

Kristin Peterson

7402 Libby Lane Fairview, TN 37062
kristin.r.peterson@vanderbilt.edu
(586)822-5884

EDUCATION

- 2013-present PhD Candidate
Vanderbilt University School of Medicine
Department of Pharmacology
Advisor: Alyssa Hasty Ph.D.
- 2009-2013 Honors B.S. in Biology, Integrated Science minor, *cum laude*
University of Richmond

RESEARCH

- 2014-present PhD Candidate
Advisor: Alyssa Hasty, Ph.D.
Vanderbilt University School of Medicine, Molecular Physiology & Biophysics
- 2013-2014 Rotation student
Advisors: Christine Eischen Ph.D., Todd Giorgio Ph.D.,
Alyssa Hasty Ph.D., Bryan Venters Ph.D.
Vanderbilt University School of Medicine, Interdisciplinary Graduate Program
- 2010-2013 Undergraduate research assistant
Differential gene expression by Cliona varians during the uptake of symbionts.
Advisor: April Hill, Ph.D.
University of Richmond, Department of Biology
- 2012 Summer undergraduate research fellow
RCAN1 and NFkB: Protection of the heart through innate immune pathways.
Advisor: Beverly Rothermel, Ph.D.
UT Southwestern Medical Center, Department of Internal Medicine

FELLOWSHIPS

- 2014-2016 NIH T-32 Training Grant: Training in Pharmacological Sciences (GM07628)
2016-2017 NIH T-32 Training Grant: Immunobiology of Blood & Vascular Systems (HL069765)

HONORS & SCHOLARSHIPS

- 2012-2013 Lori & Mike Duggan Scholarship, University of Richmond
2011-2012 Bernard & Jennie Flax Scholarship, University Richmond
2010-2011 Lush Pre-Medical Scholarship, University of Richmond
2009-2010 Phi Eta Sigma National Honor Society, University of Richmond

CERTIFICATIONS

- 2016 National Institutes of Health Introduction to the Principles and Practice of Clinical Research

NATIONAL SOCIETIES

- 2016-2017 Vanderbilt University Chapter, American Association of Pharmaceutical Scientists
Vice President

UNIVERSITY SERVICE

- 2015-2017 Vanderbilt University Department of Pharmacology Graduate Student Association
VP of Community Affairs
- 2015-2017 Vanderbilt University Department of Pharmacology Retreat
Committee Chair

2015-2017 Vanderbilt University Joel G. Hardman Student-Invited Pharmacology Forum
Committee Chair

TEACHING & SCIENTIFIC WORK EXPERIENCE

2010-2013 Laboratory teaching assistant, University of Richmond Department of Biology
2010-2013 Cell line maintenance & preparation, University of Richmond Department of Biology
2009-2013 Office assistant, University of Richmond Department of Biology
2009-2013 Office assistant, University of Richmond Department of Chemistry

ORAL PRESENTATIONS

Department of Pharmacology Seminar Series, Vanderbilt University, TN, April 2017
Peterson K. Novel regulation of insulin receptor processing and signaling by complement factor 5.

Inflammation Forum, Vanderbilt University, TN, December 2016.
Peterson K. Novel regulation of insulin receptor processing and signaling by complement factor 5.

Department of Pharmacology Retreat, Vanderbilt University, TN, October 2016.
Peterson K. Novel regulation of insulin receptor processing and signaling by complement factor 5.

Department of Pharmacology Retreat, Vanderbilt University, TN, October 2014.
Peterson K. Iron handling by adipose tissue macrophages.

Department of Biology seminar series: Honors thesis, University of Richmond, April 2013.
Peterson K. Differential gene expression by *Cliona varians* during the uptake of symbionts.

POSTER PRESENTATIONS

Department of Pharmacology Retreat, Vanderbilt University, TN, October 2017.
Peterson K, Gutierrez D, Kikuchi T, Anderson-Baucum E, Bolus W, Cox N, McGuinness O, Hasty A. Novel Regulation of insulin receptor processing & signaling by complement factor 5.

Keystone Symposia Conference: Integrating Metabolism and Immunity, Dublin, Ireland, May 2017
Peterson K, Gutierrez D, Kikuchi T, Anderson-Baucum E, Bolus W, Cox N, McGuinness O, Hasty A. Novel Regulation of insulin receptor processing & signaling by complement factor 5.

Vanderbilt Diabetes Day, Vanderbilt University, TN, November 2016.
Peterson K, Gutierrez D, Kikuchi T, Anderson-Baucum E, Bolus W, Cox N, McGuinness O, Hasty A. Novel Regulation of insulin receptor processing & signaling by complement factor 5.

FASEB Meeting: Immunological Aspects of Obesity, Big Sky, MT, August 2016.
Peterson K, Gutierrez D, Kikuchi T, Anderson-Baucum E, Bolus W, Cox N, McGuinness O, Hasty A. Novel Regulation of insulin receptor processing & signaling by complement factor 5.

Digestive Disease Research Center Retreat, Vanderbilt University, TN, January 2016.
Peterson K, Hasty A. The immunophenotype of brown adipose tissue in aging and obesity.

Department of Pharmacology Retreat, Vanderbilt University, TN, October 2015.
Peterson K, Hasty A. The immunophenotype of brown adipose tissue in aging and obesity.

HHMI Student Symposium: University of Richmond, VA, September 2012.
Strehlow B, **Peterson K,** Cotman C, di Stefano M, McCauley M, Richardson C, Riesgo A, Hill A, & Hill M. Examination of genetic regulation of *Symbiodinium* uptake and the morphological development of the zooxanthella-dense pinacoderm in the sponge *Cliona varians*.

UT Southwestern Medical Center SURF Symposium: Dallas, TX, August 2012.

Peterson K. *RCAN1* and *NFkB*: Protection of the heart through innate immune pathways.

University of Richmond Arts and Sciences Symposium: University of Richmond, VA, April 2012.

Strehlow B, **Peterson K**, Cotman C, di Stefano M, McCauley M, Richardson C, Riesgo A, Hill A, & Hill M. Examination of genetic regulation of *Symbiodinium* uptake and the morphological development of the zooxanthella-dense pinacoderm in the sponge *Cliona varians*.

The Society for Integrative & Comparative Biology Annual Meeting: Charleston, SC, January 2012.

Strehlow B, **Peterson K**, Cotman C, di Stefano M, McCauley M, Richardson C, Riesgo A, Hill A, & Hill M. Examination of genetic regulation of *Symbiodinium* uptake and the morphological development of the zooxanthella-dense pinacoderm in the sponge *Cliona varians*. (P3.189)

HHMI Student Symposium: University of Richmond, VA, September 2011.

Peterson K & Cotman C. Evaluating Gene Expression Patterns During Sponge Endosymbiont Acquisition.

HHMI Student Symposium: University of Richmond, VA, September 2010.

Peterson K. Upregulation of Gene Expression During Symbiont Acquisition.

PUBLICATIONS

Peterson K, Cottam M, & Hasty A. Macrophage-targeted therapeutics for metabolic disease. *Trends in Pharmacological Sciences*. 25(11). 1881-1884. 2017

Bolus W, **Peterson K**, Hubler M, Kennedy A, Gruen M, & Hasty A. Elevating adipose eosinophils in obese mice to physiologically normal levels does not rescue metabolic impairments. *Molecular Metabolism*. 2017

Peterson K, Flaherty D, & Hasty A. Obesity alters B cell and macrophage populations in brown adipose tissue. *Obesity*. 11: 1881-1884. 2017

Hubler M, **Peterson K**, & Hasty A. Iron homeostasis: a new job for macrophages in adipose tissue? *Trends in Endocrinology and Metabolism*. 26: 2. 2015.

Riesgo A, **Peterson K**, Richardson C, Heist T, Strehlow B, McCauley M, Cotman C, Hill A, & Hill M. Transcriptomic analysis of differential host gene expression upon uptake of symbionts: a case study with *Symbiodinium* and the major bioeroding sponge *Cliona varians*. *BMC Genomics*. 15: 376. 2014.

Acknowledged for work conducted in:

Hill M. & Hill A. The magnesium inhibition and arrested phagosome hypotheses: new perspectives on the evolution and ecology of *Symbiodinium* symbioses. *Biological Reviews*. 87: 804-821. 2012.