BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
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NAME	POSITION TITLE
Peter P. Sayeski, Ph.D.	Professor, Associate Chair, and Program Director
eRA COMMONS USER NAME psayeski	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
University of California, Berkeley, CA	B.A.	1988	Physiology & Anatomy
University of Alabama at Birmingham, Birmingham, AL	Ph.D.	1996	Physiology & Biophysics
Emory University, Atlanta, GA	Post Doctoral	1996-2000	Vascular Biology & Signal Transduction

A. Personal Statement.

I have been actively involved in cardiovascular related research for 20+ years. For the past 14 years I have had my own independent research laboratory. During this time, I have mentored nine Ph.D. graduate students, have served on nearly 40 Ph.D. Dissertation Advisory Committees, and currently mentor an MS student. Furthermore, I have trained two Post Doctoral Fellows over this time. Based on their success in my lab, my trainees were offered and accepted positions at Emory University, the NIH, St. Jude's Children's Research Hospital, UCSD, Vanderbilt University, the University of Iowa, and NYU among others. I am also actively involved in graduate student teaching in the classroom including courses in Human Physiology, Advanced Signal Transduction, and the Essentials of Graduate Research & Professional Development. I have been recognized by the University of Florida College of Medicine as being a repeat Exemplary Teacher and an Outstanding Doctoral Mentor. In 2012, I was recognized campus wide, as being an Outstanding Graduate Mentor. Thus, these and other mentoring accomplishments make me qualified to serve as a mentor on this training grant.

B. Positions and Honors.

POSITIONS AND EMPLOYMENT:

1986-1988 Undergraduate Student Researcher, Department of Biology/Reproductive Endocrinology, The University of California at Berkeley, Berkeley, California.
1988-1990 Research Technician, Department of Psychiatry and Behavioral Sciences, Stanford University Medical Center, Stanford, California.
1990-1996 Graduate Student, Department of Physiology & Biophysics, The University of Alabama at Birmingham, Birmingham, Alabama.
1996- 2000 Post Doctoral Fellow, Dept. of Pathology, Emory University School of Medicine, Atlanta, GA.
2000- 2006 Assistant Professor, Department of Physiology, University of Florida College of Medicine, Gainesville, Florida.
2006- 2012 Associate Professor, Department of Physiology, University of Florida College of Medicine, Gainesville, Florida.
2012- present Professor, Department of Physiology, University of Florida College of Medicine, Gainesville, Florida.

ADMINISTRATIVE POSITIONS:

2008- present Program Director, University Scholars Program, University of Florida College of Medicine.
2010- present Associate Chair, Department of Physiology, University of Florida College of Medicine.
2013-present Associate Program Director, NIH T32 Multi-Disciplinary Training Program in Hypertension, University of Florida Health Science Center.

HONOR AWARDS:

William C. Dement Research Award, Stanford University Medical Center, Stanford, CA, 1989.
Dean's Award, UAB Dean of Student Affairs, University of Alabama at Birmingham, 1994.
Samuel B. Barker Research Award, Dept. of Medicine, University of Alabama at Birmingham, 1995.
Trainee Investigator Award, The Clinical Research Meetings, San Diego, CA, 1995.
Dean's Award, UAB Dean of the Graduate School, University of Alabama at Birmingham, 1995.
National Graduate Achievement Award, The National Graduate Council, Washington D.C., 1995.
Trainee Investigator Award, Keystone Symposia on the Molecular Biology of the Cardiovascular System, Snowbird, Utah, 2000.
Honorary Fellow, Council for High Blood Pressure Research of the American Heart Association, 2001.
Young Investigator Travel Award, Cardiovascular Section of the American Physiology Society, Experimental Biology Meetings, New Orleans, Louisiana, 2002.
Exemplary Teacher Award, University of Florida College of Medicine, 2005, 2006, 2007, 2008, 2010, 2012, 2013, 2014.
Doctoral Mentoring Award, University of Florida College of Medicine, 2008.
Honorary Fellow, Cardiovascular Section of the American Physiological Society, 2010.
Doctoral Mentoring Award, University of Florida College of Medicine, 2012.
Doctoral Dissertation Advisor/Mentoring Award, University of Florida Graduate School, 2012.

STUDY SECTIONS AND COUNCILS:

Member, American Heart Association Southern and Ohio Valley Research Consortium, Committee 5A, Cellular Cardiovascular Physiology, Pharmacology, Molecular Genetics & Molecular Signaling, July 2001 - June 2004. .
Ad Hoc Reviewer, National Science Foundation, 2006.
Co-Chair, American Heart Association Southern and Ohio Valley Research Consortium, Committee 5A, Cellular Cardiovascular Physiology, Pharmacology, Molecular Genetics & Molecular Signaling, July 2006 - June 2007.
Chair, American Heart Association Region II Basic Cell and Molecular Biology II Study Group, July 2007 - June 2009.
Ad Hoc Reviewer, National Institutes of Health, Vascular Cell and Molecular Biology (VCMB) Study Section, 2009.
Ad Hoc Reviewer, National Institutes of Health, Vascular Cell and Molecular Biology (VCMB) Study Section, 2011.
Ad Hoc Reviewer, National Institutes of Health, Special Emphasis Panel for the NIH Director's Early Independence Awards (DP5), 2011.
Ad Hoc Reviewer, National Institutes of Health, P50 Pediatric Centers of Excellence in Nephrology (ZDK1 GRB-G) Study Section, 2012.
Ad Hoc Reviewer, National Institutes of Health, Omnibus Special Emphasis Panel, Scientific Review Group 2014/10 ZCA1 SRB-V (01) S, 2014.

REVIEWER AND EDITORIAL BOARDS:

Editorial Board Member: Regulatory Peptides
Stem Cell Investigation

Ad Hoc Reviewer: Journal of Clinical Investigation, EMBO Journal, Journal of Biological Chemistry, Nature Chemical Biology, Hypertension, AJP-Cell Physiology, AJP-Renal Physiology, American Journal of Pathology, PLOS ONE, International Journal of Cancer, Journal of Cellular Physiology, Journal of Medicinal Chemistry, and ACS Medicinal Chemistry Letters among others.

PATENTS:

Vaccinia Virus-mediated High Level Expression and Single Step Purification of Recombinant Jak2 Protein (2003). Xianyue Ma and Peter P. Sayeski. U.S. Patent Application No. 60/443,042.
Kinase Inhibitor Compounds (2007) Peter P. Sayeski. U.S. Provisional Patent Application No. 60/933,449 filed on June 6, 2007 and PCT application filed on June 5, 2008.

Jak2 Tyrosine Kinase, Myeloproliferative Disorders, and Small Molecule Inhibitors (2008) Peter P. Sayeski. U.S. Provisional Patent Application No. 61/201,406 filed on December 9, 2008 and PCT application filed on December 9, 2009.

Vimentin as a Biomarker for the Progression of Myeloproliferative Neoplasms (2011) Peter P. Sayeski. U.S. Provisional Patent Application No. 61/513,314 filed on July 29, 2011 and PCT application filed on July 27, 2012.

C. Selected Peer Review Publications (from 63 total).

Most relevant to the current application

1. Majumder A, Govindasamy L, Magis A, Kiss R, Polgar T, Baskin R, Allan RW, Agbandje-McKenna M, Reuther GW, Keseru GM, Bisht KS, and **Sayeski PP**. Structure-function correlation of G6, a novel small molecule inhibitor of Jak2: indispensability of the stilbenoid core. *J. Biol. Chem*. 285:31399-31407, 2010.

2. Kirabo A, Embury J, Kiss R, Polgár T, Gali M, Majumder A, Bisht KS, Cogle CR, Keseru GM, and **Sayeski PP**. The Stilbenoid Tyrosine Kinase Inhibitor, G6, Suppresses Jak2-V617F Mediated Human Pathological Cell Growth *in vitro* and *in vivo*. *J. Biol. Chem*. 286:4280-4291, 2011.

3. Kirabo A, Park SO, Majumder A, Gali M, Reinhard MK, Wamsley HL, Zhao ZJ, Cogle CR, Bisht KS, Keseru GM, and **Sayeski PP**. The Jak2 Inhibitor, G6, Alleviates Jak2-V617F Mediated Myeloproliferative Neoplasia by Providing Significant Therapeutic Efficacy to the Bone Marrow. *Neoplasia* 13:1058-1068, 2011.

4. Kirabo A, Park SO, Wamsley HL, Gali M, Baskin R, Reinhard MK, Zhao ZJ, Bisht KS, Keseru GM, Cogle CR, **Sayeski PP**. The small molecule inhibitor, G6, significantly reduces bone marrow fibrosis and the mutant burden in a mouse model of Jak2-mediated myelofibrosis. *American Journal of Pathology* 181:858-865, 2012.

5. Park SO, Wamsley HL, Bae K, Hu Z, Li X, Choe SW, Slayton WB, Oh SP, Wagner KU, **Sayeski PP**. Conditional Deletion of Jak2 Reveals an Essential Role in Hematopoiesis throughout Mouse Ontogeny: Implications for Jak2 Inhibition in Humans. *PLoS One* 8:e59675, 2013.

Additional publications of importance to the field (in chronological order)

6. Sandberg EM, Ma X, VonDerLinden D, Godeny MD and **Sayeski PP**. Jak2 tyrosine kinase mediates angiotensin II-dependent inactivation of ERK2 via induction of MAP kinase phosphatase 1 (MKP-1). *J. Biol. Chem.* 279:1956-1967, 2004.

7. Sandberg EM and **Sayeski PP.** Jak2 tyrosine kinase mediates oxidative stress-induced apoptosis in vascular smooth muscle cells. *J. Biol. Chem.* 279:34547-34552, 2004.

8. Wallace TA, VonDerLinden D, and **Sayeski PP.** Microarray analyses identify Jak2 tyrosine kinase as a key mediator of ligand-independent gene expression. *Amer. J. Physiol.; Cell Physio.* 287:C981-C991, 2004.

9. Sandberg EM, Ma X, He K, Frank SJ, Ostrov DA and **Sayeski PP**. Identification of cyclohexane-1,2,3,4,5,6-hexabromo as a small molecule inhibitor of Jak2 tyrosine kinase autophosphorylation. *J. Med. Chem*. 48:2526-2533, 2005.

10. Kiss R, Polgár T, Kirabo A, Sayyah J, Figueroa NC, List AF, Sokol L, Zuckerman KS, Galie M, Bisht KS, **Sayeski PP**, Keseru GM. Identification of a Novel Inhibitor of JAK2 Tyrosine Kinase by Structure-Based Virtual Screening. *Bioorganic & Medicinal Chemistry Letters* 19:3598-3601, 2009.

11. Gnanasambandan K, Magis A, and **Sayeski PP**. The Constitutive Activation of Jak2-V617F is Mediated by a Pi Stacking Mechanism Involving Phe 595 and Phe 617. *Biochemistry* 49:9972-9984, 2010.

12. Kirabo A, Oh SP, Kasahara H, Wagner KU, **Sayeski PP**. Vascular Smooth Muscle Jak2 Deletion Prevents Angiotensin II-mediated Neointima Formation Following Injury in Mice. *Journal of Molecular and Cellular Cardiology* 50:1026-1034, 2011.

13. Kirabo A, Kearns PN, Jarajapu Y, Sasser JM, Oh SP, Grant MB, Kasahara H, Cardounel AJ, Baylis C, Wagner KU, and **Sayeski PP**. Vascular Smooth Muscle Jak2 Mediates Angiotensin II-induced Hypertension via Increased Levels of Reactive Oxygen Species. *Cardiovascular Research* 91:171-179, 2011.

14. Jin X, Zhao W, Kirabo A, Park SO, Ho WT, **Sayeski PP**, Zhao ZJ. Elevated Levels of Mast Cells Are Involved in Pruritus Associated with Polycythemia Vera in JAK2V617F Transgenic Mice*. J Immunol*. 193:477-484, 2014.

15. Baskin R, Park SO, Keseru GM, Bisht KS, Wamsley HL, **Sayeski PP**. The Jak2 Small Molecule Inhibitor, G6, Reduces the Tumorigenic Potential of T98G Glioblastoma Cells In Vitro and In Vivo. *PLoS One*, 9:e105568, 2014.

D. Research Support.

Ongoing Research Support

TITLE: The Role of Vascular Smooth Muscle Cell Derived Jak2 Tyrosine Kinase in Angiotensin II-mediated pathogenesis.
PRINCIPAL INVESTIGATOR: Peter P. Sayeski, Ph.D.
AGNECY: Greater Southeast Affiliate of the American Heart Association
TYPE: Grant-in-Aid Award (13GRNT16930005)
TIME PERIOD: 07/01/13 - 06/30/15
DESCRIPTION: To determine the effect of temporal deletion of Jak2 on blood pressure.

TITLE: Pre-Clinical Analysis of Novel Therapeutic Strategies
PRINCIPAL INVESTIGATOR: Peter P. Sayeski, Ph.D.
Agency: Cellworks Group, Inc.
TYPE: Fee-for-Service Contract
TIME PERIOD: 10/01/13 - 03/31/15
DESCRIPTION: To identify novel therapy regimens against Jakafi resistant cells.

Recently Completed Research Support

TITLE: The Role of Jak2 in Angiotensin II Signaling
PRINCIPAL INVESTIGATOR: Peter P. Sayeski, Ph.D.
AGENCY: National Institutes of Health
TYPE: Independent Research Award R01-HL67277-09
TIME PERIOD: 04/01/08 – 03/31/14
DESCRIPTION: To characterize a novel site of Jak2 phosphorylation and a putative Jak2 inhibitor.

TITLE: Vascular ANGII/Jak2 in Progression of Renal Disease
CO-PRINCIPAL INVESTIGATORS: Peter P. Sayeski, Ph.D. and Chris Baylis, Ph.D.
AGENCY: NIH
TYPE: Exploratory/Developmental Grant Award R21DK092476
TIME PERIOD: 09/27/12 – 08/31/13 (NCE through 08/31/2014)
DESCRIPTION: To determine the effect of VSMC derived Jak2 on chronic kidney disease.