**Texas Genetics Society**  
*42nd Annual Meeting*  
March 26 – March 28, 2015  
Texas Scottish Rite Hospital for Children  
2222 Welborn Street  
Dallas, Texas 75219

**Thursday, March 26th**

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>3:30-5:00 pm</td>
<td>Board Meeting</td>
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<tr>
<td>5:00-7:00 pm</td>
<td>Registration</td>
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<tr>
<td>5:30-7:00 pm</td>
<td>Opening Reception</td>
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<td>7:00 pm</td>
<td>Welcome and Announcements</td>
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<td>Trey Fondon, Ph.D., TGS President</td>
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**KEYNOTE ADDRESS:**  
*Genetic Susceptibility to Environmentally Induced Birth Defects*  
**Richard Finnell, Ph.D.**  
Professor and Director, Genomic Research  
Department of Nutritional Sciences  
Department of Chemistry  
Department of Biochemistry  
The University of Texas, Austin  
Dell Children’s Medical Center

**Friday, March 27th**

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<tr>
<th>Time</th>
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<tr>
<td>7:30-8:30am</td>
<td>Late registration and continental breakfast</td>
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<td>8:30-8:35am</td>
<td>Announcements - Trey Fondon, Ph.D., TGS President</td>
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<td>8:35-9:30am</td>
<td>INVITED ADDRESS I:</td>
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<tr>
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<td><em>Molecular genetic and genomic strategies to understand male fertility in the goat</em></td>
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<td><strong>Shaye Lewis, Ph.D.</strong></td>
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<td>Research Scientist</td>
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<td>College of Agriculture and Human Sciences</td>
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<td>Cooperative Agricultural Research Center</td>
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<td>Prairie View A&amp;M University</td>
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<tr>
<td>9:30-10:30am</td>
<td>CONTRIBUTED PAPERS SESSION I</td>
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<td>9:30-9:50am</td>
<td><em>Genetics of basic coat colors in the dromedary (Camelus dromedarius)</em></td>
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<td>Fahad Alshanbari, Terje Raudsepp</td>
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Department of Veterinary Integrative Biosciences, Texas A&M University, College Station, Texas

9:50-10:10am Molecular testing of tobiano and grey coat color in horses (Equus caballus)
Michael T. Vallon, Helena J. Kjöllerström, Terje Raudsepp
Department of Veterinary Integrative Biosciences, Texas A&M University, College Station, Texas

10:10-10:30am Characterization of a major locus affecting coat color reddening in cattle
Tasha R. Womack, Clare A. Gill
Department of Animal Science, Texas A&M University, College Station, Texas

10:30-11:00am Coffee Break, Poster and Exhibit Viewing

11:00am-12:00pm CONTRIBUTED PAPERS SESSION II

11:00-11:20am Elucidating a role for glycogen accumulation in the calcium homeostasis defects observed in a pgm2Δ strain of Saccharomyces cerevisiae
Akshaya Selvamani, David P. Aiello
Department of Biology, Austin College, Sherman, Texas

11:20-11:40am Saccharomyces cerevisiae synthesizes ribosomal RNA (rRNA) by RNA Polymerase II during nitrogen deprivation
Arjuna Rao Vallabhaneni, Heather Conrad-Webb
Department of Biology, Texas Woman’s University, Denton, Texas

11:40am-12:00pm Glucose induces sensitivity to oxygen deprivation and is modulated via Insulin/IGF-1 signaling and lipid biosynthesis in Caenorhabditis elegans
Anastacia M. Garcia, Mary L. Ladage, Rajeev K. Azad, Brian K. McFarlin, Pamela A. Padilla
Department of Biological Sciences, University of North Texas, Denton, Texas

12:00-1:30pm Networking Lunch

1:30-2:30pm CONTRIBUTED PAPERS SESSION III

1:30-1:50pm The role of CMP-Sialic Acid Synthetase in drosophila nervous system
Hilary Scott¹, Rafique Islam¹, Courtney Caster¹, Mark Zoran², Vlad Panin¹
¹Department of Biochemistry and Biophysics, and ²Department of Biology, Texas A&M University, College Station, Texas

1:50-2:10pm PAH mRNA gene expression response to cofactor BH4 supplementation
Renee Ackley¹, Keith Hyland², Richard S. Gunasekera¹
¹Department of Biology, University of Houston-Victoria, University of Houston Sugar Land, Sugar Land, Texas; ²Medical Neurogenetics, Atlanta, Georgia
2:10-2:30pm  *Genome-wide knockdowns in zebrafish to study thrombocyte function*
Hemalatha Sundaramoorthi, Gauri Khandekar, Uvaraj Radhakrishnan, Abdullah Alsrhani and Pudur Jagadeeswaran
*Department of Biological Sciences, University of North Texas, Denton, Texas*

2:30-3:00pm  Coffee Break, Poster and Exhibit Viewing

3:00-3:05pm  Announcements - Trey Fondon, Ph.D., TGS President

3:05-4:00pm  INVITED ADDRESS II:
*Opportunities for diagnostics and profiling from surveys of subtle allelic imbalance in tissue*

Paul Scheet, Ph.D.
Associate Professor
Department of Epidemiology
University of Texas MD Anderson Cancer Center

4:00-5:00pm  CONTRIBUTED PAPERS SESSION IV

4:00-4:20pm  *Genotype imputation for genomewide association with idiopathic clubfoot*
Anas M. Khanshour, Jonathan J. Rios
*Sarah M. and Charles E. Seay Center for Musculoskeletal Research, Texas Scottish Rite Hospital for Children, Dallas, Texas*

4:20-4:40pm  *Adapting HyCCAPP as a tool to study protein complexes at the promoters of WNT target genes in colorectal cancer*
*1Department of Genetics, Texas Biomedical Research Institute, San Antonio, Texas; 2Department of Chemistry, University of Madison, Madison, Wisconsin*

4:40-5:00pm  *Identification of copy number variants in the Nellore and Angus founders of a mapping population*
Yue Xing, Clare A. Gill
*1Interdisciplinary Graduate Program in Genetics, and 2Department of Animal Science, Texas A&M University, College Station, TX*

5:00-7:00pm  Reception, poster and exhibit viewing
Banquet and Meeting Awards

Barbara Bowman Award Recipient
Distinguished Texas Geneticist

Jonathan Cohen, Ph.D.
C. Vincent Prothro Distinguished Chair in Human Nutrition Research
Department of Internal Medicine
Eugene McDermott Center for Human Growth & Development
The University of Texas Southwestern Medical Center

Saturday, March 28th

7:30-8:30am Continental breakfast

8:30-8:35am Announcements - Trey Fondon, Ph.D., TGS President

8:35-9:30am INVITED ADDRESS III:

Filamin A stabilizes a mechanosensitive complex at the endothelial surface to promote angiogenesis

Kayla Bayless, Ph.D.
Associate Professor
Department of Molecular and Cellular Medicine
Texas A&M Health Science Center

9:30-10:30am CONTRIBUTED PAPERS SESSION V

9:30-9:50am Genome-wide serine protease knockdowns in zebrafish: identification of prostasin in factor VII activation pathway
Gauri Khandekar, Hemalatha Sundaramoorthi, Pudur Jagadeeswaran
Department of Biological Sciences, University of North Texas, Denton, Texas

9:50-10:10am Diurnal fluctuations in the dopaminergic system in GTP-cyclohydrolase deficient mouse: a model for dopa-responsive dystonia.
Lesley Wilson¹, Keith Hyland², and Richard S. Gunasekera¹
¹Department of Biology, University of Houston-Victoria, University of Houston Sugar Land, Sugar Land, Texas; ²Medical Neurogenetics, Atlanta, Georgia

10:10-10:30am Modeling the influence of genetic background on diet response in mice
William Barrington¹, David Threadgill²,³, Daniel Pomp⁴, Brian Bennett⁴
¹Program in Genetics, North Carolina State University, Raleigh, North Carolina; ²Department of Veterinary Pathobiology, Texas A&M University, College Station, Texas; ³Department of Molecular and Cellular Medicine, Texas A&M Health Science Center, College Station, Texas; ⁴Department of Genetics, University of North Carolina, Chapel Hill, North Carolina

10:30-11:00am Coffee break and judges’ meeting

11:00am-12:00pm Business meeting

12:00pm Adjourn