CURRICULUM VITAE

Name: James Gerard Patton

Birth: June 13, 1958 Adrian, Michigan

Address: Department of Biological Sciences
Vanderbilt University
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Education

1976-1980 B.A., Chemistry
College of St. Thomas, St. Paul, Minnesota

1983-1988 Ph.D., Molecular Biology and Biochemistry
Mayo Clinic, Rochester, Minnesota

Research Employment

1980-1983 Atherosclerosis Research Unit, Mayo Clinic, Rochester, MN
1988-1992 Post-doctoral Fellow
Department of Molecular and Cellular Physiology, Harvard Medical School
Department of Cardiology, Children's Hospital, Boston, MA
1993-1999 Assistant Professor, Department of Biological Sciences, Vanderbilt University
1999-2005 Associate Professor, Department of Biological Sciences, Vanderbilt University
2000- Director, Interdisciplinary Graduate Program, Vanderbilt University
2005- Professor, Department of Biological Sciences, Vanderbilt University
2005- Director, Honors Program, Department of Biological Sciences
2011- Stevenson Professor of Biological Sciences
2017- Professor, Department of Ophthalmology and Vision Sciences, VUMC
2016- Professor, Department of Cell and Developmental Biology, Vanderbilt
2018 Director, MS Program in Biomedical Sciences, Vanderbilt University

Awards and Honors

1988-1990 Recipient, Muscular Dystrophy Association Fellowship.
1990-1992 Recipient, National Institutes of Health National Research Service Award.
2009 Chancellors Award for Research, Vanderbilt University
2011 Stevenson Professor of Biological Sciences
2013 Fellow, American Association for the Advancement of Science for Distinguished Contributions to RNA Biology and Leadership in Graduate Education

Current Funding

2 T32 GM008554-21 Patton (PI) 07/01/16 – 06/30/21
NIH/NIGMS $377,039
Cellular, Biochemical, and Molecular Sciences Training Grant

This grant coordinates and supports the training of 8 second and third year graduate students.

U19 CA179514-05 Coffey (PI), Weaver, Patton 09/01/13 - 08/31/19 (1 year NCE)
NIH/NCI
Secreted RNA during CRC Progression: Biogenesis, Function, and Clinical Markers
This program project is a collaboration devoted to identify extracellular RNAs and their function in colorectal cancer (CRC).

U01EY027265-01 Levine (PI), Patton, Calkins 09/01/16 – 08/31/19
NIH/NEI
Novel Activators of Regeneration in Muller glia
This program project is a collaboration devoted to identify novel methods to elicit retina regeneration and is part of the Audacious Goal Initiative at the NEI.

Pending

1PO1CA229123-01A1Weaver 09/01/19 – 08/31/24
NIH/NCI
exRNA in colorectal carcinoma: biogenesis and function
Project 2: Mechanisms and Functional Consequences of Selective miRNA Transfer via Exosomes
The major goal of this project is to identify potential therapeutic target genes whose expression is altered when proper cell-cell communication is altered during colorectal cancer.

Publications

Patton, J.G., Dinh, D.M., and Mao, S.J.T. (1982) Phospholipid Enhances Triglyceride Quantitation Using An Enzyme Kit Method, Clinica Chimica Acta 118:125-128.

Patton, J.G., Alley, M.C., and Mao, S.J.T. (1982) Evaluation of Monoclonal Antibodies to Human Plasma Low-Density Lipoproteins. A Requirement for Lipids to Maintain Antigenic Structure J. Imm. Meth. 55:193-203.

Mao, S.J.T., Patton, J.G., Badimon, J.J., Kottke, B.A., Alley, M.C., and Cardin, A.D. (1983) Monoclonal Antibodies to Human Plasma Low-Density Lipoproteins. I. Enhanced Binding of ^{125}I-Labeled Low Density Lipoproteins by Combined Use of Two Monoclonal Antibodies, Clin. Chem. 29: 1890-1898.

Patton, J.G., Badimon, J.J., and Mao, S.J.T. (1983) Monoclonal Antibodies to Human Plasma Low-Density Lipoproteins. II. Evaluation for use in Radioimmunoassay for Apolipoprotein B in Patients with Coronary Artery Disease, Clin. Chem. 29: 1898-1902.

Hurt, R.D., Briones, E.R., Offord, K.P., Patton, J.G., Mao, S.J.T., Morse, R.M., and Kottke, B.A. (1986) Plasma Lipids and Apolipoproteins A-I and A-II Levels in Alcoholic Patients, Am. Jo. Clin. Nutr. 43: 521-529.

Badimon, J.J., Fleming, C.R., and Patton, J.G., and Mao, S.J.T. (1986) Changes of plasma levels of apolipoproteins A-I, A-II, and B and their isoforms in patients with intestinal failure receiving long-term parenteral nutrition. Am. Jo. Clin. Nutr. 45: 414-422.

Patton, J.G., and Wieben, E.D. (1987) U1 Precursors: Variant 3' Flanking Sequences are Transcribed in Human Cells. J. Cell Biol. 104: 175-182.

Smith, C.W.J., Porro, E.B., Patton, J.G., and Nadal-Ginard, B. (1989) Scanning from an independently specified branch point defines the 3' splice site of mammalian introns. Nature 342: 243-247.

Smith, C.W.J., Patton, J.G., and Nadal-Ginard, B. (1989) Alternative splicing in the control of gene expression. Ann Rev Genetics 23: 527-577.

Mullen, M.P., Smith, C.W.J., Patton, J.G., and Nadal-Ginard, B. (1991) □lpha-tropomyosin mutually exclusive exon selection: competition between branchpoint/polypyrimidine tracts determines exon choice. Genes and Development 5: 642-655.

Nadal-Ginard, B., Smith, C.W.J., Patton, J.G., and Breitbart, R. (1991) Alternative splicing is an efficient mechanism for the generation of protein diversity: Contractile protein genes as a model system. Advances in Enzyme Regulation, Vol. 31 pp. 261-286.

Patton, J.G., Mayer, S.A., Tempst, P., and Nadal-Ginard, B. (1991) A polypyrimidine binding complex necessary for pre-mRNA splicing: Identification, characterization, and molecular cloning of the 57kD subunit. Genes and Development 5: 1237-1251.

Nadal-Ginard, B., Smith, C.W.J., and Patton, J.G. (1991) Regulation of alternative splicing of contractile protein genes. Frontiers in Muscle Research. Ozawa et al. (eds.) pp. 151-165. Elsevier Press.

Zamore, P.D., Patton, J.G., and Green, M.R. (1992) Cloning and domain structure of the mammalian splicing factor U2AF. Nature 355: 609-614.

Patton, J.G., Porro, E.B., Galceran, J., Tempst, P. and Nadal-Ginard, B. (1993) Cloning and characterization of PSF, a novel pre-mRNA splicing factor. Genes and Development 7: 393-406.

Borman, A., Howell, M.T., Patton, J.G., and Jackson, R.J. (1993) The involvement of a spliceosome component in internal initiation of human rhinovirus RNA translation. J. General Virology 74: 1775-1788.

Gozani, O., Patton, J.G., and Reed, R. (1994) A novel set of spliceosome-associated proteins (SAPs) and the essential splicing factor PSF bind stably to pre-mRNA prior to catalytic step II of the splicing reaction. EMBO J. 13: 3356-3367.

Coolidge, C.J. and Patton,J.G., (1995) Run-Around PCR: A Novel Way to Create Duplications Using Polymerase Chain Reaction. Biotechniques 18: 763-764.

Lin, C-H. and Patton, J.G., (1995) Regulation of Alternative 3' Splice Site Selection by Constitutive Splicing Factors. RNA 1: 234-245.

Kaminski, A., Hunt, S.L., Patton, J.G., and Jackson, R.J. (1995) Direct evidence that polypyrimidine tract binding protein (PTB) is essential for internal initiation of translation of encephalomyocarditis virus RNA. RNA 1: 924-938.

Hirano, K., Erdodi, F., Patton, J.G., and Hartshorne, D.J. (1996) Interaction of protein phosphatase type 1 with a splicing factor. FEBS Letters 389:191-194.

Coolidge, C.J., Seely, R.J., and Patton,J.G. (1997) Functional Definition of the Polypyrimidine Tract in pre-mRNA Splicing. Nucleic Acids Res. 25: 888-896.

Perez, I., Lin, C-H., McAfee, J.G. and Patton, J.G. (1997) Mutation of PTB Binding Sites Causes Misregulation of Alternative 3' Splice Splice Site Selection In Vivo. RNA 3: 764-778.

Patton, J.G., Dye, B.T., Barnard, D.C., and McAfee, J.G. (1997) Identification of pre-mRNA splicing factors and analysis of RNA-protein interaction. in mRNA Formation and Function, Richter, J.D., ed. Academic Press. pp. 55-78.

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Chanas-Sacre, G., Mazy-Servais, C., Wattiez, R., Pirard, S., Rogister, B., Patton, J.G., Belachew, S., Malgrange, B., Moonen, G. and Leprince, P. (1999) Identification of PSF, the Polypyrimidine Tract Binding Protein-Associated Splicing Factor, as a developmentally regulated neuronal protein. J. Neuroscience Res. 57: 62-73.

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Dye, B.T. and Patton, J.G. (2001) An RNA recognition motif (RRM) is required for the localization of PTB-Associated splicing factor (PSF) to subnuclear speckles. Experimental Cell Research 263: 131-144.

Patton, J.G. and Smith, C.W.J. (2001) Alternative pre-mRNA Splicing: Prevalence, Mechanisms, and Disease. Encyclopedia of Molecular Medicine, Creighton, T.E. (Ed.) John Wiley and Sons, New York.

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hyperphosphorylation, masking of antigenic epitopes, and changes in protein interactions. Molecular Biology of the Cell 12: 2328-2340.

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Li, N., Flynt, A.S., Kim, H.R., Solnica-Krezel, L., and Patton, J.G. (2008) *Dispatched* 2 is Targeted by *miR-214* through a Combination of Three Weak MicroRNA Recognition Sites. Nucleic Acids Research 36: 4277-4285.

Solis, A.S, Peng, R., Crawford, J.B., Phillips, J.A. III, and Patton, J.G. (2008) Growth Hormone Deficiency and Splicing Fidelity: ASF/SF2 activates exon inclusion and SC35 promotes exon skipping. J. Biol. Chem. 283: 23619-23626.

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Solis, A.S. and Patton, J.G. (2010) Analysis of SRrp86 regulated alternative splicing: control of c-Jun and IkBb activity. RNA Biology, 7: 486-494

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Thatcher, E.J. and Patton, J.G. (2010) Small RNAs have a big impact on regeneration. RNA Biology 7: 1-6.

Li, N., Wei, C. and Patton, J.G. (2011) Regulation of Endoderm Formation and Left-Right Asymmetry by *miR-92* During Early Zebrafish Development. Development, 138: 1817.

Wei, C., Salichos, L., Rokas, A., and Patton, J.G. (2012) Transcriptome-wide analysis of small RNA expression in early zebrafish development. RNA 18: 915-926.

Wei, C., Thatcher, E.J., Olena, A.F., Perdigoto, A.L., Marshall, A., Carter, B.D., Broadie, K., and Patton, J.G., (2013) *miR-153* regulates SNAP-25, Synaptic Transmission, and Neuronal Development. PLOS One 8: e57080.

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Rajaram, K.*, Harding, R.L.*, Bailey, T. Patton, J.G.#, and Hyde, D.R.# (2014) Dynamic miRNA Expression Patterns During Retina Regeneration in Zebrafish: Loss of Dicer Inhibits Regeneration. *Co-first authors. #Co-corresponding authors. Developmental Dynamics, 2443: 1591-1605.

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down regulated by mutant KRAS in colon cancer and can be transferred to exosomes. Scientific Reports 6:37982. PMCID: PMC5125100.

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Classroom Teaching

Current Assignments:
BSCI 1510 Introduction to Biological Sciences. First semester of Introductory Biology. Lectures covering the central dogma of molecular biology during fall semester. ~200 students, 3 credit hours.

BSCI 4999 Honors Research in Biological Sciences. Undergraduate Honors Research. I serve as the **Director of the Honors Program** in Biological Sciences. 8-12 credits, Fall and Spring, ~14 students.

IGP 8001,8002 Bioregulation. Interdisciplinary Graduate Program. Introductory course for first year graduate students in the biomedical sciences. I serve as the **program director, curriculum director, and course director.** I teach RNA Biology in the Gene Expression section in the Fall. 68 students; 6 credit hours.

IGP 8000 FOCUS. Interdisciplinary Graduate Program. FOCUS sessions are weekly small group discussion sections teaching first year graduate students how to read and critically evaluate the primary literature. I serve as the course coordinator. Weekly, fall semester, 10 students per section, 2 credit hours.

IGP 8999 IMPACT. Interdisciplinary Graduate Program. IMPACT sessions are weekly mentoring sessions for first year students. I serve as the course coordinator**.**

IGP 8004 Responsible Conduct in Research. This is a required day-long class for all Vanderbilt biomedical graduate students. I serve as the course director/coordinator. 200 students.

IGP 8002 RNA World. Spring semester module elective for graduate students. Co-taught with Dr. Ron Emeson. 18 students, 1 credit.

BMS 7001 Effective Communication in the Biomedical Sciences. First year course for students in the MS Program in the Biomedical Sciences. 10 students, 1 credit hour.

BMS 7003 Critical Thinking Skils in the Biomedical Sciences. First year course for students in the MS program in the Biomedical Sciences. 10 students, 3 credit hours.

BMS 7004 Service Learning in the Biomedical Sciences. 1 credit.

Past Assignments:
BCHM 5015 Advanced Biochemistry. A 3 credit biochemistry course taught to a select group of advanced first year medical students. I taught 6 lectures on RNA processing in the Fall. 20 students.

MBIO 115 Freshman Seminar: Molecular Biology of AIDS. A three credit Science and the World class taught in a seminar format covering the immunology and molecular biology of HIV/AIDS. I designed the course from scratch and taught all lectures. Fall, 1993-1995; 42 lectures.

MBIO 258 Human Physiology. A three credit team taught class for juniors and seniors. Spring, 1993; 8 lectures on the endocrine system.

MBIO 301 Laboratory Methods in Molecular Biology. An intense three credit summer laboratory course for Masters candidates in the Vanderbilt Summer Institute in the Biological Sciences. I designed the course from scratch and personally lectured or led 18 lab sessions. Taught in the summer of 1994.

MBIO 240 Developmental Biology. A three credit class taught spring semester, 1995-1996; 21 lectures on gene regulation and development.

HONORS 183 HIV/AIDS: Science and Society. A three credit Honors Seminar modeled after MBio 115. Spring, 1996-1999; 42 lectures.

MBIO 282. Independent Reading in Molecular Biology. Course coordinator for students reading with various Molecular Biology Faculty. Responsible for final oral exams.

BSCI 320 Graduate Seminar in Biological Sciences. Course coordinator. Spring. 1999-2002

Research Training

Undergraduate Reseach Trainees

Past Students

Anderson B. Collier, B.A., 1994, MD, 1998. Honors research. Vanderbilt Medical.

Dawn Gupta, B.A., 1995. Honors research. Ph.D., Washington University, 2001.

Regina Barrett, B.A., 1995. Honors research. University of Alabama, Birmingham School of Medicine.

Michael Jacobs, B.A. 1996. Honors research. Duke University School of Medicine.

Jay Parrish, B.A. 1998. Directed, Independent, and Honors Research. Ph.D., University of Colorado, Boulder, 2003. **Winner of the Harold Weintraub Graduate Student Award, 2002.** Current position, Assistant Professor, University of Washington.

Wendy Ertmer, B.A. 1999. Directed, Independent, and Honors Research. J.D., Vanderbilt Law School, 2003.

Chris Nalbantyan, B.A. 2001. Directed Research.

Christian Gocke, B.A. 2001. Directed, Independent and Honors Research. MSTP, UT Southwestern Medical School, Dallas.

Brian Griffith, B.A. 2001. Directed and Independent Research. Duke University Medical School.

Amanda Thompson, B.A. 2003. Directed and Independent Research. Vanderbilt Medical School.

Christopher Harvey, B.S. 2003. Directed, Independent and Honors Research. Assistant Professor of Neurobiology, Harvard Medica School.

Bryan Harris, B.A, 2005. Directed, Independent and Honors Research. Vanderbilt Medical School.

Eric Byrum, B.A. 2004. Directed and Independent Research. Ohio State Medical School.

Melissa Germany, B.A. 2005. Directed and Independent Research. Ole Miss Medical School.

Carmen Wolffe, B.A. 2005. Directed and Independent Research. Vanderbilt Medical School.

Allison Ray, Directed and Independent Research, 2006-2008.

Allison Button, Directed Research, 2006-2007.

Jordan Bond, Directed Research, 2007-2008

Jacqueline Palma, B.A. 2008-2009. Directed and Independent Research. Arizona School of Dentistry.

Ima Paydar, Directed, Independent and Honors Research, 2004-2008. Washington University School of Medicine

Ryan Cleary, Directed and Independent Research, 2005-2008. University of Kentucky School of Medicine

Courtney Bartel, Directed and Independent Research, 2005-2010. MSTP, Case

Western Reserve University
Nila Manandhar, Directed and Independent Research, 2009-10. University of Missouri School of Medicine.
Lora Aboulmouna, Directed Research, 2008-2009.
Andrew Marshall, Directed and Independent Research, 2008-11.
Brittany Cowfer, Directed and Independent Research 2010-11. University of Colorado School of Medicine.
Carli Wittgrove, Directed and Independent Research, 2010-11. University of Missouri Medical School.
Grace Coggins, Directed and Independent Research 2011-2014. Graduate Student, University of Pennsylvania.
Emily Summerbell, Directed and Independent Research 2011-2014. Graduate student, Emory University.
Grace Randazzo, Directed Research, 2012-2014
Alexander Commanday, Directed Research 2013-2015. Baylor College of Medicine.
Anna Zhao, Directed, Independent and Honors Research 2013-2016. Harvard Medical School.
Calvin Yang, Directed, Independent Research, 2015-2018
Lihua Shu, Directed, Independent Research, 2015-2018
Jinwei Ren, Directed Research 2016-2018. Columbia University Biostatistics PhD Program.
Hannah Cutshall, Directed Research, 2016-2018, UAB Medical School.
Alexis Gutierrez, 2017-2010, Directed Research. Harvard Medical School.

Current Students
Margaret Clement, 2018-
Shivani Sharma, 2018

Graduate Students
Past:
Chorng-Horng Lin, 1994-1998. Ph.D. Current position, Dayeh University, Taiwan.
Ismael Perez, 1994-1998. Ph.D. Current position, High school science teacher, Abu Dhabi.
Ray Seely, 1995-1999. M.A. Current position, Department of Biology, Belmont University.
Candace Coolidge, 1994-1999. Ph.D. Current position, Professor, Valencia Community College, Florida.
Daron Barnard, 1996-2001. Ph.D. Current position, Associate Professor, Worcester State College, Massachusetts
Billy Dye, 1996-2001. Ph.D. Current position, Professor, Vol State Community College, Gallatin, TN.
Jun Li, 1999-2003. Ph.D. Current position, R&D Systems, Minneapolis, MN
Robin Ryther, 2001-2005. M.D., Ph.D. Current Position, Department of Pediatrics, Washington University, St. Louis
Rui Peng, 2000-2006. Ph.D. Current position, Associate Professor, Soochow Univ., Suzhou, Jiangsu, China.
Barry Crawford, 2001-2007. Ph.D. Current position, Pharmasys, Inc., Cary, NC.
Ian Hawkins, 2002-2006. M.A. Current position, Assistant Professor, Free Will Baptist College, Nashville, TN.
Alex Flynt, 2003-2007. Ph.D. Current position, Assistant Professor, University of Southern Mississippi.
Nikki Shariat, 2004-2008. Ph.D. Current position, Assistant Professor, Gettysburg College.
Amanda Solis, 2006-2010, Current position, Patent Agent, Parker Highlander, Austin TX.
Elizabeth Thatcher, 2004-2010, Current position, Medical Science Liaison, St. Louis.

Nan Li, 2004-2010, Current position, Assistant Professor, Sichuan University
Chunyao Wei, 2008-2013. Current position, post-doctoral fellow with Dr. Jeannie Lee, Harvard Medical School
Kamya Rajaram, 2009-2014. Current position, post-doctoral fellow with Dr. Slobodan Beronja, Fred Hutchinson Cancer Research Center
Omozusi Andrews, 2012-2014. Current position, Food and Drug Administration
Abigail Olena, 2008-2015, Ph.D. Current position, Duke Science and Society Program
Sataree Khuansuwan, 2009-2015, Ph.D. Current position, Arkana, Inc.
Mahesh Rao, 2011-2016, Ph.D. Current position, post-doctoral fellow with Dr. Ed Levine, Vanderbilt Medical Center.
Diana Cha, 2012-2017, Ph.D. Current position, Amgen, Boston.
Nergis Kara, 2012-2018, Ph.D. Current position, post-doctoral fellow with Dr. Sean Morrison at UT Southwestern Medical Center.

Current:
Matthew Kent, 2015-present
Scott Hinger, 2015-present
Jessica Abner, 2017-present
Hannah Nelson, 2019-present

Post-Doctoral Fellows
James McAfee, 1996-1997. Current position, Professor of Chemistry, Pittsburg State University, Pittsburg, KS.

Research Assistant Professor
Dominic Didiano, 2015-2019.

Invited Lectures and Research Seminars Outside Vanderbilt
1993 Mayo Clinic, Department of Molecular Biology and Biochemistry.
1995 University of South Carolina, Departments of Biochemistry and Pathology.
1995 European Research Conference. Molecular Biology of RNA. Mont Ste Odile, France.
1996 RNA Society Meeting. Madison, WI.
1997 RNA Society Meeting. Banff, Alberta, Canada
1997 RNA Society Meeting. Banff, Alberta, Canada
1998 RNA Society Meeting, Madison, WI
1998 Mini-symposium Organizer, RNA Society Meeting, Madison, WI.
1999 Cold Spring Harbor Meeting on RNA Processing, Cold Spring Harbor, NY.
1999 Medical College of Wisconsin, Department of Microbiology and Molecular Genetics.
2000 Cold Spring Harbor Laboratory Meeting; Eukaryotic RNA Processing, Cold Spring Harbor, NY.
2000 Georgia State University, Department of Biology
2001 Mayo Research Forum, Rochester, MN
2001 RNA Society Meeting, Banff Alberta, Canada.
2003 University of Kentucky Medical School, Lexington, KY
2003 American Society for Biochemistry and Molecular Biology, San Diego, CA.
2003. RNA Society Meeting, Vienna, Austria
2004 University of Arizona, Department of Molecular and Cellular Biology
2004 Tennessee State University, Department of Biology
2004 Meharry Medical School, Department of Microbiology
2005 University of West Virginia, Department of Biochemistry

2005 Keystone Conference on microRNAs and RNAi, Vancouver, Canada
2006 Cold Spring Harbor Symposium on Regulatory RNAs, Cold Spring Harbor, NY
2006 Department of Biochemistry, Vanderbilt University
2007 Department of Biochemistry and Molecular Biology, Penn State University
2007 Department of Human Genetics, Vanderbilt University
2008 Department of Cell and Developmental Biology, Vanderbilt University
2008 Department of Microbiology and Immunology, Vanderbilt University
2008 Department of Microbiology and Molecular Genetics, Michigan State University
2008 Drug Information Association Annual Meeting, Boston, MA
2008 The Robert E. Forster Lecture, Respiration Research Retreat, University of Pennsylvania School of Medicine, Institute for Environmental Medicine
2008 Department of Pathology, Vanderbilt University
2009 Society of Toxicology Annual Meeting, Baltimore, Plenary Session: miRNAs in Biology and Toxicology
2009 Experimental Biology 2009 (FASEB), Plenary Session: The Emerging Role of miRNAs
2010 Symposium on Basement Membranes in Tissue Development and Regeneration, Vanderbilt University
2010 Vanderbilt Center for Stem Cell Biology
2011 Vanderbilt Department of Cell and Developmental Biology
2013 exRNA Consortium, Bethesda, MD
2014 Carleton College, Department of Biology, Northfield MN
2014 Mayo Clinic, Department of Biochemistry and Molecular Biology, Rochester, MN
2014 St. Olaf College, Department of Biology, Northfield MN
2014 exRNA Consortium, Bethesda, MD
2014 University of St. Thomas, Departments of Biology and Chemistry, St. Paul, MN
2014 Department of Ophthalmology and Visual Sciences, Vanderbilt University
2015 exRNA Consortium, Bethesda, MD
2015 Department of Biological Sciences, Lipscomb University, Nashville, TN
2016 exRNA Consortium, April, Bethesda, MD
2016 Extracellular RNA in Drug and Diagnostic Development, Boston, MA
2016 miRNAs During Zebrafish Development and Regeneration, Meharry Medical School, Nashville, TN
2016 Extracellular RNA Consortium, November, Bethesda, MD
2016 Audacious Goal Initiative, National Institutes of Health, December, Bethesda, MD
2017 University of Kentucky, invited speaker for graduate student seminar.
2017 Extracellular RNA Consortium, April, Bethesda, MD
2017 Co-Organizer, James W. Freston Conference, Extracellular Vesicles: Biology, Translation, and Clinical Application in GI Disorders, St. Paul, MN
2017 Extracellular RNA Consortium, November, Bethesda, MD
2017 Audacious Goal Initiative Consortium, National Eye Institute, Bethesda, MD
2018 Extracellular RNA Consortium, November, Bethesda, MD
2018 Extracellular RNA Consortium, April, Bethesda, MD
2018 Center for Stem Cell Biology, February, Vanderbilt University
2018 Audacious Goal Initiative, National Institutes of Health, Bethesda MD
2019 Department of Cell Biolog, University of Georgia
2019 Audacious Goal Initiative Consortium, National Eye Institute, Bethesda, MD

Ph.D. Committees:

Past:

Keri Merritt, Department of Molecular Biology

Brian Keplinger, Department of Molecular Biology
Colleen Burns, Department of Pharmacology
Jiunn-Lin Wang, Department of Molecular Biology
Susan Reuter, Department of Pharmacology
Mehmet Goral, Department of Microbiology and Immunology
Chorng-Horng Lin, Department of Molecular Biology (Mentor)
Sara Perlaky, Department of Molecular Biology (Chair)
Lily Milam, Department of Molecular Biology
Ismael Perez, Department of Molecular Biology (Mentor)
DeAnne Olsen, Department of Molecular Biology (Chair)
Ray Seely, Department of Molecular Biology (Mentor)
Todd Reynolds, Department of Molecular Biology
Candace Coolidge, Department of Molecular Biology (Mentor).
Po-Yung Cheng, Department of Biochemistry
Eleanor Sandstead McCarthy, Department of Biochemistry
Kim Fekany, Department of Molecular Biology (Chair)
Michelle Grundy, Department of Microbiology and Immunology
Daron Barnard, Department of Molecular Biology (Mentor)
Amy Altman, Department of Molecular Biology (Chair).
Geoff Burns, Department of Cell Biology.
Billy Dye, Department of Molecular Biology (Mentor).
Maciej Pawlak, Department of Microbiology and Immunology.
Dina Meyers, Department of Molecular Biology (Chair)
Erica White, Department of Microbiology and Immunology
Amy Sims, Department of Microbiology and Immunology
Renae Dawson, Department of Pharmacology
Michelle Becker, Department of Microbiology and Immunology
Mike Marlow, Department of Molecular Biology
Daewoong Jo, Department of Microbiology and Immunology
Chris Rogers, Department of Pharmacology
Chris Sansam, Department of Pharmacology
Walt Gall, Department of Molecular Biology
Melanie Wright, Department of Cell Biology
Renae Combs, Department of Molecular Physiology and Biophysics
Andrea Patten, Department of Biological Sciences
Robin Ryther, Department of Biological Sciences (Mentor)
Rui Peng, Department of Biological Sciences
Robin Milley, Department of Microbiology and Immunology
Steven Gray, Department of Biological Sciences
Barry Crawford, Department of Biological Sciences (Mentor)
Ian Hawkins, Department of Biological Sciences (Mentor)
Jing Xiao, Department of Biological Sciences
Hilyna Gebre-Amlak, Department of Microbiology and Immunology
Josh Rosenberg, Department of Cell and Developmental Biology
Alex Flynt, Department of Biological Sciences (Mentor)
Atuhani Burnett, Department of Microbiology and Immunology
Vince Gerbasi, Department of Microbiology and Immunology
Hanjian Liu, Department of Biological Sciences
Mike Morabito, Department of Pharmacology

Nikki Shariat, Department of Biological Sciences (Mentor)
Ginger Jiang, Department of Biological Sciences (Chair)
Hong Ji, Department of Biological Sciences
Brandon Kirby, Department of Biological Sciences (Chair)
Hanjian Liu, Department of Biological Sciences
Amanda Solis, Department of Biological Sciences (Mentor)
A'Drian Pineda, Department of Biological Sciences
Elizabeth Rula, Department of Pharmacology
Eric Shows, Department of Cell and Developmental Biology
Yuanfeng Xia, Neuroscience Program
Xiaohua Jiang, Department of Biological Sciences (Chair)
Kavitha Surendran, Department of Biological Sciences (Chair)
Elizabeth Thatcher, Department of Biological Sciences (Mentor)
Patrick Robertson, Department of Biological Sciences (Chair)
Jeanne Bristow, Department of Biological Sciences (Chair)
Nan Li, Department of Biological Sciences (Mentor)
Huang Hao, Department of Biological Sciences (Chair)
Jennell Talley, Department of Biological Sciences
Haiting Ma, Department of Biological Sciences (Chair)
Morgan Sammons, Department of Biological Sciences
Gulfem Guler, Department of Biological Sciences (Chair)
Yinzi Liu, Department of Biological Sciences (Chair)
Chunyao Wei, Department of Biological Sciences (Mentor)
Tessy Sebastian Department of Biological Sciences (Chair)
Jenifer Ferguson, Department of Biological Sciences
Ryan Baldridge, Department of Biological Sciences
Josh Clanton, Department of Biological Sciences
Sarah Parker, Department of Microbiology and Immunology
Brent Livesay, Department of Cell and Developmental Biology
Yuantai Wu, Department of Biological Sciences (Chair)
Abby Olena, Department of Biological Sciences (Mentor)
Kamya Rajaram, Department of Biological Sciences (Mentor)
Omozusi Andrews, Department of Biological Sciences (Mentor)
Clare Adams, Department of Pathology
Clint Bertram, Department of Cancer Biology
Mahesh Rao, Department of Biological Sciences (Mentor)
Diana Cha, Department of Biological Sciences (Mentor)
Elizabeth Ferrick, Department of Molecular Physiology and Biophysics
Haley Eidem, Department of Biological Sciences
Nergis Kara, Department of Biological Sciences (Mentor)
Carrie Wiese, Department of Molecular Physiology and Biophysics

Current:
Xiong Jing, Department of Biological Sciences
Amanda Leung, Department of Cell and Developmental Biology
Scott Hinger, Department of Biological Sciences (Mentor)
Matthew Kent, Department of Biological Sciences (Mentor)
Jessica Abner, Department of Biological Sciences (Mentor)
Kerri-Ann Anderson, Department of Biological Sciences (Chair)
Cait Kirby, Department of Biological Sciences

Jamie O'Neale, Department of Biological Sciences, (Chair)
Turnee Malik, Neuroscience Program