CURRICULUM VITAE

DATE: May 29, 2018

NAME: Teresa L. Wood

PRESENT TITLE: Professor and Rena Warshow Endowed Chair in Multiple Sclerosis

OFFICE ADDRESS: NJMS CINJ-Newark, H1200

TELEPHONE NUMBER/E-MAIL ADDRESS: 973-972-6529/terri.wood@rutgers.edu

CITIZENSHIP: US

EDUCATION:

A. Undergraduate

Carleton College Northfield, MN

B.A. Biology 1978

B. Graduate and Professional

University of California

Los Angeles, CA

Ph.D. Biology 1987

POSTGRADUATE TRAINING:

- A. Internship and Residencies none
- B. Research Fellowships none
- C. Postdoctoral Appointments

Department of Neurobiology and Behavior, State University of New York, Stony Brook, NY Neuroendocrinology

1987-1988

Department of Anatomy and Cell Biology, Columbia University, New York, NY Molecular Neurobiology

1989-1992

MILITARY: None

ACADEMIC APPOINTMENTS:

Department of Pharmacology, Physiology & Neuroscience Rutgers Biomedical & Health Sciences, New Jersey Medical School Newark, NJ Professor and Rena Warshow Chair in Multiple Sclerosis

July 2015-present

Department of Neurology and Neuroscience

Rutgers Biomedical & Health Sciences (formerly University of Medicine and Dentistry of New

Jersey), New Jersey Medical School Newark, NJ

Professor and Rena Warshow Chair in Multiple Sclerosis

Vice Chair for Basic Science, Department of Neurology & Neuroscience

October 2005-June 2015

Department of Neural and Behavioral Sciences

Penn State College of Medicine, Hershey, PA

Professor (Adjunct)

October 2005-September 2010

Department of Neural and Behavioral Sciences Penn State College of Medicine, Hershey, PA Associate Professor July 1999- September 2005

Department of Neuroscience and Anatomy Penn State College of Medicine, Hershey, PA Assistant Professor October 1993- June 1999

Department of Neuroscience and Cell Biology

University of Medicine and Dentistry New Jersey, Robert Wood Johnson Medical School, Piscataway,

NJ

Instructor

September 1992 – September 1993

HOSPITAL APPOINTMENTS: none

OTHER EMPLOYMENT OR MAJOR VISITNG APPOINTMENTS:

Brain and Spinal Cord Institute, ICM Pierre and Marie Curie University, Paris, France Visiting Scientist November 2014 – September 2015

PRIVATE PRACTICE: none

LICENSURE: none

DRUG LICENSURE: none

CERTIFICATION: none

MEMBERSHIPS, OFFICES AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES:

AAAS, member, 1991 - present

Society for Neuroscience, member, -present

Endocrine Society, member, - present

Abstract reviewer, 2000-present

Member of Scientific Program Steering Committee, 2000-2003

International IGF Society, member, - present

Past President, Council Member, 2015-present

President, 2010-2014

Officer/council member, 1997-2014

Program Committee member, International GH/IGF Conference, 2004, 2006, 2012

Program Committee Chair for Basic IGFs, International GH/IGF Conference, 2010

Program Committee member, International IGF meeting, 1999

American Society for Neurochemistry, member, - present

President-Elect, 2017-2019

Council member, 2005-2009; 2016-2017

Scientific planning committee for Annual meeting, 2003, 2009

Program Chair, Annual Meeting, 2008

International ISN/ASN 2013 Meeting Proposal Chair, 2009-2010

Presidential Advisory Committee, 2004-2007

Myelin Satellite Meeting to the International Society for Neurochemistry, 2017, Co-chair

American Society for Cell Biology, member, 2004-present

International Society for Neurochemistry, member, 2010-present

European Society of Endocrinology, member 2012-2017

Initiator and co-chair of the first Gordon Research Conference on IGFs in Physiology and Disease, March, 2003

Gordon Research Conference on Mammary Gland Biology, 2013 Co-chair; 2012 Vice-Chair

HONORS AND AWARDS:

Javits Neuroscience Investigator Award NINDS 2017-2024

Excellence in Research Award, Foundation of UMDNJ, 2010

University Professorship, UMDNJ, 2005-2010

Medal of Excellence Award, Musical Moments for Multiple Sclerosis Research, 2008

Service Award, National MS Society, Central PA Chapter, 2004

Career Development Award, Dept. of Defense Breast Cancer Research Program, 1999-2003

Excellence in Teaching Award 1999, Pennsylvania State University College of Medicine, Presented by Medical Class of 2002

Travel award, Winter Conference on Brain Research Fellow, Snowmass, Colorado, 1996

Travel award, International IGFBP Meeting, Tuebingin, Germany, 1995

NRSA Postdoctoral Fellow, Columbia University, 1989-1990

NRSA Postdoctoral Fellowship, SUNY, Stony Brook, 1987-1988

NRSA Predoctoral Fellowship Award, UCLA, 1982-1986

BOARDS OF DIRECTORS/TRUSTEES POSITIONS: none

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

Ad Hoc Reviewer, NMSS Fellowship Review Panel, 2018

Ad Hoc Reviewer, NIH/Cell & Molecular Biology of Glia (CMBG), 2018

Reviewer, Science Foundation of Ireland, 2017

Reviewer, European Leukodystrophy Foundation, 2006, 2010, 2012, 2017

Ad Hoc Reviewer, NIH/Molecular Oncology Study Section (MONC), 2016-2017

Ad Hoc Reviewer, National Multiple Sclerosis Society Grant Review Panel A, 2017

Reviewer, Department of Defense Review Panel, 2016, 2018

Ad Hoc Reviewer, NIH/Integrative and Clinical Endocrinology and Reproduction Study Section (ICER), 2016

Reviewer, French Agence Nationale de la Recherche, 2016, 2018

Reviewer, French National Research Agency, 2016

Reviewer, Multiple Sclerosis Research of Australia, 2015

Chair, National Multiple Sclerosis Society Grant Review Panel A, 2012-2015

Ad Hoc Reviewer, NIH/NICHD Developmental Biology CHHD-C1, 2014

Chair, NIH SEP Molecular Neuroscience, ZRG1 MDCN-N (02), Spring/Fall 2011

Reviewer, National Multiple Sclerosis Society Grant Review Panel A, 2010-

Mail Reviewer, Challenge Grants in Glial Biology

National Institutes of Health, 2009

Ad Hoc Reviewer, Molecular Oncology Study Section

National Institutes of Health, 2009

Mail Reviewer, Diabetes Research and Training Center Grants

University of Michigan Diabetes Center

Member, Cellular and Molecular Biology of Glia Study Section

National Institutes of Health, 2007-2008

Member, Neural Degenerative Disorders and Glial Biology Study Section

National Institutes of Health, 2006

Reviewer, Cancer Research Commission, United Kingdom, 2005, 2006

Ad Hoc Reviewer, Molecular Oncology Study Section

National Institutes of Health, 2005

Ad Hoc Reviewer, Neurodegeneration and Biology of Glia Study Section, National Institutes of Health 2004-2006

Ad Hoc Reviewer, Molecular, Cellular and Developmental Neuroscience-A Study

Section, National Institutes of Health 2004

Ad Hoc Reviewer, Mouse Models of Human Cancer Consortium Request for

Applications, National Cancer Institute, National Institutes of Health 2004

Ad Hoc Reviewer, Molecular, Cellular and Developmental Neuroscience-6 Study

Section, National Institutes of Health 2003

Reviewer, Natural Sciences and Engineering Research Council of Canada 2002

Reviewer, Alberta Heritage Foundation for Medical Research 2001

Reviewer, Special Emphasis Panel Special Emphasis Panel, National Institutes of Health 2000

Outside reviewer, National Science Foundation 1999

Independent Grant Reviewer, Department of Veterans Affairs 1999

Scientist Reviewer for National Center for Toxicological Research, Department of Health and Human Services 1998

Grant Reviewer, Spinal Cord Research Foundation 1996-1997

Outside reviewer, General Medicine Study Section, NIH 1994

SERVICE ON MAJOR COMMITTEES:

- A. International None
- B. National None
- C. Medical School/University

Member, Histology Core Facility Advisory Committee, 2017-present

Member, Genome Editing Core Facility Advisory Committee, 2016-present

Chair, Rutgers Klein Endowed Chair Search Committee, 2016-2017

Chair, Reviewer, Grant Review Panel for New Jersey Health Foundation, 2016

Panel Advisory Board Member, Brain Health Institute, Rutgers University, 2015-present

Co-Chair, RBHS Strategic Planning Working Group on Neuroscience, 2014

Reviewer, NJMS Bridge Grant Program, 2014

Member, Search Committee for Strongwater Endowed Chair and Director, Brain Health Institute, Rutgers University, 2013-2014

Member, Search Committee for Chair, Dept. Neurology & Neuroscience 2012-2014

Track Director, Cell Biology, Neuroscience & Physiology Graduate Program, NJMS/GSBS, 2010- 2014

Member, Investigative Panel for Research Integrity, UMDNJ, 2009-2011

Member, Committee to Revise Core Curriculum for Graduate Training, 2009-2010

Chair, Committee to Evaluate Goals for Graduate Education at NJMS/UMDNJ

Member, Transgenic Oversight Committee, 2009-present

Member, Faculty Search Committee for the NJMS Cancer Center, 2007-2008

Chair, Faculty Oversight Committee for Transgenic Core Facility, NJMS, 2007-2009

Member, Search Committee for Faculty Position in Quantitative Neuroscience, New Jersey Medical School, 2007-present

Faculty Mentor for Dr. Deborah Lazzarino, NJMS Faculty Mentoring Program

Chair, Committee to Develop the Neuroscience Institute, NJMS, 2006-present

Member, Presidents Strategic Advisory Council, UMDNJ, 2005-2006

PSU Integrated Biosciences Graduate Program Committee, Member 2004-2005

Scientific Leadership Committee for the Penn State Cancer Institute, Member 2003-2005

Executive Committee, PSU Intercollege Graduate Program in Genetics, Member 1995-2005

PSU/COM Transgenic Mouse Facility. Co-Director/Consultant 1995-2005

Advisory Committee for the PSU Intercollege Graduate Program in Cell and Molecular Biology, 1995-2004

Interview Committee for Cell and Molecular Biology Graduate Program, Member 1994-2004

PSU Graduate Research Forum, Faculty Evaluator 1994-2004 PSU Life Sciences Consortium Steering Committee, Member 2000-2003

RA-10 Investigative Committee for Penn State University, Member 2003

Search Committee for Chair of the Department of Psychiatry, PSU/COM 2002-2003

PSU Life Sciences Consortium Nominating Committee, Member 2001-2002

PSU Life Sciences Consortium Seed Grant Review Committee, Member 2001

PSU Tobacco Review Settlement Board Grant Review Committee, Member 2001

PSU/COM Committee for Biomedical Department Websites Project, Member 2000 PSU/COM Cancer Center Research Grant Review Committee, Member 1998 PSU/COM Steering Committee for Graduate Recruitment, Member 1995-1997 PSU Graduate Research Exhibition, Member of Judging Committee 1995

D. Hospital – none

E. Department

Task Force for Department Recruitment 2011-2012

Graduate Recruitment Committee for Neuroscience and Anatomy Graduate Program, PSU/COM, 1994-1995

Faculty Recruitment Committee, Department of Neuroscience and Anatomy, PSU/COM, 1994-1995

F. Editorial Boards

Review Editor, Molecular and Structural Endocrinology, Frontiers in Endocrinology, 2016present

Associate Editor, Journal of Neuroscience, 2015-present

Associate Editor, Frontiers in Cancer Endocrinology, 2015-present

Review Editor, Frontiers in Cancer Endocrinology, 2014-present

Guest Editor, *Journal of Mammary Gland Biology and Neoplasia* "Methods in Mammary Gland Biology and Breast Cancer", 2012

Growth Hormone and IGF Research, 2011-present

ASN Neuro, 2008-present

Guest Editor, *Journal of Mammary Gland Biology and Neoplasia* "The IGF System in Mammary Development and Breast Cancer", December 2008

Developmental Neuroscience, 2007-2012

Journal of Biological Chemistry, 2006-2011

Guest Editor, *Journal of Mammary Gland Biology and Neoplasia*, "The Cell Cycle in Mammary Development and Breast Cancer, January, 2004

Endocrinology 2001 – 2004

Guest Editor, *Journal of Mammary Gland Biology and Neoplasia* "The Insulin-Like Growth Factors and Insulin-Like Growth Factor Binding Proteins in the Mammary Gland and in Breast Cancer", January, 2000

Journal of Mammary Gland Biology and Neoplasia, 2000 - present

G. AdHoc Reviewer

American Journal of Physiology, American Journal of Physiology & Endocrinology, ASN-Neuro, Autophagy, Brain, Brain Research, Breast Cancer Research, Cancer Research, Cancers, Carcinogenesis, Cell Communication & Signaling, Developmental Neuroscience, Endocrinology, Experimental Neurology, Frontiers in Cancer Endocrinology, GLIA, Growth Hormone & IGF Research, Journal of Biological Chemistry, Journal of Cellular Physiology, Journal of Clinical Investigation, Journal of Endocrinology, Journal of Neurobiology, Journal of Neuroscience Research, Lung, Mechanisms of Ageing and Development, Molecular and Cellular Biology, Molecular and Cellular Endocrinology, Molecular Endocrinology, Nature Genetics, Neuroscience Letters, Oncotarget, PLOS ONE, Proceedings of the National Academy of Sciences, Regulatory Peptides

SERVICE ON GRADUATE SCHOOL COMMITTEES:

Member, Rutgers Graduate School Nominating Committee, 2018-present
Member, Search Committee for Associate Dean of the Graduate School of Biomedical Sciences at
UMDNJ, 2008-2009

SERVICE ON HOSPITAL COMMITTEES: None

SERVICE TO THE COMMUNITY:

Invited speaker, National Multiple Sclerosis Society New Jersey Conference, 2010

Invited speaker, National Multiple Sclerosis Society Regional Conference, NJ, 2007

Invited speaker, Central PA Chapter MS Society, Team MS Rally, Hershey, PA, 2005

Invited speaker, MS Support Group of Palmyra, 2004

Invited speaker, National MS Society Tour of Champions, San Diego, CA, 2004

Invited speaker, Parson's E&C "Tournament for Life" Benefit, American Cancer Society, 2003

Invited speaker, Benefit Fundraiser for the PA Chapter of the Multiple Sclerosis Society, 2003

Invited speaker, American Cancer Society, Relay for Life, Kutztown, PA, 2002

Invited speaker, American Cancer Society, Making Strides Against Breast Cancer, Harrisburg, PA, 2002

Invited speaker, PA Chapter, National Multiple Sclerosis Society, Women with MS, 2002 Invited speaker, American Cancer Society, Relay for Life, Millersville, PA 2001

SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE:

Doctoral Students:

Joseph Bulatowicz, 2017-present

Marisa Adhikusuma, 2016-present

Angeliki Evangelou, 2015-present

Luipa Khandker, 2015-present

Virginia Ciliento, 2014-2018

Aminat Saliu, 2013-2018

Shravanthi Chidambaram, 2013-2017 (Co-mentor)

Lauren McLane (Mursch), 2011-2016

Stacey Wahl (Cifelli), 2009-2014

Lauren Rota, 2008-2014

Amber Ziegler, 2007-2012 (Co-mentor)

Kedar Mahajan, (MD/PhD) 2007-2010

Zhaoyu Sun, 2005-2010

Jungsoo Min, 2004-2009

Anne Rowzee, 2002-2007

Bill Tyler, 2002-2007

Robert Romanelli, 2002-2006

Aimee Loladze, 2001-2006

Terra Frederick, 1999-2003

Malinda Stull. 1998-2003

Jennifer Ness, 1999-2002

Mike Allar, 1998-2002

Fengjun Jiang, 1995-2000

Steven O'Donnell, 1995-1999

Monica Richert, 1994-1998

Masters Research Thesis:

Daniele Scarola, 2011-2012

Lauren Rota, 2007-2008

Aimee Loladze, PSU/COM, 2004-2006

SPONSORSHIP OF POSTDOCTORAL FELLOWS:

Alison Obr, 2014-

Isis Ornelas, 2014-2017

Lidia Albanito, 2012-2014

Marcus Shin, 2011-2013

Jungsoo Min, 2009-2010

William Tyler, 2007-2009

Anne Rowzee, 2007-2009

Sopio Simonishvili, 2004-2008

Sain Shushanov, 2004-2007

Robert Romanelli, 2006

Vaho Loladze, 2003-2004 Malinda Stull, 2003 Dawn Kardash-Richardson,2000-2004 Jennifer Ness, 2002-2003

TEACHING RESPONSIBILITIES:

A. Lectures or Course Directorships

New Jersey Medical School Medical Curriculum

Mind, Brain & Behavior, Laboratory Instruction, 2008-2013, 2017 3-6 hrs

New Jersey Medical School Graduate Curriculum

Professional Skills – Grant Writing, 2016-present (26 hrs)

Developmental Biology & Stem Cells, 2012-present (2 hrs)

Cell and Developmental Neuroscience, Course Director, 2011-present (taught in alternate yrs)

Lectures: Neuroembryology (1 hr)

Cell Biology of Myelinating Glia (2 hrs)

Neural Induction & Neural Patterning (2 hrs)

Gliogenesis (2 hrs)

Demyelinating Diseases, 2011-present, 12 sessions/critical readings, 12 hrs

Cancer Biology, 2010-present,

Lectures: Growth Factors & Receptors – RTKs (1.5 hrs)

Growth Factors & Receptors – non-RTKs (1.5 hrs)

Intro to Biomedical Sciences, 2009- present

Lectures: Introduction to Scientific Method, 2 hrs

Transgenic Mice, 1 hr

Alternative Learning Module Co-Director, 2009-2012, 6 hrs

NJMS Graduate Core Course 2007-2009

Director, Molecular & Cellular Biology Module 5/Neurophysiology Part II, 6 hrs

Professional Skills, 2007-present, Co-Director, 6 lectures 20 hrs

Neuroscience Foundations, 2009-2010

1 lecture

Developmental Neuroscience, 2006, 2 lectures, 2 hrs

Penn State College of Medicine Graduate Curriculum

Genetic Approaches to Biomedical Problems, 2004

Molecular Biology, 2002-2005

Research Problems in Molecular Medicine, 2002-2003

Neurochemistry, 1999-2005

Biology of Neoplasia, 1997

Cellular and Molecular Neuroscience, 1995-2005

Molecular Genetics, 1994-2001

Advanced Topics in Neuroscience, 1995-2002

Advanced Topics in Cellular and Molecular Physiology, 1995

Penn State College of Medicine Medical Curriculum

Medical Histology, 1996-2004

Medical Embryology, 1994-1998 (Course Director, 1996-1998)

Penn State University Undergraduate Curriculum (University Park)

Neurobiology, 2000-2004

Cold Spring Harbor Laboratories

Molecular Probes of the Nervous System, 1989-1990

B. Research Training

Post Doctoral Fellows: none

Pre Doctoral Students:

Doctoral Student Committees:

Helena Mello, NJMS Immunology, Inflammation & Infectious Disease Marc Brillantes, NJMS Immunology, Inflammation & Infectious Disease Themistoklis Vasilopoulos, NJMS Molecular Biology, Genetics & Cancer Kyle Saita, RWJMS Neuroscience Program

Mariana Saboya, Cook College Endocrinology & Animal Biosciences

Canan Kasikara, Molecular Biology, Genetics & Cancer, GSBS Newark, 2017

Ishwarya Murali, UMDNJ Pharm/Phys Program, 2017

Neetu Razdan, Molecular Biology, Genetics & Cancer, GSBS Newark, 2017

Samir Tivari, Biomedical Sciences, GSBS Newark, 2016

Pradeepa Ghokina, Rutgers Biology Program, 2013

Kavya Reddy, Rutgers Biology Program, 2012

Ru Chen, UMDNJ Interdisciplinary Program, 2010

Homer Adams, UMDNJ Biomedical Sciences, 2010

Jennifer Woodbury, UMDNJ MD/PhD Program, 2009

Pedro Rodriguez, UMDNJ Biomedical Sciences, 2009

Nan Li, PSU, Genetics, 2009

Dhivyaa Alagappan, UMDNJ Biomedical Sciences, 2008

Sarah Gramling, PSU, Integrative Biosciences, Molecular Toxicology, 2008

Wei Jin, PSU, Genetics, 2008

Michael Debies, PSU/COM Cell and Molecular Biology, 2005

Ryan Felling, PSU/COM M.D./Ph.D., Neuroscience, 2005

David Drubin, PSU Integrative Biosciences, Molecular Medicine, 2004

Katie Streicher, PSU Integrative Biosciences, Immunobiology, 2004

Melissa Cunningham, PSU/COM M.D./Ph.D. Cell and Molecular Biology, 2004

Jason Heaney, PSU/COM Physiology, 2004

Michael Romanko, PSU Integrative Biosciences, Molecular Medicine, 2004

Robin Kilker, PSU/COM M.D./Ph.D., Cell and Molecular Biology, 2004Jelena

Lazovic-Stojkovic, PSU Integrative Biosciences, Molecular Medicine, 2004

Ligun Zhang, PSU Integrative Biosciences, Neuroscience, 2003

Jia-Hai Lee, PSU/COM Biochemistry and Molecular Biology, 2003

Tricia Hogan, PSU/COM Cell and Molecular Biology, 2003

Geoffry Knudsen, PSU/COM Biochemistry, Microbiology and Molecular Biology, 2003

Christine Brazel, PSU/COM Cell and Molecular Biology, 2003

Akiva Mintz, PSU/COM M.D./Ph.D. Cell and Molecular Biology, 2002

Christine Silvis, PSU/COM Cell and Molecular Physiology, 2002

Vinayshree Kumar, PSU/COM Physiology, 2002

Laura Palmer, PSU/COM Biochemistry and Molecular Biology, 2002

Shelley Gestle, PSU/COM Biochemistry and Molecular Biology. 2001

Brandy Furman, PSU/COM Neuroscience, 2001

Ridwan Lin, PSU/COM M.D./Ph.D., Neuroscience, 2001

Carolyn Pizzoli, PSU/COM M.D./Ph.D. Cell and Molecular Biology, 2001

Phil Albrecht, PSU/COM Neuroscience, 2001

Patricia Opresko, PSU/COM Biochemistry and Molecular Biology, 2000

Tina Cairns, PSU/COM Cell and Molecular Biology, 2000

H. Wayne Lambert, Cell Biology, University of North Carolina, 2000

Khristy Manges, PSU/COM Neuroscience, 1999

Scott Millhouse, PSU/COM Microbiology and Immunology, 1999

Nadine Dejneka, PSU/COM Pharmacology, 1998

Dan Campbell, PSU/COM Neuroscience, 1998

Lisa Falls, PSU/COM Biochemistry and Molecular Biology, 1998

Masters Committees:

Cassandre Noel, UMDNJ Masters Program, 2012

Emyln Capili, UMDNJ Masters Program, 2010

Christopher Hansen, NJMS/UMDNJ Cell and Molecular Biology, 2008

Christine Liberto, PSU/COM Cell and Molecular Biology, 2006

Beverly Baptiste, PSU/COM Cell and Molecular Biology, 2004

Christopher Freet, PSU/COM Anatomy, 2001

Matthew Snyder, PSU/COM Anatomy, 2001

Christopher J. Kuhlow, PSU/COM Anatomy, 2001

Stacy Hudgins, PSU/COM Anatomy, 1997

Undergraduate Research Training:

Tiffany Porras, Hendrick Hudson High School/SUNY Albany, 2010-present **Other Laboratory Trainees:**

Nathan Swilling, 1994, Summer Whitaker Foundation Scholar

Andrew Wang, 1995, Summer Whitaker Foundation Scholar

Megan Williams, 1997, Summer Whitaker Foundation Scholar

Debra Thiel, 1998, Summer Whitaker Foundation Scholar

Justin Stahl, 1998, Medical Student Research Project

Beverly Baptiste, 1999, Rotation student, Cell and Molecular Biology

Terra Frederick, 1999, Rotation student, Molecular Medicine

Matt Silvis, 1999, Summer Medical Student Research

Aimee vanOlden, 2000, Rotation student, Molecular Medicine

Stephanie Stoehr, 2001, Rotation student, Molecular Medicine

Ryan Felling, 2001, Rotation student, M.D./Ph.D.

Bill Tyler, 2001, Rotation student, Cell and Molecular Biology

Pei-Chun Yeh, 2001, Rotation student, Genetics

Melissa Nowotarski, 2002, Rotation student, Cell and Molecular Biology

Anne Rowzee, 2002, Rotation student, Cell and Molecular Biology

Wei Jin, 2003, Rotation student, Genetics

Nu-Chu Liang, 2003, Rotation student, Neuroscience

Jessica Rudy-Heimlick, 2003, Rotation student, Molecular Medicine

Yan Yan, 2004, Rotation student, Genetics

Jungsoo Min, 2004, Rotation student, Molecular Medicine

Krista Buono, 2006, Rotation Student, NJMS/UMDNJ Biomedical Sciences

Kedar Mahajan, 2006, 2007, Rotation Student, NJMS/UMDNJ MD/PhD

Stacey Cifelli, 2008, Rotation Student, NJMS/UMDNJ Integrated Neurosciences

Mark Nicolau, 2008-2009, Masters Student/MD Student, NJMS/UMDNJ

Douglas Clements, 2009, Masters Student, NJMS/UMDNJ

Lauren Mursch, 2010, Rotation Student, NJMS/UMDNJ, Neuroscience Program Jason Domegauer, 2011, Rotation Student, NJMS/UMDNJ, MD/PhD program

Saurav De, 2012, Rotation Student, NJMS/UMDNJ, MBGC PhD track

Ed Beninati, 2012, Spring/Summer Research, NJMS/UMDNJ, MD program

Aminat Saliu, 2013, Rotation Student, NJMS/UMDNJ, CBNP PhD track Virginia Ciliento, 2014, Rotation Student, NJMS/Rutgers, MBGC PhD track

Luipa Khandker, 2014, Rotation Student, NJMS/Rutgers, MBGC PhD track

Angeliki Evangelou, 2015, Rotation Student, NJMS/Rutgers, CBNP PhD track

Stephen Lu, 2016, NJMS Master's Biomedical Science, Rotation

Albert Bargoud, 2016, Summer Research Cancer Program, NJMS MD program Joseph Bulatowicz, 2017, Rotation Student, NJMS/Rutgers, MBGC PhD track

Joshua Kim, 2017, NJMS Summer Research Program

Stephanie Smith, 2017-2018, NJMS Master's Biomedical Science, Rotation

CLINICAL RESPONSIBILITIES: None

GRANT SUPPORT:

A. Principal Investigator

NIH R37 NS082203-01 (Wood, Macklin, dual PIs)

The role of mTOR signaling in oligodendrocyte differentiation and CNS myelination 09/30/2017-07/31/2024

Direct Costs (Rutgers): \$1,249,940

Total Costs (Rutgers): \$1,896,925

NIH/NCI 1 R01 CA204312-01 (Wood) Pathways that regulate basal and metastatic phenotypes in triple negative breast cancers 01/01/2017-12/31/2021

Direct Costs: \$1,771,101 Total Costs: \$2,564,936

Rutgers Brain Health Institute Pilot Grant (Levison, Wood, Dreyfus, Dhib-Jalbut) Delineating oligodendrocyte progenitor subtypes and their roles in CNS remyelination

11/01/2016-10/31/2017 Direct Costs: \$40,000 Total Costs: \$40,000

NMSS RG 5371-A-4 (Wood)

mTOR Signaling Targets and Pathway Intersections in Oligodendrocyte Differentiation and

Myelination

04/01/2015-03/31/2018 Direct Costs: \$642,725 Total Costs: \$706,997

Rutgers University Neuro Engineering Group (RUNEG) (Shreiber, Wood, Comoletti)

An axon free, in vitro model of central nervous system myelination

06/01/2017-05/31/2018 Direct Costs: \$25,000 Total Costs: \$25,000

NIH R01 NS082203-05 (Wood, Macklin, dual PIs)

The role of mTOR signaling in oligodendrocyte differentiation and CNS myelination

09/30/2012-05/31/2017 NCE 05/31/2018 Direct Costs: (Rutgers BMHS): \$1,029,555

Total Costs: \$1,626,695

NIH R21 NS076874-01A1 (Wood, Levison Dual PIs)

Insulin Receptor in Neural Stem Cells 09/01/2013 to 08/31/2015 NCE 02/28/2017

Direct Costs: \$275,000 Total Costs: \$437,248

NJ Health Foundation Signature Initiative Grant (Wood, Dreyfus Dual PIs)

Identifying pathways that promote remyelination from endogenous progenitors

01/01/2015-12/31/2015 NCE 06/30/2016

Direct Costs: \$100,000 Total Costs: \$100,000

Diversity Supplement to

NIH 5R01NS082203-04 (Wood; Macklin dual PIs) The Role of mTOR Signaling in Oligodendrocyte Differentiation and CNS Myelination, 07/01/2014-06/30/2016

Direct Costs (Rutgers): \$35,448/yr

NMSS Daniel Haughton Senior Faculty Award (Wood)

Activation of mTOR Signaling in Remyelination in Human MS Lesions and EAE 09/01/2014-05/31/2015 NCE to 12/31/2015

Direct Costs: \$83,546 Total Costs: \$83,546

NMSS RG 4015A2/2

The mTOR Pathway: A Master Regulator of Oligodendrocyte Differentiation

11/01/2009-10/31/2013 Direct Costs: \$793,197 Total Costs: \$872,517

NIH NIDDK RO1 DK060612

IGF and IGF Receptor Function in Mammary Development

09/30/2007-07/31/2012 NCE to 07/31/2014

Direct Costs: \$1,061,880 Total Costs: \$1,628,000

DOD TS093091

TSC Regulates Oligodendroglial Differentiation and Myelination in the CNS

09/30/2010-09/29/2012 Direct Costs: \$98,727 Total Costs: \$154,014

UMDNJ Translational Mini-Grant

Assay for Measurement of IGF Type 1 Receptor and Insulin Receptor Expression in Human

Cells and Tissues 12/01/2009-11/30/2010 Direct Costs: \$9.999 Total Costs: \$9,999

UMDNJ Foundation Collaborative High Impact Award

IGF Signaling Promotes Bypass of Cellular Senescence during Early Stage of Breast Cancer

07/01/2009-06/30/2010 No cost extension to 06/30/2011

Direct Costs: \$34,977 Total Costs: \$34,977

NIH NINDS RO1 NS050742-03

Mechanisms of Death and Survival in Oligodendroglia

09/23/2005-6/30/2010 Direct Costs: \$1,074,575 Total Costs: \$1,670,965

NIH NINDS RO1 NS37560-08

Oligodendrocyte Generation: A Multi-Factorial Approach

04/01/2003-02/28/2007 Direct Costs: \$855,000 Total Costs: \$1,319,093

NIH/R21CA120850-01

Nestin: A Putative Marker of a Mammary Stem and Progenitor Cell Lineage

04/01/2006-03/31/2008 Direct Costs: \$209,000 Total Costs: \$324,995

NIH NIDDK RO1 DK0606-12

IGF and IGF Receptor Function in Mammary Development

03/01/2002-01/31/2006 Direct Costs: \$792,003 Total Costs: \$1,112,765

Pennsylvania Tobacco Settlement Fund

Manipulation of Signaling Pathways for the Treatment of Breast Cancer (J.Bond) Project 2 (Wood): Receptor-Mediated Oncogenic Signaling in Mammary Epithelium: Downstream Interactions and the Role of the mTOR-Mediated Signaling Pathway

07/01/04-06/30/05

Direct Costs: \$100,200; Project 2: \$20,000 Total Costs: \$150,000; Project 2: \$29,940

Life Sciences Greenhouse of Central Pennsylvania

Merging Modeling & Empirical Approaches: Identification of IGF-I Coordinated

Signaling Pathways 08/01/2003-07/31/2004 Direct Costs: \$83,333 Total Costs: \$100,000

Pennsylvania Tobacco Settlement Fund 02-173

Manipulation of Signaling Pathways for the Treatment of Breast Cancer (Smith) Project 2 (Wood): Evaluation of Signaling and Translational Control Mechanisms

in IGF Regulation of Breast Cancer Proliferation and Survival

06/01/2003-05/31/2006

Direct Costs: \$233,801; Project 2: \$33,400 Total Costs: \$350,000; Project 2: \$50,000

Susan G. Komen Breast Cancer Foundation PDF 0100718

Insulin-like Growth Factor Receptor Signaling in Breast Epithelial Cell

Proliferation

10/01/2001-09/30/2004 Direct Costs: \$105,000 Total Costs: \$105,000

NIH 1R13 CA100040-01

Insulin-like Growth Factors in Physiology and Disease (Gordon Research

Conference)

03/09/2003-01/31/2004 Direct Costs: \$9,000 Total Costs: \$9,000

U.S. Army Medical Research & Material Command, Career Development Award

DAMD 17-99-1-9296

The Insulin-Like Growth Factors and Receptor in Hormone-Mediated Breast

Growth and Tumorigenesis 05/01/1999-05/31/2003 Direct Costs: \$149,205 Total Costs: \$207,127

NIH NINDS RO1 NS37560-04

Oligodendrocyte Generation: A Multi-Factorial Approach

12/20/1998-03/31/2003 Direct Costs: \$515,193 Total Costs: \$710,109

Research Planning Grant American Cancer Society RPG-99-162-01-CNE

Insulin-like Growth Factors in Breast Epithelial Proliferation

07/01/1999-06/30/2002 Direct Costs: \$317,365 Total Costs: \$395,000

National Multiple Sclerosis Society Pilot Grant MS PPO558

CNTF Regulation of Peptide Growth Factors in Oligodendrocytes

08/01/1997-07/31/1998 Direct Costs: \$25,000 Total Costs: \$27,500

NIH NIDDK R29 DK 48103-05

Functional Studies of IGF Binding Protein-1

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01/01/1995-12/31/1999 Direct Costs: \$349,948 Total Costs: \$530,430

NSF Research Planning Grant IBN-9408860

Functional Studies of the Insulin-like Growth Factor Binding Protein-2 in CNS

Neurogenesis

09/01/1994-08/31/1996 Direct Costs: \$16,200 Total Costs: \$18,000

Dean's Feasibility Grant, PSU/M.S. Hershey Medical Center

In viivo Studies of the Insulin-like Growth Factor Binding Protein-2 in Mammary

Tumorigenesis

06/01/1994-05/31/1995 Direct Costs: \$24,652 Total Costs: \$24,652

B. Co-Investigator

NIH/NINDS F31 (M. Jeffries-PI; Wood, mentor)

mTOR Signaling in Oligodendrocyte Vulnerability to Demyelination and Efficiency of

Remyelination in the Brain 07/01/2018-06/30/2020 Direct Costs: \$88,088 Total Costs: \$88,088

NJCCR #DFHS18PPC007 (J. Bulatowicz-PI; Wood, mentor)

Predoctoral Fellowship, New Jersey Commission on Cancer Research

Investigating a Link between Cellular Stress and Metastatic Potential in Response to Loos of

IGF1R in Breast Tumor Cells

1/01/18-12/31/19 Direct Costs: \$50,000 Total Costs: \$50,000

American Cancer Society 130455-PF-17-244-01-CSM (A. Obr; Wood, mentor)

Postdoctoral Fellowship

Mechanisms for Metastasis due to Reduced IGF Signaling in Breast Cancer

01/01/18-12/31/19 Direct Costs: \$111,500 Total Costs: \$111,500

NJCCR #DFHS15PPC039 (A. Obr; Wood, mentor)

Postdoctoral Fellowship, New Jersey Commission on Cancer Research

Determining the Role of Insulin/IGF Signaling in Inflammation and Metastasis of Basal-like

Breast Cancer

01/01/2015-12/31/2016 Direct Costs: \$100,000 Total Costs: \$100,000

NIH/NCI RO1 CA128799-05 (LeRoith; Wood Investigator)

Mechanisms for Increased Breast Cancer Risk in Type 2 Diabetes

04/01/2008-03/30/2013 NCE to 2014 Direct Costs: \$19,231 (subcontract)

Total Costs: \$30,000

NJCCR #DFHS12CRP011 (M.Shin/L.Albanito/L.Rota); Wood, mentor)

Postdoctoral Fellowship, New Jersey Commission on Cancer Research

IGF Signaling Inhibits Oncogene Mediated Breast Tumors

07/01/12-06/30/14; NCE to 12/31/14

Direct Costs: \$91,000 Total Costs: \$91,000

NIH F31 NS076187-01A1 (S. Cifelli; Wood, Mentor)

The Role of mTORC2 in Oligodendrocyte Differentiation

07/01/2012 – 06/30/2014 Direct Costs: \$60,726 Total Costs: \$60,726

New Jersey Commission on Spinal Cord Research Fellowship Award (K.

Mahajan; Wood, Mentor)

IGF-1 Mediated Oligodendrocyte Progenitor Survival in SCI

06/15/2008-06/30/2010 Direct Costs: \$60,000 Total Costs: \$60,000

2RO1 MH59950 (S. Levison)

Neural Stem Cell Responses to Perinatal Brain Damage

05/01/04-06/30/09 Direct Costs: \$980,000 Total Costs: \$1,467,060

Pennsylvania Tobacco Settlement Fund 4100020604 (K.Cheng)

Function of Rad51 and Mats in Cell Division and Cancer

05/01/2004-04/30/2006 Direct Costs: \$70,681 Total Costs: \$87,421

NIH NIGMS 1T32 GM 064332 (W. Souba)

Training Program in Trauma and Organ Injury

07/01/2002-06/30/2007 Direct Costs: \$866,772 Total Costs: \$932,631

NIH 1F31 NS043080-02 (T. Frederick; Wood, Mentor)

Cell Cycle Regulation in Oligodendrocyte Progenitors

01/01/2002-12/31/2003 Direct Costs: \$43,346 Total Costs: \$43,346

Hershey Medical Center Dean's Feasibility Grant (M. Verderame)

Targeted Overexpression of ODC and the ODC inhibitor Antizyme-1

07/01/2002-06/30/2003 Direct Costs: \$24,111 Total Costs: \$24,111

Commonwealth of Pennsylvania (H.Isom)

Cancer Control Program 07/01/2001-06/30/2003 Direct Costs: \$1,200,000 Total Costs: \$1,200,000

Hershey Medical Center Cancer Center (S.Bronson)

Investigation of Cell Survival Pathways and Mechanisms in Breast Epithelial

Cells

09/01/2001-08/31/2002 Direct Costs: \$33,635 Total Costs: \$33,635

NIH NCI F31 CA 83174 (M.Stull; Wood, Mentor) IGF Receptor in Mammary Growth and Tumorigenesis

08/01/1999-07/31/2003 Direct Costs: \$67,252 Total Costs: \$67,252

American Heart Association, Pennsylvania 0010054U (J.Ness; Wood, Mentor) Mechanisms of Oligodendrocyte Cell Death and Trophic Factor Rescue in

Periventricular White Matter Damage

07/01/2000-09/30/2002 Direct Costs: \$32,000 Total Costs: \$32,000

NIH NICHD 2PO1 HD 030704 (R. Vannucci)

Perinatal Hypoxic-Ischemic Brain Damage

Project 3 (S. Vannucci): Neuroprotective Mechanisms

07/01/1999-12/31/2004

Direct Costs: \$6,093,013; Project 3: \$564,453 Total Costs: \$9,331,353; Project 3: \$780,035

NIH NCI RO1 CA 87728 (D. Welch)

Molecular Regulation of Breast Cancer Metastasis

07/01/2000-10/31/2002 Direct Costs: \$607,500 Total Costs: \$940,902

Hershey Medical Center Cancer Center (M.Stull; Wood, Mentor)

IGF Receptor in Mammary Growth and Tumorigenesis

05/01/1999-04/30/2000 Direct Costs: \$5,000 Total Costs: \$5,000

American Heart Association, Pennsylvania Affiliate (S.O'Donnell; Wood,

Mentor)

IGF Binding Protein Modulation of IGF Neurotrophic Actions in

Hypoxic/Ischemic Stroke 07/01/1997 - 06/30/1999 Direct Costs: \$25,000 Total Costs: \$25,000

NIH NICHD R01 HD24565 (J. Hammond)

Ovarian Growth Factors 12/01/1996-11/30/2000 Direct Costs: \$832,011 Total Costs: \$1,207,573

Juvenile Diabetes Foundation International (S. Vannucci)

GLUT4 in Mouse Brain: Function, Activity and Effect of Diabetes

09/01/1996-08/31/1997 Direct Costs: \$90,532 Total Costs: \$99,585

C. Pending

NMSS RG170728557 (Wood, Dreyfus, co-PIs) Cooperative Functions of mTOR and TrkB/Erk Signaling in Remyelination 10/01/2018-09/30/2021 Direct Costs: \$716,925

Total Costs: \$788,618

PUBLICATIONS:

- A. Refereed Original Article in Journal
 - 1. **Wood, T.L.**, Frantz, G.D., Menkes, J.H. and Tobin, A.J. Regional distribution of messenger RNAs in postmortem human brain. *Journal of Neuroscience Research* 16:311-324, 1986.
 - Wood, T.L., Kobayashi, Y., Frantz, G., Varghese, S., Christakos, S. and Tobin, A.J. Molecular cloning of mammalian 28,000 M_r vitamin D-dependent calcium binding protein (Calbindin D_{28K}): Expression of Calbindin D_{28K} RNAs in rodent brain and kidney. *DNA* 7:585-593, 1988.
 - 3. **Wood, T.L.**, Brown, A.L., Rechler, M.M. and Pintar, J.E. The expression pattern of an insulin-like growth factor (IGF)-binding protein gene is distinct from IGF-II in the midgestational rat embryo. *Molecular Endocrinology* 4:1257-1263, 1990.
 - 4. Olchovsky, D., Bruno, J., **Wood, T.L.**, Gelato, M., Leidy, J.W., Gilbert, J.M.Jr. and Berelowitz, M. Altered pituitary growth hormone regulation in streptozotocin-diabetic rats: a combined hormone-defect of hypothalamic somatostatin and growth hormone-releasing factor. *Endocrinology* 126:53-61, 1990.
 - Wood, T.L., Berelowitz, M., Gelato, M., Roberts, C.,Jr., LeRoith, D., Millard, W. and McKelvy, J.F. Hormonal regulation of rat hypothalamic neuropeptide mRNAs: Effect of hypophysectomy and hormone replacement on GRF, SRIF and the insulin-like growth factors. *Neuroendocrinology* 53: 298-305, 1991.
 - 6. **Wood, T.L.,** Streck, R.D. and Pintar, J.E. Expression of the IGFBP-2 gene in post-implantation rat embryos. *Development 114*: 59-66, 1992.
 - 7. Streck, R.D., **Wood, T.L.**, Hsu, M.-S. and Pintar, J.E.The transcript for insulin-like growth factor binding protein-2 is extremely abundant in the apical ectodermal ridge of rat embryonic limbs. *Developmental Biology* 151:586-596, 1992.
 - 8. **Wood, T.L.**, Rogler, L., Streck, R.D., Cerro, J., Green, B., Grewal, A. and Pintar, J.E. Targeted disruption of the IGFBP-2 gene. *Growth Regulation 3*:3-6, 1993.
 - Cerro, J., Grewal, A., Wood, T.L. and Pintar, J.E. Tissue-specific expression of the insulin-like growth factor binding protein (IGFBP) mRNAs in mouse and rat development. *Regulatory Peptides* 48:189-198, 1993.
 - **10.** Green, B.N., Jones, S.B., Streck, R.D., **Wood, T.L.**, Rotwein, P. and Pintar, J.E. Distinct expression patterns of insulin-like growth factor binding proteins 2 and 5 during fetal and post-natal development. *Endocrinology 134*:954-962, 1994.
 - 11. Fliegner, K.H., Kaplan, M.P., **Wood, T.L.**, Pintar, J.E. and Liem, R.K.H. Expression of the gene for the neuronal intermediate filament protein a internexin coincides with the onset of neuronal differentiation in the developing rat nervous system. *Journal of Comparative Neurology* 342:161-173, 1994.

- 12. **Wood, T.L.**, O'Donnell, S.L. and Levison, S.W. Cytokines regulate IGF binding proteins in the CNS. *Progress in Growth Factor Research* 6(2-4):181-187, 1995.
- 13. LeRoith, D., Neuenschwander, S., **Wood, T.L.** and Henninghausen, L. Insulin-like growth factor-1 and insulin-like growth factor binding protein-3 inhibit involution of the mammary gland following lactation: studies in transgenic mice. *Progress in Growth Factor Research* 6(2-4):433-436, 1995.
- 14. Levison, S.W., Ducceschi, M.H., Young, G.M., and **Wood, T.L.** Acute exposure to CNTF *in vivo* induces multiple components of reactive gliosis. *Experimental Neurology* 141(2):256-268, 1996.
- 15. Pintar, J.E., Cerro, J.A. and **Wood, T.L.** Genetic approaches to the function of insulinlike growth factor-binding proteins during rodent development. *Hormone Research* 45(3-5):172-177, 1996.
- Neuenschwander, S., Schwartz, A., Wood, T.L., Roberts, Jr., C.T., Henninghausen, L., and LeRoith, D. Involution of the lactating mammary gland is inhibited by the IGF system in a transgenic mouse model. *Journal of Clinical Investigation* 97(10):2225-2232, 1996.
- 17. Hernández-Sánchez, C., **Wood, T.L.** and LeRoith, D. Developmental and tissue specific sulfonylurea receptor gene expression. *Endocrinology* 138:705-711, 1997.
- 18. Butler, A.A., Blakesley, V.A., Poulaki, V., Tsokos, M., **Wood, T.L.** and LeRoith, D. Stimulation of murine fibrosarcoma growth by recombinant human insulin-like growth factor-I (IGF-I) treatment in nude mice. Dependency on IGF-I dose and IGF-I receptor number. *Cancer Research* 58:3021-3027, 1998.
- 19. Wandji,S.-A., **Wood, T.L.**, Crawford,J.L., Levison,S.W., and Hammond, J.M. Expression of mouse ovarian IGF system components during follicular development and atresia. *Endocrinology 139*:5205-5214, 1998.
- 20. Richert, M.M. and **Wood, T.L.** The insulin-like growth factors and IGF type I receptor during postnatal growth of the murine mammary gland: Sites of mRNA expression and potential functions. *Endocrinology* 140:454-461, 1999.
- Jiang, F., Levison, S.W. and Wood, T.L. Ciliary neurotrophic factor induces expression of the IGF type I receptor and FGF receptor 1 mRNAs in adult rat brain oligodendrocytes. *Journal of Neuroscience Research* 57:447-457, 1999.
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- 23. Jiang, F., Frederick, T.J. and **Wood, T.L.** IGF-I and FGF-2 synergize to stimulate oligodendrocyte progenitors to enter the cell cycle. *Developmental Biology* 232:414-423, 2001.
- 24. Ness, J.K., Romanko, M.J., Rothstein, R.P., **Wood, T.L.** and Levison, S.W. Perinatal hypoxia/ischemia induces apoptotic and excitotoxic death of periventricular white matter oligodendrocyte progenitors. *Developmental Neuroscience* 23:203-208, 2001.
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- 27. Stull, M.A., Richert, M.M., Loladze, A.V. and **Wood, T.L.** Requirement for insulin-like growth factor-I in epidermal growth factor-mediated cell cycle progression of mammary epithelial cells. *Endocrinology* 143:1872-1879, 2002.
- 28. O'Donnell, S.L., Vannucci, S.J., Frederick, T.J., Krady, K. and **Wood, T.L.** IGF-I and microglial/macrophage proliferation in the ischemic mouse brain. *GLIA* 39:85-97, 2002.
- Ness, J.K. and Wood, T.L. IGF-I but not NT-3 sustains Akt activation and provides long-term protection of immature oligodendrocytes from L-glutamate mediated apoptosis. *Molecular and Cellular Neuroscience* 20:476-488, 2002.
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- 32. Allar, M.A. and **Wood, T.L.** Expression of the insulin-like growth factor binding proteins during postnatal development of murine mammary glands. *Endocrinology* 145:2467-2477, 2004.
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- 34. Frederick, T.J. and **Wood, T.L.** IGF-I and FGF-2 coordinately enhance cyclin D1 and cyclin E-cdk2 association and activity to promote G₁ progression in oligodendrocyte progenitor cells. *Molecular and Cellular Neuroscience* 25:480-492, 2004.
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- 37. Romanelli, R.J., LeBeau, A.P., Hochberg, A. and **Wood T.L.** IGF type I receptor internalization and recycling mediate the sustained phosphorylation of Akt. *Journal of Biological Chemistry* 282:22513-22524, 2007.
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- 44. Romanelli, R.J.*, Mahajan, K. R.*, Fulmer, C. G. and **Wood, T.L.** IGF-I stimulated Akt phosphorylation and oligodendrocyte progenitor cell survival requires cholesterol-enriched membranes. *Journal of Neuroscience Research* 87:3369-3377, 2009. *authors contributed equally.
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- 47. Tyler, W.A., Jain, M. Cifelli, S.E., Li, H. and **Wood, T.L.** Proteomic analysis and identification of novel targets regulated by the mTOR pathway during oligodendrocyte differentiation. *GLIA* 59:1754-1769, 2011.
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- 53. Kichov, A., Rousset, C.I., Baburamani, A.A., Levison, S.W., Wood, T.L., Gressens, P., Thornton, C. and Hagberg, H. (2014) TNF-related apoptosis-inducing ligand (TRAIL) signaling and cell death in the immature central nervous system after hypoxia-ischemia and inflammation. *Journal of Biological Chemistry* 289:9430-9439.
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- Bercury, K.K., Dai, J., Sachs, H.H., Ahrendsen, J.T., Wood, T.L. and Macklin, W.B. (2014) Conditional ablation of raptor or rictor has differential impacts on oligodendrocyte differentiation and CNS myelination. *Journal of Neuroscience* 34:4466-4480.
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- 58. Flannery, C.A., Rowzee, A.M., Choe, G., Saleh, F., Taylor, H.S. and **Wood, T.L.** (2016) Development of a quantitative PCR assay for detection of human insulin-like growth factor receptor and insulin receptor isoforms. *Endocrinology* 157:1702-8.
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- 60. Jiang, M., Liu, L., He, X., Wang, H., Lin, W., Wang, H., Yoon, S.O., **Wood, T.L.** and Lu, Q.R. (2016) Regulation of PERK-eIF2α signaling by tuberous sclerosis complex-1 controls homeostasis and survival of myelinating oligodendrocytes. *Nature Communications* 7:12185.
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- B. Books, Monographs and Chapters
 - Christakos, S., Wood, T.L., Varghese, S. and Tobin A.J. Molecular cloning and regulation of the mammalian 28,000 M_r vitamin D-dependent calcium binding protein (Calbindin D_{28K}). In A.W. Norman, T.C. Vanaman and A.R. Means (Eds.), *Calcium Binding Proteins in Health and Disease* (pp. 276-284). New York: Academic Press; 1987.
 - 2. **Wood, T.L.**, Berelowitz, M. and McKelvy, J.F. Hormonal feedback regulation of brain IGF-I and IGF-II gene expression. In D. LeRoith and M.K. Raizada (Eds.), *Molecular and Cellular Biology of Insulin-like Growth Factors and their Receptors* (pp. 209-217). New York: Plenum Press; 1989.
 - 3. Pintar, J.E., **Wood, T.L.**, Streck, R.D., Havton, L., Rogler, L. and Hsu, M.-S. Expression of IGF-II, the IGF-II/mannose-6-phosphate receptor and IGFBP-2 during rat embryogenesis. In M.K. Raizada and D. LeRoith (Eds.), *Molecular Biology and Physiology of Insulin and Insulin-Like Growth Factors* (pp. 325-333). New York: Plenum Press; 1991.
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 - 6. **Wood, T.L.** Frederick, T.J. and Ness, J.K. IGF-I and brain growth: Multifarious effects on developing neural cells and mechanisms of action. In: <u>Research and Perspectives in Endocrine Interactions, Deciphering Growth,</u> eds. Carel, J.-C., Kelly, P.A. and Christen, Y. pp. 77-93; Springer-Verlag, Berlin Heidelberg; 2005.
 - 7. Jain, M.R., Tong, L., Wood, T.L. and Li, H. (2012) iTRAQ proteomics profiling of regulatory proteins during oligodendrocyte differentiation. In: <u>Neuromethods, Expression Profiling in Neuroscience</u>, Vol. 64, ed. Karamanos, Y. (Humana Press).

C. Patents Held

- U.S. Utility Application Entitled "Assay for the Measurement of IGF Type I Receptor and Insulin Receptor Expression" Serial No.: 12/721,327; issued as US Patent 8,377,655 on 02/19/2013
- D. Other Articles (Reviews, Editorials, etc.) In Journals; Chapters; Books; other Professional Communications
 - 1. **Wood, T.L.** Gene targeting and transgenic approaches to IGF and IGF binding protein function. Invited Review. *American Journal of Physiology* 269 (*Endocrinology and Metabolism* 32): E613-E622, 1995.
 - **2. Wood, T.L.** and Yee, D. Introduction: The IGFs and IGFBPs in the normal mammary gland and in breast cancer. (Special Issue on the IGFs and IGFBPs in mammary gland development and breast cancer, **T.L.Wood** and D.Yee guest editors). *Journal of Mammary Gland Biology & Neoplasia* 5:1-5, 2000.

- 3. **Wood, T.L.**, Richert, M.M., Stull, M.A. and Allar, M.A. Insulin-like growth factors and insulin-like growth factor binding proteins during postnatal development of murine mammary glands. *Journal of Mammary Gland Biology & Neoplasia* 5:39-42, 2000.
- 4. Stull, M.A. and **Wood, T.L.** Expression of IGF system components in the normal mammary gland. Invited Review, special edition on the Insulin-Like Growth Factors, D.Yee (Ed), *Breast Disease 17*:15-26, 2003.
- 5. Rowzee, A.M., Lazzarino, D.L., Rota, L., Sun, Z. and **Wood, T.L.** IGF ligand and receptor regulation of mammary development. *Journal of Mammary Gland Biology & Neoplasia* 13:361-370, 2008.
- 6. Yee, D. and **Wood, T.L.** The IGF system in mammary development and breast cancer (Preface). *Journal of Mammary Gland Biology & Neoplasia* 13:351-352, 2008.
- 7. Romanelli, R.J. and **Wood**, **T.L.** Directing traffic in neural cells: Determinants of receptor tyrosine kinase localization and cellular responses. *Journal of Neurochemistry* 105:2055-2068, 2008.
- 8. Kleinberg, D., **Wood, T.L.,** Lee, A,V. and Furth, P.A. (2009) IGF-I in the transition from normal mammary development to preneoplastic mammary lesions. *Endocrine Reviews* 30:51-74.
- 9. Rota, L.M.*, Lazzarino, D.A.*, Ziegler, A., LeRoith, D. and Wood, T.L. (2012) Determining mammosphere-forming potential: Application of the limiting dilution analysis. *Journal of Mammary Gland Biology & Neoplasia* 17:119-123. *authors contributed equally
- 10. Bentires-Alj, M. and Wood, T.L. Introduction: Methods in Mammary Gland Biology and Breast Cancer (2012) *Journal of Mammary Gland Biology*. & *Neoplasia* 17:89-90.
- 11. **Wood, T.L.**, Bercury, K.K., Cifelli, S.E., Mursch, L.E., Min, J., Dai, J. and Macklin, W.B. (2013) mTOR: A link from the extracellular milieu to transcriptional regulation of oligodendrocyte development. *ASN Neuro* 5(1):63-79.
- 12. Ziegler, A.N., Levison, S.W. and **Wood, T.L.** (2014) Insulin and IGF receptor signaling in neural stem cell homeostasis. (invited review) *Nature Reviews Endocrinology*, advance online publication 2 December 2014; doi:10.1038/nrendo.2014.208.
- 13. Rota, L.M. and **Wood, T.L.** (2015) Crosstalk of the insulin-like growth factor receptor with the Wnt signaling pathway in breast cancer. (invited mini-review) *Frontiers in Endocrinology*, section *Cancer Endocrinology* Jun 9;6:92. doi: 10.3389/fendo.2015.00092. eCollection 2015. Review.
- 14. Ornelas, I.M., McLane, L.E., Saliu, A., Evangelou, A.V., Khandker, L., and **Wood, T.L.** (2016) Heterogeneity in Oligodendroglia: Is it Relevant to Mouse Models and Human Disease? *Journal of Neuroscience Research*, 94:1421-1433, doi: 10.1002/jnr.23900, Epub 2016 Aug 25. Review.

PRESENTIONS:

1993

The Wistar Research Institute, PA, "The IGF Binding Protein-2 Gene: Developmental Expression and Genetic Deletion by Gene Targeting"

Department of Biochemistry, UMDNJ, Newark, NJ, "The IGF Binding Protein-2 Gene: Developmental Expression and Genetic Deletion by Gene Targeting"

Center for Biotechnology and Medicine, UMDNJ, Piscataway, NJ, "The IGF Binding Protein-2 Gene: Developmental Expression and Genetic Deletion by Gene Targeting"1994

Department of Endocrinology, PSU/Hershey Medical Center, PA, "Functional Studies of the IGF Binding Proteins: Lessons from Mouse Models"

Department of Pharmacology, PSU/Hershey Medical Center, PA, "Using Gene-Targeted Mouse Lines to Study IGF Binding Protein Expression and Function in Reproductive Tissues"

1995

Department of Endocrinology, PSU/Hershey Medical Center, PA, "Expression of IGFs and IGFBPs in Developing Mammary Gland"

Fifth International Insulin and IGF Symposium, Gainesville, FL, "Regulation of Brain IGFBP-2 and the Type I IGF Receptor by Ciliary Neurotrophic Factor"

Third International Symposium on IGFBPs, Tuebingen, Germany, "Cytokines Regulate IGF Binding Proteins in the CNS"

Department of Biology, PSU, PA, "Cytokine Regulation of Injury-Associated Growth Factors in the CNS"

1996

Winter Conference on Brain Research, Snowmass, Colorado, "Regulation of Brain IGFBP-2 and the Type I IGF Receptor by Ciliary Neurotrophic Factor"

Department of Biochemistry, PSU/College of Medicine, PA, "IGFs and their Binding Proteins: Induction by Trauma and Cytokines in the Brain"

Genetics Colloquium, PSU, State College, PA, "Using Gene-Targeted Mouse Lines to Study IGF Binding Protein Expression and Function in Reproductive Tissues"

Department of Anatomy, West Virginia University, Morgantown, West Virginia, "Gene Targeting Approaches to Reveal IGF and IGF Binding Protein Functions"

1997

Department of Endocrinology, PSU/College of Medicine, Hershey, PA, "Update on the IGFBP-2 Knock-out Mouse"

Cephalon Pharmaceuticals, West Chester, PA, " Developmental Expression and Targeting of the IGFBP-2 Gene"

Cell and Molecular Biology Seminar Series, PSU/College of Medicine, Hershey, PA, "IGF Binding Proteins in Development and CNS Injury: Regulators of IGF Availability"

Department of Neurology, University of Michigan, Ann Arbor, MI, "Trophic Factors in the CNS: In Vivo Approaches to Investigate Regulation and Function"

The Wistar Institute and The University of Pennsylvania, Philadelphia, PA, "Manipulating adult oligodendrocytes in vivo: Growth and trophic factor synergisms"

1998

Winter Conference on Brain Research, Snowbird, Utah, Workshop Organizer and Speaker, "Strategies for Remyelination: From Stem Cells to Sheaths"

Genetics Colloquium, PSU, State College, PA, "Regulation and Function of the IGFs and IGFBPs during Normal Development of the Mouse Mammary Gland"

Department of Cell Biology, University of North Carolina, Chapel Hill, NC, "Insulin-Like Growth Factors in the Developing Mammary Gland"

Department of Anatomy, Uniformed Services University of the Health Sciences, Bethesda, MD, "Mechanisms of Ciliary Neurotrophic Factor Action in the CNS"

1999

Gordon Conference on Mammary Gland Biology, Henniker, NH, "Roles for the IGFs and IGF Binding Proteins in Mammary Ductal Growth"

5th International Symposium on Insulin-Like Growth Factors, Brighton, England, "IGF-Mediated Growth of Mammary Epithelium during Ductal Development in the Mouse"

Department of Molecular and Cellular Physiology, PSU/College of Medicine, "The IGFs and IGFBPs in Mammary Epithelial Growth in the Mouse"

2000

Department of Physiology, University of Colorado School of Med, Denver, CO, "Deciphering Functions of the IGFs and IGFBPs in the Postnatal Mammary Gland"

Department of Biochemistry, UMDNJ, Newark, NJ, "IGF-Mediated Growth of Mammary Epithelium in the Mouse"

Gordon Conference on Myelin, Invited Speaker, Luca, Italy, "Growth Factor Interactions in Oligodendrocyte Generation"

Baylor College of Med Postdoctoral Association Seminar Series, Houston, TX, "Deciphering Functions of the IGFs and IGFBPs in the Developing Mammary Gland"

Rutgers University, Department of Animal Sciences, "Deciphering Functions of the IGFs and IGFBPs in the Developing Mammary Gland"

2001

Kutztown University, "Transgenic and Gene-Targeting Approaches to Investigate Gene Function" Penn State Cancer Center, "IGF-Mediated Growth of Breast Epithelium"

2002

Clinical Endocrinology Branch, NIH, "Role of IGFs and IGF-IR in Mammary Epithelial Growth"
Department of Endocrinology, New York University, "Deciphering Functions of the IGFs and IGFBPs in the Developing Mammary Gland"

Department of Pathology, University of Virginia, "The IGFs and IGF-IR in Mammary Epithelial Growth and Function"

Rutgers University, Department of Animal Sciences, "The IGFs and IGF-IR in Mammary Epithelial Growth and Function"

Department of Pharmacology, Penn State College of Medicine, "The IGFs and IGF-IR in Mammary Epithelial Growth and Function"

Department of Cell Biology, Georgetown University School of Medicine, "The IGFs and IGF-IR in Mammary Epithelial Growth and Function"

Department of Biomedical Sciences, Ohio University, "The IGFs and IGF-IR in Mammary Epithelial Growth and Function"

Neuroscience Program sponsored Research Day, Penn State University, "Proliferation and Cell Cycle Regulation in Oligodendrocyte Progenitors"

Department of Physiology, University of Chicago Medical Center, "The IGFs and IGF-IR in Mammary Epithelial Growth and Function"

Third Hershey Conference on Developmental Cerebral Blood Flow and Metabolism, Invited Speaker, "Glutamate-Mediated Apoptosis and Trophic Factor Protection of Immature Oligodendrocytes"

Weiss Center for Research, "Death and Survival in the Oligodendrocyte Lineage: Differential Effects of Trophic Factors on Akt Activation"

Department of Neuroscience, University of Connecticut Health Center, "Survival of Oligodendrocyte Progenitors: Differential Effects of Trophic Factors on Akt Activation"

2003

Department of Neuroscience, Syracuse University Medical Center, "Proliferation and Survival in the Oligodendrocyte Lineage"

Endocrinologie Moleculaire, Inserm, Faculte De Medecine Necker, Paris, France, "IGF-I in Cell Cycle Checkpoint Progression: General and Tissue-Specific Effects"

Department of Neurology & Neurosciences, UMDNJ, Newark, "Proliferation and Survival in the Oligodendrocyte Lineage"

Juvenile Diabetes Foundation/Penn State University Workshop on Diabetic Retinopathy, "Trophic Factors and Survival Pathways in Neural Cells"

8th International Pituitary Congress, NYC, "Overview of GH and IGF Actions in the Central Nervous System"

Athens Conference on GH, IGF and Prolactin, Athens, Ohio, "Context Dependency of IGF Actions

in Proliferation, Survival and Differentiation"

2004

Winter Conference on Brain Research, Copper, Colorado, Invited Symposium speaker, "Glutamate-Mediated Death and Trophic Factor Protection of Oligodendrocyte Progenitors"

Department of Pharmacology, University of Florida, Gainesville, Florida, "Mechanisms of Excitotoxic Death and Trophic Factor Protection in Oligodendrocyte Progenitors"

NIH, Division of Diabetes & Metabolism, Bethesda, MD, "IGF Regulation of Cell Cycle and Differentiation in Mammary Epithelial Cells"

Gordon Research Conference on Myelin Biology, Il Ciocco, Italy, Invited speaker, "Convergence of Signaling Pathways on Cell Cycle Targets in Oligodendrocyte Progenitors"

Penn State Children's Hospital, Pediatric Research Day, June 3, Hershey, PA, "Mechanisms of Death and Survival in the Perinatal Brain"

Annual Meeting of the Endocrine Society, New Orleans, Invited Symposium speaker, "Insulin-Like Growth Factors and Cell Cycle Progression in the Mammary Gland"

Endocrine Retreat 2004, Bel Air Castle, Beaugency, France, Invited Speaker, "IGF Receptor Signaling Pathways in Oligodendrocyte Progenitors"

Ipsen Foundation Symposium – Deciphering Growth, Paris, France, "IGF-Mediated Pathways that Regulate Brain Growth"

2005

Universidad Central del Caribe, April 14, Bayamon, Puerto Rico, "Mechanisms of Excitotoxic Death and Trophic Factor Protection in Oligodendrocyte Progenitors"

New Jersey Medical School, UMDNJ Tumor Board, October 17, "Insulin-like Growth Factor Signaling and Function in Mammary Epithelial Cells and Breast Cancer Cells"

International Conference: The Role of the IGF System in Cancer, November 10-12, Taormina, Italy, "The IGF-IR in Breast Development and Cancer"

Albert Einstein College of Medicine of Yeshiva University, Department of Pathology, November 29, "IGF Receptor Signaling Pathways and Targets in Oligodendrocyte Progenitors"

2006

Department of Reproductive Sciences, University of Colorado Health Sciences Center, January 20, "Functions of Epithelial and Stromal IGF-I in Mammary Development"

Department Neurology & Neurosciences, Grand Rounds, NJMS/UMDNJ, March 1, "Pathways of Death and Survival in Oligodendrocytes"

American Society for Neurochemistry, Portland, OR, March 12, "IGF-I-Mediated Signaling Pathways and Downstream Targets in Oligodendrocyte Progenitors"

Dept. Medicine, Brown University Medical School, March 28, "IGF Receptor Trafficking and Sustained Akt Phosphorylation in Neural Progenitors"

Department of Biochemistry & Molecular Biology, New Jersey Medical School/UMNDJ, April 6, "IGF Receptor Signaling Pathways and Targets in Oligodendrocyte Progenitors"

Fifth Hershey Conference on Developmental Cerebral Blood Flow and Metabolism, Invited Speaker, June 2, "Death and Survival Pathways in Perinatal Oligodendrocytes"

Department of Biology, Rutgers University, September 26, "IGF Receptor Signaling Pathways and Trafficking in Oligodendrocyte Progenitors"

2007

Gordon Research Conference on IGFs in Physiology and Disease, March, 19, "IGF-I is a Master Regulator of CNS Progenitor Development"

NJMS Tumor Board, May, 7, "Insulin-like Growth Factors and Receptors in Mammary Epithelial Growth"

ImClone Systems, New York, May 10, "New considerations for understanding IGF-IR signaling in mammary and neural epithelial cells"

New Jersey Medical School, Symposium on Neuroprotection and Neuropeair: Pharmacology to Stem Cells, May 14, "Pathways and Targets of IGF-I Mediated Neuroprotection"

NovoNordisk/Hagedorn Research Institute, Copenhagen, September 13, "IGF Signaling Pathways in CNS Progenitors"

National Multiple Sclerosis Society Regional Conference, Parsippany, NJ, October 14, "Stem Cells & Beyond: Emerging Therapies for CNS Repair in MS"

Dept. Physiology, University of Cincinnati, Nov 13, "Insulin, IGF and Hybrid Receptors in Mammary Epithelial Cells – the Plot Thickens for IGF Signaling"

2008

Program Project Grant Retreat, Denver Health Sciences Center, January 17, "New Perspectives on IGF Signaling in Mammary Gland Development and Breast Cancer"

Winter Conference on Brain Research, January 30, "IGF Signaling and Oligodendrocyte Development"

Endocrine Grand Rounds, NYU School of Medicine, February 15, "New Perspectives on IGF Signaling in Mammary Gland Development and Breast Cancer"

Department of Pharmacology, Emory University School of Medicine, April 1, "IGF Signaling Pathways and Function in Oligodendrocyte Progenitors"

University of Sydney, Australia, May 6, "IGF Signaling in Mammary Epithelial Cells"

- School of Molecular and Biomedical Science, University of Adelaide, Australia, May 14, "Diverse Roles for IGF-I and PI3K/Akt Signaling in CNS Progenitors"
- IGF-OZ 2008 Meeting on The IGF System and Related Proteins in Development and Disease, Adelaide, Australia, May 15-16, Keynote International Speaker, "New Perspectives on IGF Signaling in Mammary Development and Breast Cancer"
- Chicago Myelin Afficionado Group, Aug. 25, "Diverse Roles for IGF-I and PI3K/Akt Signaling in Oligodendrocyte Progenitors"
- UCLA, October 31, "Diverse Roles for IGF-I and PI3K/Akt Signaling in Oligodendrocyte Progenitors"

2009

- Pathology Department, NJMS/UMDNJ, January 8, "New Perspectives on IGF Signaling in Mammary Development and Breast Cancer"
- Program Project Grant Retreat, Denver Health Sciences Center, January 23, "Mysteries of IGF-IR and Insulin Receptor Signaling in Mammary Epithelial Cells"
- Center for Neuroscience Research, Children's Research Institute, Children's National Medical Center, Washington D.C., April 3, "Diverse Roles for IGF-I and PI3K/Akt Signaling in Oligodendrocyte Progenitors"
- Institutes of Brain Science, Fudan University, Shanghai, China, April 9, "The Mammalian Target of Rapamycin (mTOR) Pathway in Differentiation of Oligodendroglia"
- Second Shanghai Forum in Neonatology, Shanghai, China, April 10-11, "Cell Death and Survival Pathways in Oligodendrocyte Progenitors: Why Glioprotective Strategies may differ from Neuroprotective Strategies"
- Developmental Biology Program for Pediatric Disorders, CHOP/UPENN, June 2, "The Mammalian Target of Rapamycin (mTOR) Pathway in Differentiation of Oligodendroglia"
- Endocrine Society Annual Meeting, Invited Symposium Speaker, Washington D.C., June 12, "IGF Regulation of Neural Stem/Progenitor Cells"
- Myelin Satellite Meeting, Gyeongju, South Korea, August 20, "PI3K/Akt/mTOR Signaling in Oligodendrocyte Differentiation"
- International Society for Neurochemistry Conference, Invited Symposium Speaker, Busan, South Korea, August 26, "PI3K/Akt/mTOR Signaling in Oligodendrocyte Differentiation"
- Euroglia 2009 Conference, Paris, France, September 11, "The PI3K/Akt/mTOR Pathway in Oligodendrocyte Differentiation"

2010

- Program Project Grant Retreat, Denver Health Sciences Center, January 21, "Disruption of IGF Signaling during Alveolar Differentiation"
- Myelin Gordon Research Conference, February 16, "Targets of mTOR Signaling and Oligodendrocyte Differentiation"
- Department of Molecular, Cellular & Developmental Biology, University of Michigan, Ann Arbor, April 9, "PI3K/Akt/mTOR Signaling in Oligodendrocyte Differentiation"
- Department of Animal Sciences, Rutgers University, New Brunswick, April 23, "New Perspectives on IGF-IR and Insulin Receptor in Mammary Epithelial Cells"
- SUNY Glial Biology Seminar Series, Stony Brook, NY, April 30, "Unraveling mTOR Signaling and the Differentiation Program in Oligodendroglia"
- Department of Cell Biology, New York University, New York, May 18, "Unraveling mTOR Signaling and the Differentiation Program in Oligodendroglia"
- Hershey Conference on Developmental Brain Injury, Snowbird, Utah, June 3, "Mechanism of Glutamate Excitotoxicity in Oligodendrocyte Progenitors"
- Endocrine Society Annual Meeting, San Diego, CA, June 19, "Insulin-like Growth Factor Signaling Regulates Stem/Progenitor Cells in the Epithelium of Virgin Mouse Mammary Glands"
- Foundation des Treilles Conference on Myelinating Glia: Development, Function and Pathobiology, October 19, "Signaling in the Oligodendrocyte Lineage"

2011

- Program Project Grant Retreat, Denver Health Sciences Center, January 21, "IGF Regulation of Mammary Epithelial Lineage and Differentiation"
- Winter Conference on Brain Research, Keystone, CO, January 26, "mTOR Signaling in Oligodendrocyte Differentiation and Myelination"
- Genetics Department, Einstein College of Medicine, February 16, "IGF Regulation of

Mammary Epithelial Lineage and Differentiation"

Neurology Grand Rounds, Robert Wood Johnson Medical School/UMDNJ, March 16, "Mechanisms of Remyelination and Repair in Multiple Sclerosis: From Mice to (Wo)Men"

Honorary Symposium for Dr. Margaret Neville, Department of Obstetrics & Gynecology, Denver Health Sciences Center, Denver, CO, May 11, Keynote speaker, "What Breasts and Brains can tell us about IGF Receptors in Stem/Progenitor Cell Regulation"

International Society for Neurochemistry, Athens, Greece, August 30, "mTOR Signaling in Oligodendrocyte Differentiation"

Dept. Anatomy & Cell Biology, Schulich School of Medicine and Dentristry, University of Western Ontario, London, Ontario, Canada, September 22

Biomedical Engineering Program, NJIT, Newark, NJ, November 4, "Targeting CNS Repair: Signaling Pathways that Regulate Myelination and Remyelination"

2012

Winter Conference on Brain Research, Snowbird, Utah, January 22, "Trails to Myelination and Shutes to Oligodendrocytes"

Molecular, Cellular, Developmental Endocrinology Program, Yale University School of Medicine, February 24, "What Breasts and Brains can tell us about IGF/Insulin Receptors in Stem & Progenitor Cell Regulation"

American Society for Neurochemistry, Symposium, Baltimore, MD, March 5, "Extrinsic to Intrinsic Signaling in OPCs: Impact of mTOR Signaling in Oligodendrocyte Differentiation and Myelination"

Max Plank Institute for Experimental Medicine, Göttingen, Germany, October 22, "Extrinsic to Intrinsic Signaling in Neural Stem Cells and OPCs"

2013

ISN 2013 Satellite Meeting - Myelin: from Basic to Translational Research, Cancun, Mexico, April 16-19, Opening Keynote Address, "Extrinsic to Intrinsic Signaling in OPCs: Impact of mTOR Signaling in Oligodendrocyte Differentiation and Myelination"

Northeast Regional MS Symposium, Boston, MA, September 21, "The mTOR Pathway in Oligodendrocyte Differentiation and Myelination"

Obesity, Diabetes and Cancer: The role of Insulin and Insulin-like Growth Factors, Taormina, Italy, October 4, "The Role of the IGF System in Stem Cells and Cancer Stem Cells"

2014

Human Genetics Institute of NJ/Stem Cell Program, Rutgers University, April 17th, "Insulin and IGF receptor signaling in neural stem cell homeostasis"

Plenary Speaker, 16th International Congress of Endocrinology and Endocrine Society 96th Annual meeting, Chicago, IL, June 21st, "Insulin and IGF Receptor Signaling in Stem Cell Homeostasis" Cancer Institute of New Jersey, September 10th, "IGF/insulin receptor and Wnt signaling interactions

Cancer Institute of New Jersey, September 10th, "IGF/insulin receptor and Wnt signaling interac in mammary development and tumorigenesis"

Immunology-Cancer Biology Seminar Series, Cedars-Sinai Medical Center/UCLA, September 18th, Department of Biology, Carleton College, September 22nd, Signaling Pathways Regulating Neural Stem/Progenitor Cell Homeostasis and Myelination in the CNS

International Congress of the Growth Hormone Research and IGF Societies, October 18th, Singapore "Insulin-like Growth Factor Receptor Inhibition in Mammary Epithelium enhances Wnt1-Mediated Tumors, Canonical Wnt Signaling and IGF-II/Insulin-Receptor A Expression"

Brain and Spine Institute, L'Institut du Cerveau et de la Moelle Épinière (ICM), Paris, November 24, "IGF/Insulin and mTOR signaling in Neural Stem Cell Homeostasis and CNS Myelination"

2015

Symposium Speaker, Endocrine Society Annual Meeting, March 5th, San Diego, CA., "IGF/insulin receptor and Wnt signaling interactions in mammary development and cancer"

Descartes University, April 7, Paris, "Extrinsic to Intrinsic Signaling in OPCs: Impact of mTOR Signaling in Oligodendrocyte Differentiation and Myelination"

Conference on Novel Mechanisms of Signal Transduction Involved in Cancer Chemoresistance, University of Catanzaro, Italy, May 6th, "IGF-1R and Wnt signaling cross-talk in triple-negative breast cancer"

Endocrinologie Moleculaire, Inserm, Faculte De Medecine Necker, Paris, France, May 22nd, "IGF/insulin receptor and Wnt signaling cross-talk in triple-negative breast cancer"

CNRS/Muséum National d'Histoire Naturelle, Paris May 26th, "IGF/insulin and mTOR Signaling in

- Neural Stem Cell Homeostasis and CNS Myelination"
- Invited speaker, ELA Foundation, Paris, France June 25th, "Extrinsic to Intrinsic Signaling in Oligodendrocyte Progenitors"
- Inserm, Hôpital Robert Debré, Paris Diderot Université, Paris, France, July 2nd, "mTOR Signaling in Oligodendrocyte Differentiation and Myelination"
- Department of Physiology, Anatomy & Genetics, St. Anne's College, University of Oxford, UK, July 10th, "IGF/insulin and mTOR Signaling in Neural Stem Cell Homeostasis and CNS Myelination"
- Symposium speaker and Session Chair, XII European Meeting on Glial Cells in Health and Disease, Bilbao, Spain, July 17th, "mTOR Signaling in Oligodendrocyte Progenitor Cell Differentiation and Myelination"

2016

- Department of Cell Biology, Rutgers University, "IGF/insulin and mTOR Signaling in Neural Stem Cell Homeostasis and CNS Myelination"
- 8th International Congress of the GRS and IGF Society, Tel Aviv, Israel, "Loss of IGF-1R in the Luminal Lineage promotes Basal and Metastatic Phenotypes in the Wnt model of Triple Negative Breast Cancer"
- Child Health Institute, Rutgers University, "mTOR Signaling in Oligodendrocyte Progenitor Cell Differentiation and Myelination"

2017

- Gordon Research Conference on Insulin and IGF Signaling in Physiology & Disease, Ventura, CA, Invited Speaker, "Insulin and IGF Receptor Signaling in Neural Stem Cell Homeostasis"
- American Society for Neurochemistry Meeting, Little Rock, AR, Symposium Speaker, "TSC and mTOR Signaling in Oligodendrocyte Differentiation and Remyelination"
- Children's Health Research Institute, University of Western Ontario, Canada, "IGF-II and Insulin Receptor Signaling in Adult Neural Stem Cell Homeostasis"
- International Society for Neurochemistry ISN/ESN Conference, Paris, France, Symposium Organizer & Chair, "Insulin and IGF Signaling in the Adult Brain: New Functions in Stem Cells, Plasticity, Aging and Neurodegeneration"; Speaker, "Insulin and IGF Receptor Signaling in Neural Stem Cell Homeostasis"
- Neuroscience Department, U. Connecticut Medical School, Farmington, CT, "TSC and mTOR Signaling in Oligodendrocyte Differentiation and Remyelination"

2018

- Rutgers Brain Health Institute, Alzheimer's Disease and Neurodegeneration Symposium, Invited Speaker, "White Matter Vulnerability: Intracellular Signaling Pathways in Oligodendroglia that Regulate Demyelination and Repair"
- Cancer Institute of New Jersey, Cancer Metabolism & Growth Program, "A Paradigm Shift for IGF-1R in Breast Cancer: Loss of IGF-1R Function Promotes Microenvironment changes and Metastasis in a Model of TNBC"