



# Faculty Forum

## Departmental Spotlight

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Department of Anatomical Sciences & Neurobiology

J. Pat Moore



# Department of Anatomical Sciences & Neurobiology

## Description and Demographics

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### Description of Department

- **New programs**
  - H.A.N.D. -Human Anatomy & Neurobiology Degree
  - Robert D. Ackland -Anatomical Sciences Ph.D. Program
  - Interdisciplinary Neuroscience Ph.D. Program in Translational Neuroscience
  - LOI for undergraduate neuroscience program
- **# of Faculty: 21 primary faculty and 14 joint/ affiliate members**
- **# of Students: 27 PhD, 1 MD/Ph.D., 7 MS**
- **Chair: Dr. William Guido, Ph.D.**
  - Vice Chair of Education: Jennifer Brueckner-Collins, Ph.D.
  - Vice Chair of Graduate Studies: Charles Hubscher, Ph.D.
  - Vice Chair of Research: Dr. Robin Krimm, Ph.D.
- **Other Department Contacts**
  - Unit Business Manager: Donna Bottorff
  - Administrative Associate: Michelle Ahlers



## Department Contribution to the SOM four planning pillars

### Education

- **LCME curriculum reform (integrated content, Sono-Sim, faculty staffing, EPC)**
- **Provide instruction in the School of Medicine and Dentistry**
  - Gross Anatomy, Histology, Embryology, Neuroanatomy
- **Provide instruction for School of Interdisciplinary & Graduate Studies**
- **Provide training for the MD/PhD program**
- **Fully supported PhD program with a focus in Neuroscience**
- **Masters degree program offered in Anatomical Sciences**
- **35 graduate students (27 PhD, 1 MD/Ph.D., 7 MS)**
- **New graduate courses**
  - Fundamentals in Neuro, Development Neuro, Molecular Neuro, Synaptic Organization
- **Numerous postdoctoral fellows and associates**
- **Charles Hubscher**
  - 2015 Provost's Award Exemplary Director of Graduate Studies
- **Jennifer Brueckner-Collins**
  - 2014: Doyle Award for Excellence in Basic Sci. Ed., Dentistry
  - 2015: Dean's Outstanding Educator Award
  - 2016: Presidents Award for Education, SOM Deans Educator Award, Paul Weber Award Dentistry



## Department Contribution to the SOM four planning pillars

### Clinical Care Training

- **Sonography Simulation**

- **Surgical Dissection Techniques**

- |                        |                            |
|------------------------|----------------------------|
| Carotid endarterectomy | Resuscitative thoracotomy  |
| Central line           | Leg fasciotomy             |
| Tracheotomy            | Anterior approach to hip   |
| Appendectomy           | Anterior forearm approach  |
| Left hemicolectomy     | Anterior shoulder approach |
| Cholecystectomy        |                            |

- **Fresh Tissue Lab**

- **Surgery**

- Division of Hand Surgery
    - Division of Plastic & Reconstructive Surgery
    - Division of Otolaryngology – Head & Neck Surgery
    - Division of General Surgery
    - Division of Thoracic and Cardiovascular Surgery

- **Obstetrics, Gynecology, & Women's Health**

- Division of Female Pelvic Medicine and Reconstructive Surgery
    - Division of General Obstetrics & Gynecology – Minimally Invasive Gynecologic Surgery

- **Neurosurgery**

- **Orthopedic Surgery**

- **Ophthalmology & Visual Sciences**

- **Anesthesiology and Perioperative Medicine**



# Department of Anatomical Sciences & Neurobiology

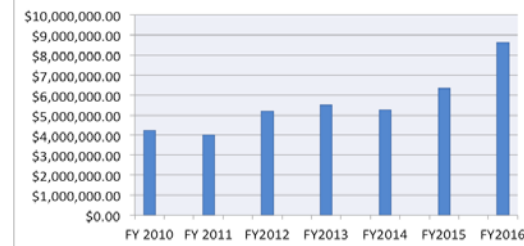
## Department Contribution to the SOM four planning pillars

### Research

**Research Groups: Sensory Systems, Development, Neural Injury & Repair, Comparative Anatomy & Evolution**

- **CURRENT GRANT PORTFOLIO (7/1/16): 23**

- 15 NIH (R01, R21, R03, F21, F32)
- 1 KBRIN (NIGMS)
- 2 KSCIRC
- 1 DOD
- 1 UK Research Foundation
- 1 Paralyzed American Veterans
- 1 Matilda Ziegler Foundation
- 1 Indiana State Dept. of Health



**Total funds 2016: \$8,753,902 (Direct: \$6,605,145; Indirect: \$2,148,757)**

#### **Ashok Kumar:**

- 2015: University Distinguished Scholar
- 2015: R01 Investigator Award NIAMSD (3rd R01)
- 2016: Finalist Presidents Award for Research

#### **Charles Hubscher:**

- 2015: R01 Investigator Award NICHHD
- 2015: KSCIRC Grant Award
- 2015: DOD Grant Award

#### **Jeff Petruska**

- 2015: R01 Investigator Award NINDS

#### **Robin Krimm**

- 2015: R21 Investigator Award NIDCD
- 2016: R01 Investigator Award NIDCD

### PUBLICATIONS

2013: 27 peer review papers

2014: 34 peer review papers (Jan-Jun 2014)

Jul 2014- Sept 2015: 42 peer review papers, 1 book

Jul 2015- Sept 2016: 33 peer review papers

Bickford (5): J Neuroscience, Cell

Kumar (4): Nature Communication

Petruska (4) J Neuroscience, Brain

Qiu (6): J Neuroscience

Borghuis (2): Neuron, J Neuroscience (featured)

Davis : Sci Report

# Department of Anatomical Sciences & Neurobiology

## Department Contribution to the SOM four planning pillars

### Community Engagement

- “Teach the Teachers” Summer Program
- Kentucky Science Louisville Youth Science Summit
- Kentucky Science Museum “Nano-Days”
- SPOG- Student Policy and Outreach Group
- Brain Awareness Week
- Louisville Regional Science & Engineering Fair
- duPont Manual Regional Science Fair
- Willed Body Program
- SOM Convocation of Thanks Program
- Fresh Tissue Facility



**UofL Trauma Institute**  
 Acute Care Nurse Practitioner Program  
**Norton Audubon**  
 Podiatry  
**Jewish Hospital & St. Mary’s Healthcare**  
 Podiatry  
**Sullivan University**  
 Physician Assistant Program

**Academy of General Dentistry**  
 Practicing Dentists Anatomy Review  
**United States Armed Forces**  
 Ft. Knox Medics training  
**UofL College of Dentistry**  
 Oral and Maxillofacial Surgery  
 Orthodontics

## Interesting Fact about the Department

Blue Ridge Institute for Medical Research

3754 Brevard Road  
Suite 116, Box 19  
Horse Shoe, NC 28742



16	UNIVERSITY OF KANSAS MEDICAL CENTER	\$8,464,939
17	JOHNS HOPKINS UNIVERSITY	\$8,401,986
18	EMORY UNIVERSITY	\$7,283,812
19	UNIVERSITY OF WISCONSIN-MADISON	\$6,645,398
20	UNIVERSITY OF LOUISVILLE	\$6,635,787
21	WASHINGTON UNIVERSITY	\$6,613,495
22	UNIVERSITY OF ARIZONA	\$6,611,940
23	UNIVERSITY OF HAWAII AT MANOA	\$6,538,442
24	DREXEL UNIVERSITY	\$6,167,497
25	UNIVERSITY OF WASHINGTON	\$4,915,673
26	UNIVERSITY OF CALIFORNIA-IRVINE	\$4,798,684
27	UNIVERSITY OF MARYLAND BALTIMORE	\$4,682,615
28	UNIVERSITY OF CINCINNATI	\$4,674,477
29	UNIVERSITY OF VIRGINIA	\$4,573,693

**10 year Program Review KY Council of Postsecondary Education**  
"Gold Standard"

