

Revised: March 21, 2016

## CURRICULUM VITAE

**DATE:** March, 2016

**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 (MSB E627)  
185 South Orange Ave.  
Newark, NJ 07103-2714

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

Office: (973) 972-2984  
Lab E629: (973) 972-2983  
Fax: (973) 972-5594  
Home: (908) 233-2545  
Email: [rogersmb@njms.rutgers.edu](mailto:rogersmb@njms.rutgers.edu)

**CITIZENSHIP:** USA

**EDUCATION:**

A. Undergraduate

Rensselaer Polytechnic Institute,  
Troy, NY  
B.S. Biology  
1979

B. 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

C. 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

D. Postdoctoral Appointments:

Dana-Farber Cancer Institute and Department of Biological Chemistry and  
Molecular Pharmacology  
1985-1991

Advisor: Dr. L. J. Gudas,

Harvard Medical School, Boston, MA  
Hughes Scholar  
1992

Advisor: Dr. J. G. Seidman, Dept. of Genetics,

**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  
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

**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

**HONORS AND AWARDS:**

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 & 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

**SERVICE ON MAJOR COMMITTEE:**

A. International: N/A

B. National: N/A

C. 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

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

D. Hospital: N/A

E. 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

F. Editorial Boards: N/A

G. *Ad hoc* Reviewer

National Science Foundation external reviewer  
NSF Proposal # 1121760, Feb. 2011

NSF Proposal # 1052219, Oct. 2010  
Alzheimer's Association  
Philip Morris External Research Program

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

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 - Cancer Research Summer Program Closing Symposium  
2015

Judge - ORSP-SSRP Poster Symposium  
2015

Judge – 21<sup>st</sup> 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:**

A. 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

**UMDNJ - Graduate School of Biomedical Sciences**

**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

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

2009 – 2012

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

**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

Biochemistry of Nucleic Acids (BIOC5070)  
“Eukaryotic Activators and Repressors”  
“Transcriptional Factors during Embryogenesis and Development” *new in 2011*  
2002 – 2014

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”  
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

## **UMDNJ - 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

**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 – present

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 –Present  
“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  
“Signaling – Peptide Hormones II”  
2015  
“Developmental Genetics” (new in 2015)  
2015

**UMDNJ - NJ Dental School**

**Lectures:**

Dental Biochemistry (BIOC7102)  
“Chromosomes”  
“Bones”  
2006 – 2010

Small group leader (4 two-hour sessions):

Dental Biochemistry PBL sessions  
2004 – 2008, 2015

**B. Research Training**

Post Doctoral Fellows:

Lakshmi Gummadi, Ph.D.  
2012 – 13

Adriano S. Martins, Ph.D.  
2009-10  
Postdoctoral Fellow, Florida State University, Tallahassee, FL

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  
2014 -

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**

Ashley Franko (thesis)  
2015 - present

Daniel Tabaras (thesis)

2015 - present

Gabriella Slater (thesis)

2015 - present

Tyler Sharp (non-thesis)

2015

Justin Hulin (non-thesis)

2015

Joseph Doran (non-thesis)

2015

Precious Martin (non-thesis)

2015

Nadia Shaikh (thesis)

2014 - present

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)

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,

Jason Matthews,

Kumar Jairamdas,

Yasmin Issa,

Anita Arias

**UMDNJ/Rutgers**

Undergraduates:



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

Annica Tehim, NJMS  
2015

Jordana Goldman, NJMS  
2014

Manpreet Parmar, NJMS (1<sup>st</sup> 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

Lauren Cué, 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):

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:

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:

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

C. 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:**

A. Principal Investigator:

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 – 06/30/2016

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

B. 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:**

**A. REFEREED ORIGINAL ARTICLES IN JOURNALS**

1. 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)
2. **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)
3. 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)
4. 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)
5. Kruithof, BPT, Xu J, Fritz, DT, Cabral CS, 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.*
6. 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
7. 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)
8. 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)
9. 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)
10. 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)
11. 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)
12. 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)
13. 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)

14. Xu J, **Rogers MB**. Modulation of Bone Morphogenetic Protein (BMP) 2 Gene Expression by Sp1 Transcription Factors. *Gene* 392: 221–229. (2007)
15. 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)
16. 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)
17. 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)
18. 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)
19. 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: 27-41 published on-line 10/3/02. (2003)
20. 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)
21. 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)
22. 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)
23. 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)
24. Glozak, M.A. and **Rogers, M.B.** BMP4 and RA-induced Apoptosis is Mediated through the Activation of Retinoic Acid Receptor  $\alpha$  and  $\gamma$  in P19 Embryonal Carcinoma Cells. *Experimental Cell Research*. 242: 165-173. (1998)
25. **Rogers, M.B.**, Glozak, M.A., and Heller, L.C. Induction of Altered Gene Expression in Early Embryos. *Mutation Research*. 396: 79-95. (1997)
26. **Rogers, M.B.** Receptor-selective Retinoids implicate RAR  $\alpha$  and  $\gamma$  in the Regulation of bmp-2 and bmp-4 in F9 Embryonal Carcinoma Cells. *Cell Growth & Differentiation*. 7: 115-122. (1996)
27. 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)
28. 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)
29. **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)
30. 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)
31. **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 Spermatoocytes. *Development*. 113: 815-824. (1991)

32. 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)
33. **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)
34. **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)
35. **Rogers, M.B.** and Karrer, K.M. Adolescence in Tetrahymena thermophila. *Proceedings of the National Academy of Science, USA* 82: 436-439. (1985)
36. **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)

B. BOOKS, MONOGRAPHS AND CHAPTERS

1. 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)
2. **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)
3. **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)
4. **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)

C. PATENTS HELD: N/A

D. OTHER ARTICLES IN JOURNALS: REVIEWS

1. **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)
2. **Rogers, M.** and Langenfeld, J. Chance favors only the prepared mind. *UMDNJ Research*. 10: 4 – 5. (2009)
3. 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)
4. **Rogers, M.B.** Life and Death Decisions Influenced by Retinoids. *Current Topics in Developmental Biology* 35: 1-46. (1997)
5. **Rogers, M.B.** Retinoids: a Window into Vertebrate Development. *Journal of the Florida Medical Association*. 81: 553-556. (1994)

E. ABSTRACTS (published only)

1. **Rogers, M.B.** and Jiang, S. Switching from repression to activation: Post-transcriptional regulation of BMP2 synthesis. *Developmental Biology*. 319: 463, abstract #3. (2008)
2. 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)
3. **Rogers, M.B.**, Fritz, D.T., and Jiang, S. Bmp2 Gene Regulation: Genetic Polymorphisms. *Journal of Bone & Mineral Research*. 21: S210. (2006)
4. Abrams, K.L. and **Rogers, M.B.** Retinoic Acid Altered Expression of Bmp2. *Developmental Biology*. 222: 219. (2000)



5. Glozak, M.A. and **Rogers, M.B.** Cell Cycle Proteins and the Induction of Apoptosis in P19 EC Cells. *Developmental Biology*. 210: 222. (1999)
6. **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)
7. Li, Y. and **Rogers, M.** Antiproliferative effects of RXR-selective retinoids in F9 embryonal carcinoma cells. *Developmental Biology*. 186: 338. (1997)
8. Heller, L.C. and **Rogers, M.B.** Retinoic Acid Regulation of the BMP2 Gene. *Devl. Biol.* 175: 388. (1996)
9. **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)
10. 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)
11. **Rogers, M.B.** Retinoic Acid and Bmp2 & 4 Regulated Differentiation of Embryonic Stem Cells and F9 Cells. *Developmental Biology*. 170: 747 (1995)

F. REPORTS: N/A

**PRESENTATIONS:**

A. 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 67<sup>th</sup> 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, 2015, “*Mechanisms  
that Repress Bone Morphogenetic Protein 2 (BMP2) In Mesenchymal Cells*” Chicago, IL

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

B. Professional (Clinical): N/A