

**VIII INTERNATIONAL GENETICS
CONFERENCE**
“70 Years of 46 Human Chromosomes”
Latest Advances in Genetic and Molecular Biology
February 26 and 27, 2026
Stony Brook, New York, USA

Organizers:

- International Circle of Genetic Studies, Chiclayo Chapter, Peru
- The International Circle of Genetic Studies Project, New York Chapter, USA •
- International Circle of Genetic Studies, Navarra Chapter, Spain

Sponsors:

- AGT, The Association for Cytogenetic and Molecular Professionals, USA •
- Precision Punch & Plastics, Minneapolis, Minnesota, USA
- OGT (Cytocell), Tarrytown, NY, USA
- Breakthrough Genomics, Irvine, CA, USA
- Empire Genomics LLC, Depew, NY, USA
- Metasystems Probes, Medford MA, USA.
- BioDot, Irvine, CA, USA
- ASI, Carlsbad, CA, USA
- BioView, MA 01821, USA
- Bionano, San Diego, CA, USA
- Rainbow Scientific, Inc. 83 Maple St, Windsor CT 06095, USA

I. OVERVIEW:

- The VIII International Scientific Conference on Genetics aims to develop competencies based on knowledge, skills, and attitudes regarding genetic mechanisms or processes, enabling students to understand genetic syndromes that predispose to cancer, hematological malignancies, as well as the genes involved in carcinogenesis.
- To acquire critical elements for a multidisciplinary approach to these diseases, focusing on prevention, diagnosis, and treatment.

II. OBJECTIVES:

1. Achieve that attendees can familiarize themselves with the basic concepts of the mechanisms in hereditary diseases such as cancer using the human model, as well as other organism models.
2. Recognize techniques used in Genetics and Molecular Biology.
3. Identify the use of Genetics in the Diagnosis and Monitoring of hereditary, hematological diseases, and cancer.

III. PROGRAM:

February 26, 2026 (8:00 AM – 7:10 PM)

The presentation of posters will be on the day assigned to each person and at the indicated time. 8:00 AM – 8:15 AM: Inauguration

Moderators: Alexandra Chu, Jonathan Lin, and Dori Chau

8:15 AM – 8:30 AM: Epigenetics in B-CLL

Alexandra Chu and Carlos A. Tirado, Ph.D.
Stony Brook University
New York, USA

8:30 AM – 8:45 AM: A Relapsed AML Case Featuring Distinct *MYC* and *MECOM* Rearrangements

Kevin A Murgas¹, Pons Materum III², Luke Li³, Jacob Rocha², Michael Schuster³, Tahmeena Ahmed², Carlos Tirado²

Affiliations:

¹Medical Scientist Training Program, Stony Brook University Renaissance School of Medicine, Stony Brook, NY

²Department of Pathology, Stony Brook University Hospital, Stony Brook, NY ³Department of Hematology and Oncology, Stony Brook University Hospital, Stony Brook, NY

8:45 AM – 9:25 AM: Cytogenomic Advances in Lymphoma

Christina Y. Lee, M.D.
Assistant Professor
Stony Brook Cancer Center
New York, USA

9:25 AM - 10:05 AM: Genomics of Pediatric Rare Diseases

David Ledbetter, Ph.D.
Professor of Clinical Sciences
Florida State University

10:05 AM - 10:20 COFFEE BREAK

Moderators: Sanay Shah and Fares Hassan

10:20 AM - 11:00 AM: The Molecular Characterization Initiative: Lessons learned

Yasmine MN Akkari, Ph.D., FACMG

Senior Director, Clinical Laboratory
The Steve and Cindy Rasmussen Institute for Genomic Medicine
Nationwide Children's Hospital
Professor - Department of Pathology
The Ohio State University College of Medicine
575 Children's Crossroad
Columbus, OH 43215

11:00 AM - 11:40 PM: Case Examples of Classifying Copy Number variants

Dr. Sibel Kantarci, M.S., PhD, FACMG, MBA

Senior Director Quest Diagnostics Nichols Institute
Advanced Diagnostics - Genetics, Genomics and R&D
San Juan Capistrano, CA

11:40 PM - 12:20 PM: From Cytogenetic Anomalies to Understanding Normal and Abnormal Brain Development"

Dr. Maximilian Muenke

Former Chief of the Medical Genetics Branch, NHGRI, NIH
Former, CEO, ACMG

12:20 PM - 1:00 PM: Integration of Genomics into Medical Practice

Bruce Korf, MD., PhD.

Distinguished Professor of Genetics, Emeritus
University of Alabama at Birmingham
Birmingham, AL

1:00 PM - 2:00 PM: LUNCH BREAK

Moderators: Saifan Ahmed, Shash Uddvam, and William Shi

2:00 PM - 2:40 PM: Long-Read Sequencing as the Foundation of Next-Generation Cytogenomic Testing

Dr. Joseph Tripodi

Department of Pathology, Molecular and Cell-Based Medicine
The Mount Sinai Health System, Inc
USA

2:40 PM – 3:20 PM: Solving Difficult Rare Disease Cases using AI Tools

Laura Li, PhD, FACMG

Director
Breakthrough Genomics
California, USA

3:20 PM – 4:00 PM: Chromosomal structural rearrangements implicate long non coding RNAs in rare germline disorders

Dr. Cynthia Morton

Brigham and Women's Hospital, Harvard Medical School
Boston, MA USA

4:00 PM – 4:15 PM: COFFEE BREAK

Moderators: Stacey Chuang, Alessia Scala, and Humayra Anzum

4:15 PM – 4:55 PM: Changing perspectives on how we imagine and communicate Cytogenetics in the delivery of clinical care.

Dr. Robert Best, Ph.D, FACMG

Distinguished Professor Emeritus USC
Senior Clinical Laboratory Director of Cytogenetics
Labcorp, NC, USA

4:55 PM – 5:35 PM: Rediscovering Cytogenomics in Hematological malignancies through Optical Genome Mapping

Alka Chaubey, PhD, FACMG

Chief Medical Officer
Bionano Genomics

5:35 PM – 6:15 PM: Bioinformatics, Challenges and Opportunities in the current Health care environment

Eduardo Castro, MD

Head of the Molecular Pathology Laboratory Sonic Reference Lab
Austin, Texas

6:15 PM - 6:55 PM: Enhancing CNS Tumor Classification and Grading: The Evolving Role of Chromosomal Microarray Testing

Jinbo Fan, Ph.D, FACMG

Associate Professor of Pathology- Director of Clinical Cytogenetics
Program Director, Laboratory Genetics and Genomics (LGG) fellowship
Department of Pathology

University of Virginia, Virginia, USA

6:55 PM – 7:10 PM: Ikaros, a key player gene in Philadelphia-like pediatric B-ALL

Jose M Negroe^{1,2}, DV Delgado^{1,2}, CA Sánchez CA^{1,2} and Carlos A. Tirado^{1,3}

Affiliations:

1. The International Circle of Genetic Studies Project, Chapter Mexico,
2. Universidad Anáhuac México, Campus Norte
3. Department of Pathology Stony Brook Medical Center

February 27, 2026 (8:00 AM – 6:55 PM)

The presentation of posters will be on the day assigned to each person and at the indicated time.

Moderators: Linda Shi, Jeff Chen, and Ethan Zhang

8:00 AM – 8:15 AM: A Cytogenetic study of primary amenorrhea in women from South of Iraq

Saad Alomar, MD.

University of Basrah, Iraq

8:15 AM – 8:55 AM: Pediatric B-ALL, a very difficult puzzle

Dr. Carlos A. Tirado

Head of Cytogenetics, Renaissance School of Medicine

Professor at the Department of Pathology - Stony Brook University

New York, USA

8:55 AM - 9:35 AM: Hypodiploid ALL and TP53 Mutant Analysis: In Silico Free Energy Profiling of TP53 variants

Rolando García, Ph.D, FACMG

Assistant Professor

Department of Pathology

Laboratory of Genetics and Genomics

UT Southwestern Medical Center

Dallas, TX. 75235

9:35 AM - 10:15 AM: Clonal 6p loss of heterozygosity in hematolymphoid neoplasms

Dr. Scott Smith

Medical Director, Cytogenetics; Assistant Director, Molecular

Diagnostics Associate Professor, Pathology & Laboratory Medicine
SUNY Upstate Medical University

10:15 AM - 10:55 AM: Clinical Flow Cytometry: A Brief Introduction and its Role in the Diagnosis of Hematolymphoid Neoplasms

Dr. Franklin Fuda

The University of Texas Southwestern Medical Center
Dallas, Texas, USA

10:55 AM - 11:05 AM: COFFEE BREAK

Moderators: Charlie Westphal, Samuel Li, and Tyrese Brown

11:05 AM - 11:45 AM: Perspectives on the Care of Children with trisomies 13 and 18: The traditional Narrative and Evolving views.

John Carey, MD, FACMG

Emeritus Professor
Department of Pediatrics
University of Utah

11:45 AM - 12:25 PM: Cytogenomics in MDS/MPN, my experience at KU Medical Center

Patrick R. Gonzales, Ph.D., FACMG, CG(ASCP)

Co-Director, Cytogenetics Laboratory
Consultant, Clinical Molecular Oncology Laboratory
Clinical Associate Professor, Department of Pathology and Laboratory
Medicine The University of Kansas Medical Center
Lenexa, KS

12:25 PM - 1:05 PM: Bladder Cancer and the microbiota in Urine

Dr. Carlos Santa Maria

Clinica Angloamericana
Lima, Peru

1:05 PM - 2:00 PM: LUNCH BREAK

Moderators: Joshua Moe, Samara Rahman, and Manaal Khurram

2:00 PM - 2:40 PM: Myeloproliferative and Myelodysplastic neoplasm (MPN/ MDS) in a nut shell

Sruthi Babu, MD, PhD

Assistant Professor
Department of Pathology
Stony Brook Medicine, New York, USA

2:40 PM - 3:20 PM: Circulating tumor cells in multiple myeloma: Clinical and Genomic value

Juan José Garcés, Ph.D.

Myeloma Services & Sohrab Shan Computational Lab Memorial
Sloan Kettering Cancer New York

3:20 PM - 4:00 PM: Oncogenic Drivers and Mechanisms of Pancreatic Cancer

Mario A. Shields, Ph.D

Assistant Professor of Pathology
Stony Brook Medicine

4:00 PM - 4:40 PM: Novel Immunotherapeutic strategies in Pediatric B-ALL

Laura Hogan, M.D.

Professor in Pediatrics Hematology Oncology
Stony Brook Cancer Center
New York, USA

Moderators: Anjali Nambakam, Ashish Roddam, and Siddharth Yadav

4:40 PM- 5:20 PM: Genetics of lymphomas

Tahmeena Ahmed, MD

Assistant Professor of Pathology
Stony Brook Medicine

5:20 PM- 6:00 PM: Genetics of brain tumors

Jared Woods, MD, Ph.D

Assistant Professor of Pathology
Stony Brook Medicine

6:00 PM - 6:20 PM: Chromothripsis in PLASMA CELL MYELOMA, A case report.

Jaymie Oentorio, MD

Department of Pathology
Stony Brook Medical Center
USA

6:20 PM – 6:40 PM: Single-Lab Deployable, Multi-Lab Extensible: A Deployable, SHAP-Interpretable XGBoost Classifier for Tumor-of-Origin Prediction from Routine NGS Outputs

Roland Tian¹, Xiuhua Dong¹ and Ari Rao¹

Affiliation:

¹MD, Resident Department of Pathology Baylor Scott & White Health Inc. Temple,

TX

6:40 PM – 6:55 PM: Closing