**CURRICULUM VITAE**

**DATE:** September, 2017

**NAME:** Melissa Brinkman Rogers

**PRESENT TITLE:** Associate Professor

**HOME ADDRESS:** 1415 Boynton Ave.

Westfield, NJ 07090

**OFFICE ADDRESS:** Rutgers New Jersey Medical School

 Microbiology, Biochemistry & Molecular Genetics (CC F1216)

205 South Orange Ave.

Newark, NJ 07103-2714

**TELEPHONE NUMBER/E-MAIL ADDRESS:**

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Home: (908) 233-2545

Email: rogersmb@njms.rutgers.edu

**CITIZENSHIP:** USA

**EDUCATION:**

1. Undergraduate

 Rensselaer Polytechnic Institute,

 Troy, NY

 B.S.Biology

 1979

1. Graduate

 Brandeis University

 Waltham, MA

 Ph.D.Biology

 1985

 Advisor: Dr. K.M. Karrer,

 Thesis: A Molecular and Biochemical Analysis of

 Conjugation and Adolescence in *Tetrahymena thermophila*

**POSTDOCTORAL TRAINING:**

A. Internship and Residencies: N/A

1. Research Fellowships

Pharmaceutical Manufacturers’ Association Foundation Pharmacology-Morphology Fellowship

1989-1991

 Aid for Cancer Research Postdoctoral Fellowship (declined)

 1989-1991

 Massachusetts American Cancer Society Postdoctoral Fellowship

 “Mouse Teratocarcinomas and Embryos: Genes in Common”

 1986-1988

1. Postdoctoral Appointments:

 Dana-Farber Cancer Institute and Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School

 1985-1991 Advisor: Dr. L. J. Gudas,

 Dept. of Genetics, Harvard Medical School, Boston, MA

 Hughes Scholar

 1992 Advisor: Dr. J. G. Seidman

**MILITARY:** N/A

**ACADEMIC APPOINTMENTS:**

 Biology Department and Institute for Biomolecular Sciences

 – primary appointments

 Department of Pharmacology and Therapeutics - joint appointment

 University of South Florida, Tampa, FL

 Assistant Professor

 1993 – 1999

 Biology Department and Institute for Biomolecular Sciences

 – primary appointments

 Department of Pharmacology and Therapeutics - joint appointment

 University of South Florida, Tampa, FL

 Associate Professor with Tenure

 1999 - 2001

 Department of Biochemistry & Molecular Biology

 UMDNJ-New Jersey Medical School, Newark, NJ

Associate Professor (with tenure from 2013)

2001- 2014

 Department of Microbiology, Biochemistry & Molecular Genetics

 Rutgers-New Jersey Medical School, Newark, NJ

Associate Professor with Tenure

2014 - Present

NJMS – UH Cancer Center Community

Member

2007 – Present

Cardiovascular Research Institute

Rutgers-New Jersey Medical School, Newark, NJ

Member

2015 – Present

Rutgers Cancer Institute of New Jersey

Member

2016 – Present

**HOSPITAL APPOINTMENTS:** N/A

**PRIVATE PRACTICE:** N/A

**OTHER PROFESSIONAL POSITION AND MAJOR VISITING APPOINTMENTS –** NONE

**LICENSURE:** N/A

**DRUG LICENSURE:** N/A

**CERTIFICATION:** N/A

**MEMBERSHIPS, OFFICES AND COMMITTEE ASSIGNMENT IN PROFESSIONAL SOCIETIES:**

 Association of Biochemistry Course Directors (ABCD)

 Member

 2013 – 2016

 International Association of Medical Science Educators (IAMSE)

 Member

 2012 – Present

 American Heart Association

 Member

 2011 – Present

 Association for Computing Machinery (ACM) First International Workshop on

 Text Mining in Bioinformatics

 Program Committee

 (TMBIO 2006)

 Society for Developmental Biology

 Member

 1993 – Present

 World Federation of Chinese Medicine Societies (WFCMS)

 Member

 2017 – Present

**HONORS AND AWARDS:**

 NJMS Faculty Organizations Basic Science Teaching Award

 2016

Nominated for a Foundation of UMDNJ Excellence in Teaching Award

 2012

 Research highlighted in the UMDNJ *Pulse* publication

 2009

 Faculty Quality Research Award for Providing Exemplary Research

 Experiences

 McNair Scholars Program, University of South Florida, Tampa, FL

 2000

 Honorary Member of the Golden Key National Honor Society –

 Student nominated

 1998

 Outstanding Research Award,

 H. Lee Moffitt Cancer Center & Research Institute, Tampa, FL

 1996

**BOARD OF DIRECTORS/TRUSTEES POSITION:** N/A

**SERVICE ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES:**

 Chair

 American Heart Association, Basic Cell Genetics & Epigenetic Committee

 2017 -

 *ad hoc* Member

 American Heart Association, Allen Distinguished Investigator Award

 2017

Chair

 American Heart Association, Basic Cell—Genetics & Epigenetics (GE) 3

 Committee

 2012 - 2015 Fall and Spring cycles

 Co-Chair

 American Heart Association, Basic Cell—Genetics & Epigenetics

 (GE) 1 Committee

 2011

 Member, American Heart Association, Basic Cell—Genetics & Epigenetics

 (GE) 1 Committee

 2010, 2011

 Member

 American Heart Association Region 1 Basic Cell 2 Review Panel

 2008

 Member

 American Heart Association National, Basic Cell & Molecular Biol. 3

 2008

 Member

 American Heart Association 2006-7 NEA5 (Gene Expression: Cardiovascular

 Development) Review Panel

 2006, 2007

 Ad hoc member

 Cell Development and Function-5 Study Section, NIH

 2002

 Member

 American Cancer Society Institutional Research Grant Review Committee

 1995 - 2000

 *ad hoc* external reviewer

 National Science Foundation external reviewer

 NSF Proposal # 1121760, Feb. 2011

 NSF Proposal # 1052219, Oct. 2010

 Alzheimer's Association

 Philip Morris External Research Program

**SERVICE ON MAJOR COMMITTEE:**

1. International: N/A
2. National: N/A

1. Medical School

UMDNJ - New Jersey Medical School

NJMS Faculty Organization Vice President for Basic Research (elected)

2015 – 2016

NJMS Faculty Investigator’s Committee (Chair)

2015 - 2016

NJMS Faculty Investigator’s Committee (Member)

2016 - present

Foundations group (Member)

within the Organ Systems-based Integrated Curriculum Workgroup within the NJMS Curriculum Renewal Taskforce

2013 – 2015

 Endocrine Group (CoChair)

 within the Organ Systems-based Integrated Curriculum Workgroup within the NJMS Curriculum Renewal Taskforce

 2013 – 2014

 Goal 1 Taskforce (Member)

 2013 – 2015

 PreClerkship Committee (PCC) (Member)

 2013 – 2015

 Reviewer for the 2013 FUMDNJ Bridge Grants Program

 2013

 Committee on Faculty Affairs (Vice Chair)

 2012 – 2014

 Committee on Faculty Affairs (Member)

 2010 – 2012

 Reviewer for the 2009 FUMDNJ Bridge Grants Program

 2009

 Institutional Animal Care & Use Committee (IACUC)

 2007 – 2008

 Biomedical Engineering Academic Progress Committee

 2005 – 2006

 Faculty Council (elected Member at large)

 2004 - 2006

1. Hospital: N/A
2. Department:

 Chairperson - Biochemistry Medical Education Self Study Report for Department Review

 2013

 Chairperson - Biochemistry Department Graduate Admissions Committee

 2010

 Biochemistry Department External Seminar Series Organizer

 2009 – 2010

 Biochemistry Departmental Committee on Graduate Program

 2008

 Biochemistry Graduate Curriculum Review Committee

 2007

 Committee on Additional Training in Biochemistry for Biochemistry Students

 2007

 Molecular Genetic Medicine Steering Group

 2006

 Biochemistry Graduate Education Self Study Group

 2003

1. Editorial Boards: N/A
2. *Ad hoc* Reviewer

Journals:

Biochemistry, Biochimie, Cancer Cell, Comparative Biochemistry and Physiology, Endocrinology, FASEB Journal, FEBS Letters, Human Genetics, Human Molecular Genetics, International Journal of Developmental Biology, In Vitro Cellular & Developmental Biology, Journal of Biological Chemistry, Journal of Bone and Mineral Research, Journal of Cellular Biochemistry, Journal of Neurochemistry, Oncogene, Stem Cells and Development

Individual reviews recorded since Oct. 2009

International Journal of Molecular Sciences, ijms-339586

 July 2018

Journal of Molecular and Cellular Cardiology, JMCC11369

 January 2018

PLOS ONE, PONE-D-17-26771

 September 2017

BMC Medical Genomics, MGNM-D-17-00032R1

 July 2017

Scientific Reports (Nature journal), SREP-17-08209

 March 2017

Diabetes Research Center (DRC) McAbee Endowed Postdoctoral Fellowship, University of Washington,

 April 2015

MDAdvisor, A Journal for the New Jersey Medical Community, D-14-00003

 June 2014

PLOS ONE, PONE-D-13-13379

 Apr. 2013

Molecular and Cellular Biochemistry, mcbi-649

 Jan. 2013

PLOS ONE, PONE-D-12-39216

 Jan. 2013

Developmental Biology, DBIO-12-448R1 (revised)

 Dec. 2012

Developmental Biology, DBIO-12-448

 Sept. 2012

AJP-Heart and Circulatory Physiology, H-00263-2012 (revised)

 Jul. 2012

AJP-Heart and Circulatory Physiology, H-00263-2012

 Apr. 2012

ACS Medicinal Chemistry Letters, ml-2011-00279s

 Dec. 2011

Human Genetics, HumGen-11-0039

 Feb. 2011

Journal of Medical Genetics; JMG/2010/084814 (revised)

 Jan. 2011

Growth Factors, GGRF-2010-0056

 Oct. 2010

Journal of Medical Genetics, JMG/2010/084814

 Oct. 2010

Human Genetics, HMG-2010-W-00661

 Jul. 2010

FASEB Journal, /2010/157768

 Feb. 2010

Stem Cells and Development, SCD-2009-0357

 Oct. 2009

**SERVICE ON GRADUATE SCHOOL COMMITTEES:**

**UMDNJ – Graduate School of Biomedical Sciences**

 Judge - ORSP-SSRP Poster Symposium

 2017

 Judge - Cancer Research Summer Program Closing Symposium

 2015

 Judge - ORSP-SSRP Poster Symposium

 2015

Judge – 21st Annual GSA Symposium

 2014

 Judge - Cancer Research Summer Program Closing Symposium

 2014

 Judge - ORSP-SSRP Poster Symposium

 2014

Judge - 20th annual GSA Symposium

 2014

Judge - 19th annual GSA Symposium

 2013

 Chairperson – Molecular Biology, Genetics, and Cancer (MBGC) Track

 Graduate Admissions Committee

 2012

 Judge - ORSP-SSRP Poster Symposium

 2012

 Co-Chairperson – Molecular Biology, Genetics, and Cancer (MBGC) Track

 Graduate Admissions Committee

 2011

 Member - GSBS Recruitment Committee for Multidisciplinary PhD Program in Biomedical Sciences

 2011, 2012

 Judge - 18th annual GSA Symposium

 2011

 Judge - Cancer Research Summer Program Closing Symposium

 2011

 Member – Molecular Biology, Genetics, and Cancer (MBGC) Track Oversight Committee

 2011 – Present

 Judge - 17th annual GSA Symposium

 2010

 Judge - Cancer Research Summer Program Closing Symposium

 2010

**SERVICE ON UNIVERSITY OF SOUTH FLORIDA COMMITTEES:**

 University

 University of South Florida Institutional Biosafety Committee

 1999

 Provost’s Task Force on Allied Health/Health and Basic Sciences

 1998 – 1999

 Research and Creative Scholarship Grant Review Committee

 1995 – 1996

 University of South Florida Grievance Committee

 1993 – 1996

 Suncoast Biomolecular Science Conference Planning Committee and Session

 Leader

 1993 – 1994

 Department

 State University System Program Evaluation Committee

 2000-01

 Developmental Biologist Faculty Search Committee

 2000-01

 Faculty Advisory Committee, elected member, formally evaluated Biology

 Department Faculty. Weight of committee evaluations equaled those of the

 Department Chair

 1999-02

 Cell Function Faculty Search Committee

 1999-00

 Honors Committee

 1997-00

 Graduate Curriculum Committee

 1996-98

 Genetics Faculty Search Committee

 1997

 Cell Biology Faculty Search Committee (2 positions)

 1996

 Interdisciplinary Ph.D. Program in Cellular and Molecular Biology Admissions

 and Recruitment Committee

 1995-01

 Faculty Planning Committee (elected member)

 1994-97

 Biology Department Graduate Admissions Committee

 1994-96

 Microbiology Faculty Search Committee

 1994

**SERVICE ON HOSPITAL COMMITTEES:** N/A

**SERVICE TO THE COMMUNITY:** N/A

**SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE:** see below

**SPONSORSHIP OF POSTDOCTORAL FELLOWS:** see below

**TEACHING EXPERIENCE:**

1. Lectures or Course Directorships

 **University of South Florida**

 **Course director:**

 Advanced Cell Biology (BSC6107, ~25 graduates)

 Developed and gave all lectures (3 h/wk) and exams in course, Fall 1994, 1996

Responsible for one third of curriculum, Fall 1997, 1998

Responsible for lectures on “Cell Cycle and Apoptosis”, Spring 2001

 Advances in Cell and Molecular Biology (BSC6920) Fall 1993, 1994, 1996, 2000;

 Spring 1994, 1998, 1999; Summer 1996

 Cell Biology (PCB3023, 140-200 undergraduates)

Developed and gave all lectures (3 h/wk) and exams in course, Spring 1994, Fall 1997, 1998, 2000

Responsible for one half of course Fall 1995, Spring 1996

 Cell Biology Labs (PCB3023L, 140-200 students) Spring 1994, 1996; Fall 1996

Revised lab manual

Supervised 4 teaching assistants

 Cell Growth, Death, and Differentiation (BSC6932, 13 graduates), Spring 1996

Recruited nationally renowned scientists for the associated 1996 Institute for Biomolecular Science Spring Seminar series

Prepared students for seminars

Organized extensive interactions between speakers and students

Developmental Biology (PCB4253/PCB5256, 19-30 upper level undergraduates and graduates) Spring 1993, 1995, 1997, 1998, 1999, 2001

Developed and gave all lectures (3 h/wk) and exams in course

Compiled workbook with scientific research publications and student exercises in interpreting and designing scientific experiments in developmental biology

Practical Applications in Developmental Biology (BSC5931, ~4 students) Spring 1997, 1998, 1999; Fall 1997, 1998, 1999, 2000

 Tutorial in Development (BSC6932, 1 graduate) Spring 1998

 **Lectures:**

 Biology Honors Seminar (BSC4931)

 “Tissue Culture Techniques”

 Methods in Pharmacology (GMS6503)

 “Tissue Culture Techniques”

 Spring 1998

 Cellular and Molecular Pharmacology (GMS6501)

 “Steroid Receptor Superfamily”

 Fall 1995, 1997

**Rutgers School of Graduate Studies (UMDNJ - Graduate School of Biomedical Sciences until 2014, Rutgers GSBS until 2017)**

 **Course director:**

Introduction to Biomedical Sciences Molecular Function Module I

(GSND5200Q)

Modified course by recruiting new lecturers and guiding the design of new lectures to increase topic integration and lecture quality within the new Multidisciplinary Track curriculum

Mentors lecturers by previewing lecture slides and providing constructive criticism on presentations (Neerja Kaushik-Basu, Hong Li, Vanessa Routh, Caroline Suzuki, Ray Birge)

Prepares and administers comprehensive exam

Reviews course direction and effectiveness each year, including a major course wide review in 2016 – 2017.

2009 – 2012

2016 - present

 Molecular Cell Biology Core Course Module I: Molecular Structure & Metabolism (GSND5200)

Developed new outline emphasizing topic integration

Mentored lecturers (Hong Li, Shuishu Wang, Matt Neiditch)

2007, 2008

 Molecular Biology of the News (BIOC5240)

Modified course by recruiting new lecturers and developing a new student evaluation system

Mentored lecturers by providing constructive criticism on presentations (Hong Li, Shuishu Wang, Betsy Barnes, Ray Birge)

2007, 2009, 2011

 Molecular & Genetic Medicine(GSND 5201Q)

 Introductory Lecture (new in 2013)

 “Sickle Cell Disease – Cases to Exemplify Genetics, Protein Biology, and Cell Biology” (new Podcast 2013)

 “Mitosis & Meiosis” (new Podcast 2013)

 “Signaling – Peptide Hormones” (new Podcast 2014)

 “Cell Metabolism Basics” (new Podcast 2014)

 2005 – 2014

**Unit Leader:**

 Genes Molecules and Medicine (GSND 5205Q)

 Unit 6 leader - Endocrinology and Cancer

 2010 - 2014

 **Co-course director:**

Molecular Biology of the News (BIOC5240)

2005

Critical Readings of the Literature (BIOC5290Q)

2016

Fundamentals of Biomedical Sciences A: Biochemistry and Molecular Biology (GSND N500A)

2017

 **Lectures:**

Genes, Molecules and Medicine (GSND 5205Q)

 “Mitosis and Meiosis”

 “Signaling – Peptide Hormones I and II”

 “Mechanism of Action of Steroid Hormones”

 “Calcium Metabolism”

 “Techniques in Molecular Biology” 2012

 2010 – 2014

 Foundations in Biochemistry and Molecular Biology (BIOC5007)

 “Nuclear Hormone Receptors: from Glucocorticoids to Orphans”

 2006, 2008, 2010, 2012, 2014, 2016

 Seminar in Biomedical Sciences (MSBS-591Q)

 “BMP2 Gene Regulation”

 “How to keep BMP2 off when it should be off”

 “Turning BMP2 On and Off”

 "Controlling the level of BMP2"

 2003, 2009, 2010, 2011, 2012, 2014, 2015, 2016, 2017

 Biochemistry of Nucleic Acids (BIOC5070)

 “Eukaryotic Activators and Repressors”

 “Transcriptional Factors during Embryogenesis & Development” *new in 2011*

 2002 – 2014, 2016

 Molecular Cell Biology Core Course (GSND5200)

 “Cellular & Biochemical Foundations”

 2007, 2008

 Molecular Biology of the News (BIOC5240)

 “Stem Cells”

 2003, 2005, 2007, 2009, 2011, 2013

 Evening Core I (GSND N551Q)

 “Cellular & Biochemical Foundations”

 2007, 2008

 Developmental Biology (CBMM5020)

 “Cell Cycle and Apoptosis”

 “Teratogens”

 2003 – 2009

 Introduction to Biomedical Sciences (GSND5200Q)

 “Biochemical Foundations”

“Tying it Together, Regulation of Metabolism” *new in 2017*

 2009 – Present

 Current Topics in Biochemistry (BIOC508A)

 “BMP2 Gene Regulation”

 2002

 Cancer Biology (MBGC 5020Q)

 “p53 and Apoptosis”

 2012 - present

 Cancer Biology (GSND5225Q)

 “p53 and Apoptosis”

 2010, 2011

 Molecular Methods in Biochemistry (BIOC5170)

 “Tissue Culture”

 2008 – 2010

Analytical Methods in Biochemistry (BIOC5170)

 “Tissue Culture”

 2002 – 2007

Responsible Conduct of Research (GSND 5001Q)

Small Group Leader (1 hour)

2018

 **Rutgers (UMDNJ until 2014) - NJ Medical School**

 **Course Director**

Molecular & Genetic Medicine (EDUC6002K)

2013 – 2014

Compressed course from 9 weeks to 7 weeks and 3 days in 2013

Increased use of active learning techniques such as problems sessions and use of the Automated Response System (clickers)

Prepared 4 new podcasts

Added Cell Biology material via a podcast prepared by Richard Feinberg

Developed new Team Based Learning Exercises

Organized new Problems Sessions on Biochemistry

Prepared pretest to be administered online with the assistance of the CALM tutors and the Office of Student Affairs

Reviewed lectures (60-66 total), TBLs (6), and problems sessions (4)

Edited syllabus introduction and prepared schedules

 **Course Coordinator – Biochemistry & Molecular Biology**

Molecular & Genetic Medicine (EDUC6002K)

2012 – 2014

Reviewed lectures

Prepared and administered exams

 **Unit Leader:**

Molecular & Genetic Medicine Unit 1 – Introduction to Molecular & Genetic Medicine (EDUC6002K)

Reviewed lectures in Unit 1 (9 total) and suggested modifications to increase topic integration and lecture quality

2013 – 2014

Molecular & Genetic Medicine Unit 6 – Endocrinology and Cancer (EDUC6002K)

Developed new case-based learning exercise (CBL6) designed to

 review basic concepts in frame shift mutations, receptor function,

 oncogenes and tumor suppressors, PCR, retroviral gene integration and

 to discuss the risks and benefits of gene therapy.

 Reviewed lectures in Unit 6 (8 total) and suggested modifications to increase topic integration and lecture quality

 2009 – 2013

 **Lectures:**

 Molecular & Genetic Medicine(EDUC6002K)

 Introductory Lecture (new in 2013)

 “Sickle Cell Disease – Cases to Exemplify Genetics, Protein Biology, and Cell Biology” (new Podcast 2013)

 “Mitosis & Meiosis” (new Podcast 2013)

 “Mitosis & Meiosis” (lectures 2005 - 2012)

 “Signaling – Peptide Hormones”

 2005 –2013

 “Signaling – Peptide Hormones I”

 2014

 “Signaling – Peptide Hormones II”

 2014

 “Cell Metabolism Basics” (new Podcast 2014)

 “Peptide Hormones Basics” (new Podcast 2014)

 Team Based Learning Exercise 1 “Key Concepts in Biochemistry, Molecular, & Cell Biology” (new in 2013)

 Team Based Learning Exercise 6 “SCID” (new in 2014)

Small group leader (2 to 6 two-hour sessions/year):

 Molecular & Genetic Medicine recitations (EDUC6002K)

 2004 – 2010

 Molecules Cells and Systems(Foundations)

 “Signaling – Peptide Hormones I”

 2015 - present

 “Signaling – Peptide Hormones II”

 2015 - present

 “Developmental Genetics” (new in 2015)

 2015 – present

 Reviewed new Small Interactive Group (SIG) activities

 **Rutgers School of Dental Medicine (UMDNJ - NJ Dental School until 2014)**

 **Lectures:**

 Dental Biochemistry (BIOC7102)

 “Chromosomes”

 “Bones”

 2006 – 2010

“Mechanism of action of peptide hormones (insulin/glucagon)” (new in 2017)

“Integration of Metabolism” (new in 2017)

2017 -

 Small group leader (4 two-hour sessions):

 Dental Biochemistry PBL sessions

 2004 – 2008, 2015

1. Research Training

Post-Doctoral Fellows:

Ying Tang, Ph.D.

2018 -

Jianbo Guo, M.D. (Joint with Dr. Azzam)

General Surgery, The Fourth Affiliated Hospital of China Medical University, Shenyang, China

 2016 – 2018

Lakshmi Gummadi, Ph.D.

2012 – 13

Adriano S. Martins, Ph.D.

Maimonides Medical Center, Brooklyn, NY

2009-10

Junwang Xu, Ph.D.,

2002-06

Assistant Professor, Department of Surgery, University of Colorado, Denver – Anschutz Medical Campus, Aurora, CO

Jaspreet Kochar, Ph.D.

2003-05

Donglin Liu, Ph.D.

2003-05

Scientist, Immunomedics, Inc., Morris Plains, NJ

Céline Nativelle-Serpentini, Ph.D.

2002-03

Pragnya Das, Ph.D.

2002-05

Scientist, Department of Pediatrics, Drexel University College of Medicine

Michele A. Glozak, Ph. D.

1995-02

Scientist, H. Lee Moffitt Cancer Institute, USF, Tampa, FL

Loreé Heller, Ph.D.,

1994-97

Associate Professor, Medical Diagnostic & Translational Sciences, Old Dominion University, Norfolk, VA

 Pre Doctoral Students:

 Ph. D Students:

 **University of South Florida**

Kevin L. Abrams,

 "Transcriptional Regulation of *Bmp2*",

 AdWords and SEO Specialist, Thermo Fisher Scientific, ClickKinetics, Rockford, IL

 1997-04

 Todd Meyer, Ph.D. supervised jointly with Dr. John Francis (Walt

 Disney Cancer Institute)

 "Cellular Effects of Tissue Factor Binding Proteins

 Walt Disney Cancer Institute, FL

 1995-02

 Yong Li, Ph.D.

 "Characterization and trapping of novel RA-regulated genes"

 Professor, Life Sciences, Xiamen University, Xiamen, Fujian, P.R.China

 1995-99

**UMDNJ/Rutgers**

 Shan Jiang, Ph.D.

 “Bone Morphogenetic Protein 2 (Bmp2) Gene Regulation in Lung

 Cells” American Society for Cell Biology (ASCB) Predoctoral Student

 Travel Award recipient, 2006, Southeast Developmental Biology

 Meeting Runner-Up Poster Presentation, 2007

 Scientist, Gene Tools, LLC; Philomath, OR

 2003-08

 Tapan Shah

 “Post-transcriptional Gene Regulation of Bone Morphogenetic Protein (BMP)-2 During Embryogenesis and Cardiovascular Calcification”

 Advanced Cell Diagnostics (ACD - a Bio-Techne brand) Newark, CA

 2014 – 2018

 M.S. Students:

**University of South Florida**

Vivian Wong, M.S. in Microbiology

 "The Effects of RA and BMP-4 on the *In Vitro* Differentiation of

 Mouse Embryonic Stem (ES) Cells"

 1995-98

 Travis VanDyke, M.S. in Zoology, Co-Major Professor with Dr.

 Samuel Edwards "Possible Regulation of *Limulus polyphemus* Lateral

 Eye Protein Phosphatase Type 2A by PKA Phosphorylation of AB

 Subunit"

 1994-96

**UMDNJ/Rutgers**

Jocelyn Packer (non-thesis)

2018

Sydney Panella (non-thesis)

2018

Paula Phu (non-thesis)

2018

Patricia Palanca (non-thesis)

2018

Nadim Modi (non-thesis)

2018

Morgan Zahn (non-thesis)

2018

Irina Kleiman (non-thesis)

2017

Risha Patel (non-thesis)

2017

Nadia Shaikh, M.S. (thesis)

“Characterization of Three New Bone Morphogenetic Protein (BMP)-2 Alleles”

Student at St. George’s University School of Medicine 2017

2014 - 2017

Giany Salinas (non-thesis)

2016

Imani Williams (non-thesis)

2016

Risha Patel (non-thesis)

2016

Irina Kleiman (non-thesis)

2016

Ashley Franko (non-thesis)

2015 - 16

Daniel Tabaras (non-thesis)

2015

Gabriella Slater (non-thesis)

2015

Tyler Sharp (non-thesis)

2015

Justin Hulin (non-thesis)

2015

Joseph Doran (non-thesis)

2015

Precious Martin (non-thesis)

2015

Chinwendu Emelumba (non-thesis)

2014

Danni Fu (non-thesis)

2014

Pedro EspinoGrosso (non-thesis)

 2013

Anastasios V. Fotinos, M.S. (thesis)

 “Regulation of Bone Morphogenetic Protein 2 (Bmp2) Signaling and Post-Transcriptional Elements in Lung Cells”

 student at Rowan University School of Osteopathic Medicine 2014

 2012 – 2013

 Naila Saidu-Kamara (non-thesis)

 2012

 Meegan Napoleon (non-thesis)

 2011

 Channing Hui (non-thesis)

 2011

 Jacek Waszkiewicz (non-thesis)

 2010

 Nathalie Duroseau (non-thesis)

 2010

 Yijun Liu, M.S. (thesis)

 “Bone Morphogenetic Protein 2 (Bmp2) Gene Regulation”

 Account Manager, Qiagen, Washington, DC

 2009-10

 **University of South Florida**

 Honors Undergraduates:

 Gialinh T. Le (USA Today All-USA College Academic Team finalist,

 Biology and University Honors), now Lynn Thi Le, MD, Florida Hospital, Orlando, FL

 Alekh Hira (Institute for Biomolecular Science Undergraduate

 Research Fellow, Biology honors)

 Rosario Martinez-Angel (Biology and University Honors)

 Elisa Schuetz (Biology and University Honors)

 Christine Roland (Institute for Biomolecular Science Undergraduate

 Research Fellow, University Honors)

 Greg Twarowski

 American Cancer Society (ACS) R.G. Thompson Summer Research Fellows (undergrad):

 Cynthia Higgins-Owsinski

 Kerri Aaron

 Simon Wloch

Ronald E. McNair Postbaccalaureate Achievement Program (an undergraduate program that aims to increase the attainment of Ph.D. degrees by students from underrepresented segments of society):

 Sherma St. Fort

 Katrina Duckworth

 Brandon Rodriguez

Non-Honors Program University of South Florida Undergraduates:

 Terri Slifko,

 Denise Basch,

 Michael Randall,

 Susan Smith,

Juan P. Richiusa, MD, Family Health Centers of Southwest Florida Inc., Fort Myers, FL

 Jason Matthews,

 Kumar Jairamdas,

 Yasmin Issa,

 Anita Arias

 **UMDNJ/Rutgers**

 Undergraduates and graduate volunteers from other schools:

Lindsey Hernandez (RU New Brunswick), joint with Dr. Patricia Buckendahl (received *Rutgers Aresty Undergraduate Research Fellowship* and Society of Developmental Biology *Choose Development! Summer Fellowship*, $4000)

2016 – 2019

 Lianhua Jin (MS student, NJ Institute of Technology)

 2017

Weijun Huang (Doctoral student, Beijing University of Chinese Medicine)

 2017

 Ludmila Lisii (Rutgers New Brunswick)

 2015

 Alicja Zalewski (TCNJ BS/MD program, entered NJMS in 2012)

 2010

 Abdul Rahman (NJ Institute of Technology)

 2007-08

 Swetha Yeldandi (University of Maryland Honors Undergraduate,

 entered NJMS Fall 2010)

 2006

 NHLBI Summer Minority Program

 Ismanie Guillaume (Rutgers University)

 2008

 Cancer-Related Student Research Program

 Anirudh Goyal, NJMS

 2016

 Annica Tehim, NJMS

 2015

 Jordana Goldman, NJMS

 2014

 Manpreet Parmar, NJMS (1st Place in Poster Competition)

 2013

 Steven Lisica, (TCNJ BS/MD program, entered NJMS in 2011), 2011; 2012

 Dena Abelshahed, NJMS

 2010

 Shanchita Ghosh, NJMS (2nd Place in Poster Competition)

 2009

 Jason Teichman, NJMS

 2008

 Guy Jones, NJMS (3rd Place in Poster Competition)

 2006

 NJMS Summer Student Research Program

Mark Danila, RU New Brunswick undergrad, joint with Dr. Patricia Buckendahl (Aresty Undergraduate Research Fellowship recipient ($1,000)

2017 – 2018 (2017 summer plus academic year)

Claudia Siniakowicz, TCNJ/NJMS BS/MD program

2018

Amy Song, TCNJ/NJMS BS/MD program

2017

Theresa Krawiec, NJMS,

2016

Vanya Jain (RU Newark undergrad)

2016

Lauren Cué, NJMS,

2015

Annica Tehim, TCNJ BS/MD program, entered NJMS in 2014,

2014

David Kam, NJMS (2nd Place in Poster Competition)

2013

Sandra Chesoni, Ph.D, NJMS

2012

Hao Sun, NJMS

2011

Zain Boghani (TCNJ)

2007

 Rotating Graduate Students (3 to 6 month projects):

 Ian Campbell

 2017

 Mayra Tuiche

 2017

 Jaemin Byun

 2013

 Ke Geng

 2012

 Narayani Nagarajan (2014 S.-C. Joseph Fu Scholarship Award)

 2010

 Yi Jun Liu

 2009

 Manpreet Kaur

 2008

 Khanh Quynh Nguyen

 2007

 Sarah Darmon

 2006

 Jiaying Huang

 2003

 Wei Li

 2002

 Qualifying Examination Committee Member for:

ShanShan Li

2018

Sonia DaSilva-Arnold, Molecular Biology, Genetics, & Cancer Track

2016

Daniel Vollenweider, Biochemistry and Molecular Biology

2011

 Ruifeng Zheng, Pharmacology and Physiology

 2010

 Wenting Luo, Biochemistry and Molecular Biology

 2010

 Wen-I Tsou, Biochemistry and Molecular Biology

 2009

 Sneha Joshi, Biochemistry and Molecular Biology

 2007

 Lisa Hague, Biochemistry and Molecular Biology

 2005

 Eduardo Areche, Biochemistry and Molecular Biology

 2004

 Qi Wang, Ph.D. Biochemistry and Molecular Biology

 2003

 Qi Shen, Ph.D. Biochemistry and Molecular Biology

 2002

 Nitu Tibrewal, Ph.D. Biochemistry and Molecular Biology

 2001

 Doctoral Thesis Committee Member for:

Sonia DaSilva-Arnold, Molecular Biology, Genetics, & Cancer Track

2016 -

Qi Wang, Ph.D. Biochemistry and Molecular Biology

 2003-07

 Qi Shen, Ph.D. Biochemistry and Molecular Biology

 2002-06

 Doctoral Thesis Defense Committee Member for:

 Corey Chang, NJMS MD/PhD program

 2014

 Kevin Hong Nguyen, Interdisciplinary Biomedical Sciences Program

 2014

 Lisa Hague, Ph.D. Biochemistry and Molecular Biology

 2010

 Gregor Balaburski, Ph.D. Orthopaedics

 2005

 Matt Hosler, MD, Ph.D. Biochemistry and Molecular Biology

 2005

 Mateusz Opyrchal, Ph.D. Microbiology and Molecular Genetics

 2005

 Naomi Bergman, Ph.D. Microbiology and Molecular Genetics

 2004

1. Other instructional activities at UMDNJ

 Compiled Biochemistry Department Ethics Guidelines for students.

 Prepared written summaries of the characteristics of good multiple

 choice and NBME style questions for Molecular & Genetic Medicine

 faculty.

Participated in National Board of Medical Examiners (NBME) Item Writing Workshop: Constructing Better Quality Multiple-Choice Questions (MCQs) for the Basic and Clinical Sciences

 Participated in AAMC Careers in Medicine Advising Workshop:

 Helping Students Find Their Fit

 2011

**CLINICAL RESPONSIBILITIES:** N/A

**GRANTS SUPPORT:**

1. Principal Investigator:

National Heart, Lung, and Blood Institute, “Gene Regulatory Mechanisms that Repress BMP2 in Pathological Calcification”, 1R01HL134947, $750,000 total, ($441,882 indirect costs - IDC)

08/15/17 - 07/31/20

National Institute on Aging, “Regulation of BMP2 in CKD Induced Calcification in the Klotho Aging Model”, 1R56AG050762-01A1, $250,000 total, ($147,500 indirect costs - IDC)

09/15/16 - 08/31/18

Dean’s Biomedical Research Support Program, Core Facilities

Matching Funds, “MicroRNA Profiles in Calcified Aorta”, $3,000 (no indirect costs – IDC)

07/01/2016 - 6/30/2017

National Heart, Lung, and Blood Institute, “BMP2 Gene Regulation in

Calcific Aortic Valve Disease”, 1R01HL114751, $1,000,000 total,

Multiple Principal Investigator with Douglas Mortlock, Ph.D,

Vanderbilt University, $500,000 to UMDNJ – NJMS ($280,000

indirect costs - IDC)

08/23/2012 – 06/30/2017

Foundation of UMDNJ and Dean’s Biomedical Research Support

Program, “BMP2 Repression and Embryogenesis and Adult

Physiology”, #PC53-12, $25,000 (no indirect costs – IDC)

04/01/2012-03/30/2014

Dean’s Biomedical Research Support Program, Core Facilities

Matching Funds, “A Modified Allele for Conditionally Inducing

BMP2”, $3,000 (no indirect costs – IDC)

10/12/2011-6/30/2013

American Heart Association, Founder’s Affiliate, “Natural Repressors

of BMP2 Synthesis”, #09GRNT2220251, $180,000 ($18,000 IDC)

7/1/2009-6/30/2012

NJ State Commission on Cancer Research, “Mycoplasma and BMP2 in Lung Cell Transformation”, #09-1132-CCR-EO, $120,000 ($12,000 IDC)

7/1/2008-6/30/2010

Council of Research Deans (CoRD), “Research Career Development

Travel Award” $1,500 (no IDC)

2008

Foundation of UMDNJ, “BMP2 RNA Binding Proteins”, $50,000 (no IDC)

11/1/2006-10/31/2007

American Heart Association, Heritage Affiliate, “Retinoids and Bmp2

Expression in Embryos”, #0655881T, $180,000 ($18,000 IDC)

7/1/2006-6/30/2009

Foundation of UMDNJ, “Genetic Polymorphisms Influencing Bone

Density in Mice” $50,000 (no IDC)

7/1/2005-6/30/2006

Foundation of UMDNJ, “Bone Morphogenetic Protein 2 RNA

processing”, $50,000 (no IDC)

7/1/2004-6/30/2005

March of Dimes, “Trapping Murine Retinoic Acid Response Elements

 (RAREs) Directly in Yeast”, #1-FY00-381, $167,770 ($16,777 IDC)

7/1/2000-6/30/2004

National Institute of Child Health and Human Development, "Retinoic

Acid-Regulated Genes and Embryos", R01 #HD31117, $827,961($322,905 IDC)

2/1/2000-1/31/2006

 American Heart Association, Florida Affiliate, Inc., "Induction of

 Embryonic Apoptosis by Retinoids and Bmp2 or 4", $90,000

 7/1/1997-6/30/1999

 National Institute of Child Health and Human Development Research

 Supplements for Underrepresented Minorities for undergraduates Juan

 P. Richiusa and Gialinh T. Le, $13,850

 1995-1998

 University of South Florida Presidential Young Faculty Award

 “Apoptosis and Retinoid-regulated Differentiation”, *Two awarded out*

 *of 38 proposals,* $10,000

 1995

 National Institute of Child Health and Human Development, "Retinoic

 Acid-Regulated Genes and Embryos", R29 #HD31117, $350,000

 1994-2000

 University of South Florida Research and Creative Scholarship Grant,

 "Inactivation of the BMP-2 and -4 genes in Embryonic Stem Cells”,

 $7,500

 1993-1994

 American Cancer Society, FL Div. Starter Grant, "Retinoic Acid-

 Regulated Genes and Differentiation", $10,000

 1993-1994

 Leukemia Research Foundation, Inc. Research Grant, "Retinoic Acid-

 Regulated Genes and Differentiation", $35,000

 1993-1994

1. Co-Investigator

Council of Research Deans (CoRD) UMDNJ Team Science Initiative

Grant with John Langenfeld, MD, UMDNJ – RWJMS, “The Role of

Mycoplasma-induced Tumorigenesis”, $10,000 (no IDC)

2008-2009

**as Mentor:**

NJ State Commission on Cancer Research "Alternate Polyadenylation

of BMP2 mRNA in Cancer Cells", Postdoctoral Fellowship, Donglin

Liu, transferred to Aaron Shatkin’s lab due to visa issues because grant

notice came too late, $69,000

2005-2007

 American Heart Association, Florida Affiliate, Inc., “Retinoic Acid

 Altered Expression of Bone Morphogenetic Protein 2”, Predoctoral

 Fellowship, Kevin Abrams, $33,500

 2000-2002

 Tharpe Scholarship, "Transcriptional Regulation of *Bmp2*", Kevin

 Abrams, $4,000

 2000

 American Heart Association, Florida Affiliate, Inc., "Induction of

 Apoptosis in Pluripotent Embryonal Cells", Postdoctoral Fellow,

 Michele A. Glozak, Ph.D., $73,500

 1997-1999

 American Heart Association, Florida Affiliate, Inc., "Retinoic Acid

 Regulation of the BMP2 Gene", Postdoctoral Fellow, Loree C. Heller,

 Ph.D., $69,000

 1995-1997

**PUBLICATIONS:**

1. REFEREED ORIGINAL ARTICLES IN JOURNALS
2. Shah TA and **Rogers MB**. Unanswered Questions Regarding Sex and BMP/TGF-β Signaling. *Journal of Developmental Biology.* 6, 14; doi:10.3390/jdb6020014 (2018)
3. Shah TA, Zhu Y, Shaikh NN, Harris MA, Harris SE, **Rogers MB**. Characterization of New Bone Morphogenetic Protein (Bmp)-2 Regulatory Alleles *Genesis*. Jul;55(7). doi: 10.1002/dvg.23035. (2017)
4. Fotinos, A, Fritz, DT, Lisica, S, Liu, Y, **Rogers, M. B.** Competing Repressive Factors Control Bone Morphogenetic Protein 2 (BMP2) in Mesenchymal Cells *Journal of Cellular Biochemistry,* 117:439–447(2016)
5. **Rogers, M. B.**, TA Shah, NN Shaikh. Turning Bone Morphogenetic Protein 2 (BMP2) On and Off in Mesenchymal Cells. *Journal of Cellular Biochemistry* 116(10):2127-38 (2015)
6. Yutzey, KE, Demer, LL, Body, SC, Huggins, GS , Towler, DA, Giachelli, CM, Hofmann-Bowman, MA, Mortlock, DP, **Rogers, MB**, Sadeghi, MM, Aikawa, E. Calcific aortic valve disease: A consensus summary from Alliance of Investigators on Calcific Aortic Valve Disease, *Arteriosclerosis, Thrombosis and Vascular Biology*, 34(11):2387-93 (2014)
7. Fotinos, A, Nagarajan, N, Adriano S. Martins, AS, Fritz, DT, Garsetti, D, Lee, AT, Hong, CC, and **Rogers, MB**, Bone Morphogenetic Protein-focused Strategies to Induce Cytotoxicity in Lung Cancer Cells, *Anticancer Research*, 34 (5): 2095-2104 (2014)
8. Kruithof, BPT, Xu J, Fritz, DT, CabralCS, Gaussin, V, and **Rogers, M. B.** An In Vivo Map of Bone Morphogenetic Protein 2 Post-transcriptional Repression in the Heart, genesis*, The Journal of Genetics and Development* 49:841–850*.* (2011)

*One figure chosen for cover art.*

1. Kruithof, BPT, Fritz, DT, Liu, Y, Garsetti, DE, Frank, DB, Pregizer, SK, Gaussin, V, Mortlock, DP, and **Rogers, M. B.** An Autonomous BMP2 Regulatory Element in Mesenchymal Cells, *Journal of Cellular Biochemistry* 112: 666 - 674. (2011) PMID: 21136487
2. Jiang, S, Chandler, RL, Fritz, DT, Mortlock, DP, **Rogers, MB** Repressive BMP2 Gene Regulatory Elements Near the BMP2 promoter*, Biochemical and Biophysical Research Communications* 392: 124 – 128*.* (2010)
3. Jiang, S, Fritz, DT, and **Rogers, M. B.** A Conserved Post-Transcriptional Bmp2 Switch in Lung Cells, *Journal of Cellular Biochemistry* 110: 509 – 521. (2010)
4. Devaney, J. M., Tosi, L. L., Fritz, D. T., Gordish-Dressman, H. A., Jiang, S., Orkunoglu-Suer, F. E., Gordon, A. H., Harmon, B. T., Thompson, P. D., Clarkson, P. M., Angelopoulos, T. J., Gordon, P. M., Moyna, N. M., Pescatello, L. S., Visich, P. S., Zoeller, R. F., Brandoli, C., Hoffman, E. P., **Rogers, M. B.** Differences in Fat and Muscle Mass Associated With a Functional Human Polymorphism in a Post-transcriptional BMP2 Gene Regulatory Element. *Journal of Cellular Biochemistry* 107: 1073 – 1082. (2009)
5. Liu D, Fritz, DT, **Rogers MB**, Shatkin, AJ (Species-specific cis-regulatory elements in the 3′UTR direct alternative polyadenylation of bone morphogenetic protein 2 mRNA. *Journal of Biological Chemistry* (283) 28010-28019. (2008)
6. Das, P., Doyle, T.J., Liu, D., Kochar, J., Kim, K.H., **Rogers, M.B.** Retinoic Acid Regulation of Eye and Testis-Specific Transcripts within a Complex Locus*.* *Mechanisms of Development*. 124: 137-145. (2007)
7. Han, K, Song, H, Moon, I, Augustin, R, Moley, K, **Rogers, MB**, H. Lim Utilization of DR1 as True RARE in Regulating the Ssm, a Novel Retinoic Acid-Target Gene in the Mouse Testis. *Journal of Endocrinology* 192(3):539-51. (2007)
8. Jiang S, Zhang S, Langenfeld J, Lo S.-C, **Rogers, MB** Mycoplasma Infection Transforms Normal Lung Cells and Induces Bone Morphogenetic Protein 2 Expression by Post-transcriptional Mechanisms *Journal of Cellular Biochemistry* 104(2): 580-594*.* (2007)
9. Xu J, **Rogers MB.** Modulation of Bone Morphogenetic Protein (BMP) 2 Gene Expression by Sp1 Transcription Factors. *Gene* 392: 221–229. (2007)
10. Hu J, Fritz DT, Tian B, **Rogers MB**. Using Emerging Genome Data to Identify Conserved Bone Morphogenetic Protein (Bmp)2 Gene Expression Mechanisms. *ACM First International Workshop on Text Mining in Bioinformatics (TMBIO2006) Proceedings.* ACM Press, New York, NY(2006)
11. Fritz DT, Jiang S, Xu J, **Rogers MB**. A Polymorphism in a Conserved Post-transcriptional Regulatory Motif Alters BMP2 RNA:Protein Interactions. *Molecular Endocrinology* 20: 1574-1586(2006)
12. Abrams, K.L., Xu J., Nativelle-Serpentini, C., Dabirshahsahebi, S., and **Rogers,** **M.B**. An Evolutionary and Molecular Analysis of Bmp2 Expression*. Journal of Biological Chemistry.* 279: 15916-28, pub. online 2/2/04. (2004)
13. Fritz DT, Liu D, Xu J, Jiang S, **Rogers MB**. Conservation of Bmp2 post-transcriptional regulatory mechanisms*.* *Journal of Biological Chemistry*. 279: 48950 - 48958. (2004)
14. Glozak, M.A., Li, Y., Reuille, R., Kim, K.H., Vo, M.N., and **Rogers, M.B**. Trapping and Characterization of Novel Retinoid Response Elements. *Molecular Endocrinology*, 17: 27-41published on-line 10/3/02. (2003)
15. Glozak, M.A. and **Rogers, M.B.** Retinoic Acid- and Bone Morphogenetic Protein 4- Induced Apoptosis in P19 Embryonal Carcinoma Cells Requires p27. *Experimental Cell Research*. 268: 128-138. (2001)
16. Heller, L.C., Li, Y., Abrams, K.A. and **Rogers, M.B.** Transcriptional Regulation of the Bmp2 Gene: Retinoic Acid Induction in F9 Embryonal Carcinoma Cells and Saccharomyces cerevisiae. *Journal of Biological Chemistry*. 274: 1394-1400*.* (1999)
17. Li, Y, Glozak, M.A., Smith, S.M., and **Rogers, M.B.** The Expression and Activity of D-type Cyclins in F9 Embryonal Carcinoma Cells: Modulation of Growth by RXR-selective Retinoids. *Experimental Cell Research*. 253: 372-384*.* (1999)
18. Li, Y., MacLennan, A.J., and **Rogers, M.B.** A Putative G-Protein Coupled Receptor, H218, is Down-regulated During the Retinoic Acid-Induced Differentiation of F9 Embryonal Carcinoma Cells. *Experimental Cell Research*. 230: 320-325. (1998)
19. Glozak, M.A. and **Rogers, M.B.** BMP4 and RA-induced Apoptosis is Mediated through the Activation of Retinoic Acid Receptor α and γ in P19 Embryonal Carcinoma Cells. *Experimental Cell Research*. 242: 165-173. (1998)
20. **Rogers, M.B.,** Glozak, M.A., and Heller, L.C. Induction of Altered Gene Expression in Early Embryos. *Mutation Research*. 396: 79-95*.* (1997)
21. **Rogers, M.B.** Receptor-selective Retinoids implicate RAR α and γ in the Regulation of bmp-2 and bmp-4 in F9 Embryonal Carcinoma Cells. *Cell Growth & Differentiation*. 7: 115-122. (1996)
22. Glozak, M.A. and **Rogers, M.B.** Specific Induction of Apoptosis in P19 Embryonal Carcinoma Cells by Retinoic Acid and BMP2 or BMP4. *Developmental Biology*. 179: 458-470. (1996)
23. Hosler, B.A., **Rogers, M.B.,** Kozak, C.A., Gudas, L.J. An Octamer Motif Contributes to the Expression of the Retinoic Acid-Regulated Zinc Finger Gene Rex-1 (Zfp-42) in F9 Teratocarcinoma Cells*.* *Molecular Cellular Biology*. 13: 2919-2928. (1993)
24. **Rogers, M.B.,** Rosen, V., Wozney,J. M.,and Gudas, L.J. Bone Morphogenetic Proteins-2 and 4 are involved in the Retinoic Acid-induced Differentiation of Embryonal Carcinoma Cells. *Molecular Biology of the Cell*. 3: 189-196. (1992)
25. Sasaki, A., Doskow, J., MacLeod, C.L., **Rogers, M.B.,** Gudas, L.J., and Wilkinson, M. The oncofetal gene Pem encodes a homeodomain and is regulated in primordial and pre-muscle stem cells. *Mechanisms of Development*. 34: 155-164. (1991)
26. **Rogers, M.B.,** Hosler, B., and Gudas, L.J. Specific Expression of a Retinoic Acid Regulated, Zinc Finger Gene, Rex-1, in Preimplantation Embryos, Trophoblast, and Spermatocytes. *Development*. 113: 815-824. (1991)
27. Sundin, O.H., Busse, H.G., **Rogers, M.B.,** Gudas, L.J., and Eichele, G. Region specific expression in early chick and mouse embryos of Ghox-lab and Hox 1.6, vertebrate homeobox-containing genes related to Drosophila labial. *Development*. 108: 47-58. (1990)
28. **Rogers, M.B.,** Watkins, S.C., and Gudas, L.J. Gene expression in visceral endoderm: a comparison of mutant and wild type F9 embryonal carcinoma cell differentiation. *Journal of Cellular Biology* 110: 1767-1777. (1990)
29. **Rogers, M.B.** and Karrer, K.M. Cloning of Tetrahymena genomic sequences whose message abundance is increased during conjugation. *Developmental* *Biology*. 131: 261-268(1989)
30. **Rogers, M.B.** and Karrer, K.M. Adolescence in Tetrahymena thermophila. *Proceedings of the National Academy of Science, USA* 82: 436-439. (1985)
31. **Brinkman, M.,** Fogelman, K., Hoeflein, J., Lindh, T., Pastel, M., Trench, W.C., and Aikens, D.A. Distribution of Polychlorinated Biphenyls in the Fort Edward, New York, Water System. *Environmental Management* 4: 511-520. (1980)

1. BOOKS, MONOGRAPHS AND CHAPTERS
2. **Rogers, M.B. (Editor)** *Bone Morphogenetic Proteins Methods and Protocols*Springer series *Methods in Molecular Biology* (in press 2018)
3. Zeller, R. and **Rogers, M.** *In situ* hybridization to cellular RNA. *In* *Current Protocols in Pharmacology.* John Wiley & Sons, NY, A.3F.1-A.3F.14. (1999)
4. **Rogers, M.** and Zeller, R. Counterstaining and Mounting of Autoradiographed *In situ* Hybridization Slides. *In* *Current Protocols in Molecular Biology*. Ausubel, F., Brent, R., Kingston, R.E., Moore, D., Seidman, J., Smith, J.A., and Struhl, K., eds. Wiley Interscience, NY, 14.3.1-14.3.14. (1991)
5. **Rogers, M.** and Zeller, R. *In situ* hybridization to cellular RNA. *In* *Current Protocols in Molecular Biology*. Ausubel *et al*., eds. Wiley Interscience, NY, 14.5.1-14.5.5. (1989)
6. **Rogers, M.** Detection of hybridized probe. *In* *Current Protocols in Molecular Biology.* Ausubel *et al*., eds. Wiley Interscience, NY, 14.4.1-14.4.3. (1989)
7. PATENTS HELD: N/A
8. OTHER ARTICLES IN JOURNALS: REVIEWS
9. **Rogers, M.B**. Mycoplasma and cancer: in search of the link; *Oncotarget*, 2: 271 - 273. (2011) Commentary on: Barykova, YA, DY Logunov, MM Shmarov, AZ Vinarov, DN Fiev, NA Vinarova, IV Rakovskaya, PS Baker, I Shyshynova, AJ Stephenson, EA Klein, BS Naroditsky, AL Gintsburg, and AV Gudkov, Association of Mycoplasma hominis infection with prostate cancer. *Oncotarget*, 2: 289-97. (2011)
10. **Rogers, M.** and Langenfeld, J. Chance favors only the prepared mind. *UMDNJ Research*. 10: 4 – 5. (2009)
11. Sadler, T.W., **Rogers, M.,** Slavkin, H., Lauder, J., Maness, P., Linney, E., Sulik, K., and Mirkes, P. Growth and Differentiation Factors. *Reproductive Toxicology*. 11: 331-337. (1997)
12. **Rogers, M.B.** Life and Death Decisions Influenced by Retinoids. *Current Topics in Developmental Biology* 35: 1-46. (1997)
13. **Rogers, M.B.** Retinoids: a Window into Vertebrate Development. *Journal of the Florida Medical Association*. 81: 553-556. (1994)
14. ABSTRACTS (published only)
15. **Rogers, M.B.** and Jiang, S. Switching from repression to activation: Post-transcriptional regulation of BMP2 synthesis. *Developmental* *Biology*. 319: 463, abstract #3. (2008)
16. Jiang S, Fritz DT, **Rogers MB** The Role of the 3’UTR in Regulating BMP2 Gene Expression in Lung Cells. *Molecular Biology of the Cell*. 17 (suppl), 1844. (2006)
17. **Rogers, M.B.,** Fritz, D.T., and Jiang, S. Bmp2 Gene Regulation: Genetic Polymorphisms. *Journal of Bone & Mineral Research*. 21: S210. (2006)
18. Abrams, K.L. and **Rogers, M.B.** Retinoic Acid Altered Expression of Bmp2. *Developmental* *Biology*. 222: 219. (2000)
19. Glozak, M.A. and **Rogers, M.B.** Cell Cycle Proteins and the Induction of Apoptosis in P19 EC Cells. *Developmental* *Biology*. 210: 222. (1999)
20. **Rogers, M.B.,** Glozak, M.A., Smith, S.M., and Hinton, D.A. The Role of Retinoic Acid and Bone Morphogenetic Proteins in Inducing Apoptosis. *Developmental* *Biology*. 198: 212. 1998)
21. Li, Y. and **Rogers, M.** Antiproliferative effects of RXR-selective retinoids in F9 embryonal carcinoma cells. *Developmental* *Biology*. 186: 338. (1997)
22. Heller, L.C. and **Rogers, M.B.** Retinoic Acid Regulation of the BMP2 Gene. *Devl. Biol.* 175: 388. (1996)
23. **Rogers, M.B.,** Y. Li, and A.J. MacLennan. Genes Down-Regulated during the Retinoic Acid-Induced Differentiation of F9 Cells. *Developmental* *Biology*. 175: 388. (1996)
24. Glozak, M.A. and **Rogers, M.B.** Specific Induction of Apoptosis in P19 Embryonal Carcinoma Cells by Retinoic Acid and BMP2/4. *Developmental* *Biology*. 175: 388. (1996)
25. **Rogers, M.B.** Retinoic Acid and Bmp2 & 4 Regulated Differentiation of Embryonic Stem Cells and F9 Cells. *Developmental* *Biology*. 170: 747 (1995)
26. REPORTS**: N/A**

**PRESENTATIONS:**

1. Scientific (Basic Science):

Experimental Biology 2003- “Translating the Genome”, Apr. 13, 2003, San Diego, CA,

Session Co-Chair, “*Vitamin A and Retinoids II*” Lecture: “*Trapping and Characterization of Novel Retinoid Response Elements*”

Cold Spring Harbor Apr. 2004 - Evolution of Developmental Diversity, “*A Conserved 3' Untranslated Element Controls Bmp2 Transcript Stability*”, Cold Spring Harbor, NY

FASEB Summer Research Conference – Retinoids, June 21, 2006, “*Retinoic Acid Regulation of BMP2*”Indian Wells, CA

Society for Developmental Biology 67th Annual Meeting, July 26-30, 2008, “*Switching from Repression to Activation: Post-Transcriptional Regulation of BMP2 Synthesis*” Philadelphia, PA

Weinstein Cardiovascular Development Conference, May 17, 2008, “*An Ultra-conserved Region in the Bone Morphogenetic Protein (BMP) 2 gene is a Post-transcriptional Repressor in the Developing Heart of the epicardial lineage and a subset of the neural crest lineage*” Houston, TX

Weinstein Cardiovascular Development Conference, May 7, 2009, “*An Ultra-conserved Region in the Bone Morphogenetic Protein (BMP)2 3’Untranslated Region is a Gene Repressor In Vivo*” San Francisco, CA

Weinstein Cardiovascular Development Conference, May 5 - 8, 2011, “*Turning off Bone Morphogenetic Protein (BMP) 2*” Cincinnati, OH

Association of Biochemistry Course Directors (ABCD) meeting, May 5 - 9, 2013, “*Teaching of Biochemistry in Medical School – A few more steps along the pathway”* Santa Fe, NM

Weinstein Cardiovascular Development Conference, May 16 - 18, 2013, “*Controlling Bone Morphogenetic Protein 2 (BMP2) In Embryos and Calcifying Tissues*” Tucson, AZ

Grantee Meeting for Basic Research in CAVD Investigators Alliance, Sept. 20, 2013, “*BMP2 Gene Regulation in CAVD*”, Boston, MA

Grantee Meeting for Basic Research in CAVD Investigators Alliance, Nov. 15, 2014, “*BMP2 Gene Regulation in CAVD*”, Chicago, IL

2014 Scientific Sessions, American Heart Association, Nov. 15 – 20, 2014, “*Mechanisms that Repress Bone Morphogenetic Protein 2 (BMP2) In Mesenchymal Cells”* Chicago, IL

Weinstein Cardiovascular Development Conference, Apr. 30 – May 2, 2015, “*Characterization of a New Bmp2 Allele*” Boston, MA

Symposium on Open Access: *Perspectives in Biomedical and Health Sciences*, Oct. 20, 2015. *Panelist*, Rutgers NJMS, Newark NJ

Grantee Meeting for Basic Research in CAVD Investigators Alliance, Nov. 7, 2015, “*BMP2 Gene Regulation in CAVD*”, Orlando, FL

Weinstein Cardiovascular Development Conference, May 19 - 21, 2016, “*A New Hypermorphic Bmp2 Allele*” Durham, NC

11th International BMP Conference, Oct. 26 - 30, 2016, “*A New Hypermorphic Bmp2 Allele*” Boston, MA

Weinstein Cardiovascular Development Conference, May 4 - 6, 2017, “*Characterization of New Bone Morphogenetic Protein (Bmp)-2 Regulatory Alleles*” Columbus, OH

Invited seminar, Dec. 20, 2017, “*BMP2 Gene Regulation*”, Molecular Cell Biology, Leiden University Medical Center, Leiden, Netherlands

Weinstein Cardiovascular Development Conference, May 17 - 19, 2018, “*Post-Transcriptional Regulation of Bone Morphogenetic Protein 2 (BMP2): Embryos, Disease, and Sex*” Nara, Japan

**RESOURCES PROVIDED TO THE SCIENTIFIC COMMUNITY:**

**A. Genetically Engineered Mouse Models (GEMM):**

*Bmp2* conditional allele (*Bmp2flU*, MMRRC:042043) deposited in the Mutant Mouse Resource & Research Centers (MMRRC, https://www.mmrrc.org) repository

*Bmp2* conditional allele (*Bmp2NeoUCS*, MMRRC: 042279) deposited in the MMRRC

**B. Public databases:**

Microarray database GEO accession # GSE557487