Global Genomic Medicine Collaborative

Young Investigators Come Join Us!

The Global Genomic Medicine Collaborative (G2MC) is an independent not-for-profit charitable organization with the mission to bring together healthcare professionals, educators, policymakers, researchers and other professionals in the field of genomic medicine. This community is entitled with the undertaking of demonstrating the value and the effective use of genomics that improve health and economic outcomes. For this multifaceted purpose G2MC includes three main working groups – Education, Policy, Evidence – and supports the activities of developing Flagship Projects.

The Young Investigator (YI) sub-committee was set up with the intention of engaging and incorporating YIs in G2MC efforts and to identify areas that the group can uniquely contribute to the advancement of the G2MC mission. Below are some specific roles that interested YIs could potentially engage in the ongoing G2MC Working group activities and Flagship projects.

Education Working Group

Co-chairs: Prof. Vajira Dissanayake, Prof. Rich Haspel, Prof. Bruce Korf

The mission of the Education Working Group is to assess and facilitate educational activities to prepare providers in implementation of genomic medicine in clinical practice. The Group has recently conducted a survey-based needs assessment as a first step in developing genomics educational tools for healthcare providers in lower-resource settings. The Group is also in the process of developing a Genomic Medicine Immersion Workshop for G2MC international conferences and other venues.

- Develop courses, case studies, assessment tools and other educational resources
- Collaborate with other educational groups/organizations to develop educational resources and expand outreach opportunities
- Develop programs that support the G2MC Flagship Projects

Policy Working Group

Co-chairs: Prof. Catalina Lopez-Correa, Prof. Sue Hill, Dr. Laura Rodriguez

The Policy Working Group seeks to analyze global policy issues surrounding the implementation of genomic tools and knowledge into health care delivery.

- Mapping of international policies that are helping advance the implementation of Genomic Medicine
- Identification of policy groups or meeting that are discussing the clinical implementation of genomics
- Development of policy white papers that highlight the opportunities and challenges of the clinical implementation of genomics

Evidence Working Group

Co-chairs: Prof. Marc Abramowicz, Prof. Fahd Al-Mulla

The group aims to monitor evidence of clinical utility of genomic medicine and to promote awareness about current evidence available to support genomic medicine. The ultimate-goal is to promote the implementation of genomic medicine worldwide, including in low- and middle- income countries.

Flagship Projects

Family Health History

Co-chairs: Prof. Grant Wood, Dr. Theodora Katsila

This project aims to advance global recognition and implementation of family health history (FHH) data collection tools and risk assessment methods among practitioners and patients.

- Develop G2MC website searchable database functionality to capture worldwide high-level use case information on FHH capabilities, with a secondary long-term goal of capturing specific pedigree cases for clinical sharing
- Research and report on current local FHH tools and IT capabilities in use, and future IT needs to be developed and implemented
- Create a 2-5 page report on how FHH data could be accessed/shared, both the regulations of sharing within their countries, and the regulations to share outside of their countries (not moving data, but accessed via a federated model)
- Talk to local genealogy groups in their countries about their interest in promoting local FHH projects

Longer-term and more advanced projects

- Determine how to generate consistent FHH data across multiple different research and healthcare sites in their countries
- Investigate how to utilize common or standardized methods/processes to capture FHH data. Research if local people like to create computer pedigrees for FHH collection, or if a bot-driven method to ask pedigree questions is a better idea
- Learn how to analyze FHH data, mixed with clinical and genomic data, to develop clinical decision support algorithms

Rare/Undiagnosed Diseases

Co-chairs: Prof. Alan Shuldiner, Prof. Vajira Dissanayake

The overall objective of this project is to bring exome sequencing to genomic medicine underserved communities across the globe. Serving this purpose, several vanguard clinical sites have been engaged with the mission to implement genome and exome sequencing in children with rare, undiagnosed genetic diseases.

- Engage the role of the local PI/co-PI of one of the clinical sites
- Help organize/provide content and/or participate in the education component of this Flagship project
- Lead/participate in publications describing the program and its implementation
- Work with the Coordinating Center to help with various activities (analysis of exome sequence data, organization of phenotype and pedigree data; participation in case conferences)

Pharmacogenomics

Chair: Prof. George Patrinos

The project aims to establish translational projects and allow for the implementation of innovations and research capacities in personalized medicine.

- Help organize/provide content and/or participate in the education and outreaching component of this Flagship project
- Lead/participate in publications describing the program and its implementation
- Work with the Coordinating Center to help with various activities (data analysis; interpretation of pharmacogenomics data, participation in case conferences)

Cancer

Chair: Prof. Federico Innocenti

The Cancer project aims to conduct family-based studies coupled with whole genome sequencing in subjects with atypical presentations of familial cancer to discover new genetic etiology among different ethnic groups, which will serve as a pilot effort to provide a framework for genomic implementation in these countries with hopes of expansion to larger cohorts.

For more details: info@g2mc.org

YI Sub-committee Co-chairs: Dr. Nirmala Sirisena and MSc. Stefania Koutsilieri