

2017 J.B. Johnston Club for Evolutionary Neuroscience Annual Meeting
November 10, 2017
College Park Marriott in Hyattsville, MD

- 7:30-8:30** **Breakfast**
- 8:30-8:40** **Introduction/Welcome, Program Committee**
- 8:40-8:55** **Andrew C. Halley, Mary K.L. Baldwin, S Murray Sherman and Leah Krubitzer**
Scaling of thalamic nuclei in primates, rodents and carnivores
- 8:55-9:10** **Catherine M. Early, Ryan C. Ridgely and Lawrence M. Witmer**
Assessing the utility of avian brain endocasts as predictors of vision-related neuroanatomy and potential functional capabilities
- 9:10-9:25** **Ian Glidden, Paul R. Manger, Rachel H. Dunn and Muhammad A. Spocter**
Using 3D surface data to reconstruct the sulcal morphology of fossil and extant canids
- 9:25-9:40** **Cristian Gutierrez-Ibanez, Andrew N. Iwaniuk and Douglas R. Wylie**
Enlargement of telencephalic-cerebellar pathways in parrots: Convergent evolution with primates?
- 9:40-9:55** **Lara D. LaDage, Yee-Eun Kim, Thomas Neuberger, and Gangchea Lee**
Measuring the effects of environmental complexity on telencephalon volume using high-field magnetic resonance imaging (MRI) in a lizard species
- 9:55-10:10** **Break (15 Minutes)**
- 10:10-10:40** **Karger Special Invited Guest: David Van Essen**
Parcellation of cerebral cortex in humans and non-human primates.
- 10:40-10:55** **Daniel J. Miller and Jon H. Kaas**
Evolution of high-acuity circuitry in the primate primary visual cortex
- 10:55-11:10** **David R. Vanier DR, B.M. Schilder BM, C.C. Sherwood and J.B. Smaers**
Comparative neuroanatomy of navigational maps in primates
- 11:10-11:25** **Sandra E. Dos Santos, Louise Botelho, Marcelle Medeiros, Jairo Porfirio, Débora Messeder and Suzana Herculano-Houzel**
Invariant microglial cells densities suggest conserved developmental and evolutionary mechanisms governing their addition to mammalian brains

- 11:25-11:40** **Lissa Ventura-Antunes, Louise Botelho, Felipe Tenorio, Marina Ricardo, Gabriela Gomes and Suzana Herculano-Houzel**
Quantitative analysis of neural cells in different structures of the murine brain reveals that the energetic intake is constrained by the neuronal density of the tissue
- 11:40-11:55** **Suzana Herculano-Houzel**
Longevity is predicted by absolute number of pallial neurons, not body size, brain size or metabolic rate, across mammalian and bird species alike
- 11:55-1:30** **Lunch Break**
- 1:30-1:45** **Christa A. Baker, Xiao-Juan Guan, Micah Fletcher and Mala Murthy**
Specification of male versus female acoustic communication behaviors in *Drosophila virilis*
- 1:45-2:00** **Christopher B. Braun and José Alves-Gomes**
The vocabulary of communication in pulse gymnotiforms: Jamming avoidance and beyond
- 2:00-2:15** **Katie L. Willis and Catherine E. Carr**
Tonotopy and time difference sensitivity in turtles
- 2:15-2:30** **Jonathan T. Perelmuter, Joseph A. Sisneros and Paul M. Forlano**
What is the natural biological function of dopamine in the peripheral auditory system and does the plainfin midshipman fish have an answer?
- 2:30-2:45** **Solal Bloch, Manon Thomas and Kei Yamamoto**
Mesencephalic origin of the inferior lobe and the preglomerular nucleus in zebrafish
- 2:45-3:00** **Break** (15 minutes)
- 3:00-3:15** **W. Ted Allison and A. Phil Oel**
Duplicitous retina: Development suggests that rods evolved from UV-sensitive cones
- 3:15-3:30** **Spencer Balay S and Ted W. Allison**
The mysteries of magnetoreception: The role of UV cones in zebrafish cryptochrome expression
- 3:30-3:45** **Georg F. Striedter and R. Glenn Northcutt**
Rampant convergence between mammals and birds in body and brain

- 3:45-4:05** **Daniel Hoops, Marta Vidal-García, Jeremy F.P. Ullmann, Andrew L. Janke, Timothy Stait-Gardner, David A. Duchêne, William S. Price, John Endler, Martin J. Whiting and J. Scott Keogh**
Many selective pressures influence brain structure simultaneously but distinctively:
An examination of patterns and processes in lizards
- 4:05-4:20** **Break** (15 minutes)
- 4:20-4:30** **Carneiro Award Presentation**
Karger Award Presentation
- 4:35-4:55** **DataBlitz**
Erin Maher, Hanako Hagio, Mary Harvey, Blake McClure, Alicia Hobbs
Lauren Williams, Dawei Han, Annaleigh York
- 4:55-5:00** **Jack Johnson memorial**
- 5:00-6:00** **Business Meeting**
- 6:00-9:00** **Reception and Silent Auction**