

SALLY ANN MOODY**CURRICULUM VITAE**

Birth place: Troy, New York, USA

EDUCATION:

Goucher College 1970 - 1973 B.A. Biological Sciences

University of Maryland 1974 - 1976 M.S. Anatomy
 Thesis Advisor: Richard M. Meszler, Ph.D.
 Thesis Title: "Sub-nuclear Organization of the Ophidian Trigeminal Motor Nucleus"

University of Florida 1976 - 1981 Ph.D. Neuroscience
 Dissertation Advisor: Marieta B. Heaton, Ph.D.
 Dissertation Title: "Extrinsic Influences on the Migration of Trigeminal Motor Neuroblasts in Chick Embryos"

University of Utah 1981 - 1983 Postdoctoral fellow
 Sponsor: Marcus Jacobson, M.D., Ph.D.
 Title: "Initial Axon Outgrowth and Guidance in *Xenopus* Embryos"

PROFESSIONAL EXPERIENCE:

Assistant Professor 1983 - 1989. University of Virginia School of Medicine,
 Department of Anatomy and Cell Biology
 1987 - 1989. Joint appointment, Dept. Neuroscience

Associate Professor 1989 - 1992. University of Virginia School of Medicine,
 Department of Anatomy and Cell Biology, tenured.
 1989 - 1992. Joint appointment, Dept. Neuroscience, tenured
 1989 - 1992. Director, NICHD T32 Training Program in
 Neurobiological and Behavioral Development
 1992 - 1994. The George Washington University Department
 of Anatomy and Cell Biology, tenured.
 1992 - 1994. Associate Professor of Genetics

Professor 1994 - present. The George Washington University
 Department of Anatomy & Cell Biology

Interim Chair 2016 - 2017. The George Washington University
 Department of Anatomy & Cell Biology

Chair 2018 - present. The George Washington University
 Department of Anatomy & Cell Biology

Director 1994 - 1996. Neuroscience Graduate Program, GWU

Associate Director 2002 - 2004. Institute for Biomedical Sciences, GWU

Program Official 2004-2006. NIH-NICHHD, Developmental Genetics and Genomics Program

Honorary Professor 2006. Peking Union Medical College, Chinese Academy of Medical Science, Beijing, China

TEACHING EXPERIENCE

Medical Student Courses:

Gross Anatomy, Univ. Maryland, University of Virginia
Neuroanatomy, Univ. Maryland, Univ. Florida, Univ. Utah, Univ. Virginia
Veterinary Comparative Neuroscience, University of Florida
Neurobiology, George Washington University School of Medicine

Graduate Student Courses:

Colloquium in Neuroanatomy, "Motor Systems", University of Virginia, co-director
Survey of Neuroscience, University of Virginia, instructor
Experimental Methods in Cell & Developmental Biology, University of Virginia, director
Development of the Nervous System, University of Virginia, course director
Developmental Biology, University of Virginia, instructor
Advanced Topics in Developmental Neurobiology, University of Virginia, course director
Advanced Topics in Neurobiological & Behavioral Development, Univ. Virginia, director
Cell Interactions in Development, University of Virginia, course director
Gene Expression in Nervous System Development, George Washington Univ, director
Seminars in Developmental Genetics, George Washington Univ, course director
Cell-Cell Interactions in Nervous System Development, GWU, course director
Advanced Readings in Genetics (GEN 398), George Washington Univ., lecturer
Careers in Biomedical Science (BMSC 217), George Washington Univ., course director
Development and Immunology (BMSC 213), George Washington Univ., course director
Career Skills: Writing and Presenting Data (BMSC 216), GWU, course director
Career Skills: Ethics and Grantsmanship (BMSC 218), GWU, course director
Advanced Problems in Genetics (GEN 301), George Washington Univ., lecturer.
Developmental Neurobiology (ANAT 253), George Washington Univ., lecturer
Developmental Genetics (ANAT 260), George Washington Univ., course director
Molecular Medicine (BMSC 214), GWU, stem cell section director and lecturer
Advanced Topics in Stem Cell and Regenerative Biology (ANAT 221), GWU, course director
Advanced Research in Stem Cell and Regenerative Biology (ANAT 222), GWU, course director
Developmental Cell Biology (BMSC 8212), GWU, lecturer 2008 - 2018
Human Embryology (ANAT 2130/6130), GWU, lecturer 2014, 2015
Developmental Neurobiology, Uniformed Services University of the Health Sciences graduate program in Neuroscience, guest lecturer, 2013, 2014, 2016, 2017
Developmental Biology, GWU guest lecturer and lab demonstrator, 2013, 2016
Developmental Biology, invited lecturer for Marymount University Biology Olympiad, 2016
Special Topics in Regenerative Medicine (ANAT 6223), GWU, course director, 2016
Clinically Oriented Human Functional Neuroanatomy (ANAT 2160/6160), lecturer, Spring 2017, 2020
Neural Development and Neurodevelopmental Disorders (MMED 8282), lecturer, 2017 - 2018

Fundamentals of Translational Science (ANAT 6182), lecturer, 2014 - present

International Courses:

- "*Neurobiology*", Marine Biology Laboratory, Woods Hole, Instructor, 1992, 1993, 1994
"*Neurobiology of Animal Behavior*", Cornell University Shoals Marine Laboratory, Instructor, 1992, 1993
"*Cell and Developmental Biology of Xenopus*", Cold Spring Harbor Laboratory, Director 1997-2000.
Guest Lecturer 2001 - 2002
"*Global Ecosystem – Israel*", joint graduate course between Hebrew University and University of Hohenheim (Germany), invited lecturer, Spring 2018
"*Developmental Genetics*" (#94921), graduate course at Hebrew University of Jerusalem-Hadassah Medical School, invited lecturer, Spring 2018
"*Latin American Practical Course in Embryology*", Quintay Marine Biology Station, Chile, Invited lecturer and laboratory instructor, January 2020

HONORS, FELLOWSHIPS AND AWARDS:

- Leah Seidman Shaffer Award for Microbiological Research, Goucher College, 1973
Graduate Council Fellowship, University of Florida, 1976 - 1977
Center for Neurobiological Sciences Traineeship (NIH T32), Univ. Florida, 1977 - 1978
NIH-NIMH Predoctoral National Research Service Award (F31 MH07541) "Mechanisms of Neuroblast Migration", 1978 - 1980
Adams-Morgan Embryology Predoctoral Fellowship, American Association University Women, 1981
Grass Foundation Scholarship, Cold Spring Harbor Laboratory, "Principles in Neural Development", 1980
NIH-NINDS Postdoctoral National Research Service Award (F32 NS06955). "Initial Axon Outgrowth and Guidance in *Xenopus* Embryos", 1981 - 1983
March of Dimes Basil O'Connor Starter Scholar Research Grant, 1985 - 1987
Alfred P. Sloan Foundation Neuroscience Research Fellowship, 1985 - 1987
NIH-NINDS Research Career Development Award (K04 NS01373) "Neuronal Lineage Determinants in Frog Embryos", 1989 - 1994
GWU Medical Center Distinguished Researcher Award, 1996
Columbian School Award for Excellence in Graduate Advising, 1996
Elected Fellow of the American Association of Anatomists, 2018
Elected Full Member of *Sigma Xi* Scientific Research Honor Society, 2020

FUNDED RESEARCH AWARDS:

- NIH-UVA Biomedical Research Support Grant S07 RR05431, July 1983 - June 1984, "Lineage Relationships Between Pioneer Axons and Their Targets". S.A. Moody, Principal Investigator.
NIH-NINCDS Grant R01 NS20604, April 1984 - March 1987, "Axon Guidance by Clonal and Compartment Affiliations". S.A. Moody, Principal Investigator.
March of Dimes Basil O'Connor Starter Scholar Research Grant 5-527, September 1985 - August 1987, "Genetic and Lineage Determination of the Development of Muscular and Cutaneous Innervation". S.A. Moody, Principal Investigator.

Alfred P. Sloan Foundation Research Fellowship in Neuroscience, September 1985 - August 1987. S.A. Moody, Principal Investigator.

Amyotrophic Lateral Sclerosis Association Grant, January 1987 - July 1991, "Lineage Determination of Specific Neuromuscular Connections". S.A. Moody, Principal Investigator.

NIH-NINDS Research Career Development Award K04 NS01373, April 1989 - March 1994, "Neuronal Lineage Determinants in Frog Embryos". Principal Investigator.

NIH-NEI Grant R01 EY10096, August 1992 - March 2006, "Determination of Neurotransmitter Phenotype in Retina". S.A. Moody, Principal Investigator.

NIH-NINDS Grant R01 NS23158, January 1986 - May 2009, "Neuronal Lineage Determinants in Embryos". S.A. Moody, Principal Investigator.

NSF Grant IOS-0817902, July 2008 - June 2012, "Molecular Specification of the Pre-placodal Ectoderm". S.A. Moody, Principal Investigator.

GWU Medical Center Facilitation Fund, July 2010 - June 2011, "Is the *foxd4* gene required to form neural stem cells?" S.A. Moody, Principal Investigator, A-S LaMantia, Co-I.

GWU Medical Center Facilitation Fund, July 2011 - June 2012, "Creating a *foxd4* knock-out mouse". S.A. Moody, Principal Investigator, A-S LaMantia, Co-I.

NSF Grant MCB-1121711, December 2011 - November 2015, "Maternal Determinants of Neural Fate". S.A. Moody, Principal Investigator.

GWU Columbian College Facilitating Fund, July 2015 - June 2016. "Toward single-cell proteomics by mass spectroscopy for early embryo development. Peter Nemes, Principal Investigator; S.A. Moody, Co-PI.

NIH-NIDCR Grant R01 DE022065, August 2011 - June 2018, "Gene Regulation of Cranial Sensory Placode Development". S.A. Moody, Principal Investigator, A. Streit, Co-I.

NIH-NIGMS Grant R21-GM114854, September 2014 - October 2017. "In situ opto-guided microsampling single-cell mass spectrometry for elucidating cell heterogeneity" Peter Nemes, Principal Investigator; S.A. Moody, collaborator.

United States-Israel Binational Science Foundation Grant #2013422, October 2014 - September 2017. "The gene network that regulates neural plate size and regional specification". A. Fainsod, Principal Investigator, S.A. Moody, US collaborating Co-PI.

NSF Grant DBI-1455474, April 2015 - March 2019, IDBR: TYPE A – Development of an in situ single-cell mass spectrometer for mapping small-molecule expression in the developing embryo. Peter Nemes, Principal Investigator; S.A. Moody, Co-PI.

NIH-NICHD P01 HD083157, March 2015 - February 2021. "Pathology, Developmental Origins and Prevention of Pediatric Dysphagia" A.S. LaMantia, Principal Investigator, Director; S.A. Moody, Co-PI, Associate Director, 2015 - 2019 S. A. Moody, PI and Director, 2020 - 2021.

NIH-NIGMS R35 GM124755, January 2018 - December 2022. "Single-cell metabolomics and proteomics: The missing link to understanding vertebrate embryonic patterning" P. Nemes, Principle Investigator; S.A. Moody, Collaborator on Subcontract for 1st year of project (2018).

NIH-NIDCR R01 DE026434, August 2018 - June 2023, "Six1 Co-factors in Craniofacial Development". S.A. Moody, Principle Investigator; Co-Investigators: F. Pignoni, D. Alfandari.

United States-Israel Binational Science Foundation Grant #2017199, October 2018 - September 2022. "Retinoic Acid Regulation of Sensory Placode Differentiation". A. Fainsod, Principal Investigator, S.A. Moody, US collaborating Co-PI.

STUDENT SUPPORT AWARDS:

NINCDS National Research Service Award (F32 NS07868), October 1985 - September 1987, sponsor for Dr. Betty C. Gallagher. "Determination of a Neuronal Lineage"

NICHD National Research Service Award (F32 HD08055), August 1995 - July 1998, sponsor for Dr. Steven A. Sullivan. "Maternal Determinants of Nervous System Lineages"

NEI National Research Service Award (F32 EY06649), July 1995 - June 1998, sponsor for Dr. Kathryn B. Moore. "Signaling Pathways that Determine Retinal Lineages"

NICHD T32-HD07323, July 1986 - June 1996, "Training in Neurobiological and Behavioral Development", 4 postdoctoral, 2 predoctoral trainees, Principal Investigator, 1989 - 1992

March of Dimes Summer Science Research Program for Medical Students:
1986: Ms. Wendy Kauffman; 1987: Mr. Eric Trumble

University of Virginia Medical Student Summer Research Program:
1986: Mark Quigg, Michael Kline; 1989: Pamela Markiewicz-Wiseman, Daniel Bauer

NINDS 3 R01 NS23158-S1: Minority Supplement for Ms. Latania Akers, 1999 - 2001

NINDS 3 R01 NS23158-S3: Re-Entry Supplement for Dr. Karen M. Neilson, 2005 - 2007

NSF Supplement for Professor Charles Sullivan, Grinnell College sabbatical, 2010 - 2011

NSF Supplement for Elton Kane, minority high school student, 2010

GWU CCAS Luther Rice Undergraduate Research Fellowships for Mona Herold, 2011, 2012

GWU CCAS Luther Rice Undergraduate Research Fellowship for Max Mandelbaum, 2013

GWU CCAS Luther Rice Undergraduate Research Fellowship for Shailly Gaur, 2013

NIDCR 3 R01 DE022065-03S1 Disability Supplement for Mr. Andrew Donald, 2013 - 2015, (Declined)

GWU CCAS University Undergraduate Research Award for Max Mandelbaum, 2014

GWU CCAS Luther Rice Undergraduate Research Fellowship for Jay Pandya, 2014

GWU CCAS Luther Rice Undergraduate Research Fellowship for Alex Marchak, 2014

GWU Wilbur V. Harlan Scholarship for Alex Marchak, 2014

Fulbright Summer Institute Fellowship for Yeshwant Chillakuru, 2015

GWU CCAS University Undergraduate Research Award for Yeshwant Chillakuru, 2015

Thermo Scientific Pierce Scholarship for Yeshwant Chillakuru, 2015

GWU CCAS Luther Rice Undergraduate Research Fellowship for Yeshwant Chillakuru, 2016

Cosmos Club Award to Aparna Baxi, 2017 - 2018

GWU CCAS University Undergraduate Research Award for Sarah Ahsan, 2020

NIH F31 DC018742 individual predoctoral fellowship award to Aparna Baxi, 2020 - 2022

PROFESSIONAL SOCIETY MEMBERSHIP:

American Association for Anatomy
Association of Anatomy, Cell Biology and Neurobiology Chairs
International Society of Differentiation
International Society of Developmental Biology
Society for Craniofacial Genetics and Developmental Biology
Society for Developmental Biology
Society for Neuroscience

PROFESSIONAL ACTIVITIES:

Grant Review:

National Science Foundation, Ad Hoc Grant Reviewer for Developmental Neuroscience, Molecular Neuroscience, and Developmental Biology, 1983 - 2014

National Science Foundation, Developmental Neuroscience Advisory Panel Member, 1986

American Association of University Women, Selected Professions Fellowships, 1988 - 1995

National Institutes of Health, Neurology B2 Study Section, 1990 - 1994

Member of Site Visit Review Team for the program review of the Laboratory of Cellular and Molecular Biology, Food and Drug Administration, November 1992

American Institute of Biological Sciences reviewer for NASA, 1991 - 1993

NIH, Behavioral and Neurosciences Special Emphasis Panel, 1994

National Institutes of Health, NIGMS "Systems and Integrative Biology" Program, Site Visit and Special Emphasis Panel to review predoctoral training, July 1995

National Institutes of Health, NIDA "Neuroscience Networks" Special Emphasis Panel, 1995

National Academy of Sciences, National Research Council, Neuroscience and Physiology 2 Panel for Howard Hughes Medical Institute Predoctoral Fellowships, February 1996

National Institutes of Health, Cellular Biology and Physiology Special Emphasis Panel for Evaluating Minority Predoctoral Fellowship Applications (F-31), 1996 - 1998

National Institutes of Health, Neurological Sciences-2 Special Emphasis Panel for evaluating individual Postdoctoral Fellowship Applications (F32), 1997

National Institutes of Health, Cell, Development and Function Review Group for evaluating individual Postdoctoral Fellowship (F32) Applications, 2001

National Institutes of Health, Mammalian Genetics Review Panel, 2002, 2003

National Institutes of Health, NCRR Special Emphasis Review Panel for Rat Embryonic Stem Cells, ZRR1, CM-3 01, Comparative Medicine, 2003

National Institutes of Health, Genome Study Section, 2003

National Institutes of Health, NEI Loan Repayment review panel, 2003

Guy's & St. Thomas' Charitable Foundation (UK), 2003 - 2004

National Science Foundation, Developmental Mechanisms Program, 2003

Children's National Medical Center, pre-K08 and Avery Research awards, 2003 - 2008

Philip Morris External Research Program, 2005 - 2007

Nat'l Institutes of Health, Neurodifferentiation, Plasticity & Regeneration Study section, 2006

Comitato Telethon Fondazione of Italy grant review, May 2007, 2010

Chair of NIH CSR Biology of Development & Aging-L (02) Special study section, July 2007

NIH-NICHD review panel for Intramural Program in Genomics of Differentiation, April 2008

National Science Foundation, Developmental Neuroscience Panel, April 2009

NIH-NIDCR Special review panel for FACEBASE program, June 2009

NICHD Special Review panel for model organism databases, October 2009

CNMC-GWU CTSI-CN Pilot Project Awards Panel for translational research, 2010 - 2011

NIH Special Review panel for PAR: *Xenopus* Genetics and Genomics, February 2011

ARC review panel, Université Libre de Bruxelles (Belgium), 2011

NIH-NIDCR DSR2 Review Panel (training and new investigator awards), February 2012

NIH-NICHD review panel for Intramural Program in Genomics of Differentiation, May 2012

CNMC-GWU CTSI-CN, Mentored Research Career Development Program Awards (KL2) review panel for translational research, June 2012, June 2013

NIH-CSR Special Review panel for Genetics and Genomics of *Xenopus*, February 2013

NIH-NIDCR Special Emphasis Panel ZDE1 MH26 1, FaceBase2: Hub application review, December 2013

NIH-NIDCR Special Emphasis Panel ZDE1 MH25 1, FaceBase2 Spoke application review, December 2013

Chair, NIH-CSR Special Review panel for *Xenopus* Genomics, January 2014

NIH-NIAID Special Review Panel for *Xenopus* Immunology resources, March 2014

NASA Student Spaceflight Experiments Program (SSEP) Step 2 Review Panel, May 2014; May 2015; December 2015

Chair, NIH-CSR Special Review panel for *Xenopus* PAR, February 2015

NIH-ZRG1 CB-G (02) "Regeneration & Developmental Biology" Special Emphasis Panel, March 2016

US-Israeli Binational Science Foundation, "Cell and Developmental Biology" Panel, December 2015, May 2016

NIH-ZRG1 CB-T (81) "AREA Applications in Cell and Developmental Biology" Special Emphasis Panel, June 2016

NIH-CSR Developmental Biology 1 (Dev1) Study Section, October 2016

Belgian Fondation Contre le Cancer, external reviewer, October 2016

NIH SEP ZDE1 GZ 07 Panel "NIDCR Award for Sustaining Outstanding Achievement in Research (SOAR) (R35)", June 2017

Israeli Science Foundation reviewer, 2009 - present

BBRSC program (UK) external reviewer, 2009 - present

Wellcome Trust (UK), 2004 - present

French National Research Agency (ANR) CE13- Cellular Biology, Developmental Biology and Evolution Evaluation reviewer, May 2018

NIH NIDCR FaceBase 3 Special Emphasis Panel, October 2018

FWF Austrian Science Fund, external reviewer, April 2019

Friedrich-Alexander Universitat Faculty of Sciences external reviewer, June 2019

BSF Professor Rahamimoff Travel Grants for Young Scientists, June 2019

NIH NIDCR ZED1 YM 08 1 R13 Application Review, July 2019

NIH Neural Cell Fate study section, ad hoc reviewer, October 2019

NIH NIDCD scientific advisory panel to review intramural programs, October 2019

NIH NICHD scientific advisory panel to review intramural programs, December 2019

NIH Office of Research Infrastructure Programs Strategic Plan panel member for Division of Comparative Medicine, May 2020

NIH 2021/01 ZRG1 GGG-A (55) R Special Emphasis Panel for Resource Grants, November 2020

Editorial Experience:

Editor of Book: "*Cell Lineage and Fate Determination*" (Academic Press), 1998.

Editor of Book: "*Principles in Developmental Genetics*", first edition (Elsevier), 2007.

Editor of Book: "*Principles in Developmental Genetics*", second edition (Elsevier), 2014.

Co-Editor (with Brian K. Hall) book series on "*Evolutionary Cell Biology*", (CRC Press), 2015 - present.

Editor of Book: "*Xenopus: Cell Biology, Gene Discovery and Evolution*" (CRC Press), 2020 - present.

Principal Editor: "*Cell Fate*" domain of *TheScientificWorldJOURNAL*, 2000 - 2006.

Associate Editor for Neuroscience: "*The Anatomical Record*" (Wiley), 2001 - 2002.

Editorial Board: "*Biology of the Cell*" (Portland Press), 2002 - 2010.

Editorial Board: “*Stem Cells*” (AlphaMed Press), 2004 - 2015.
 Editor for Life and Biomedical Sciences section, *Collabra*, Univ. California Open Press, 2013 - 2016.
 Guest editor of stem cell articles in “*Biology of the Cell*”, February 2005 - May 2005 issues.
 Guest editor of Special Issue on “Cell Fate Determination”, in *Birth Defects Part C: Embryo Today*, 2009.
 Guest editor of Special Issue on “Craniofacial Development”, in *genesis: The Journal of Genetics and Development*, 2011
 Guest editor of Special Issue on “*Xenopus* Genetics, Genomics and Cell Biology”, in *genesis: The Journal of Genetics and Development*, 2012.
 Editor of Special Issue on “Advances and Emerging Technologies in *Xenopus*”, in *genesis: The Journal of Genetics and Development*, 2016.
 Editor-in-Chief: “*genesis: The Journal of Genetics and Development*” (Wiley-Blackwell), 2010 - 2020.
 Embryology Section Editor: “*Xenopus: A Laboratory Manual*”, Cold Spring Harbor Laboratory Press, 2013 - 2019.
 Editorial Board: “*Developmental Dynamics*” (Wiley-Blackwell), 2002 - 2012 and 2015 - present.
 Editorial Advisory Board: “*Internatl. Journal of Developmental Biology*” (UPV/EHU Press), 2017- present.
 Editorial Board: “*StemJournal*” (IOS Press, Amsterdam), 2018 - 2020.
 Editorial Board: “*Journal of Developmental Biology*”(MDPI, Basel), 2018 - present.
 Editorial Board: “*Frontiers in Cell and Developmental Biology - Signaling*” (Frontiers, Lausanne), 2019 - present.

Manuscript Reviewer for the Following Journals:

<i>The Anatomical Record</i>	<i>Aquatic Toxicology</i>	<i>Am. J. Stem Cells</i>
<i>Biochemistry & Cell Biology</i>	<i>Biology of the Cell</i>	<i>Biology OPEN</i>
<i>BMC Devel. Biology</i>	<i>BMC Biology</i>	<i>BMC Genetics</i>
<i>Cells, Tissues, Organs</i>	<i>Cerebral Cortex</i>	<i>Chinese J. Oceanology & Limnology</i>
<i>Development</i>	<i>Developmental Biology</i>	<i>Developmental Cell</i>
<i>Developmental Brain Research</i>	<i>Developmental Dynamics</i>	<i>Developmental Neurobiology</i>
<i>Developmental Neuroscience</i>	<i>Dev, Genes & Evolution</i>	<i>Disease Models & Mechanisms</i>
<i>eLIFE</i>	<i>Experimental Eye Research</i>	<i>Frontiers in Cell & Dev Biol.</i>
<i>Frontiers in Physiology</i>	<i>Gene Genomics</i>	<i>Growth, Devel. & Aging</i>
<i>genesis, The Journal of Genetics and Development</i>		<i>Human Molecular Genetics</i>
<i>Internatl. J. Devel. Biol.</i>	<i>J. Comparative Neurology</i>	<i>Journal of Neuroscience</i>
<i>J. Natl. Cancer Inst.</i>	<i>Mechanisms of Development</i>	<i>Molecular Neurobiology</i>
<i>Molecular Vision</i>	<i>Nucleic Acids Res.</i>	<i>Proc. Natl Acad. Sci. (USA)</i>
<i>PLoS Biology</i>	<i>PLoS ONE</i>	<i>PLoS Genetics</i>
<i>Science</i>	<i>Scientific Reports</i>	<i>Stem Cells</i>

National and International Committee Work:

Chair, "Developmental Neurobiology" Session, Southeast Regional Developmental Biology Conference, Beauford, NC, 1986
 Co-Organizer, Southeast Regional Developmental Biology Conference, 1990
 Co-Organizer, Special Topics Symposium, "Molecules Involved in Axon Outgrowth", Annual Meeting of the American Association of Anatomists, 1991
 Organizer, "Determination of the Dorsal/Ventral Axis in Development" Minisymposium, American Society for Cell Biology, 1993

Abstract Programming Committee, American Society for Cell Biology Annual Meeting, 1993
 Elected member of the Board of Trustees, Society for Developmental Biology, 1995 - 1998, 1998 - 2001, 2008 - 2011, 2011 - 2014
 Amer. Assoc. Anatomists Representative to the FASEB Graduate Education Consensus Conference, 1996
 Society for Developmental Biology Representative to the FASEB Funding Consensus Conference, 1997, 1998, 2000
 NIH, DRG, Special Panel to Reorganize Neuroscience-related Review Panels, 1997
 Speaker, NIH-NICHD Workshop "Use of Animal Models for Study of Birth Defects", 1998
 NIH, Director's Meeting on "Non-Mammalian Models for Genomics Research", February 1999
 Follow-up meeting in March 2000.
 International Committee for *Xenopus* Genome Projects, 1999 - 2002
 Organizer and Chair of International Space Agency (ISLSWG) Developmental Biology Workshop, Marine Biology Laboratory, Woods Hole, September 1999
 Chair, Society for Developmental Biology Membership Committee, 1998 - 2001
 Chair, Society for Developmental Biology Publication Committee, 2000 - 2001
 Chair, "Nervous System Development" scientific session, International *Xenopus* Molecular Development Conference, Estes Park, CO, August 2000
 Chair, NSF Funding Committee, FASEB Consensus Conference for FY2002
 Co-manager of Xenbase, the *Xenopus* research community's website, 2000 - 2002
 Speaker and Participant, NIH-NIAAA workshop, "Potential Use of Stem Cells in Alcohol-related Conditions", 2001
 Co-organizer, Mid-Atlantic Regional Developmental Biology meeting, 2002
 Society for Developmental Biology Representative to the FASEB Publications and Communications Committee, 2004 - 2007
 NICHD, Developmental Biology, Genetics and Teratology Branch 5th Annual Postdoctoral Fellows' Workshop, Organizer and Speaker, April 2005
 Society for Developmental Biology Representative to Center for Scientific Review (CSR) Neuroscience Open House Meeting, 2007
 Society for Developmental Biology Representative to the FASEB-Ely Lilly "Excellence in Science" Annual Award, 2007 - 2016
 Society for Developmental Biology, elected and re-elected Treasurer, 2008 - 2011 and 2011 - 2014
 Chair, Society for Developmental Biology Finance subcommittee, 2009 - 2014
 Co-Chair, "Regeneration" session, Society for Developmental Biology Annual meeting, 2010
 Discussion Leader, Gordon-Kenan Research Seminar on Craniofacial Morphogenesis and Tissue Regeneration, April 2010
 Organizer and Chair: Placode Development mini-symposium at American Association of Anatomists annual meeting, April 2011
 Chair, "Cellular Mechanisms Driving Developmental Events" session, Society for Developmental Biology Annual meeting, 2011
 Scientific Advisory Board, University of Ulm, International Graduate School in Molecular Medicine, 2011 - 2019
 Chair, Federation of Societies for Experimental Biology (FASEB) "Excellent in Science" Award

committee, 2012 - 2016

Chair, Immunology, Physiology and Evolution Session, XIV International *Xenopus* Conference, 2012

Invited Discussant, American Association of Anatomists, Strategic Planning Workshop, August, 2013

Invited Discussant/ Session Chair for Gordon Research Conference on Craniofacial Morphogenesis and Tissue Regeneration, March 2014

Invited Discussant, Deutsche Forschungsgemeinschaft (German Research Foundation) Roundtable Discussion: "The frog *Xenopus* as a model system for the study of human disease mechanisms", April 2014

Chair and Discussant, "Gene Regulatory Mechanisms" symposium, Society for Developmental Biology annual meeting, July 2014

Chair and Discussant, "Cell and Molecular Biology of Early Development" session, XV International *Xenopus* Conference, August 2014

Discussion Leader, PI meeting at XV International *Xenopus* Conference, 2014

Appointed to Society for Developmental Biology Investment Subcommittee, 2014 - 2019

Invited Discussant, NIH-NICHD's 10th Structural Birth Defects Meeting, December 2014

Founding member and Treasurer of the "International *Xenopus* Board", 2014 - present.

Elected Vice Chair of "Neural Crest and Cranial Placode" Gordon Research Conference, 2015

Member, Awards Committee for Latin American Society for Developmental Biology Young Investigator Awards, 2015

Invited Participant, National Science Foundation workshop entitled: Deciphering Genome to Phenome (G2P) Relationships: Interdisciplinary Research at the Interface of the Biological and Mathematical Sciences, October 2015

Steering Committee Chair, "White Paper Report", International *Xenopus* community, 2015 - 2016

Steering Committee Member, "Gene Regulatory Networks in Developmental Biology" Workshop, Caltech, February 2016

Organizer: "Cranial Sensory Organs: from Placodes to Disease", AAA meeting, April 2016

Organizer and Chair: "Morphogenesis and Differentiation of Cranial Neural Crest and Placodes", AAA meeting, April 2016

Elected Chair of "Neural Crest and Cranial Placode" Gordon Research Conference, February 2017

Chair, "Resources and Emerging Technologies" session at XVI Internat'l *Xenopus* Conference, 2016

Elected Vice President, Society for Craniofacial Genetics and Developmental Biology, 2016 - 2018

Gordon Research Conferences Council Member, 2016 - 2017

Session Co-Chair, Neurobiology Session, Univ. Ulm (Germany) International Graduate School in Molecular Medicine Spring Symposium, March 2017

Organizer of Poster Judging, Society for Craniofacial Genetics and Developmental Biology annual meeting, July 2017

Invited participant in *Xenopus* Transcriptomics Annotation Jamboree, Janelia Farms, February 2018

Poster presentation judge at "Craniofacial Morphogenesis and Tissue Regeneration" Gordon Research Conference, February 2018

Chair, "Resources and Emerging Technologies" session at XVII International *Xenopus* Conference, August 2018

Organizer of Poster Judging, Society for Craniofacial Genetics and Developmental Biology annual meeting, October 2018

Postdoc trainee poster presentation judge at Society for Craniofacial Genetics and Developmental Biology annual meeting, October 2018
Elected President, Society for Craniofacial Genetics and Developmental Biology, 2018 - 2020
Member, Organizing Committee of Genetics Society of America 2020 TAGC meeting, 2019 - 2020
Elected Councilor for Association of Anatomy, Cell Biology and Neurobiology Chairs, 2019 - 2021
Nomination Committee, Association of Anatomy, Cell Biology and Neurobiology Chairs, 2019
Poster presentation judge at European Amphibian Conference, June 2019
Elected Coucillor to Executive Committee, Association of Anatomy, Cell Biology and Neurobiology Chairs, 2020 - present
Chair, External Advisory Board of the National *Xenopus* Resource, 2019 - present
Chair, "Craniofacial Development" session at American Assoc. for Anatomy meeting, April 2020 (cancelled due to COVID-19 epidemic)
Invited Discussant, "Neural Crest and Cranial Placode" Gordon Research Conference, July 2021

University Committees & Service:

University of Virginia:

Neuroscience Program Executive/Graduate Committee, 1983 - 1990
Neurobiological & Behavior Development Training Program, Director, 1989 - 1992
Developmental Biology Training Program Steering Committee, 1984 - 1991
GPEP Responses Subcommittee of the Council on Medical Education, 1988
Medical School Admissions Committee, 1988 - 1990
Medical Scientist Training Program, Admissions Committee, 1989 - 1992
School of Medicine Committee on Women, 1989 - 1991

The George Washington University:

Dean LaRosa's Committee for Basic Science, 1992
Task Group on Graduate Education in the Biomedical Sciences, 1993
Dean LaRosa's Neuroscience Research Committee, 1993
Department of Anatomy Self-Study Committee, 1994
Organizer of GWU Neuroscience Site Visit (for VP Roger Meyers), 1994
Medical Center Faculty Senate Committee on Research, 1993 - 1996
"Institute Without Walls" Task Force (for VP Roger Meyers), 1994 - 1996
Thelma Hunt Endowed Professorship Search Committee, 1994 - 1996
Department of Pharmacology Chair Search Committee, 1994 - 1996
Neuroscience Graduate Program, Director 1994 - 1996
Department of Anatomy and Cell Biology Faculty Search Committee, Chair, 1995
The Henry R. Luce Endowed Professorship in Human Origins Search Committee, 1995
Neuroscience/Pharmacology Faculty Search Committee, 1996, 1997, 1999
Department of Anthropology Human Origins Faculty Search Committee, 1997, 2003
Promotions & Tenure Committee, Dept. Anatomy and Cell Biology, 1996-present, Chair, 2018-present
Department of Biological Sciences Faculty Search Committee, 1999
Neurosciences Planning Committee, 1999
Neurosciences and Genetics Planning Committee, 1999
Organizer, Neuroscience Genetics Symposium, 1999

GWU Institute for Biomedical Sciences Graduate Programs Curriculum Committee, 1994 - 2003
 GWU Institute for Biomedical Sciences Executive Committee, 1998 - 2003
 Chair, GWU Institute for Biomedical Sciences Operations Committee, 2002 - 2003
 Anatomy Department Seminar Series director, 2000 - 2001, 2003 - 2004, 2006 - 2008
 Multi-User Research Facility Committee (for VP Research), 2000 - 2002
 Director, Stem and Progenitor Cell Research Interest Group, 2001 - 2003; co-director, 2005 - 2007
 Scientific Co-Organizer for GWUMC Research Day featuring Stem Cell Research, 2003
 Jack Kent Cooke Scholarship Selection Committee, Columbian College, 2005 - 2007
 Anatomy Department Internal Review Committee, 2005
 Anatomy Department Faculty/Staff training for NIH electronic grant applications, 2005
 Member, Basic Science Faculty Assembly Executive Committee, 2009 - 2013
 GWU Institute for Neuroscience/Dept. Biology Faculty Search Committee, 2010, 2011, 2016
 Anatomy Department Faculty Search Committee, 2012, 2013
 Chair, GWU Institutional BioSafety Committee, 2006 - 2016
 Institute for Neuroscience Seminar Committee: 2010 - 2014
 GWU Stem Cell Research Interest Group, Co-organizer, 2011 - 2014
 GWU School of Medicine, Research Resources Advisory Committee, 2012, 2013
 GWU Office of the Vice President for Research, Pew Biomedical Scholars Program Selection Committee, 2013, 2014, 2015
 GWU School of Medicine and Health Sciences Committee on Research, 2013 - 2016
 GWU Advisory Council on Research, Office of the Vice President for Research, 2013 - 2016
 GWU School of Engineering and Applied Science, member of Search Committee for founding Chair of the Department of Biomedical Engineering, 2014
 Organizer, Research training program for summer undergraduates in Ross Hall, 2013, 2014
 Organizer, Department of Anatomy and Regenerative Biology monthly research meetings, 2014, 2015, 2016, 2017
 GWU School of Medicine and Health Sciences Bridge Funding Committee, 2015
 Member, Faculty Mentoring committee for Dr. Damien O'Halloran (Biology/Neuroscience), 2013 - 2017
 Member, Faculty Mentoring Committee, Dr. Jonathan Sherman (Neurosurgery), 2013 - 2017
 Chair, Faculty Mentoring Com., Dr. Xioayan Zheng (Anatomy & Cell Biology), 2013 - 2019
 Chair, Faculty Mentoring Com., Dr. Alexandros Tzatsos (Anatomy & Cell Biology), 2014 - 2019
 Member, Faculty Mentoring Com., Dr. Junhee Jeong (NYU Department of Craniofacial Biology), 2017 - 2019
 Chair, Faculty Mentoring Com., Dr. Tatiana Efimova (Anatomy & Cell Biology), 2015 - present
 Member, Faculty Mentoring Com., Dr. Katie DeVeau (Anatomy & Cell Biology), 2017 - 2021
 Member, Faculty Mentoring Com., Dr. Nicole DeVaul (Anatomy & Cell Biology), 2018 - present
 Member, Faculty Mentoring Com., Dr. Marc Spencer (Anatomy & Cell Biology), 2018 - present
 Member, Faculty Mentoring Com., Dr. Victor Taylor (Anatomy & Cell Biology), 2018 - present
 Member, Faculty Mentoring Com., Dr. Inhee Chung (Anatomy & Cell Biology), 2018 - present
 Member, Faculty Mentoring Com., Dr. Maho Shibata (Anatomy & Cell Biology), 2018 - present
 Member, Faculty Mentoring Com., Dr. Hui Lu (Pharmacology/Physiology), 2019 - 2020
 Member, Dean's subcommittee on research compensation policies, 2015

GWIN/Pharmacology Faculty Search Committee, 2015 - 2016
 Member, SMHS Strategic Research Leadership Committee, 2016 – 2018
 Member, Dean’s Academic Leadership Group, 2016 – present
 Member, Dean’s Ross Hall Space committee, 2017
 Member, Dean’s Committee on Departmental Review, 2017
 Member, Dean’s Council of Chairs, 2018 - present
 Member, Department of Biology faculty search committee, 2018-2019
 Member, SMHS Executive Committee, 2019
 Chair, Department of Anatomy and Cell Biology search committee for Full Professor of
 Translational Neuroscience, 2019
 Chair, Department of Anatomy and Cell Biology search committee for Assistant Professor in
 Histology and Medical Ethics, 2019
 Member, Department of Anatomy and Cell Biology search committee for Associate Professor in
 Gross Anatomy and Neuroanatomy, 2019 - 2020
 Member, SMHS Gross Anatomy Oversight Committee, 2019 – present
 Member, SMHS Committee for Building Use (Re-opening during Covid-19), 2020
 Member, GWU Resource Allocation Committee, 2020 - present

INVITED SPEAKER (since 2010)

January 2010, Georgetown University Dept. Biochemistry: “Fox ‘n Sox: unraveling the transcriptional network that initiates a neural state in vertebrate embryos”
 January 2010, NIH-NICHD: “Fox ‘n Sox: unraveling the transcriptional network that initiates a neural state in vertebrate embryos”
 April 2010, University of Ulm, Center for Signaling and Signal Processing during Cellular Differentiation: “Maintaining an immature neural state: a tricky tale of transcription”
 November 2010, Craniofacial Genetics Society annual meeting, “The molecular regulation of cranial placode specification”
 November 2010, Latin American Society for Developmental Biology Bi-annual Meeting, Santa Cruz, Chile, “FoxD5 regulates neural ectodermal fate via both transcriptional repression and activation”
 April 2011, Amer. Assoc. Anatomists Neural Crest and Placodes Mini-Meeting, Washington, DC, “The Molecular Regulation of Cranial Placode Specification”
 April 2011, GW Institute for Neuroscience 1st Annual Neuroscience Symposium, Washington, DC, “Fox ‘n’ Sox: the Origins of being Neural”
 September 2011, University of Utah, Department of Neurobiology, “Fox ‘n’ Sox: the Origins of being Neural”
 October 2011, University of Maryland at Baltimore County, Department of Biology, “Fox ‘n’ Sox: the Origins of being Neural”
 March 2012, American Society for Neurochemistry annual meeting, “A gene regulatory network that directs embryonic ectoderm to a neural fate: what the embryo can tell us about embryonic stem cells”
 September 2012, Kings College London, Department of Craniofacial Development and Stem Cell Biology, “Fox and Sox: what can the embryo tell us about neural stem cells?”

November 2012, International Study Seminar on “Development, regulation and evolution of ectodermal placodes” at Foundation des Treilles, France, "In search of novel targets and co-factors of Six1 in placode development"

February 2013, Cincinnati Children’s Hospital Medical Center, “Fox ‘n’ Sox: a neural gene regulatory network”

April 2013, Georgetown University Medical Center, “What the embryo can tell us about NSCs: a tale of two stem cells”

April 2013, Mid-Atlantic Regional Society for Developmental Biology meeting, Featured Speaker, “Fox n’ Sox: on becoming neural”

May 2013, University of Massachusetts, Amherst, “Fox ‘n’ Sox: a neural gene regulatory network”

June 2013, Keynote speaker: Aquatic Animal Models for Human Disease Conference, Milwaukee, WI, “Of frogs and fish: from pond to bedside”

August, 2013, Uniformed Services University of the Health Sciences Neuroscience Program, “Neural induction and specification of fate”

September 2013, Molecular Medicine Program, GWU, “Of frogs and fish: from pond to bedside”

October 2013, University of Maryland College Park, “What the embryo can tell us about NSCs: a tale of two stem cells”

October 2013, University of Ulm (Germany) International Graduate School in Molecular Medicine, “What the embryo can tell us about NSCs: a tale of two stem cells”

October 2013, German Society for *Xenopus* Research, “What the embryo can tell us about neural stem cells”

April 2014, Keynote Speaker, “International *Xenopus* Community and Resources”, Deutsche Forschungsgemeinschaft (DFG) Priority Program Roundtable Discussion, Stuttgart, Germany

May 2014, University of Missouri Department of Biochemistry, “Fox n’ Sox: the origins of becoming a neural stem cell”

October 2014, Keynote Speaker in “Developmental Signal Transduction in Embryogenesis Symposium”, International Conference for the Korean Society for Molecular and Cellular Biology, Seoul, Korea, "Neural inductive signaling and gene regulatory networks: from embryo to stem cells"

October 2014, Department of Biological Sciences, Kangwon National University, Chuncheon, Korea, “What the embryo can tell us about neural stem cells”

October 2014, College of Natural Sciences, Kyungpook National University, Kyungpook, Korea, "Neural inductive signaling and gene regulation from embryo to stem cells"

December 2014, Platform Speaker at 7th Aquatic Animal Models of Human Disease Conference, “Novel co-factors for the vertebrate Six1 transcription factor are candidates for Branchiootorenal spectrum disorders”

October 2015, Keynote Speaker, the Society for Craniofacial Genetics and Developmental Biology, “A search for new candidates for Branchio-oto-renal spectrum disorders”, JHU Medical School

February 2016, Invited Speaker, Gene Regulatory Networks in Development Workshop, Caltech, “A gene regulatory network for early neural specification”

April 2016, Invited Speaker, American Assoc. Anatomists Symposium: Cranial Sensory Organs: from Placodes to Disease, “A search for new candidates for Branchio-oto-renal spectrum disorders”

April 2016, Department of Biological Sciences, University of Delaware, "Neural inductive signaling and gene regulatory networks: from embryo to stem cells"

- May 2016, Department of Developmental Biology and Cancer Research, Hebrew University of Jerusalem, Hadassah Medical Center, "Neural inductive signaling and gene regulatory networks: from embryo to stem cells"
- August 2016, Invited Speaker, International *Xenopus* Conference, "Novel Six1 co-factors are candidates for Branchio-oto-renal spectrum disorders"
- March 2017, Invited Speaker, Dept. Zoology, Univ. Hohenheim (Stuttgart, Germany), "A search for new candidates for Branchio-oto-renal spectrum disorders"
- March 2017, Invited Speaker, Ulm University (Germany) International Graduate School in Molecular Medicine Spring Symposium, "A search for new candidates for Branchio-oto-renal spectrum disorders"
- March 2017, Invited Speaker, International Graduate School in Molecular Medicine Spring Symposium, "Career Perspectives – advice from a senior scientist"
- March 2017, Invited Speaker, Universitätsklinikum Freiburg (Germany) Dept. Nephrology, "A search for new candidates for Branchio-oto-renal spectrum disorders"
- June 2017, Invited Speaker, XenoTreaT meeting, "The developmental function of Wbp2nl is to promote neural border zone gene expression in the embryonic ectoderm"
- June 2018, Invited Speaker, Department of Developmental Biology and Cancer Research, Hebrew University of Jerusalem-Hadassah Medical School, "In search of novel genes in Branchio-oto-renal spectrum disorders"
- March 2019, Invited Speaker, Dept Craniofacial Biology, New York University, "In search of novel genes in Branchio-oto-renal spectrum disorders"
- April 2019, Invited Speaker, Gordon Research Conference on "Neural Crest and Cranial Placodes, Il Ciocco, Italy. "Moving borders; neural crest and placode gene interactions"
- October 2019, Invited Speaker, *Xenopus* Resources and Emerging Technology meeting, "Human *SIX1* mutations cause gene expression and morphological changes in otic precursors", Marine Biology Laboratory, Woods Hole, MA.
- January 2020, Invited Speaker, "Using *Xenopus* to search for novel genes involved in Craniofacial Birth Defects". Latin American Society for Developmental Biology Symposium, Quintay, Chile
- October 2020, Invited Speaker, GWU SMHS Inter-departmental Seminar Series, "In search of novel genes in Branchio-oto-renal spectrum disorders"
- August 2021, Invited Speaker, "Human *SIX1* mutations cause gene expression and morphological changes in craniofacial structures". 18th International *Xenopus* Conference, Portsmouth, UK.

PUBLICATIONS:

Books

- Moody, S.A. (1998) "Cell Lineage and Fate Determination" (Editor) Academic Press, NY. ISBN: 0-12-505255-3.
- Moody, S.A. (2007) "Principles of Developmental Genetics" 1st edition, (Editor) Elsevier, NY. ISBN: 0-12-369548-1. Awarded a 5-star rating by Doody Enterprise's Book Review Service.
- Moody, S.A. (2014) "Principles of Developmental Genetics" 2nd edition, (Editor) Elsevier, NY. ISBN-13: 978-0124059450 ISBN-10: 0124059457. Selected as a Core Title in Clinical Genetics by Doody Enterprise's Book Review Service.

Hall, B.K. and Moody, S.A. (2018) "Translating Genotypes into Phenotypes – Past, Present and Future". CRC Press "Cells in Evolutionary Biology" book series, Volume 1. (Co-editor)
<https://www.crcpress.com/Cells-in-Evolutionary-Biology-Translating-Genotypes-into-Phenotypes---Past/Hall-Moody/p/book/9781498787864>. ISBN 9781498787864

Book Chapters & Review Articles

- Meszler, R.M. and S.A. Moody (1977) "A technique for localizing motoneurons of specific muscles for ultrastructural analyses" In: *Laboratory Techniques for Electron Microscopy*, (Ed. J. Genaro), Laboratory of Cell Biology, New York University.
- Moody, S.A., D.V. Bauer, A.M. Hainski and S. Huang (1996) "Determination of *Xenopus* cell lineage by maternal factors and cell interactions" *Current Topics in Developmental Biology* vol. 32 (Eds., R. Pedersen and G. Schatten), Academic Press, pp. 103-138.
- Moody, S.A. (1997) "Analysis of heterologous gene expression in *Xenopus* blastomeres" In: *Methods in Molecular Biology: Expression and Detection of Recombinant Genes*, (Ed., R.S. Tuan), Humana Press, pp. 271-284.
- Sullivan, S.A., K.B. Moore and S.A. Moody (1999) "Early events in blastomere fate determination" In: *Cell Lineage and Cell Fate Determination*. (Ed. S.A. Moody), Academic Press, pp. 297-321.
- Moody, S.A. (1998) "A historical perspective on the study of cell lineages and fate determination" In: *Cell Lineage and Cell Fate Determination*. (Ed. S.A. Moody), Academic Press, pp. xvii-xxii.
- Moody, S.A. (1999) "Testing the cell fate commitment of single blastomeres in *Xenopus laevis*" In: *Advances in Molecular Biology*, (Ed., J. Richter), Oxford University Press, pp. 355-381.
- Moody, S.A. (2000) "Cell lineage analysis in *Xenopus* embryos" In: *Methods in Molecular Biology: Developmental Biology Protocols*, vol. 135 (Eds., R.S. Tuan and C.W. Lo) Humana Press, pp 1-17.
- Moody, S.A. (2000) "Neural induction in *Xenopus*" In: *Encyclopedia of Life Sciences*, Macmillan, London.
- Moody, S.A. and C. A. Golden (2000) "Developmental biology research in space: Issues and directions in the era of the International Space Station" *Developmental Biology* 228: 1-5.
- Moody, S.A. and H-S Je (2002) "Neural induction, neural fate stabilization, and neural stem cells" *Cell Fate: TheScientificWorldJOURNAL* 2: 1147-1166.
- Williams, R.W. and S. A. Moody (2003) "Developmental and genetic control of cell number in retina" In: *The Visual Neurosciences*, (eds., L.M. Chalupa and J.S. Werner) MIT Press, MA. (ISBN 0-262-03308-9), pp. 63-76.
- Moody, S.A. (2004) "To differentiate or not to differentiate: Regulation of cell fate decisions by being in the right place at the right time" *Cell Cycle* 3: 105-106.
- Moody, S.A. (2005) "Stem cells: cell and developmental biology in regenerative medicine" *Biol. Cell* 97: 1.
- Brugmann, S.A. and S.A. Moody (2005) "Induction and specification of the vertebrate ectodermal placodes: precursors of the cranial sensory organs" *Biol. Cell*. 97: 303-319.
- Zaghloul, N. A., Yan, B. and S.A. Moody (2005) "Step-wise specification of retinal stem cells during normal embryogenesis" *Biol. Cell* 97: 321-337.
- Moody, S.A. (2007) "Determination of pre-placodal ectoderm and sensory placodes" In: *Principles of Developmental Genetics*. Elsevier, NY. pp. 590-614.
- Rogers, C.D., S.A. Moody and E.S. Casey (2009) "Neural induction and factors that stabilize a neural fate" *Birth Defects Research part C: Embryo Today* 87: 249-262.
- Lee, H.-S., Sokol, S.Y., Moody, S.A, and I. O. Daar (2012) "Using 32-cell stage *Xenopus* embryos to probe PCP signaling." In: *Methods in Molecular Biology: PCP Methods and Protocols* 839: 91-104. PMID: 22218895

- Moody, S.A. (2012) "Targeted microinjection of synthetic mRNAs to alter retina gene expression in *Xenopus* embryos." In: *Methods in Molecular Biology: Retinal Development* 884: 91-111. PMID: 22688700
- Moody, S.A. (2012) "Testing retina fate commitment in *Xenopus* by blastomere deletion, transplantation and explant culture." In: *Methods in Molecular Biology: Retinal Development* 884: 115-127. PMID: 22688701
- Moody, S.A., S. L. Klein, B. A. Karpinski, T. M. Maynard and A.-S. LaMantia (2013) "On becoming neural: what the embryo can tell us about differentiating neural stem cells." *Amer. J. Stem Cells* 2: 74-94. PMID: 23862097
- Saint-Jeannet, J.-P. and S.A. Moody (2014) "Establishing the pre-placodal region and breaking it into placodes with distinct identities" *Developmental Biology* 389: 13-27. PMCID: PMC3985045
- Moody, S.A. and J.-P. Saint-Jeannet (2014) "Determination of pre-placodal ectoderm and sensory placodes" In: *Principles of Developmental Genetics*. Elsevier, NY. Second edition, pp 331-356.
- Lee, H.-K., Lee, H.-S. and S.A. Moody (2014) "Neural transcription factors: from embryos to neural stem cells" *Molecules and Cells* 37: 705-712. PMCID: PMC4213760
- Moody, S.A. and A.-S. LaMantia (2015) "Transcriptional regulation of cranial sensory placode development" *Current Topics in Developmental Biology* 111: 301-350. PMID: 25662264.
- Moody, S.A., Neilson, K.M., Kenyon, K.L., Alfandari, D., and F. Pignoni (2015) "Using *Xenopus* to discover new genes involved in Branchiootorenal spectrum disorders" *Comparative Biochemistry and Physiology. Part C. Toxicol. Pharmacol.* 178: 16-24. PMID: 26117063
- LaMantia, A.-S., Moody, S.A., Maynard, T., Karpinski, B.A., Zohn, I., Mendelowitz, D., Lee, N.H. and A. Popratiloff (2015) "Hard to swallow: Developmental biological insights into pediatric dysphagia" *Developmental Biology*, 409: 329-342. PMID: 26554723
- Klein, S. L. and S.A. Moody (2016) "When family history matters: the importance of lineage analyses and fate maps for explaining animal development" *Current Topics in Developmental Biology* 117: 93-112. (invited for the 50th anniversary volume). PMID: 26969974
- Lombard-Banek, C., Moody, S.A. and P. Nemes (2016) "High-sensitivity mass spectrometry for probing gene translation in single embryonic cells in the early frog (*Xenopus*) embryo. *Frontiers in Cell and Developmental Biology*, 4:100. doi: 10.3389/fcell.2016.00100. PMID: 27761436.
- Sater, A.K. and S.A. Moody (2017) Using *Xenopus* to understand human disease and developmental disorders. *genesis, The Journal of Genetics and Development* 55. doi: 10.1002/dvg.22997. PMID: 28095616.
- Moody, S.A. (2018) Lineage tracing and fate mapping. *Cold Spring Harbor Protocols* doi: 10.1101/pdb.prot097253. PMID: 29769388.
- Moody, S.A. (2018) Microinjection of mRNAs and oligonucleotides. *Cold Spring Harbor Protocols* doi: 10.1101/pdb.prot097261. PMID: 29769401.
- Gammill, L., Cox, T., Moody, S., Taneyhill, L., Trainor, P., and Marcucio, R. (2018) The Society for Craniofacial Genetics and Developmental Biology 40th annual meeting. *Amer. J. Med. Genet. Part A*, 176: 1270-1273. doi: 10.1002/ajmg.a.38653. PMID: 29681098.
- Moody, S.A. (2018) Case study 14: Illmensee and Mahowald, 1974, Pole plasm. In: *Ahead of the Curve: Hidden Breakthroughs in the Biosciences*. Volume 2. D.S. Adams and M. Levin Eds., Bristol, UK, Institute of Physics Publishing, pp.4-1 to 4-3.
- Moody, S.A. (2019) Cleavage blastomere deletion and transplantation. *Cold Spring Harbor Protocols* doi: 10.1101/pdb.prot097311. PMID: 29769398.
- Moody, S.A. (2019) Cleavage blastomere explant culture. *Cold Spring Harbor Protocols* doi: 10.1101/pdb.prot097303. PMID: 29769392.

- Moody, S.A. (2019) Analysis of Cell Fate Commitment in *Xenopus* Embryos. *Cold Spring Harbor Protocols* doi: 10.1101/pdb.top097246. PMID: 29769394.
- Taneyhill, L.A., Moody, S.A., Cox, T., Klein, O., Marcucio, R., Schneider, R. and Trainor, P.A. (2019) The Society for Craniofacial Genetics and Developmental Biology 41st Annual Meeting. *Amer. J. Med. Genetics, Part A*. 179: 864-869. doi: 10.1002/ajmg.a.61090. PMID: 30793834
- Motahari, Z., Moody, S.A., Maynard, T.M., LaMantia, A.S. (2019) In the Line-up: Deleted genes associated with DiGeorge/22q11.2 Deletion Syndrome: Are they all suspects? *J. Neurodevel. Disorders* 11:7 doi: 10.1186/s11689-019-9267-z. PMID:31174463.
- Moody, S.A. and S.L. Klein (2019) Deferred-use molecules and decision-making in development. In: *Deferring development: Setting aside cells for future use in development and evolution*. C. Bishop and B. K. Hall Eds., CRC Press, pp 29-52.
- Maynard, T.M., Zohn, I.E., Moody, S.A. and LaMantia, A.S. (2020) Suckling, Feeding and Swallowing: Behaviors, Circuits and Targets for Neurodevelopmental Pathology. *Ann. Rev. Neuroscience* 43: 315-336. PMID: 32101484.
- Eisenhoffer, G.T., Clouthier, D., Cox, T., Saint-Jeannet, J.P., Taneyhill, L.A., Trainor, P.A. and Moody, S.A. (2020) The Society for Craniofacial Genetics and Developmental Biology 42nd Annual Meeting. *Amer. J. Med. Genetics, Part A*. 187: 1555-1561. doi 10.1002/ajmg.a.61602
- Moody, S.A. (2020) *Xenopus* explants and transplants. *Cold Spring Harbor Protocols* (in press).

Work featured on web sites and magazines:

Xenopus laevis fate maps: <http://www.xenbase.org/anatomy/static/xenbasefate.jsp>

Lab TV, The Future Heroes of Medical Research: https://www.youtube.com/watch?v=QgVb8rvjU_w
The filmographer, Sara Jenis (GWU undergraduate student), won the 2014 Tribeca film festival Outstanding Lab Profile Award.

“*Xenopus* and the art of developmental genetics” and “Amphibious lineage”:

<http://www.internationalinnovation.com/xenopus-and-the-art-of-developmental-genetics/>

in “International Innovation” (<http://edition.pagesuite-professional.co.uk/launch.aspx?eid=9d5071ec-31dd-449b-8508-5b3fe627912b>).

Moody, S.A. (2015) “Discovering Hearing Loss Genes”, *Pan European Networks: Science and Technology* 16: 170.

ScienceNode: The Anatomist’s Daughter: <https://sciencenode.org/feature/the-anatomists-daughter.php>

Research Articles

Heaton, M. B., S. A. Moody and M. E. Kosier (1978) Peripheral innervation by migrating neuroblasts in the chick embryo. *Neuroscience Letters* 10: 55-59.

Heaton, M. B., S. A. Moody and P. L. Coultas (1979) Oculomotor neuroblast migration in the chick embryo in the absence of tecto-tegmental fibers. *Developmental Biology* 68: 304-310.

Heaton, M. B. and S. A. Moody (1980) The early development and migration of the trigeminal motor nucleus in the chick embryo. *J. Comparative Neurology* 189: 61-99.

Moody, S. A. and R. M. Meszler (1980) Subnuclear organization of the Ophidian trigeminal motor nucleus. I. Localization of neurons and synaptic bouton distribution. *J. Comparative Neurology* 190:463-486.

Moody, S. A. and R. M. Meszler (1980) Subnuclear organization of the Ophidian trigeminal motor nucleus. II. Ultrastructural measurements on motoneurons innervating antagonistic muscles. *J. Comparative Neurology* 190: 487-500.

- Moody, S. A. and M. B. Heaton (1981) Morphology of migrating trigeminal motor neuroblasts as revealed by horseradish peroxidase retrograde labeling techniques. *Neuroscience* 6: 1707-1723.
- Moody, S. A. and M. B. Heaton (1983) Developmental relationships between trigeminal ganglia and trigeminal motoneurons in chick embryos. I. Ganglion development is necessary for motoneuron migration. *J. Comparative Neurology* 213: 327-343.
- Moody, S. A. and M. B. Heaton (1983) Developmental relationships between trigeminal ganglia and trigeminal motoneurons in chick embryos. II. Ganglion axon ingrowth is necessary for motoneuron migration. *J. Comparative Neurology* 213: 344-349.
- Moody, S. A. and M. B. Heaton (1983) Developmental relationships between trigeminal ganglia and trigeminal motoneurons in chick embryos. III. Ganglion perikarya direct motor axon growth in the periphery. *J. Comparative Neurology* 213: 350-364.
- Moody, S. A. and M. B. Heaton (1983) Ultrastructural observations of the migration and early development of the trigeminal motoneurons in chick embryos. *J. Comparative Neurology* 216: 20-35.
- Moody, S. A. and M. Jacobson (1983) Compartmental relationships between anuran primary spinal motoneurons and somitic muscle fibers that they first innervate. *Journal of Neuroscience* 3: 1670-1682.
- Jacobson, M. and S. A. Moody (1984) Quantitative lineage analysis of the frog's nervous system. I. Lineages of Rohon-Beard neurons and primary motoneurons. *Journal of Neuroscience* 4: 1361-1369.
- Moody, S. A. (1987) Fates of the blastomeres of the 16-cell stage *Xenopus* embryo. *Developmental Biology* 119: 560-578.
- Riggott, M. J. and S. A. Moody (1987) The distribution of laminin and fibronectin along peripheral trigeminal axon pathways in the developing chick. *J. Comparative Neurology* 258: 580-596.
- Gallagher, B. C. and S. A. Moody (1987) Development of substance P-like immunoreactivity in *Xenopus* embryos. *J. Comparative Neurology* 260: 175-185.
- Moody, S. A. (1987) Fates of the blastomeres of the 32-cell stage *Xenopus* embryo. *Developmental Biology* 122: 300-319.
- Moody, S. A. and D. B. Stein (1988) Development of acetylcholinesterase activity in the embryonic nervous system of the frog, *Xenopus laevis*. *Developmental Brain Research* 39: 225-233.
- Moody, S. A., M. S. Quigg and A. Frankfurter (1989) The development of the peripheral trigeminal system in the chick revealed by an isotype-specific anti-beta-tubulin monoclonal antibody. *J. Comparative Neurology* 279: 567-580.
- Moody, S. A., M. S. Quigg and C. D. Little (1989) Extracellular matrix components of the peripheral pathway of chick trigeminal axons. *J. Comparative Neurology* 283: 38-53.
- Moody, S.A. (1989) Quantitative lineage analysis of the origin of frog primary motor and sensory neurons from cleavage stage blastomeres. *Journal of Neuroscience* 9: 2919-2930.
- Klein, S.L. and S.A. Moody (1989) Lithium changes the ectodermal fate of individual frog blastomeres because it causes ectopic neural plate formation. *Development* 106: 599-610.
- Moody, S.A. and M. J. Kline (1990) Segregation of fate during cleavage of frog (*Xenopus laevis*) blastomeres. *Anatomy & Embryology* 182: 347-362.
- Gallagher, B.C., A.M. Hainski and S.A. Moody (1991) Autonomous differentiation of dorsal axial structures from an animal cap cleavage stage blastomere in *Xenopus*. *Development* 112: 1103-1114.
- Huang, S. and S.A. Moody (1992) Does lineage determine the dopamine phenotype in the tadpole hypothalamus: A quantitative analysis. *Journal of Neuroscience* 12: 1351-1362.

- Hainski, A. M. and S.A. Moody (1992) *Xenopus* maternal RNAs from a dorsal animal blastomere induce a secondary axis in host embryos. *Development*, 116: 347-355.
- Huang, S. and S. A. Moody (1993) The retinal fate of *Xenopus* cleavage stage progenitors is dependent upon blastomere position and competence: Studies of normal and regulated clones. *Journal of Neuroscience* 13: 3193-3210.
- Bauer, D.V., S. Huang and S. A. Moody (1994) The cleavage stage origin of Spemann's Organizer: Analysis of the movements of blastomere clones before and during gastrulation in *Xenopus*. *Development* 120: 1179-1189.
- Huang, S. and S. A. Moody (1995) Asymmetrical blastomere origin and spatial domains of dopamine and Neuropeptide Y amacrine cells in *Xenopus* tadpole retina. *J. Comparative Neurology* 360: 2-13.
- Moody, S. A., V.L. Miller, A. Spanos and A. Frankfurter (1996) Developmental expression of a neuron-specific beta-tubulin in frog (*Xenopus laevis*): a marker for growing axons during the embryonic period. *J. Comparative Neurology* 364: 219-230.
- Batni, S., L. Scalzette, S. A. Moody and B. E. Knox (1996) Characterization of the *Xenopus* rhodopsin gene. *J. Molecular Biochemistry* 271: 1-8.
- Bauer, D. V., D. W. Best, A. M. Hainski and S. A. Moody (1996) A contact-dependent animal to vegetal signal is required during cleavage stages for normal neural lineages in *Xenopus*. *Developmental Biology* 178, 217-228.
- Hainski, A. M. and S. A. Moody (1996) An activin-like signal activates a dorsal-specifying RNA between the 8- and 16-cell stages of *Xenopus*. *Developmental Genetics* 19: 210-221.
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