



1st INTERNATIONAL CONFERENCE
ON
UNSTABLE MICROSATELLITES
and HUMAN DISEASE

Co-Conveners:

Jack Griffith, University of North Carolina
David Nelson, Baylor College of Medicine
Robert Wells, Texas A&M University

Sponsored by:

National Institute of Environmental Health Sciences

Santa Fe, New Mexico, USA
April 1-6, 1997

1st International Conference on Unstable Triplets, Microsatellites, and Human Disease		
April 1-6, 1997 Santa Fe, New Mexico, USA		
Speaker	Title	Institution
Welcome Introduction: Jack Griffith, Robert Wells, and David Nelson		
Unstable Microsatellites: Mechanisms at the DNA Level 1, Chair: Miroslav Radman		
Miroslav Radman	<i>Interplay Between SOS and Mismatch Repair Systems in Genome (in) Stability and Evolution</i>	Institute Jacques Monod-France
Geoffrey M. Wahl	<i>Investigating Relationships Between Repair and p53 Mediated Responses to Diverse Types of DNA Damage</i>	Salk Institute for Biological Studies
Sam Wilson	<i>Where Errors Could Occur at the Level of Replication</i>	National Institute of Environmental Health Sciences
Cynthia T. McMurray	<i>Mechanisms of DNA Expansion in Human Disease</i>	Mayo Clinic and Foundation
Michael J. Siciliano	<i>Factors Affecting Genome Instability and the Role of Such Instability in Human Disease</i>	University of Texas/MD Anderson Cancer Center
Workshop: Microsatellite Instability (selected), Chair: Richard Sinden		
Richard Sinden	<i>Transcription With RNA Polymerase II Through Triplet Repeat DNA From the Myotonic Dystrophy and Fragile X Loci</i>	Texas A&M University
Michael Mitas	<i>Structural Properties of Trinucleotide Repeats Associated with Human Disease</i>	Oaklahoma State University
Xiaolian Gao	<i>Genetically Unstable CSG Repeats are Structurally Dynamic and Have a High Propensity for Folding Solution Studies of the Oligonucleotides by NMR, UW and Electrophoresis</i>	University of Houston
Albino Bacolla (Post-Doc, Wells Lab)	<i>Flexibility and Writhe of CCG*CCG and CTG*CAG</i>	Texas A&M University
Ed Grabczyk (Post-Doc, Karen Usdin Lab)	<i>Tetraplex Formation is an Intrinsic Property of Some of the Most Hypervariable Sequences Known</i>	National Institute of Diabetes and Digestive and Kidney Diseases
Lisa Kroutil (Post-Doc, Tom Kunkel Lab)	<i>DNA Polymerases Produce Slippage Errors Within CAG Repeats That Are Subject to Exonucleolytic Proofreading</i>	National Institute of Environmental Sciences
Dmitry Gordenin/Michael Resnick	<i>Hypermutability of Homonucleotide Runs in Mismatch Repair and DNA Polymerase Proofreading Yeast Mutants</i>	National Institute of Environmental Sciences/National Institute of Health Sciences

Unstable Microsatellites: Mechanisms at the DNA Level 1, Chair: Robert Wells		
Robert D. Wells	<i>DNA Structure, Triplet Repeats, and Human Hereditary Diseases</i>	Texas A&M University
Thomas A. Kunkel	<i>Studies of Replication Fidelity and Mismatch Repair of Repetitive DNA Sequences</i>	National Institutes of Environmental Health Sciences
Tom D. Petes	<i>Microsatellite Instability in Yeast</i>	University of North Carolina-Chapel Hill
Richard Fishel	<i>The Recognition of Mismatched Nucleotides, Microsatellite Sequences and DNA Lesions by the Human Mismatch Repair System</i>	Thomas Jefferson University
Microsatellite Chromatin, Telomeres, Fragile Sites and the Fragile X Syndrome I, Chair: Jack Griffith		
Jack Griffith	<i>Chromatin Structure of Expanded Triplet DNA's Derived from Myotonic Dystrophy and Fragile X Syndrome Patients</i>	University of North Carolina-Chapel Hill
Tom Glover	<i>Molecular Delineation of Common Fragile Sites</i>	University of Michigan
Titia deLange	<i>Mammalian Telomeric Proteins</i>	The Rockefeller University
Yuh-Hwa Wang (Post-Doc, Griffith Lab)	<i>Workshop: Microsatellite Instability</i>	University of North Carolina-Chapel Hill
Virginia Zakian	<i>Telomere Maintenance and Telomere Position Effects in Yeast</i>	Princeton University
Robert Richards	<i>Molecular Genetics of Fragile Sites</i>	Women's and Children's Hospital-Australia
Workshop: Microsatellite Instability (selected), Chair: Yuh-Hwa Wang		University of North Carolina-Chapel Hill
Yuh-Hwa Wang (Post-Doc, Griffith Lab)	<i>Nucleosomes, chromatin, myotonicdystrophy and fragile X A CTG/CAG Tract show an Orientation Dependent Instability and Can Act as a Fragile Site in Vivo in the Yeast Saccharomyces Cerevisiae</i>	University of North Carolina-Chapel Hill
Catherine Freudenreich (Post-Doc, Zakian Lab)	<i>Instability of CAG and CTG Trinucleotide Repeats in S. Cerevisiae Quantitation of Trinucleotide Repeat Instability in Somatic Cell Hybrids</i>	Princeton University - Lewis Thomas Laboratory
Robert Lahue	<i>In Vivo Studies of Secondary Structure Formation and Instability of Trinucleotide Repeats in E. Coli</i>	University of Nebraska Medical Center
Nia Spring (Graduate student, Siciliano Lab)	<i>Role of Proofreading and Mismatch Repair in Maintaining the Stability of Nucleotide Repeats</i>	Anderson Cancer Center- Houston
Kristina Schmidt (Graduate student, David Leach Lab)	<i>S-DNA: Genetic and Biophysical Support for Slipped DNA in Triplet Repeat Instability</i>	University of Edinburgh
Bernard Strauss		University of Chicago
Christopher E. Pearson (Post-Doc, Sinden Lab)		Texas A&M University

Microsatellite Chromatin, Telomeres, Fragile Sites and the Fragile X Syndrome II, Chair: David Nelson		
David L. Nelson	<i>The Fragile X Diseases</i>	Baylor College of Medicine
Ben Oostra	<i>Fragile X Syndrome and the Gene Involved</i>	Erasmus University-Netherlands
Walter Doerfler	<i>On the Molecular Biology of the Fragile X Syndrome</i>	University of Koln-Germany
Myotonic Dystrophy and Friedreich's Ataxia: Loss of Function Microsatellite Diseases and Cancer I, Chair: David Houseman		
David Housman	<i>Myotonic Dystrophy Kinase Gene Expression</i>	Massachusetts Institute of Technology
Robert Korneluk	<i>Myotonic Dystrophy (DM): Effect of the CTG Repeat Mutation on Expression of the DM Kinase Gene</i>	Children's Hospital of Eastern Ontario Research Institute-Ottawa
Be Wieringa	<i>The DM Locus in Mouse and Man: Genotype-Phenotype Correlations</i>	University of Nijmegen-Netherlands
Keith Johnson	<i>Is Myotonic Dystrophy a Polygenic Disorder?</i>	University of Glasgow-UK
Eric Hoffman	<i>Myotonic Dystrophy: Evidence for a Dominant-Negative RNA Mutation</i>	University of Pittsburgh School of Medicine
Myotonic Dystrophy and Friedreich's Ataxia: Loss of Function Microsatellite Diseases and Cancer II, Chair: Charles Cantor		
Massimo Pandolfo	<i>Friedreich's Ataxia</i>	University of Montreal
Carlo Croce	<i>Genetics of Human Cancer</i>	Thomas Jefferson University
Guillermina Lozano	<i>Cancer Predisposition in Li Fraumeni Syndrome</i>	University of Texas/MD Anderson Cancer Center
Charles Cantor	<i>New Approaches to Genome Analysis</i>	Boston University
CAG/Polyglutamine Neurodegenerative Diseases: Gain of Function? I, Chair: Harry Orr		
Jean-Louis Mandel	<i>Huntington's Disease and Spinocerebellar Ataxia</i>	INSERM-University Louis-Pasteur, France
Michael Hayden	<i>Huntington's Disease-To Gain is to Lose</i>	University of British Columbia
Kenneth Fischbeck	<i>Kennedy's Disease</i>	University of Pennsylvania School of Medicine
Marcy McDonald	<i>Huntington's Disease</i>	Massachusetts General Hospital
Harry Orr	<i>Repeat Instability and Pathogenesis of SCA1 in Transgenic Mice</i>	University of Minnesota

Workshop: Disease, Chair: David Nelson		Baylor College of Medicine
8 presentations selected from submitted abstracts		
CAG/Polyglutamine Neurodegenerative Diseases: Gain of Function? II, Chair: Jeffrey Vance		
Akira Kakizuka	<i>Molecular and Genetic Bases of Machado-Joseph Disease (SCA3)</i>	Kyoto University-Japan
Christopher Ross	<i>Huntington's Disease and DRPLA</i>	Johns Hopkins University School of Medicine
Gillian Bates	<i>Transgenic Models of Huntington's</i>	UMDS-Guy's Hospital, UK
Jeffrey Vance	<i>Haw River Syndrome</i>	Duke University Medical Center