

Neuroscience Program Faculty Meeting

May 3, 2018

New members

- **Andrew Bender**, Assistant Professor, Epidemiology/Biostatistics and Neurology/Ophthalmology, Cognitive neuroscience of aging and lifespan development
- **Marsha Gordon**, Professor, Translational Science & Molecular Medicine, Innate immunity in neurodegenerative diseases.
- **David Morgan**, Professor, Translational Science & Molecular Medicine, neuroinflammation in Alzheimer's disease
- **Hanne Hoffman**, Assistant Professor, Animal Science, Behavioral neuroendocrinology and reproduction.
- **Ralf Schmalzle**, Assistant Professor, Communication Arts and Sciences, Neuroimaging of dynamic media messages; social cognitive and affective neuroscience Message processing and audience response to messages.

Graduate Program Updates: Incoming students

- Luis Martinetti, Univ Texas/El Paso, AAGA/Early Start Fellowship
- Hannah Rudolph, Agnes Scott College
- Zac Fernandez, Wayne State Univ University Enrichment/Early Start Fellowship (rotation: David Zhu)
- Christine Kwiatkowski, joint PhD with Criminal Justice (AJ Robison, Adam Moeser)
- Ahlam Soliman, Univ of South Florida (David Morgan and Marcia Gordon)
- Mohammed Alhadidy, Univ of South Florida (David Morgan and Marcia Gordon)

Graduate student teaching assistantships

- NSP grad students entering the program in 2017 and later are required to do one teaching assistantship (TA).
- TA's are also available to NSP grad students when there is interest or need.
- In the spring term, the Graduate Secretary (Julie Delgado) sends out a call for TA applications to all NSP PhD students and mentors. These are set up for the following summer, fall and spring terms.

Graduate Program Updates: Curriculum Change (Fall term, 2019)

Year 1			Year 2	
Fall	Spring	Summer	Fall	Spring
NEU801 Molecular, Cellular & Developmental Neuroscience I (3 cr)	NEU803 Molecular, Cellular & Developmental Neuroscience II (3 cr)	PHM 841 Biostatistics (3 cr)	NEU 415 Neuroinformatics (3 cr)	Required elective (2-3 cr) Could be taken later
NEU802 Systems and Behavioral Neuroscience I (3 cr)	NEU 804 Systems and Behavioral Neuroscience II (3 cr)		Required elective (2-3 cr) Could be taken later	
NEU 807 Res strategies in neuroscience (2 cr)				

New foundational courses, NEU 801/803 and NEU 802/804 in Year 1, Team taught, will incorporate discussion of primary literature and **neurobiology of disease**.

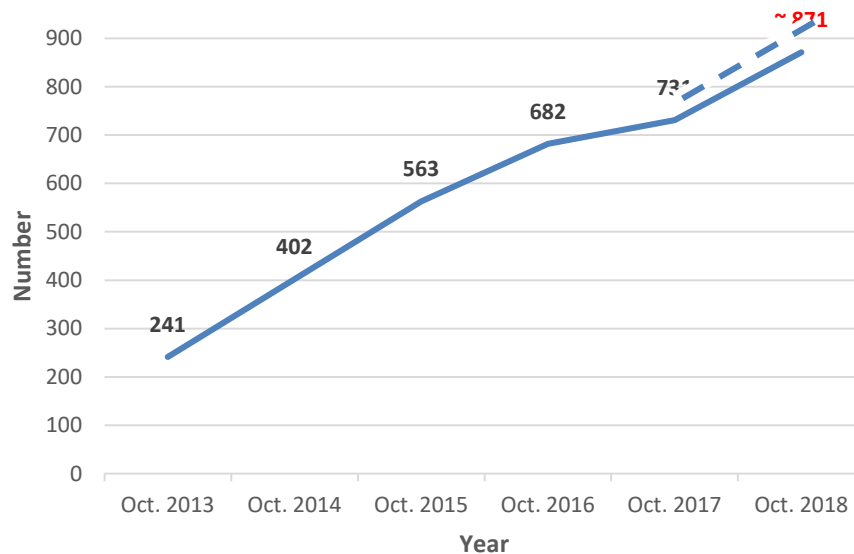
New quantitative skills requirement

2 required electives, 17 cr in year 1; 3-9 cr in year 2

Research Forum replaced by NEU 807

Neuroscience Majors: The Numbers

Number of MSU Neuroscience Majors
2013 -2018



2 May 2018: 829
Graduating: 158
Incoming: ~ 100
Est. Oct 2018: **871**

Current Challenges

Course offerings

- Need more 400-level courses, especially small seminar-style
- Not enough courses for cognitive/computational concentration

Overall Curriculum – alignment of content and learning objectives

- Faculty directors of core courses (NEU 301, 302, and 311L) to meet as prelude to formal assessment



Advising – 800 too many students to advise!

- Prestigious scholarship advising for high-achieving students
- Academic advice for under-achieving students
- Exploring & setting up internships and career placements

Continued Excellence

Broad curriculum *within* NSP:

Core Courses (3)

NEU 301/302 enrollment N ~ 300

NEU 311L: 9 sections/year, including summer

400-level courses (9)

Neuroinformatics; NEU 415

Development; NEU 416

Instrumental Methods; NEU 417

Neurobiology of Disease; NEU 420

Neuropharmacology; NEU 422/492

Modeling; NEU 425

Drug Abuse; NEU 431

Autonomic Nervous System; NEU 492

Neural Engineering; NEU 492

200-level course: Basic Concepts; NEU 230

300-level service course: Neurobiology; NEU 300

Student Advising & Career Development:

Active Mentoring Program

Neuroscience Club

Pipeline to NIH summer internships

Future Initiatives...

NEU Study Abroad

Closer ties with alumni

Online Programs

- Medical Neuroscience
 - 11 current students
 - First graduate Spring 2018; 1 student accepted to PhD program
 - 46 applicants for Fall 2018

Course	Instructor	Semester	Program
NEU 841 Medical Neuroscience	Henley	Fall & Spring	Medical Neuroscience
NEU 842 Neuroethics	Cabrera	Summer	Both certificate programs
NEU 843 Methods for Assessing the Nervous System	Symonds	Spring	Both certificate programs
NEU 844 The Science and Ethics of Brain Interventions	TBD	Summer	Both certificate programs
NEU 846 Neurobiology of Nervous System Disorders	Robison	Summer	Medical Neuroscience
NEU 847 Development of the Nervous System	Galligan	Fall	Medical Neuroscience
PHM 431 Pharmacology of Drug Addiction	Galligan	Summer	Medical Neuroscience

Online Programs

- Neuroscience & the Law
 - Starting Fall 2019
 - Adjuncts for law courses

Course	Instructor	Semester	Program
NEU 840 Social, Cognitive, and Affective Neuroscience	Henley	Fall	Neuroscience & the Law
NEU 845 Neuroscience of Drug Use and Human Disorders	Galligan	Spring	Neuroscience & the Law
NEU 848 Foundations of Law and Legal Research	Prew (Adjunct)	TBD	Neuroscience & the Law
NEU 892 Special Topics in Neuroscience and the Law	TBD	Fall	Neuroscience & the Law