MISSION
The mission of the Translational Genomics Laboratory is to provide a critical bridge to help accelerate translation from discovery into precision health care, by providing DNA sequencing, genotyping and array-based technologies.

ABOUT
The Translational Genomics Laboratory (TGL) is a CAP (College of American Pathologists) accredited and CLIA (Clinical Laboratory Improvement Amendments) compliant laboratory, capable of providing support to clinical and translational genetic/genomic studies (CAP# 8017554) (CLIA# 21D2027356). TGL is part of the University of Maryland School of Medicine’s Program for Personalized and Genomic Medicine (PPGM) and the Center for Innovative Biomedical Resources (CIBR).

The services offered by the TGL are similar to those offered in traditional academic genomic core labs, except that these assays are validated under CLIA which allows them to be used in the clinical decision-making process in research protocols and for routine patient care.

CORE SERVICES
• Confirmation of a Research Finding
• CYP2C19 Genotyping
• CYP2C19 Sequencing
• Cytogenomic Microarray
• Extract and Hold
• FLT3 ITD and TKD Analysis
• IDH1 R132_IDH2 R140 and R172
• Site-specific Familial variant analysis
• Next Gen Sequencing (NGS) Myeloid Malignancy Targeted Panel

CORE INSTRUMENTATION
• Applied Biosystems 3730XL (Sanger sequencing)
• Affymetrix GeneChip system 3000 7G (chip-based arrays, e.g. CytoScan HD, DMET)
• Applied Biosystems 7900 RT-PCR system (genotyping by Taqman®-based methods)
• Applied Biosystems 9700 thermocycler (PCR amplification)
• Nanodrop single-channel and 8-channel spectrophotometers
• ThermoFisher QuantStudio 5
• Ion Torrent Personal Genome Machine (next generation sequencing panels, e.g. Comprehensive Cancer Panel, and Custom AmpliSeq panels)
• Ion Chef System
• Ion S5 Sequencer
CONTACT

Ashkan Emadi, MD, PhD
Professor of Medicine and Pharmacology
Director, Translational Genomics Laboratory
University of Maryland School of Medicine
Associate Director for Clinical Research
Marlene & Stewart Greenebaum Comprehensive Cancer Center
aemadi@umm.edu

Danielle Sewell, MSRS
General Supervisor
dsewell@som.umaryland.edu

LOCATION
Room 7-037, Bressler Research Building
655 West Baltimore Street
Baltimore, MD 21201

Lab: 410-706-3339
Fax: 410-706-0287

Web Address
http://medschool.umaryland.edu/cibr/TGL