

Texas Genetics Society

Twenty-seventh Annual Meeting

Schedule of Events and Presentations

Thursday evening, March 23, 2000

5:00 - 8:00 Registration: Gallery

7:30 - 8:30 Keynote Address: Dr. William R. Brinkley, Dean, Graduate School of Biomedical Sciences, Baylor College of Medicine, Houston. **Graduate Education in the Post-Genome Era**

8:30 - 10:30 Reception: Houston I Room

Friday, March 24, 2000

8:00 - 8:15 Welcome and Announcements

8:15 - 9:15 Contributed Paper Session I: Stephen P. Daiger, Chair

8:15 [1] **Recombination (gene conversion) mediated expansions of TRS occur independently of TRS orientation.** J.P. Jakupciak and R.D. Wells. *Institute of Biosciences and Technology; Center for Genome Research; Texas A&M University Health Science Center System; Texas Medical Center, Houston, Texas.* [G]

8:30 [2] **Does p53 status predict genome-wide instability throughout development?** A. Maleki,¹ L.C. Strong,² B.W. Brown,³ and M.J. Siciliano.¹ *Departments of ¹Molecular Genetics, ²Experimental Pediatrics, and ³Biomathematics, The University of Texas M.D. Anderson Cancer Center, Houston, Texas.* [G]

8:45 [3] **Mutations in a novel photoreceptor-pineal gene on 17p cause Leber congenital amaurosis (LCA4).** Melanie M. Sohocki,¹ Sara J. Bowne,¹ Lori S. Sullivan,^{1,2} Seth Blackshaw,³ Constance L. Cepko,³ Annette M. Payne,⁴ Shomi S. Bhattacharya,⁴ Shagufta Khaliq,⁵ S. Qasim Mehdi,⁵ David G. Birch,⁶ Wilbur R. Harrison,⁷ Frederick F.B. Elder,⁷ John R. Heckenlively,⁸ and Stephen P. Daiger.^{1,2} *¹Human Genetics Center, School of Public Health, and ²Department of Ophthalmology and Visual Science, the University of Texas-Houston Science Center, Houston, Texas; ³Department of Genetics and Howard Hughes Medical Institute, Harvard Medical School, Boston, Massachusetts; ⁴Department of Molecular Genetics, Institute of Ophthalmology, University College, London, United Kingdom; ⁵Dr. A.Q. Khan Research Laboratories, Biomedical and Genetic Engineering Division, Islamabad, Pakistan; ⁶Retina Foundation of the Southwest, Dallas, Texas; ⁷Department of Pathology and Laboratory Medicine,*

University of Texas-Houston Health Science Center, Houston, Texas; ⁸Jules Stein Eye Institute, University of California, Los Angeles, California. [P]

9:00 [4] **Homomeric channels of P932L mutations in muscle chloride channel gene (hClC-1) is associated with a severe myotonic myopathy.** Shinichiro Nagamitsu,^{1,2} Tohru Matsuura,^{1,2} Mehrdad Khajavi,^{1,2} Richard Armstrong,¹ Clifton Gooch,¹ and Tetsuo Ashizawa.^{1,2} ¹*Department of Neurology, Baylor College of Medicine and* ²*Veterans Affairs Medical Center, Houston, Texas.*
9:15 - 10:00 Invited Speaker: Dr. Richard Gibbs, Baylor College of Medicine, Houston. **The Status of the Human Genome Sequencing Effort**

10:00 - 10:30 Coffee Break

10:30 - 12:00 Contributed Paper Session II: James E. Womack, Chair

10:30 [5] **DNA base excision repair: soma vs. germline.** Gabriel W. Intano,¹ C. Alex McMahan,² John R. McCarrey,³ Ronald B. Walter,⁴ and Christi A. Walter.¹ ¹*Departments of Cellular and Structural Biology and* ²*Pathology, The University of Texas Health Science Center at San Antonio, San Antonio, Texas;* ³*Department of Genetics, Southwest Foundation for Biomedical Research, San Antonio, Texas;* ⁴*Department of Chemistry, Southwest Texas State University, San Marcos, Texas.* [G]

10:45 [6] **Construction of a BAC contig across the NRC-1 region of chromosomal band 3p12.** J.M. McDonald,¹ S.T. Lott,¹ M. Lovell,¹ S. Naylor,² and A.M. Killary.¹ ¹*Division of Pathology and Laboratory Medicine, The University of Texas M.D. Anderson Cancer Center, Houston, Texas;* ²*Department of Cellular and Structural Biology, University of Texas Health Science Center at San Antonio, San Antonio, Texas.* [G]

11:00 [7] **Development of a bacterial artificial chromosome contig at the putative tumor suppressor locus 5q13.3.** P.D. Castro,¹ J.C. Liang,² and L. Nagarajan.¹ ¹*Department of Molecular Genetics, and the* ²*Division of Laboratory Medicine, The University of Texas M.D. Anderson Cancer Center, Houston, Texas.* [G]

11:15 [8] **Chromosome microdissection as a tool for the generation of high resolution marker maps at cattle trypanotolerant QTL regions on BTA 5q21-q24 and 7q14-q22.** T. Goldammer,¹ R.M. Brunner,¹ S. Kang'a,² P. Nilsson,² J.E. Womack,³ O. Hanotte,² and M. Schwerin.¹ ¹*Department of Molecular Biology, Research Institute for the Biology of Farm Animals, Dummerstorf, Germany;* ²*Department of Molecular Biology, International Livestock Research Institute, Nairobi, Kenya;* ³*Department of Veterinary Pathobiology, Texas A&M University, College Station, Texas.* [P]

11:30 [9] **Genetic control of diversity within species.** Huang-Mo Sung and Ronald E. Yasbin. *Department of Molecular and Cell Biology, University of Texas at Dallas, Richardson, Texas.* [G]

11:45 [10] **Chronic exposure to high levels of ionizing radiation: what are the genetic consequences?** Jeffrey K. Wickliffe,¹ Brenda E. Rodgers,¹ Ronald K. Chesser,² and Robert J. Baker.¹ ¹*Department of Biological Sciences, Texas Tech University, Lubbock, Texas;* ²*Department of Genetics, University of Georgia, Athens, Georgia.* [G]

12:00 - 1:30 Lunch

1:30 - 2:15 Invited Speaker: Dr. Ronald B. Walter, Southwest Texas State University. **The Genetic Determinants of Tumorigenesis as Developed in *Xiphophorus* Fish**

2:15 - 3:15 Contributed Paper Session III: Charleen M. Moore, Chair

2:15 [11] **Genetic variability in island populations: a comparison among congeneric species of migratory and endemic songbirds.** Patrick W. Zwartjes. *Department of Genetics, Southwest Foundation for Biomedical Research, San Antonio, Texas.* [P]

2:30 [12] **Evidence for genetic subdivisions in the desert shrew: *Notiosorex crawfordi*.** Mark B. O'Neill and Robert J. Baker *Department of Biological Sciences, Texas Tech University, Lubbock, Texas.* [G]

2:45 [13] **Polynesian origins: new insights from the Y-chromosome.** Bing Su,¹ Li Jin,^{1,2} Peter Underhill,³ Jeremy Martinson,⁴ Nilmani Saha,⁵ Stephen T. McGarvey,⁶ Mark D. Shriver,⁷ Jiayou Chu,⁸ Peter Oefner,³ Ranajit Chakraborty,¹ and Ranjan Deka.⁹ ¹*Human Genetics Center, University of Texas Health Science Center, Houston, Texas;* ²*Institute of Genetics, Fudan University, Shanghai, China;* ³*Department of Genetics, Stanford University, Stanford, California;* ⁴*Department of Anthropology, Oxford University, Oxford, England;* ⁵*Department of Molecular Medicine, Australian National University, Canberra, Australia;* ⁶*Department of Medicine and International Health Institute, Brown University School of Medicine, Providence, Rhode Island;* ⁷*Department of Anthropology, Pennsylvania State University, University Park, Pennsylvania;* ⁸*Institute of Medical Biology, Chinese Academy of Medical Sciences, Kunming, China;* ⁹*Department of Environmental Health, University of Cincinnati, Cincinnati, Ohio.* [P]

3:00 [14] **Mitochondrial DNA sequence variation in baboons (*Papio hamadryas*): phylogeny and the evolution of social organization.** Timothy K. Newman. *Department of Genetics, Southwest Foundation for Biomedical Research, San Antonio, Texas.* [P]

3:15 - 3:45 Coffee Break

3:45 - 4:30 Poster Session: San Antonio Room

4:30 - 5:15 Contributed Paper Session IV: Rodney S. Nairn, Chair

4:30 [15] **Multiple-trait-locus model for quantitative trait analysis.** Jinying Zhao and Momiao Xiong. *Human Genetics Center, The University of Texas at Houston, Houston, Texas.* [P]

4:45 [16] **Linkage disequilibrium mapping of quantitative trait loci: multiple trait analysis.** Joshua Akey, Li Jin, and Momiao Xiong. *Human Genetics Center, University of Texas, Houston, Texas.* [G]

5:00 [17] **Characterization and mapping of a *Xiphophorus* fish RAB gene.** K. Kelnar,¹ D. Rains,¹ S. Kazianis,² and R. Walter.¹ ¹*Department of Chemistry and Biochemistry, Southwest Texas State University, San Marcos, Texas;* ²*Research Division, The University of Texas M.D. Anderson Cancer Center, Science Park, Smithville, Texas.* [G]

6:30 - 7:30 Reception (cash bar)

7:30 - 8:30 Banquet

8:30 - 9:30 Barbara H. Bowman Distinguished Texas Geneticist Award: Dr. Robert E. Ferrell

Saturday morning, March 25, 2000

8:15 - 9:00 Invited Speaker: Dr. David L. Rainwater, Southwest Foundation for Biomedical Research. **Genetics of Cardiovascular Disease**

9:00 - 10:00 Contributed Paper Session V: Candace M. Kammerer, Chair

9:00 [18] **Family history of stroke predicts stroke risk: the ARIC study.** A.C. Morrison,¹ M. Fornage,¹ D. Liao,² and E. Boerwinkle.¹ ¹*Human Genetics Center and Institute of Molecular Medicine, University of Texas - Houston, Houston, Texas;* ²*Department of Health Evaluation Sciences, Penn State Hershey Medical Center, Hershey, Pennsylvania.* [G]

9:15 [19] **Nucleotide sequence of cyclophilin 40 and mapping of two cyclophilin-like loci in *Xiphophorus* fish.** C. Daniels,¹ D. Rains,¹ L. Della Coletta,² S. Kazianis,² B. McIntire,² R. Nairn,² D. Morizot,² and R. Walter.¹ ¹*Department of Chemistry and Biochemistry, Southwest Texas State University,*

San Marcos, Texas; ²Research Division, The University of Texas M.D. Anderson Cancer Center, Science Park, Smithville, Texas. [G]

9:30 [20] **Sequence analysis resources at the Baylor Human Genome Sequencing Center.** Michael P. McLeod,^{1,2} Kim C. Worley,¹ John Bouck,¹ K. James Durbin,¹ George M. Weinstock,^{1,2} Richard A. Gibbs.¹ ¹Department of Molecular and Human Genetics, Human Genome Sequencing Center, Baylor College of Medicine, Houston, Texas; ²Department of Microbiology and Molecular Genetics, University of Texas, Houston, Texas. [G]

9:45 [21] **Partial nucleotide sequence determination and mapping of a *Xiphophorus* fish *NFI* gene.** A. Wheeler,¹ D. Rains,¹ C. Daniels,¹ S. Kazianis,² and R. Walter.¹ ¹Department of Chemistry and Biochemistry, Southwest Texas State University, San Marcos, Texas; ²Research Division, The University of Texas M.D. Anderson Cancer Center, Science Park, Smithville, Texas. [G]

10:00 - 10:30 Coffee Break

10:30 - 12:00 Contributed Paper Session VI: Chair to be named

10:30 [22] **E12 is a novel gene isolated from a differential screen of the early mouse embryo.** Qiyong Hu and Richard Behringer. Department of Molecular Genetics, The University of Texas M.D. Anderson Cancer Center, Houston, Texas. [G]

10:45 [23] **Characterization of the *PMP22* gene promoters.** M. Hai,¹ S.I. Bidichandani,² and P.I. Patel.^{1,2,3} Departments of ¹Molecular and Human Genetics, ²Neurology, and ³Division of Neuroscience, Baylor College of Medicine, Houston, Texas. [G]

11:00 [24] **Analysis of the human cartilage oligomeric matrix protein (COMP) promoter region.** Kerry B. Gunning,¹ Michelle Deere,¹ Catherine Rhoades Hall,¹ Xiaowen Liang,¹ Amy L. Ridall,² and Jacqueline T. Hecht.¹ ¹Department of Pediatrics, University of Texas Medical School at Houston, Houston, Texas; ²Departments of Basic Sciences and Prosthodontics, Dental Branch, University of Texas Health Science Center, Houston, Texas. [P]

11:15 - 12:00 Invited Speaker: Dr. Jacqueline T. Hecht, University of Texas Medical School at Houston, Houston. **Pseudoachondroplasia: Too Much of a Good Thing**

12:00 - 1:00 Business meeting; awards for best papers.

1:00 Adjourn