

CURRICULUM VITAE

Jennifer R. Morgan, Ph.D.

Senior Scientist & Director
The Eugene Bell Center for Regenerative Biology
Marine Biological Laboratory (MBL)
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EDUCATION AND TRAINING:

Yale University: Department of Cell Biology
Postdoctoral Fellow
Advisor: Pietro De Camilli, M.D.
"Roles of phosphoinositides at synapses"
New Haven, CT
2001-2005

Duke University: Department of Neurobiology
Ph.D. in Neurobiology
Advisor: George J. Augustine, Ph.D.
"Mechanisms of synaptic vesicle endocytosis: the functions of clathrin in the nerve terminal"
Durham, NC
1996-2001

University of North Carolina: Department of Physiology
B.S. in Biology with Honors
Advisor: Ann E. Stuart, Ph.D.
Chapel Hill, NC
1991-1995

PROFESSIONAL EXPERIENCE:

Academic Appointments:

Senior Scientist: MBL; Bell Center for Regenerative Biology; Woods Hole, MA (2020-present)
Associate Scientist: MBL; Bell Center for Regenerative Biology; Woods Hole, MA (2013-2020)
Assistant Scientist: MBL; Bell Center for Regenerative Biology; Woods Hole, MA (2012-2013)
Assistant Professor: Univ. of Texas at Austin; Molecular Cell & Developmental Biology (2007- 2012)
Visiting Assistant Professor: Bowdoin College; Biology Dept. (2006-2007)

Other Relevant Experience:

Director, Eugene Bell Center for Regenerative Biology & Tissue Engineering: MBL (2017-present)
Associate Director, Bell Center for Regenerative Biology & Tissue Engineering: MBL (2012-2017)
Associate Director, Grass Fellowship Program in Neuroscience: MBL (2006)
Postdoctoral Fellow and Lecturer: Yale University School of Medicine; Cell Biology (2001-2005)
Graduate Research Assistant: Duke University; Neurobiology Dept. (1996-2001)
Laboratory Technician: UNC-Chapel Hill; Physiology Dept. (1995-1996)

HONORS, FELLOWSHIPS AND AWARDS:

Kavli Frontiers of Science / National Academy of Sciences Fellow (2014)

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The University of Texas Regents' Outstanding Teaching Award (2012)
Society for Neuroscience Janett Trubatch Career Development Award (2011)
College of Natural Sciences Teaching Excellence Award; Univ. of TX at Austin (2011)
Winter Conference on Brain Research Travel Fellowship (2010)
Faculty Research Award; Bowdoin (2006-2007)
Individual Postdoctoral National Research Service Award; NIH/NIMH (2002-2005)
• "Roles of Phosphoinositides at the Synapse" F32MH067385-01
Grass Fellowship in Neurosciences; MBL (2003)
Brown – Coxe Postdoctoral Fellowship; Yale (2001-2002)
Individual Predoctoral National Research Service Award; NIH/NIMH (2000-2001)
• "Mechanisms of Synaptic Vesicle Endocytosis" F31MH012632-01
Ruth K. Broad Biomedical Foundation Fellowship; Duke (1999-2000)

GRANTS:

Current:

RF1 NS078165-12 (J. Morgan, PI) 06/01/22-05/31/27
NIH-NINDS/NIA
"Mechanisms of Synaptic Dysfunction in Parkinson's and Other Synuclein-Linked Diseases"
The goal of this project is to determine how excess α -synuclein and Parkinson's disease-linked mutations affect synaptic vesicle trafficking.
Role: PI

G-2022-19477 (L. Hyman, PI) 12/01/22-11/30/24
Alfred P. Sloan Foundation
"Creating Equitable Pathways to STEM Graduate Education"
This is a seed grant for piloting a post-baccalaureate program at the MBL in partnership with minority-serving institutions across the U.S.
Role: Co-PI

Pending:

RF1 NS078165-12-S1 Research Suppl. (J. Morgan, PI) 01/01/24-12/31/25
NIH-NINDS/NIA
"Mechanisms of Synaptic Dysfunction in Parkinson's and Other Synuclein-Linked Diseases"
This is a research supplement to promote diversity, and it will help support the career development of a post-baccalaureate scholar in the Morgan lab.
Role: PI

NSF Proposal #2406670 (J. Morgan, PI) 05/15/24-05/14/27
NSF Major Research Instrumentation (MRI)
"Track 1 Acquisition of a TEM with 3D Tomography for the MBL Central Microscopy Facility"
This MRI proposal seeks to acquire a new state-of-the-art transmission electron microscope for the MBL research facilities.
Role: PI

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Completed:

R25 HD079345-07 (J. Morgan, PI)

07/16/19-04/30/25

NIH-NICHD

“Frontiers in Stem Cells and Regeneration Course”

This is a one-week intense lecture and laboratory course that trains young scientists and faculty in the newest theory and technologies on stem cells and regeneration.

Role: PI and Course Director

2R01 NS078165-11 (J. Morgan, PI)

01/15/12-05/31/22

NIH-NINDS/NIA

“Mechanisms of Synaptic Dysfunction in Parkinson’s and Other Synuclein-Linked Diseases”

The goal of this project is to determine how excess α -synuclein and Parkinson’s disease-linked mutations affect synaptic vesicle trafficking.

Role: PI

R01 NS078165-09-S1 Research Suppl. (J. Morgan, PI)

01/01/19-12/31/20

NIH-NINDS/NIA

“Mechanisms of Synaptic Dysfunction in Parkinson’s and Other Synuclein-Linked Diseases”

This is a research supplement to promote diversity, and it will help support the career development of a postdoc in the Morgan lab, Dr. Cristina Román-Vendrell.

Role: PI

NATIONAL AND INTERNATIONAL SERVICE:

NIH Reviewer: Neuronal Communication (NC) Study Section (previously SYN), Member (2018-2024)

Annual Society for Neuroscience Meeting Mini-Symposium, Organizer and Chair (2019)

Swiss National Science Foundation Grant Reviewer (2019)

NIH Reviewer: BDCN Special Emphasis Panel, Chair (2018)

NIH Reviewer: MCDN-Q Special Emphasis Panel (2018)

Aquatic Models of Human Diseases Conference, Co-Organizer (2018)

North West Cancer Research Grant Reviewer (UK) (2018)

Israel Science Foundation Grant Reviewer (2018)

University of Wisconsin-Milwaukee: Research Growth Initiative Grant Reviewer (2017)

University of Missouri System: Spinal Cord Injury Research Program Reviewer (2014)

NIH Reviewer: SYN Study Section, Ad hoc member (2013-2016)

INSTITUTIONAL SERVICE:

Director, Eugene Bell Center for Regenerative Biology and Tissue Engineering (2017-present)

MBL Diversity and Inclusion Advisory Committee, Chair and Member (2018-2022)

Bell Center Search Committee, Member (2021-2022) and Chair (2022-2023)

Scientific Advisory Committee for the MBL Director of Research Search (2021)

Scientific Advisory Committee for the MBL Director Search (2014, 2017)

Friday Evening Lecture Advisory Committee (2016-2019)

MBL Environmental Health and Safety Representative (2016-2017)

MBL Director’s Council (2015-2016)

Director of Education Search, Advisory Committee (2015)

MBL/UChicago Affiliation Committee (2014-2016)

MBL/UChicago Retreat Planning Committee (2013- 2015)

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SUCCESS Career Development Program, Organizer and Panelist (2013-2017)
Whitman Center Steering Committee, Member (2013-2014)
Institutional Committee, Member (2012-2015)
Assoc. Director, Eugene Bell Center for Regenerative Biology and Tissue Engineering (2012-2017)

TEACHING EXPERIENCE:

Marine Biological Laboratory:

UChicago Neuroscience Quarter at the MBL: Fundamentals of Synapses (2023-present)
Frontiers in Stem Cells and Regeneration: Co-Director and Faculty (2012-2022)
Woods Hole Partnership Education Program (PEP) (2020-2022)
SPINES Course: Lecturer (2016, 2018-2019)
UChicago Biosciences Bootcamp (2016-2017)
Frontiers in Aging and Regeneration Course for undergraduates: Instructor (2015)
NSF REU Program "Biological Discovery in Woods Hole": Mentor (2013-present)
Brown-MBL NeuroPracticum Course for graduate students: Instructor (2013-2015)
Neurobiology Course: Instructor and Lecturer (2005, 2018, 2022)

The University of Texas at Austin:

Cell Biology Laboratory for undergraduates; 4 semesters (2008-2012)
- Designed and implemented this new course
Presentation Skills for graduate students; 6 semesters (2009-2012)
- Designed and implemented this new course
Cell Biology core course for graduate students: Co-Instructor; 1 semester (2008)
Topics in Cell and Developmental Biology for graduate students; 1 semester (2007)

Bowdoin College:

Cell Biology of the Neuron for undergraduates: 1 semester (2007)
- Designed and implemented this new course
Brain to Behavior for non-majors: 2 semesters (2006-2007)
- Designed and implemented this new course
Neurobiology: Lecture and Lab for undergraduates: 1 semester (2006)
- Designed new lectures and exams for this existing course
Biochemistry and Cell Biology Lecture and Lab for undergraduates: 1 semester (2006)
- Designed new lectures and exams for this existing course

Yale University:

Neurobiology Laboratory for undergraduates: Instructor; 1 semester (2005)
- Taught 3 stand-alone lab sections in neurophysiology

MENTORING EXPERIENCE:

Postdoctoral Trainees:

Cristina Román-Vendrell, Ph.D.; MBL (2018-present)
Hilary Katz, Ph.D.; MBL (2018-2022)
Karina Vargas, Ph.D.; MBL (2018-2023)
Sofia Ibarra Viniegra, Ph.D.; MBL (2016-2018)
Lindsey Soll, Ph.D.; MBL (2014-2017)
Susan M. Banks, Ph.D.; MBL (2012-2016)

Current Positions:

Postdoc, MBL
Assistant Prof., Western KY Univ.
Assistant Prof., Univ. of Pittsburgh
Project Coordinator, WHOI
Clinical Research Coordinator, Tufts
Associate Prof., FL Southern College

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Abraham Rosas-Arellano, Ph.D.; MBL (2012-2013)
Naila Alieva, Ph.D.; UT-Austin (2008-2009)

Graduate Student Trainees:

David J. Busch, Ph.D.; UT-Austin (2008-2012)
Billy Y-B. Lau, Ph.D.; UT-Austin (2008-2012)

Postbaccalaureate Trainees:

Caroline Casiano-Rivera (2023-present)
Emma Johnson (2023-present)
Jaquelin Wallace (2022-present)
Zachary Crockford (2022-present)
Maliea Slocum (2021-2023)
Elizabeth Wegman, B.A. (2020-2022)
Emily Brady, B.S. (2019 - present)
Kaitlyn Fouke, B.S. (2019-2021)
Eduardo Guadarrama, (2018-2020)
Julia Eisen, B.A. (2018-2020)
Molly McQuillan, B.A. (2017-present)
Tessa Harkenrider (2017-2018)
Kendra Hanslik, B.S. (2016-2017)
Audrey Medeiros, B.S. (2015-present)
Scott Allen, B.S. (2014-2016)
Stephanie Fogerson, Ph.D. (2012-2014)
Rylie Walsh, Ph.D. (2012-2014)
Paul Oliphint, B.A. (2007-2012)

Undergraduate Trainees:

Ryan Breitbart: MBL NSF REU Fellow (2023)
Gia Fisher: MBL UChicago Metcalf Fellow (2022)
Sarah Weber: MBL UChicago Metcalf Fellow (2021)
Daniel Gonzalez-Kosasky: MBL NSF REU Fellow (2021)
Nicole McCarthy Losurdo: MBL NSF REU Fellow (2019)
Yohan Auguste: MBL NSF REU Fellow (2018)
Eduardo Guadarrama: MBL NSF REU Fellow (2017)
Yangtian Yi: MBL (2015)
 • U. Chicago Jeff Metcalf Fellow
Michele Nsianya; MBL (2015)
 • REU Fellow
Scott Allen; MBL (2013)
 • REU Fellow
Julia Eisen; MBL (2013)
Helena Lane; MBL (2013)
Alexa van Brummen; UT-Austin (2011-2013)
 • Parkinson's Disease Foundation
 Summer Fellowship; MBL (2012)
 • Undergraduate Research Forum Award (2012)
 • UT Presidential Scholarship (2012)
Adam Lipsitt; UT-Austin (2010-2011)
Derek Su (2010)
 • ICMB Summer Fellow
Melanie Molina; UT-Austin (2010)

Postdoc, UNAM – Mexico City
Core Manager, Natl. Univ Singapore

Senior Scientist, Merck
Assistant Professor, Univ. of Tennessee

ENGAGE-Bio Postbac Scholar, MBL
Research Assistant I, MBL
Research Assistant III, MBL
Research Assistant I, MBL
Cape Cod Community College
Medical Writer, Boston
Ph.D. student, Biology, Duke
Ph.D. student, Neurobiology, Duke
Ph.D. student, Northwestern
Medical student, Yale School of Med.
Ph.D. student, Neuroscience, Brown
Undergraduate, Cape Cod Community
Ph.D. student, Neuro, UW-Madison
Ph.D. student, Neuroscience, Brown
Postdoc, UNC-Chapel Hill
Manager, Powered Research LLC
Research Scientist, MBL
Research Scientist III, UT-Austin

Undergraduate, Florida Southern Univ.
Undergraduate, Univ. of Chicago
Undergraduate, Univ. of Chicago
Undergraduate, Amherst College
Ph.D. student, Neuro, Univ. of Utah
Ph.D. student, Stanford Univ.
Ph.D. student, Northwestern
Resident, Mass General Hospital

Undergraduate, UNC-Chapel Hill

Postdoc, UNC-Chapel Hill

Medical student, Yale School of Med.
Lead producer, Kluge Interactive
Ophthalmology, Seattle Children's

Psychiatry, Palm Harbor, FL
Psychiatry, Kaiser Permanente CA

Asst. Prof. Emergency Med., UCSF

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- Undergraduate Research Fellowship (2010)
Akila Amsavelu; UT-Austin (2008-2009) Pediatrics, Kid's Choice TX
- Undergraduate Research Fellowship (2008)
Julie Schackman; UT-Austin (2008-2009) Asst. Prof. Anesthesiology, Baylor
- Undergraduate Research Fellowship (2008)
Andrea Foldes; UT-Austin (2007-2008) Pediatrics, San Antonio
- Applied Biosystems/Ambion Award for Excellence
in Molecular Biology Research (2008)
- Undergraduate Research Fellowship (2007)
- Research Technician in my lab (2009-2010)
Jenna Pariseau; Bowdoin College (2006-2007) OBGYN, Mt. Auburn Hospital
- INBRE Fellow

Graduate Student Committees:

Member of 15 Ph.D. dissertation committees at UT-Austin (2008-2012)

Member of 7 Ph.D. dissertation committees for graduate students at Brandeis, Northeastern, NJIT, Princeton, University of Puerto Rico Río Piedras (2012-present)

PROFESSIONAL ACTIVITIES:

Professional Societies:

Society of the MBL (formerly the Corporation), Member (2004-present)

Society for Neuroscience, Member (1996-present)

American Society for Cell Biology, Member (2016-present)

Invited Seminars (last 5 years only):

Weill Medical College of Cornell University (March 2024)

Vollum Institute; OHSU (Dec. 2023)

University of Pennsylvania; Department of Physiology (Oct. 2023)

Case Western Reserve University; Neurosciences Department (Dec. 2022)

Brigham and Women's Hospital/Harvard University; Movement Disorders Conference (March 2022)

University of Rhode Island; Ryan Institute for Neuroscience (March 2022)

Temple University; Shriner's Hospital's Center for Neural Repair and Rehabilitation (Dec. 2021)

University of Georgia; Cell Biology Department (Oct. 2021)

Marine Biological Laboratory; Neural Systems & Behavior Course; Konishi Lecture (May 2021)

NeuroImaging Seminar Series NIH; Virtual (Jan. 2021)

University of Chicago; Neuroscience Institute; Virtual (Nov 2020)

University of Kentucky; Biology Department; Lexington, KY (April 2019)

University of Illinois at Chicago; Biology Department; Chicago, IL (April 2019)

University of Wisconsin, Milwaukee; Biological Sciences Dept.; Milwaukee, WI (Mar. 2019)

University of Puerto Rico, Rio Piedras Campus; NIH NeuroID seminar (April 2018)

Boston University; Biology Department (Mar. 2018)

Invited Presentations at Meetings and Conferences (selected):

Iowa Neuroscience Institute Synapse Workshop (Oct. 2022)

Experimental Biology Conference; Virtual (April 2021)

Louis J. Fox Center for Vision Restoration Conference; Virtual (Oct. 2020)

Annual Society for Neuroscience Meeting: Mini-Symposium; Chicago, IL (Oct. 2019)

National Center for Brain Mapping NeuroProbes Conference; MBL, Woods Hole, MA (Oct. 2018)

The 8th Aquatic Models of Human Diseases Conference; MBL; Woods Hole, MA (Sept. 2018)

Giant Synapse Symposium; Georgetown University; Washington DC (Nov. 2017)

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Louis J. Fox Center for Vision Restoration Conference; Washington, DC (July 2017)
Society for Developmental Biology: Regeneration Symposium; Boston, MA (Aug. 2016)
International Symposium on the Neurobiology of Locomotion; Washington, DC (June 2016)
The 7th Aquatic Animal Models of Human Diseases Conference; Austin, TX (Dec. 2014)
Kavli Frontiers of Science Symposium; National Academy of Sciences; Irvine, CA (Nov. 2014)

PUBLIC OUTREACH AND K-12 EDUCATION:

Invited Lectures:

Logan Science Journalism Course (June 2023)
University of Chicago Graham School (Sept. 2022)
Lynn High School, Invited Lecture at MBL on Adaptation and Evolution (Feb. 2022)
Falmouth Academy, Women in Science and Engineering (WiSE) Club (Dec. 2018, Nov. 2019)
Sandwich High School, Human Body Systems Course (April 2018)
Mullen Hall, 1st Grade Science Class on "How the Brain Works" (April 2017)
Spinal Cord Injury Awareness Day, MA State House (Sept. 2015, 2017-2018)
Science Before Supper; Falmouth Library (Mar. 2016)
New England Ocean Science Education Collaborative: Ocean Literacy Summit (Nov. 2014)
MBL Board of Overseers (July 2013)

Lab Demos:

Winsor High School Visit (Oct. 2018)
MBL Council visit (July 2017)
Logan Science Journalism Program (June 2016)

Other:

ArtLab Presents (September 2020)
"MBL: Through the Lens of Time" Photography and Video Exhibit (June 2018)
NPR/WCAI: "Spinal Cord Regeneration" Interview on Living Lab (June 2012)

PUBLICATIONS:

Peer-Reviewed Publications:

Wallace JN, Crockford ZC, Román-Vendrell C, Brady EB, Hoffman C, Vargas KJ, Potcoava M, Wegman ME, Alford ST, Milovanovic D, **Morgan JR** (2023) Excess phosphoserine-129 α -synuclein induces synaptic vesicle trafficking and declustering defects at a vertebrate synapse. (in press at *Molecular Biology of the Cell*)

Maxson Jones K, **Morgan JR** (2023) Lampreys and spinal cord regeneration: "a very special claim on the interest of zoologists," 1830s-present. *Frontiers in Cell and Developmental Biology*. 11:1113961. doi: 10.3389/fcell.2023.1113961. PMID: 37228651.

Hamlet C, Fauci L, **Morgan JR**, Tytell ED (2023) Proprioceptive feedback amplification restores effective locomotion in a neuromechanical model of lampreys with spinal injuries. *Proceedings of the National Academy of Sciences*. 120(11):e2213302120. doi: 10.1073/pnas.2213302120. PMID: 36897980.

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- Brady EB, McQuillan M, Medeiros AT, Bubacco L, Sousa R, Lafer EM, **Morgan JR** (2023). Hsc70 rescues the synaptic vesicle trafficking defects caused by α -synuclein dimers. *microPublication Biology*. 10.17912/micropub.biology.000737. PMID: 3698331.
- Pattanayak R, Underwood R, Crowley MR, Crossman DK, **Morgan JR**, Yacoubian TA (2022) Deletion in chromosome 6 spanning alpha-synuclein and multimerin1 loci in the Rab27a/b double knockout mouse. *Scientific Reports* 12:9837 doi: 10.1038/s41598-022-13557-8.
- Katz HR, Arcese AA, Bloom O, **Morgan JR** (2022) Activating transcription factor 3 (ATF3) is a highly-conserved pro-regenerative transcription factor in the vertebrate nervous system. *Frontiers in Cell and Developmental Biology*. 10:824036. doi: 10.3389/fcell.2022.824036.
- Fouke KE, Wegman ME, Weber SA, Brady EB, Román-Vendrell C, **Morgan JR** (2021) Synuclein regulates synaptic vesicle clustering and docking at a vertebrate synapse. *Frontiers in Cell and Developmental Biology*. 9:774650. doi: 10.3389/fcell.2021.774650.
- Fies J, Gemmell BJ, Fogerson SM, **Morgan JR**, Tytell E, Colin SP (2021) Swimming kinematics and performance of spinal transected lampreys with different levels of axon regeneration. *Journal of Experimental Biology*. jeb.242639. doi: 10.1242/jeb.242639.
- Haspel G, Severi KE, Fauci LJ, Cohen N, Tytell ED, **Morgan JR** (2021) Resilience of neural networks for locomotion. *Journal of Physiology*. doi: 10.1113/JP279214
- Román-Vendrell C, Medeiros AT, Sanderson JB, Jiang H, Bartels T, **Morgan JR** (2021) Effects of excess brain-derived human α -synuclein on synaptic vesicle trafficking. *Frontiers in Neuroscience*. 15:639414 doi: 10.3389/fnins.2021.639414.
- Banks SML, Medeiros AT, Sousa R, Lafer EM, **Morgan JR** (2021) Chaperone proteins as ameliorators of α -synuclein-induced synaptic pathologies: insights into Parkinson's disease. *Neural Regeneration Research*. 16:1198-1199.
- Katz HR, Fouke KE, Losurdo NA*, **Morgan JR** (2020) Recovery of burrowing behavior after spinal cord injury in the larval sea lamprey. *Biological Bulletin*. December 2020. doi/10.1086/711365. (*Undergraduate contribution)
- Soll L, Eisen JN, Vargas KJ, Medeiros AT, Hammar KM, **Morgan JR** (2020) α -Synuclein-112 impairs synaptic vesicle recycling consistent with enhanced membrane binding properties. *Frontiers in Cell and Developmental Biology*. 8:405. doi: 10.3389/fcell.2020.00405.
- Banks SML*, Medeiros AT*, McQuillan M, Wang L, Ibarra-Viniegra AS, Busch DJ, Sousa R, Lafer EM, **Morgan JR**. (2020) Hsc70 Ameliorates the Vesicle Recycling Defects Caused by Excess α -Synuclein at Synapses. *eNeuro* 7(1). pii: ENEURO.0448-19.2020. doi: 10.1523/ENEURO.0448-19.2020. (* equal contributors)
- Du Clos KT, Dabiri JO, Costello JH, Colin SP, **Morgan JR**, Fogerson SM, Gemmell BJ (2019) Thrust generation during steady swimming and acceleration from rest. *Journal of Experimental Biology*. 222(Pt 22). pii: jeb212464. doi: 10.1242/jeb.212464.
- Chanaday N, Cousin M, Milosevic I, Watanabe S, **Morgan JR** (2019) The synaptic vesicle cycle revisited: new insights into the modes and mechanisms. *Journal of Neuroscience*. 39:8209-8216. <https://doi.org/10.1523/JNEUROSCI.1158-19.2019>.

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- Hanslik K, Allen SR, Fogerson SM, Harkenrider T, Guadarrama E, **Morgan JR.** (2019) Behavioral and functional recovery in the sea lamprey after spinal cord re-transection. *PLoS One*. 14(1):e0204193. doi: 10.1371/journal.pone.0204193. (Featured in *Nature: Research Highlights* Feb. 6, 2019)
- Romaus-Sanjurjo D, Ledo-García R, Fernández-López B, Hanslik K, **Morgan JR**, Barreiro-Iglesias A, Rodicio MC. (2018) GABA promotes survival and axonal regeneration in identifiable descending neurons after spinal cord injury in larval lampreys. *Cell Death and Disease*. 9:633. doi: 10.1038/s41419-018-0704-9. PMID: 29950557.
- Weil M-T, Heibeck S, Töpferwien M, Tom Dieck S, Ruhwedel T, Salditt T, Rodicio MC, **Morgan JR**, Nave KA, Möbius W, Werner HB. (2018) Axonal ensheathment in the nervous system of lamprey: Implications for the evolution of myelinating glia. *Journal of Neuroscience*. doi: 10.1523/JNEUROSCI.1034-18.2018. PMID: 29941446.
- Medeiros AT, Bubacco L, **Morgan JR.** (2018) Impacts of increased α -synuclein on clathrin-mediated endocytosis at synapses: implications for neurodegenerative diseases. *Neural Regeneration Research*. 13:647-648.
- Herman PE, Papatheodorou A, Bryant SA, Waterbury CKM, Herdy JR, Arcese AA, Buxbaum JD, Smith JJ, **Morgan JR***, Bloom O*. (2018) Highly conserved molecular pathways, including Wnt signaling, promote functional recovery from spinal cord injury in lampreys. *Scientific Reports*. 8:742. doi: 10.1038/s41598-017-18757-1. PMID: 29335507. (* co-corresponding) (#25 in Top 100 most-viewed neuroscience articles in *Sci. Rep.* in 2018)
- Medeiros AT, Soll LG, Tessari I, Bubacco L, **Morgan JR.** (2017) α -Synuclein dimers impair vesicle fission during clathrin-mediated synaptic vesicle recycling. *Frontiers in Cellular Neuroscience*. 11:388. doi: 10.3389/fncel.2017.00388. PMID: 29321725.
- Gemmell B, Fogerson SM, **Morgan JR**, Costello JH, Dabiri JO, Colin SP. (2016) How the bending kinematics of swimming lampreys build negative pressure fields for suction thrust. *Journal of Experimental Biology*. 219:3884-3895. PMID: 27974534.
- Fogerson SM, van Brummen AJ, Busch DJ, Allen SR, Roychaudhuri R, Banks SML, Klarner F-G, Schrader T, Bitan G, **Morgan JR.** (2016) Reducing synuclein accumulation improves neuronal survival after spinal cord injury. *Experimental Neurology*. 278:105-115.
- Busch DJ, Oliphint PA, Walsh RB, Banks SML, Woods WS, George JM, **Morgan JR** (2014) Acute increase of α -synuclein inhibits synaptic vesicle recycling evoked during intense stimulation. *Molecular Biology of the Cell*. 25:3926-3941. (With cover illustration). PMID: 25273557.
- Morgan JR**, Comstra HS, Cohen M, Faundex V. (2013) Presynaptic membrane retrieval and endosome biology: Defining molecularly heterogeneous synaptic vesicles. *Cold Spring Harbor Perspectives in Biology*. 5(10):a016915. (With cover illustration).
- Lau BYB, Fogerson SM, Walsh RB, and **Morgan JR.** (2013) Cyclic AMP promotes axon regeneration, lesion repair and neuronal survival in lampreys after spinal cord injury. *Experimental Neurology*. 250: 31-42. PMID: 24041988.
- Morgan JR**, Jiang J, Oliphint PA, Jin S, Gimenez LE, Busch DJ, Foldes AE, Zuo Y, Sousa R, Lafer EM. (2013) Role for an Hsp70 nucleotide exchange factor in the regulation of synaptic vesicle endocytosis. *Journal of Neuroscience*. 33:8009-8021. (With cover illustration)

Smith JJ, Kuraku S, Holt C, Sauka-Spengler T, Jiang N, Campbell MS, Yandell MD, Manousaki T, Meyer A, Bloom OE, **Morgan JR**, Buxbaum JD, Sachidanadam R, Sims C, Garruss AS, Cook M, Krumlauf R, Wiedemann LM, Sower SA, Decatur WA, Hall JA, Amemiya CT, Saha NR, Buckley KM, Rast JP, Das S, Hirano M, McCurley N, Guo P, Rohner N, Tabin CJ, Piccinelli P, Elgar G, Ruffier M, Aken BL, Searle SMJ, Muffato M, Pignatelli M, Herrero J, Jones M, Brown CT, Chung-Davidson Y-W, Nanlohy KG, Libants SV, Yeh C-Y, McCauley DW, Langeland JA, Pancer Z, Fritsch B, de Jong PJ, Zhu B, Fulton LL, Theising B, Flicek P, Bronner M, Warren WC, Clifton SW, Wilson RK, Li W. (2013) Sequencing of the sea lamprey (*Petromyzon marinus*) provides insights into vertebrate evolution. *Nature Genetics*. 45:415-21. PMID: 23435085.

Busch DJ and **Morgan JR** (2012) Synuclein accumulation is associated with cell-specific neuronal death after spinal cord injury. *Journal of Comparative Neurology*. 520: 1751-1771. (Highlighted in BioTechniques 06/22/12). PMID: 22120153.

Bloom OE and **Morgan JR** (2011) Membrane trafficking events underlying axon repair, growth, and regeneration. *Molecular and Cellular Neuroscience*. 48: 339-348. Review. PMID: 21539917.

Smith J, **Morgan JR**, Zottoli SJ, Smith PJ, Buxbaum JD, Bloom OE. (2011) Regeneration in the era of functional genomics and gene network analysis. *Biological Bulletin* 221:18-34. Review.

Lau, BY and **Morgan JR** (2011) "Fishing" for new strategies to improve recovery. *Paraplegia News* 65:68-69. Review.

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