

Tennessee Academy of Science Western Regional Collegiate Meeting Schedule for Saturday, April 2, 2016

8:00 am	Registration begins (Location: Frazier Jelke Lobby)
8:15-9:00 am	Keynote Speaker: Dr. Rachel Jabaily (Location: Frazier Jelke B)
9:15-11:00 am	Sessions 1, 2, and 3 (please see below) Session 1: Biological Sciences (Location: Frazier Jelke A) Session 2: Health & Medical Sciences (Location: Frazier Jelke C) Session 3: Math and Physics (Location: Frazier Jelke D)
11-11:45 am	Poster Session (Location: Frazier Jelke Lobby)
12-1:00 pm	Lunch and Awards Ceremony (Location: The Refectory Dining Hall; Room: Hyde Hall)

List of speakers and presentation titles for Sessions 1, 2, and 3.

All three sessions start at 9:15 am.

The abstract for each presentation will be available in the full TAS program.

Session 1: Biological Sciences (Location: Frazier Jelke A)

- 9:15 am **Kendall Major**
*Genetic diversity and population structure in the clonal plant *Trillium recurvatum*. Kendall Major, Dr. James Moore, Dr. Jennifer Mandel*
- 9:30 am **Alyssa Tews**
*Analysis of fecal glucocorticoid (FGM) concentrations in captive brown bears (*Ursus arctos*). Alyssa Tews, Katrina Knott, Sarah Boyle, and Courtney Janney*
- 9:45 am **Alexis Smith**
The effects of dopamine 1 and 2 agonists and antagonists on sexual and aggressive behaviors in male green anoles. Alexis Smith and David Kabelik
- 10:00 am **Alma Godoy**
*Identifying strains of *Escherichia coli* with Fourier transform infrared spectroscopy. Alma L. Godoy, Tit-Yee Wong, Ying Sing Li, Ryan Parish*
- 10:15 am **Rachel Depperschmidt**
Projections from a CNS cardiovascular center to the superior salivatory nucleus that controls choroidal blood flow to the eye. Rachel Depperschmidt, Matt Ennis, Malinda E.C. Fitzgerald
- 10:30 am **Katherine Robinson**
The effect of nephrotoxic drugs on fetal mesangial cell survival. Katherine Robinson, Theresa A. John, Hitesh Soni, Randal K. Buddington and Adebowale Adebisi
- 10:45 am **Ryan Tomlinson**
PGE₂ mediates macrophage inflammatory cytokine response. Ryan Tomlinson and Richard A. Smith

Session 2: Health & Medical Sciences (Location: Frazier Jelke C)

- 9:15 am **Madison Cobb**
Common motor phenotypes in mouse models of dystonia. Madison R. Cobb, Jianfeng Xiao, and Mark S. LeDoux
- 9:30 am **Ben Tansey**
Optimum position of transthoracic line following cardiac surgery. James B. Tansey, TK Susheel Kumar, Saradha Subramanian, Mayte Figueroa, Mia McCoy, Anna Brauninger, Lindsey Bird, Jean A Ballweg, Shyam Sathanandam, Mohammed Al-Sheikh Ali, and Christopher Knott-Craig
- 9:45 am **Chelsea Casaccia**
Anxiolytic effects by modulation of GABA_A receptors in the basolateral amygdala. Chelsea Casaccia, Yudong Gao, Scott Heldt.

- 10:00 am **Chandler Martin**
Influence of voluntary exercise on appetite and obesity in the paraventricular and arcuate nuclei, Chandler Martin, Jesse Gammons, Alana Smith, and Kristen M.S. O'Connell
- 10:15 am **Ellie Vo**
Effects of alcohol on acute sleep deprivation in mice. Ellie Vo, Jessica Baker, Kristin Hamre
- 10:30 am **Joseph Krebs**
BXD mice as possible suitable candidates for glaucoma research. Joseph Krebs, Jimmy Wang, and Monica Jablonski
- 10:45 am **Miranda Anderson**
Comparison of serums used in cell culture to reduce research costs. Miranda Anderson, Hilaire Plya Barch, Raya Krutilina, and Tiffany N. Seagroves

Session 3: Math and Physics (Location: Frazier Jelke D)

- 9:15 am **Phoebe Sharp**
Multi-gate analysis of ultrasonic backscatter difference measurements on cancellous bone. Phoebe Sharp, Brent Hoffmeister, Joseph McPherson, Peyton Marshall, and Ann Viano
- 9:30 am **Ethan Lawler**
Symplectomorphisms of algebraic torus invariant rings. Ethan M. Lawler, Christopher Seaton, and Hans-Christian Herbig
- 9:45 am **Shuo Yan**
The entropy of different tent maps. Shuo Yan
- 10:00 am **Daniel Magruder**
Constraining conformation. D.S. Magruder, L. Li, J. Uhruh, and K. Si

Poster Session: 11:00-11:45 am

Location: Frazier Jelke Lobby

- P1 Imaging ultra-luminous infrared galaxies with integral field spectroscopy. **Eleanor Hook***, David Rupke ±
- P2 Initial results from a COS survey of PG quasars. **Anthony To***, David Rupke, and Sylvain Veilleux
- P3 Approaching Brownian-driven CARMA (2,1) process from CAR (1) process. **Shu Yang***
- P4 Automorphism groups of k-star n-path saturated connected graphs. **Shushangxuan Li***
- P5 Hemoparasitic infection prevalence in small mammals living in forest fragments in Paraguay. **Patrick Leavey III***, **Katharine Goebel***, **Alisha Patel***, **Aubrey Howard**, **Monali Lipman***, **Pastor Pérez-Estigarribia**, **Noé de la Sancha**, **Laura E. Luque**, **Sarah Boyle**
- P6 An analysis of the prevalence of *Plasmodium*, *Leucocytozoon* and *Trypanosoma* sp. within raptors of the Mississippi Valley region. **Gizman Abdijabar***, **Mary Crowell***, **Michael Collins**, and **Jackie Denson**
- P7 Serotonin activity in the male brown anole (*Anolis sagrei*) after social behavior encounters. **Jacob Hartline***, **Alexis Smith***, and **David Kabelik**
- P8 Vigilance in a captive herd of *Bison bison*. **Austyn Harriman***, **Kelly Gaines***, and **Lynda Miller**
- P9 Measuring active behavior in an aging African elephant (*Loxodonta africana*) in captivity. **Claire Carr*** and **Evan Tucker***
- P10 Aggressive behaviors between two female hippos (*Hippopotamus amphibius*) in captivity. **Erin Burman***, **Annie Giarla***, and **Samantha Ouyang***
- P11 Spatial and interactive data on captive meerkats of the Memphis Zoo. **Erica Carcelén***, **Brooke Rose***, and **Sarah Ferguson***
- P12 Land cover modification assessment for protected areas containing hippo study sites. **Brooke Rose***