

2019 ACMT SATELLITE SESSION

New Frontiers in Medical Toxicology: Pharmacogenomics and Precision Medicine



Precision and genomic medicine refers to the use of genetic or molecular profiling to optimize efficiency or therapeutic benefit for particular groups of patients.

Thursday, April 11, 2019

Westin St. Francis
San Francisco, CA



ACMT | American College
of Medical Toxicology

Advancing the Toxicologic Care of Patients and Populations

MEETING DETAILS

This event takes place at:

Westin St. Francis
335 Powell Street ▪ San Francisco, CA 94102

A special group rate is available for conference attendees at \$295/night. The group rate will be available until March 20, 2019 or until space runs out. Visit acmt.net to make a reservation.

Live streaming and/or webinar will not be available.

TARGET AUDIENCE

Physicians, toxicologists, pharmacogeneticists, pharmacists, clinical pharmacologists, nurses, clinical lab scientists, clinical geneticists, clinical laboratory geneticists and genetic counselors.

CONTINUING MEDICAL EDUCATION (CME)

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the University of Alabama School of Medicine and the American College of Medical Toxicology. The University of Alabama School of Medicine is accredited by the ACCME to provide continuing medical education for physicians. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Continuing Medical Education (CME) is pending for this activity. It is expected that the University of Alabama School of Medicine will designate this live activity for: 6.25 AMA PRA Category 1 credit(s)[™]

REGISTRATION FEES

Early Bird Rates

ACMT Member	\$225
Non-Member	\$300
Non-Member Govt. & Military Personnel	\$225
Fellow-in-Training	\$175
Resident	\$175
Medical Student	\$150
Specialist in Poison Information (SPI).....	\$175
Continuing Medical Education	\$75

* Early Bird Rates expire on February 1, 2019.

Regular Rates

ACMT Member	\$275
Non-Member	\$350
Non-Member Govt. & Military Personnel	\$275
Fellow-in-Training	\$225
Resident	\$225
Medical Student	\$200
Specialist in Poison Information (SPI).....	\$225
Continuing Medical Education	\$75

Register online at acmt.net

Questions? Email: info@acmt.net

ABOUT ACMT

Founded in 1993, the American College of Medical Toxicology (ACMT), is a professional, nonprofit association of physicians with recognized expertise and board certification in medical toxicology. Our members specialize in the prevention, evaluation, treatment, and monitoring of injury and illness from exposures to drugs and chemicals, as well as biological and radiological agents. Medical Toxicologists practice in clinical, academic, governmental, and public health settings, and provide poison control center leadership.

American College of Medical Toxicology
10645 N. Tatum Blvd., Suite 200-111 ▪ Phoenix, AZ 85028
acmt.net

New Frontiers in Medical Toxicology: Pharmacogenomics and Precision Medicine



Precision and genomic medicine refers to the use of genetic or molecular profiling to optimize efficiency or therapeutic benefit for particular groups of patients. Although in some

form, "precision medicine" has been a part of healthcare for many years, its role in day-to-day healthcare is expanding and evolving into exciting frontiers.

The Precision Medicine Initiative, supported by the NIH, includes investments in this emerging field of medicine that customizes healthcare based on clinical and genetic characteristics in order to improve outcomes. A major focus of NIH research is through the Pharmacogenomics Research Network which has already led to significant clinical impact through deeper understanding of genetic polymorphisms of CYP 450 and other genes responsible for drug metabolism, transport and elimination. These genetic differences explain why some patients respond favorably while others fail to respond to treatments or have life threatening adverse reactions.

This new frontier in medicine could have dramatic impact on the role of Medical Toxicologists who are poised to provide expertise in the realm of pharmacogenomics. A Medical Toxicologist's ability to understand and interpret results of pharmacogenomics testing offers an innovative practice model that would solidify our role in the rapidly evolving field of precision and genomic medicine.

This conference is designed to provide attendees with the crucial scientific knowledge and current clinical implications of pharmacogenomics so that they can build and implement this innovative field of medicine into their current practice.

- 7:45-8:00 am **Welcome & Opening Remarks**
Ayrn O'Connor, MD, FACMT, FAAEM, Director, Medical Toxicology Fellowship, University of Arizona College of Medicine Phoenix Banner—University Medical Center Phoenix
Meghan Beth Spyles, MD, Assistant Professor Of Clinical Emergency Medicine, Keck School of Medicine, University of Southern California
- 8:00-8:50 am **Pharmacogenomics into Clinical Care**
Teri Manolio, MD, PhD, Director, Division of Genomic Medicine, National Human Genome Research Institute
- 8:50-9:35 am **Informatics for Pharmacogenomics**
Russ B. Altman, MD, PhD, Professor of Bioengineering, Genetics, Medicine, and Biomedical Data Science, Stanford University
- 9:35-10:05 am **Precision Medicine and Databases: PharmGKB**
Teri Klein PhD, Professor of Biomedical Data Science and Medicine, Standford University
- 10:05-10:15 am **Break**
- 10:15-10:45 am **Pharmacogenomics of Analgesics**
Andrew Monte, MD, PhD, Associate Professor Emergency Medicine and Medical Toxicology, University of Colorado
- 10:45-11:30 am **Pharmacogenomics of Anticonvulsants: HLA & CYP2C9**
Steven Curry, MD, Professor of Emergency Medicine, Internal Medicine and Biomedical Informatics
- 11:30-12:15 pm **Pharmacogenomics: A New Frontier in Psychiatry and Substance Use Disorder**
Daniel Mueller, MD, Associate Professor, Psychiatry and Pharmacology & Toxicology, University of Toronto

- 12:15-1:30 pm **Lunch**
- 1:30-2:00 pm **Laboratory Analysis & Methodology: What the Clinician Needs to Know**
Shaun R. Opie, PhD, CEO & CSO, UniversalDx
- 2:00-2:30 pm **PGX: Challenges of Clinical Implementation**
Kelly Caudle, PharmD, PhD, CPIC Director, St. Judes Children's Research Hospital
- 2:30-3:00 pm **Pharmacogenomics of Cardiovascular Drugs: CYP 2C19 and Beyond**
Will Heise, MD, Assistant Professor, Division of Clinical Data Analytics and Decision Support, Department of Medical Toxicology, University of Arizona College of Medicine Phoenix Banner—University Medical Center Phoenix
- 3:00-3:15 pm **Characterization of CYP2C19 Polymorphisms in a Direct-to-Consumer Genetic Database**
Alison Chubb, PhD, Senior Product Scientist, 23andMe
- 3:15-3:30 pm **Break**
- 3:30-4:30 pm **Panel Discussion: Crucial Elements of Starting a Pharmacogenomics Service**
Moderator: Will Heise, MD, Assistant Professor, Division of Clinical Data Analytics and Decision Support, Department of Medical Toxicology, University of Arizona College of Medicine Phoenix Banner—University Medical Center Phoenix
Speakers: Steven Curry, MD, Professor of Emergency Medicine, Internal Medicine and Biomedical Informatics
Andrew Monte, MD, PhD, Associate Professor Emergency Medicine and Medical Toxicology, University of Colorado
Daniel Mueller, MD, Associate Professor, Psychiatry and Pharmacology & Toxicology, University of Toronto