

CURRICULUM VITAE

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Education and Training:

- 2013-2018 Doctorate of Philosophy in Molecular Physiology and Biophysics, Vanderbilt University, Nashville TN
- Mentor: Dr. Alyssa Hasty
 - Title: Elucidating the role of iron-handling macrophages in adipose tissue
- 2011-ongoing Doctorate of Medicine, Vanderbilt University, Nashville TN
- 2009-2011 Masters of Science in Biology, University of Illinois, Urbana, IL
- Mentor: Dr. Karen Sears
 - Title: The development of the marsupial shoulder girdle: a case study in *Monodelphis domestica*
- 2005-2009 Bachelors of Science in Honors Integrative Biology, University of Illinois, Urbana IL
- Dean's List for academic honors 2006-2009
 - Edmund J. James Scholar, University of Illinois 2005-2009
 - Distinction of Senior Thesis 2009

Positions and Honors

Committee Positions

- 2016-2017 Secretary and newsletter chair, MPB Graduate Student Association
- 2014-2015 Executive Admissions Committee, Vanderbilt Medical School, TN
- 2012 Committee Member, Interview Admission Committee, Vanderbilt Medical School, TN
- 2013 Committee Member, MSTP Student Advisory Committee, Vanderbilt MSTP, TN
- 2011-2012 Programming Chair, South East Medical Scientist Symposium, Vanderbilt MSTP, TN
- 2008-2010 Chair, Board of Directors, Campus Middle School for Girls, IL

Medical Positions

- 2013 Patient Health Educator, Shade Tree Clinic, Vanderbilt Medical School, TN
- 2012 Spanish Interpreter, Shade Tree Clinic, Vanderbilt Medical School, TN

Research Positions

- 2009 Research Assistant, Sears Lab, Developmental Biology, University of Illinois, IL
- 2008 Research Assistant, Sears Lab, Developmental Biology, University of Illinois, IL
- 2007 Research Assistant, Sylvia Lawry Centre for Multiple Sclerosis Research, Germany
- 2006 Research Assistant, Buchman Lab, Critical Care, Washington University, Saint Louis, MO

Teaching Positions and Certification

- 2018 Certificate in College Teaching, Vanderbilt Center for Teaching, TN
- 2015-2016 Teaching Assistant, Foundations in Biomed. Research II, Vanderbilt MSTP, TN
- 2014-2015 Teaching Assistant, Foundations in Biomed. Research I, Vanderbilt MSTP, TN
- 2010 Laboratory Instructor and Substitute Lecturer, Human Anatomy, University of Illinois, IL
- 2009 Laboratory Instructor, Molecular Biology, University of Illinois, IL
- 2008 SSAT Exam Prep Instructor, Campus Middle School for Girls, IL

Funding

- 2014 National Institute of Health Graduate Research Fellowship (F30)
- Title: *Elucidating the role of iron metabolizing macrophages in adipose tissue*
 - Resources cover tuition and personal stipend for 3 years
- 2013 Vanderbilt Medical Scientist Program Meade Haven Scholar

- 2013 Vanderbilt Institute for Clinical and Translational Research (VICTR) pilot grant recipient
- Title: *Iron Metabolization in Adipose Tissue: A Pilot Study to Characterize a Newly Identified Population of Iron-Metabolizing Macrophages in Human Visceral Adipose Tissue*
- 2010 National Science Foundation Graduate Research Fellowship
- 2010 Clark Research Support Grant
- 2010 Isabel Norton Award for Research
- 2010 Sigma-Xi Grant-in-Aid of Research

Honors and Awards

- 2014 Auburn University Boshell Diabetes Day Poster Competition – 1st place
- 2013 Vanderbilt Medical Scientist Program Meade Haven Scholar
- 2013 Vanderbilt Institute for Clinical and Translational Research (VICTR) pilot grant recipient
2009 Bachelors Graduation with Distinction for Senior Research Thesis
- 2009 List of Excellent Teachers,
- Special recognition for outstanding student feedback
- 2005-2009 Dean's List
- 2005-2008 Honors Integrative Biology Program
- Small honors program with 12 students, individual biology classes and laboratories, rigorous class requirements in math, physics, and chemistry
- 2005-2009 Edmund J. James Scholar
- Top 20% of incoming class
 - Maintain GPA above 3.5
 - Completed one James Scholar project or took honors course each semester

Publications:

Research Papers

- Hubler MJ, Erikson KM, Kennedy AJ, Hasty AH. 2018. MFehi adipose tissue macropahges compensate for tissue iron perturbations in mice. *Am. J. of Physiol Cell Physiol.* [in press] PMID: 29768045
- Bolus WR, Peterson KR, Hubler MJ, Kennedy AJ, Gruen ML, Hasty AH. 2017. Elevating adipose eosinophils in obese mice to physiologically normal levels does not rescue metabolic impairments. *Mol. Metab.* 8:86-95. PMID: 29306658
- Cooper LN, Sears KE, Armfield BA, Kala B, Hubler M, Thewissen JGM. 2018. Review and experimental evaluation of the embryonic development and evolutionary history of flipper development and hyperphalangy in dolphins (Cetacea: Mammalia). *Genesis.* 56(1). PMID: 29068152
- Orr JS, Kennedy AJ, Hill AA, Anderson-Baucum EK, Hubler MJ, Hasty AH. 2016. CC-chemokine receptor 7 (CCR7) deficiency alters adipose tissue leukocyte populations in mice. *Physiol. Rep.* 4(18). PMID: 27655794
- Hubler M, Molineux AC, Keyte A, Schecker T, and Sears KE. 2013. Development of the marsupial shoulder girdle complex: a case study in *Monodelphis domestica*. *Evolution and Development* (1):18-27. PMID: 23331914.
- Sears KE, Patel A, Hubler M, Cao X, Vadeber JL, Zhong S. 2012. Disparate Igf1 expression and growth in fore- and hind limbs of a marsupial mammal (*Monodelphis domestica*). *J. Exp Zool B Mol Dev Evol* 318(4):279-93. PMID: 22821864.
- Hubler M, Niswander LA, Peters J, Sears KE. 2010 The developmental reduction of the marsupial coracoid: a case study in *Monodelphis domestica*. *J Morphol* 271(7):769-76. PMID: 20151407.
- Hubler MJ, Buchman TG. 2008. Mathematical estimation of recovery after loss of activity: II. *Crit Care Med* 36(2):489-94. PMID: 18216602.
- Hubler MJ, Buchman TG. 2007. Mathematical estimation of recovery after loss of activity: I. *Renal Failure. J Trauma* 63(1):232-8. PMID: 17622898.

Reviews

Hubler MJ, Kennedy AJ. Role of lipids in the metabolism and activation of immune cells. 2016. *J Nutr Biochem* 34:1-7. PMID: 27424223

Hubler MJ, Peterson KR, Hasty AH. 2015. Iron homeostasis: a new job for macrophages in adipose tissue? *Trend in Endocrinology and Metabolism* 26(2):101-109. PMID: 25600948.

Abstracts

Hubler MJ, Jeb Orr, Anders Etzerodt, Alyssa Hasty. 2014, February. Elucidation the Role of "MFehi" Macrophages in Adipose Tissue Iron Metabolism. Poster presented at the Molecular Cell Biology of Macrophages in Human Disease Keystone Symposium, Santa Fe, NM.

Hubler MJ, Jeb Orr, Anders Etzerodt, Alyssa Hasty. 2014, February. Elucidation the Role of "MFehi" Macrophages in Adipose Tissue Iron Metabolism. Poster presented at the Annual Research Day at Auburn University, Boshell Diabetes and Metabolic Disease Research Program, Auburn, Alabama.

Hubler MJ, Jeb Orr, Anders Etzerodt, Alyssa Hasty. 2014, February. Elucidation the Role of "MFehi" Macrophages in Adipose Tissue Iron Metabolism. Poster presented at BioMetals 2014.

Hubler MJ. 2011. Differences in shoulder girdle development between Eutherian and Marsupial mammals. Oral presentation at the Graduate Students in Ecology and Evolutionary Biology Symposium, University of Illinois, Urbana-Champaign.

Hubler MJ and Karen Sears. 2009. The developmental reduction of the marsupial coracoid: A case study in *monodelphis domestica*. Poster presented at the Current Frontiers in the Integration of Evolution, Development and Genomics Symposium, Indiana University.

Peters JE, Merla Hubler, and Karen Sears. 2008. Ontogenesis of the Coracoid in the Marsupial Short-tailed Opossum (*Monodelphis domestica*). Poster presented at the Illinois State Academy of Sciences Conference, University of Illinois, Urbana-Champaign.