Jamey Maniscalco

Regis University ● Department of Psychology & Neuroscience
3333 Regis Blvd., Denver, CO 80221 (D-12)

EDUCATION

Ph.D.	**Center for Neuroscience at the University of Pittsburgh** Dissertation: Metabolic Tuning of Neural, Neuroendocrine, and Behavioral Responses to Stress	**2009-2014**
Bachelor of Science	**Denison University** Thesis: Effects of Neonatal Social Isolation on Play Behavior in Rats Following d-Amphetamine	**2004-2009**

PROFESSIONAL EXPERIENCE

Assistant Professor of Neuroscience, Regis University **2018-Present**

- **Teaching**
  - Instructor of record for undergraduate neuroscience and psychology courses. Responsible for syllabus and course content development, lectures and laboratory exercises, and student evaluation and assessment.
- **Research**
  - Development of independent research program at Regis; management of undergraduate research assistants conducting work on the impact of chronic caloric restriction and ghrelin signaling on neural stress and anxiety responses in rats.

Postdoctoral Research Associate, University of Illinois at Chicago **2016-2018**

- **Teaching (50%)**
  - Instructor of record for undergraduate neuroscience courses. Responsible for syllabus and course content development, lectures and laboratory exercises, and student evaluation and assessment.
- **Research (50%)**
  - Management of undergraduate research assistants and neuroscience research projects aimed at elucidating the metabolic regulation of stress responses and their underlying neural networks.

Senior Consultant, West Monroe Partners **2015-2016**

- **Business Intelligence & Data Visualization**
  - Responsible for development of data analytics dashboards for a global pharmaceutical company. Dashboards reported critical sales metrics and key performance indicators for pharmaceutical products.
  - Worked with pharmaceutical sales representatives and managers to define functional requirements for dashboards.
  - Managed 3 technical specialists and software developers; responsible for creation of project plans, status updates, investigation of risks/issues, and documentation processes.
- **Predictive Analytics & Disease Identification**
  - Managed predictive analytics projects for global pharmaceutical companies. Projects utilized real-world evidence and clinical research data to identify complex combinations of variables that predict onset of disease or disease-state events.
  - Responsible for overall project design and pricing, project plans, status updates and incorporation of client feedback, oversight of data cleansing/transformation processes, and management of predictive analyses.

Experienced Consultant, West Monroe Partners **2014-2015**

- **Data Migration, Archiving, and Visualization**
  - Led a cross-functional team of 5 business analysts and technical specialists in Europe, India, and the U.S. to execute legacy data migration and data visualization for a global pharmaceutical company.
  - Responsible for creation of >25 dashboards to visualize pharmaceutical financial data.
  - Managed the coordinated efforts and direct collaboration among resources living in 4 different countries, with 3 different primary languages, and completely distinct skillsets and work experience.
  - Developed detailed project plans, hosted daily/weekly status updates with project team as well as client sponsors, conducted quality assurance, oversaw documentation processes, and managed risks/issues.

GRANTS & AWARDS

Regis University:

Faculty Research & Scholarship Grants (FRSG) **2020 & 2021**
Merit-based awards; two $5,000 grants supporting research investigating the hormonal influences of fasting on neural and behavioral stress responses.

University of Pittsburgh:

Andrew Mellon Predoctoral Fellowship **2012-2013**
Merit-based award; included full tuition, presented annually to 50 graduate students in the University of Pittsburgh Dietrich School of Arts and Sciences.

Society for the Study of Ingestive Behavior New Investigator Travel Award **2012**
Merit-based award; included an oral presentation of research and travel funds to attend annual SSIB conference in Zurich, Switzerland.

Predoctoral Training Grant in Basic Neuroscience (NINDS – 5T32NS007433) **2010-2011**
NIH Grant; merit-based award that provided full stipend support.

TEACHING EXPERIENCE

Regis University **2018-Present**

Behave (RCC420J) – 1 section
Upper-division integrative core course investigating the neurobiology of human behavior to address the concepts of free will and justice in our society.

Advanced Neuroscience Methods (NS401) – 1 section
Upper-division course required for NS majors; teaches neuroscience laboratory techniques – including rodent behavioral observation, stereotaxic surgery, pharmacological manipulation, transcardial perfusions, and histology – through a semester-long research project.

Internship in Psychology & Neuroscience (PSY/NS498) – 1 section
Upper-division experiential learning course; students complete an off-campus internship in a field of interest, and the class meets to prepare for and reflect on internships as well as discuss career discernment and prepare professional documents.

Research Methods and Behavioral Statistics I (PY422) – 2 sections
Upper-division course required for PSY/NS majors; focuses on conceptual and practical topics in research methods as students develop independent research project proposals.

Research Methods and Behavioral Statistics Lab (PY424) – 1 section
Upper-division course required for PSY/NS majors; covers concepts in research methods and applied statistical analysis as students conduct and present independent research projects.

Introduction to Brain and Behavior – C-course (NS260c) – 3 sections
Oral communication-based Foundational Core course exploring basic topics in behavioral neuroscience.

Introduction to Brain and Behavior Lab (NS261) – 8 sections
Introductory course for PSY/NS majors and minors exploring topics in behavioral neuroscience through hands-on laboratory exercises.

Introduction to Brain and Behavior (NS260) – 6 sections
Introductory course for PSY/NS majors and minors exploring topics in behavioral neuroscience.

University of Illinois at Chicago:

Laboratory in Behavioral Neuroscience – 3 sections **2016-2018**
20-student laboratory course exploring topics and research techniques in behavioral neuroscience.

Behavioral Neuroscience – 1 section **2017-2018**
160-student lecture course covering topics in behavioral neuroscience.

Neuroscience II – 1 section **2017**
80-student team-taught capstone lecture course covering broad neuroscience topics. Acted as course coordinator as well as lecturer for ~50% of classes.

Student Advisor/Mentor **2017-2018**
Instructed an undergraduate student and a post-baccalaureate in laboratory technique, research design and execution, and critical analysis of neuroscience literature.

University of Pittsburgh:

Student Advisor/Mentor **2011-2014**
Instructed two undergraduate students in laboratory technique, critical analysis of neuroscience literature, and scientific writing.

Student Club Advisor **2012-2013**
Advisor to the University of Pittsburgh Undergraduate Neuroscience Journal Club – led discussions on neuroscience literature and instructed students on presentation technique and critical analysis of primary literature.

Brain and Behavior – Teaching Assistant **2010**
Conducted weekly recitations, held office hours, and tutored students for the course "Brain and Behavior."

SERVICE & DEPARTMENTAL EXPERIENCE

Regis University

Faculty Development Committee [Co-chair (2021-Present)] **2020-Present**
Responsible for continued faculty development via the award of grants to support research, travel, professional society membership, publications, and teaching.

Institutional Animal Care & Use Committee **2019-Present**
Committee member; responsible for ensuring proper research animal care via facility inspections, annual program oversight, and review of research protocols involving vertebrate animals.

Psychology/Neuroscience Student Club Advisor **2019-Present**
Served as the Club advisor by working with student leaders to develop biweekly extracurricular activities, including journal clubs, student-led discussions, volunteer activities, speakers, and trivia contests.

Foundational Core Teaching (NS260c) **2019-Present**
Taught C-courses in the first-year Foundational Core; created course content focused on the development of oral communication skills.

University of Illinois at Chicago:

Honors College Faculty Fellow **2017-2018**

Advised undergraduate Honors students in completion of semesterly honors activities and facilitated development and completion of year-long Capstone projects during Senior year.

Denison Alumni Neuroscience Advisor **2016-2018**

Served as an alumni mentor for Denison undergraduate students in the sciences. Connected with students to discuss career options, internship and research priorities, and structuring a diverse and productive undergraduate experience.

Denison Alumni Recruiting Team **2010-2018**

Represented Denison at high school college fairs to recruit incoming students and speak to families about the educational value of a small, liberal arts university. Contacted accepted students to discuss Denison and provide support and resources to make their college decision.

Alternative Careers in Neuroscience **2016-2017**

Developed a student-oriented seminar on considering careers outside of academia, including practical resources for the job search and application process; advised undergraduate and graduate students in identifying fulfilling career paths. Hosted a visiting industry scientist to discuss alternative careers for students with degrees in the sciences.

University of Pittsburgh:

Center for Neuroscience Admissions Committee **2013-2014**

Reviewed applications, organized interviews, and made admissions decisions for the CNUP graduate program in neuroscience.

Center for Neuroscience 2013 Annual Retreat Committee **2013**

Organized annual off-campus retreat for more than 150 neuroscience faculty, graduate students, and postdoctoral fellows. Hosted 1 of 4 visiting plenary lecturers.

Hypothalamus Journal Club Leader **2013**

Organized and ran a weekly primary literature journal club that included faculty, postdoctoral fellows, graduate students, and undergraduates.

Department of Neuroscience: Graduate Student Organization Representative **2010-2011**

Coordinated graduate student interaction with visiting speakers and communicated student feedback regarding visiting faculty applicants for department chair and hiring committee.

NEUROSCIENCE OUTREACH

Regis University

Psychology/Neuroscience Faculty Outreach Coordinator **2020**

Coordinated and hosted a series of hands-on neuroscience outreach activities for elementary- and middle-school students. Worked with Regis undergraduate students to develop the knowledge and confidence to teach outreach activities independently.

Science Sunday – Neuroscience Outreach **2019-2020**

Worked with Regis students to host neuroscience outreach booths at a large-scale outreach event hosted for elementary-, middle-, and high-school students on the Regis campus.

University of Illinois at Chicago:

Outreach Coordinator **2017-2018**

Organized and conducted a series of hands-on neuroscience outreach activities for high school seniors with learning differences. Developed a semester-long outreach program that couples neuroscience presentations with lab activities; the program focuses on topics regarding diversity/disability.

University of Pittsburgh:

Pitt Brain Program – Outreach Advocate **2010-2014**

Engaged middle- and high-school students in conversations about neuroscience while teaching principles of neuroanatomy and neurophysiology.

PUBLICATIONS (PEER-REVIEWED JOURNAL ARTICLES)

J.W. Maniscalco, C.M. Edwards, & L. Rinaman. Ghrelin signaling contributes to fasting-induced attenuation of hindbrain neural activation and hypophagic responses to systemic cholecystokinin in rats. *Am J Physiol Regul Integr Comp Physiol,* 318 (2020).

J.W. Maniscalco & L. Rinaman. Vagal Interoceptive Modulation of Motivated Behavior. *Physiology*, 33 (2018).

J.W. Maniscalco & L. Rinaman. Interoceptive Modulation of Neuroendocrine, Emotional, and Hypophagic Responses to Stress. *Physiology and Behavior*, 176 (2017).

J.W. Maniscalco, H. Zheng, P.J. Gordon, & L. Rinaman. Negative Energy Balance Blocks Neural and Behavioral Responses to Acute Stress by "Silencing" Central Glucagon-Like Peptide 1 Signaling in Rats. *The Journal of Neuroscience*, 35:30 (2015).

J.W. Maniscalco & L. Rinaman. Systemic Leptin Dose-Dependently Increases STAT3 Phosphorylation within Hypothalamic and Hindbrain Nuclei. *Am J Physiol Regul Integr Comp Physiol*, 306:8 (2014).

J.W. Maniscalco & L. Rinaman. Overnight Food Deprivation Markedly Attenuates Hindbrain Noradrenergic, Glucagon-Like Peptide-1, and Hypothalamic Neural Responses to Exogenous Cholecystokinin in Rats. *Physiology and Behavior*, 121 (2013).

J.W. Maniscalco, A.D. Kreisler, & L. Rinaman. Satiation and Stress-Induced Hypophagia: Examining the Role of Hindbrain Neurons Expressing Prolactin-Releasing Peptide (PrRP) or Glucagon-Like Peptide 1 (GLP-1). *Frontiers in Neuroscience*, 6:199 (2013).

RESEARCH PRESENTATIONS

Oral Presentations

J.W. Maniscalco, C.M. Edwards, K.A. Coakley, & L. Rinaman. Ghrelin signaling contributes to fasting-induced attenuation of hindbrain neural activation and behavioral responses to systemic cholecystokinin – but not cognitive stress exposure – in rats. *Society for the Study of Ingestive Behavior 2021.*

K.A. Coakley & **J.W. Maniscalco.** The impacts of ghrelin and cognitive stressors on the glp-1 pathway after fasting. *Nu Rho Psi Undergraduate Research Symposium 2021.*

J.W. Maniscalco. Metabolic tuning of neural circuits: how fasting influences stress responses & anxiety. *Front Range Neuroscience Group 2019.*

J.W. Maniscalco, M.F. Roitman, & L. Rinaman. Hindbrain glucagon-like peptide-1 (GLP-1) neurons: unconditioned and conditioned responses and their modulation by short-term fasting. *Society for the Study of Ingestive Behavior 2017.*

J.W. Maniscalco & L. Rinaman. Paraventricular hypothalamic (PVN) cFos activation correlates with activation of hindbrain noradrenergic (NA) neurons after systemic cholecystokinin-8 (CCK). *Society for the Study of Ingestive Behavior 2012.*

Poster Presentations

K.A. Coakley & **J.W. Maniscalco.** Impact of ghrelin signaling on glucagon-like peptide 1 (GLP-1) and prolactin-releasing peptide (PrRP) neural activation and anxiety behavior following cognitive stress in fasted rats. *Society for Neuroscience 2021.*

J.W. Maniscalco, P.J. Gordon, & L. Rinaman. Attenuated activation of glucagon-like peptide-1 (GLP-1)- and prolactin-releasing peptide (PrRP)-positive hindbrain neurons may contribute to fasting-mediated reductions in anxiety-like behavior and paraventricular hypothalamic (PVN) responses to cognitive stress. *Society for Neuroscience 2014.*

J.W. Maniscalco, P.J. Gordon, & L. Rinaman. Fasting reduces cognitive stress activation of glucagon-like peptide-1 (GLP-1) and prolactin-releasing peptide (PrRP) hindbrain neurons in conjunction with attenuated anxiety-like behavior and mpPVN neural activation. *Neurobiology of Stress Workshop 2014*.

J.W. Maniscalco & L. Rinaman. Systemic leptin is insufficient to confer sensitivity of glucagon-like peptide-1 (GLP-1) neurons to cholecystokinin-8 (CCK) in fasted rats. *Society for the Study of Ingestive Behavior 2013*.

J.W. Maniscalco, P.J. Gordon, & L. Rinaman. Activation of hindbrain glucagon-like peptide-1 (GLP-1) neurons in rats after restraint stress correlates with activation in the GLP-1 terminal-rich region of the parastrial nucleus (PS) of the hypothalamic preoptic area. *Society for Neuroscience 2012*.

J.W. Maniscalco, P.J. Gordon, & L. Rinaman. Cognitive stress activates hindbrain glucagon-like peptide-1 (GLP-1) neurons. *Neurobiology of Stress Workshop 2012*.

J.W. Maniscalco & S. Kennedy. Effects of brief neonatal isolation on play/social behaviors following d-amphetamine. *Midwestern Psychological Association 2009*.

J.W. Maniscalco & S. Kennedy. Early social isolation or handling stress alters subsequent play behavior and social interaction in juvenile rats following d-amphetamine. *Eastern Psychological Association 2009*.