date: Many Magnuton 1-23-2012  Comments:
This is a very strong groposal and has been enthusiastically recommended for funding.

Coordinator sends to Director; Director to ADVANCE Sr. Administrative Group where funding decision is made. Return to Director. Director disseminates to Admin Assistant, Fiscal Technician and Program Coordinator. Program Coordinator communicates with applicant via Award letter which outlines timeline and deliverables (e.g., reports, program evaluation, restrictions, etc.).

JAN 2 5 2012



## Coversheet

Applicant Name:Suzanne Appleyard	
Position/Title:Assistant Professor	
Department name:VCAPP	_ Zip:99163
Email:appleyas@vetmed.wsu.edu	Phone:509-335-7784
Funding requested from the following program:  Transitions  External Mentor  Hiring Augmentation Assistance  PRO-NET  Dual Partnership  Social Science Research  Department Development	
Check list for proposal:  Coversheet/Signature page Proposal Budget	
Proposal Title (if applicable):	
	ct End Date:12/31/12
PI Signature/date: /// // /// /////////////////////////	(bg ) De 16, Les,
Amount Requested:\$3250Name of Fiscal Age	ent: Ty Simanson
Department Chair Signature/date:	Doc 16,2011
Dean Signature/date:	12-16-11
Received by (ADVANCE representative)/date:	MCdt 12/16/11



Applicant Name:Suzanne Appleyard	
Proposal Title:External Mentor grant	_

		Program Budget Sheet	
		Category/Description	Amount
Operating Expenses (e.g., office supplies):		0	
Return f Taxis / t Hotels:	flight from De ravel betwee 3 night stay n both Ann A	ullman to Detroit for Appleyard etroit to Pullman for Myers en Detroit to Ann Arbor in Ann Arbor (Appleyard) and in Pullman (Myers) rbor and Pullman	2500
Salary:	Faculty:		
	Staff:		
	Graduate Student:	Salary:	7.7.70
		Fees:	
		Tuition:	
	Hourly Staf	f:	
	) - n - file (in al	ude FB rate used for calculations):	
Fringe E	senents (inci		
	e.g., honorari	<u>um):</u>	750

External Mentor: Martin G. Myers Jr., MD, PhD, is currently the Marilyn H. Vincent Professor of Diabetes Research at the University of Michigan. Dr. Myers is a leader in the fields of weight regulation and diabetes, particularly in the neuronal and signal transduction pathways activated by the hormone leptin, a crucial regulator of food intake and energy homeostasis. In 2010, he received the American Diabetes Association's prestigious 2010 Outstanding Scientific Achievement Award and his current support includes the National Institute of Diabetes, Digestive and Kidney Diseases MERIT Award.

Mentor Choice and Expected Role as Mentor and collaborator: Dr. Appleyard is an Assistant professor in the Department of VCAPP and the Program of Neuroscience. She has recently expanded her research focus to study how leptin regulates neuronal function. This work stems out of a growing interest in the association between obesity and the development of neurological problems such as Alzheimer's disease and depression. Funding from the Advance External Mentoring Program at WSU would help foster Dr. Appleyard's career development in three key areas:

- 1. To support scientific mentoring from Dr. Myers. Specifically, Dr. Myers will provide critical scientific advice to Dr. Appleyard as she expands her research into the field of leptin signaling as Dr. Myers is an acknowledged leader in this area.
- 2. To support mentoring from a leader with a very successful research program who has had numerous effective collaborations. This aspect is critical as Dr. Appleyard looks to expand her research program and set up collaborations she would greatly benefit from receiving advice about collaborating, especially outside of WSU, and how to take the next critical step in establishing her research program at the national and international level. Dr. Myers also has experience mentoring young women investigators.
- 3. To help establish an active collaboration with Dr. Myers. Dr. Appleyard has started a new project to determine the molecular mechanisms by which leptin influences synaptic development and hippocampal function. It involves active collaborations with Dr. Gary Wayman in VCAPP, who is an expert in synapse formation and Dr. Soren Impey, at Oregon Health & Science University, a pioneer in using non-biased screens to identify novel signaling molecules. This project would benefit not only from Dr. Myers' specific scientific knowledge about leptin signaling, but also because Dr. Myers has numerous genetic tools and mouse models that will be extremely helpful.

<u>Seminar Topic of Mentor:</u> The topic of Dr. Myers's seminar would be the action of leptin in the brain. For example, a possible title would be "Leptin signaling in the Brain", the title of his upcoming Keystone symposium talk in 2012.

Tentative timeline: Dr. Myers and Dr. Appleyard will communicate regularly by e mail, telephone and / or videoconferencing. However, both mentoring and collaborations benefit greatly from direct interactions. To this end Dr. Appleyard will travel to the University of Michigan in the Spring or Summer of 2012. This will allow Dr. Appleyard to observe Dr. Myers's interactions with his own research group. It will also allow her to visit and interact with other researchers in the Diabetes center and the Molecular & Integrative Physiology group at the University of Michigan and to present her data. In addition, it will provide an opportunity to have more informal discussions, both about the prospective ongoing research collaboration, as well as about running a lab, obtaining funding and managing collaborations. Dr. Myers will then travel to WSU in the fall of 2012 to present a seminar of his work. This would again allow more direct interactions between Dr. Myers and Dr. Appleyard, as well as for Dr. Myers to interact with Dr. Appleyard's collaborator on the leptin project, Dr. Wayman.



Suzanne Appleyard, Ph.D. Assistant Professor Department of VCAPP Washington State University Pullman, WA 99164 Tel: (509) 335 7784 Fax: (509) 335 4650 appleyas@vetmed.wsu.edu

Martin G. Myers, Jr., M.D., Ph.D.

Marilyn H. Vincent Professor of Diabetes Research

Director, Michigan Diabetes Research and Training Center

Department of Internal Medicine

Division of Metabolism, Endocrinology and Diabetes

6317 Brehm Tower

1000 Wall St

Ann Arbor, MI 48105

Phone: (734)-647-9515

Fax: (734)-232-8175

December 15, 2011

Dear Suzy,

Thank you for inviting me to act as an external mentor for you in the ADVANCE at WSU External Mentor Program! This letter is to confirm my willingness and enthusiasm to serve as your external mentor in the Program. I have mentored a number of other talented and successful women in science at the graduate, postdoctoral, and junior faculty level, and I am thrilled to have the opportunity to help you advance your already flourishing career.

As we have discussed, I am happy to provide you with advice and input for your new project investigating the molecular mechanisms by which leptin controls synapse formation and neuronal function in the hippocampus. As you know, I have a long track record in studying the effects of leptin on neuronal pathways, as well as elucidating leptin receptor signaling pathways. I am also glad to provide mentoring and advice as you expand your lab and initiate collaborations. I understand that this will involve some videoconference and/or telephone conversations, in addition to our ongoing email discussions. I look forward to these, as well as to the visits that we will make to each other's labs.

In addition to the mentoring component, I look forward to collaborating with you on the role of leptin action in the hippocampus. This is an interesting and important area of research. In addition to scientific input, I am happy to provide various transgenic and knockout mouse models that have been developed in my laboratory, as well as constructs that we have developed to probe the signaling mechanisms of the leptin receptor.

Good luck with the application, and I look forward to the next steps!

Sincerely,

Martin G. Myers, Jr., MD, PhD