

# ISCC-PEG Adult Cardiovascular Genomics Project Group: Updates and Opportunities

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# Adult Cardiovascular Genomics Project Group: Gaps

- Focus of most online genomics education is on pediatrics or oncology
- Congenital cardiovascular diseases are deadly
- Adult non-specialist providers tend to have less training in and exposure to genetics
- There are more adults with genetically triggered diseases because people with congenital conditions are living longer
- There are fewer clinical resources for adults with genetic conditions

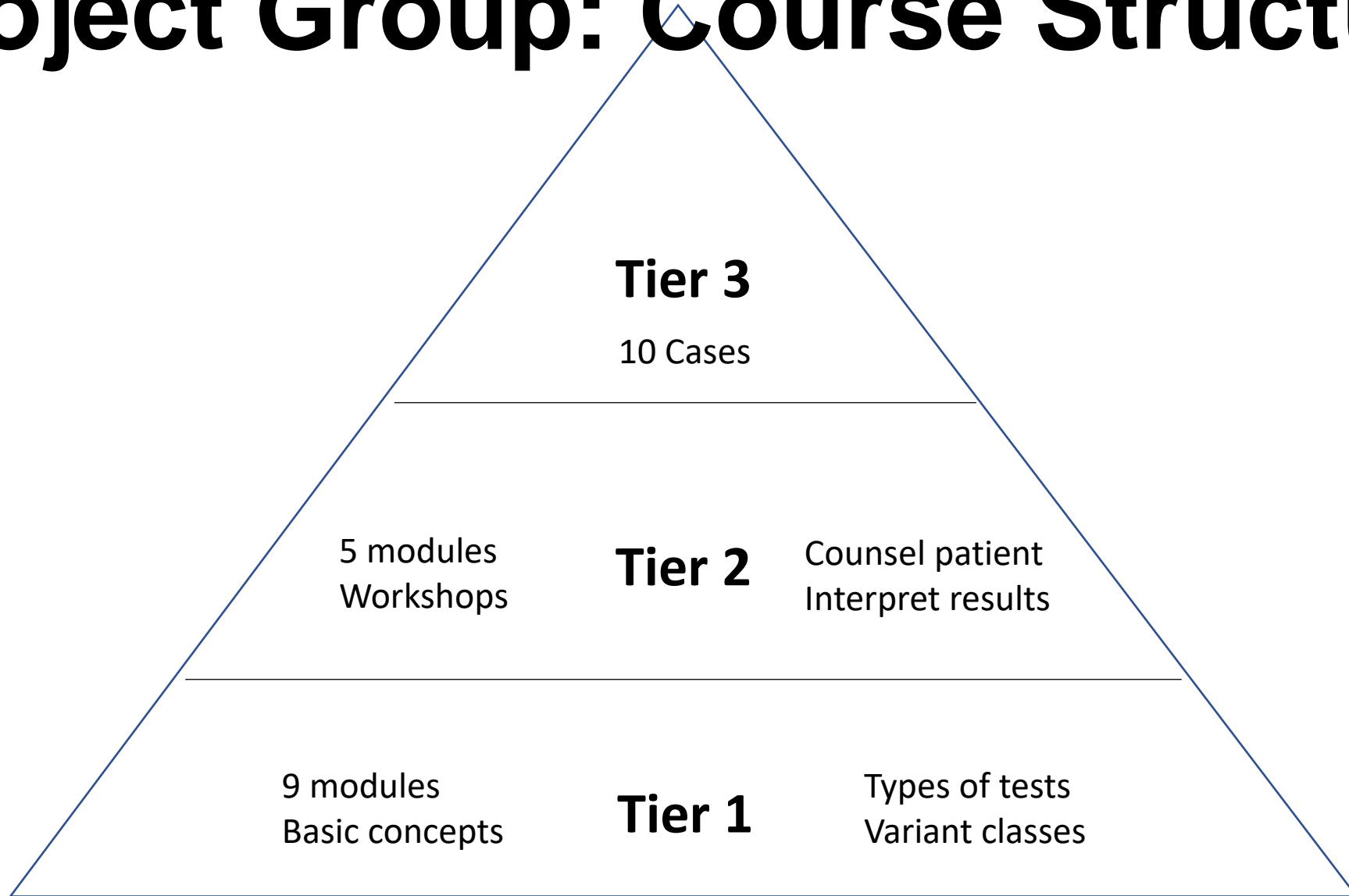
# Adult Cardiovascular Genomics Project Group: Goals

- Fulfill an unmet need for adult cardiovascular genetics education for a global audience
- Increase awareness of heritable cardiovascular diseases by non-specialist health professionals, who are gatekeepers and partners in the diagnosis and treatment of these patients
- Improve the recognition and referral of patients with genetically triggered cardiovascular diseases
- Increase the diversity of faculty perspectives by featuring case-based modules that address genomic issues that are relevant to daily clinical cardiovascular practice

# Adult Cardiovascular Genomics Project Group: Modules

- Primary objective: Publish online modules about the genetics and genomics of adult-onset cardiovascular diseases that are intended for healthcare providers who do not have specialized training in genetics
- Educational areas: Population Genetics of Complex Traits, Genetic Counseling and Ethics, Cardiovascular Pharmacogenetics, Heritable Cardiomyopathies, Cardiac Channelopathies, Familial Hyperlipidemias, Heritable Thoracic Aortic Aneurysms and Dissections
- Target learners: primary care physicians, internal medicine faculty, family medicine faculty in the Community Health program, genetic counselors, cardiothoracic and vascular surgeons, anesthesiologists and nurses.

# Adult Cardiovascular Genomics Project Group: Course Structure



# Adult Cardiovascular Genomics Project Group: Module Structure

- Introduction of concepts
- Clinical scenarios
  - Knowledge Checks
  - Quizzes
- Summary
- Feedback Survey

# Adult Cardiovascular Genomics Modules: Reviewers Needed!

- **Forward an invitation to test the modules to anyone in our target audience at your institution:** Internal Medicine, Family Medicine, Cardiovascular Surgery, CV Nurses
- **Pilot and review modules yourself:** review 2-3 modules and invite your colleagues

## **How to Access the UHealth Cardiovascular Genomics Certificate Program Course:**

- Step 1: find the course on the UHealth Canvas course catalog page:  
<https://uthealth.catalog.instructure.com/browse/ms>
- Step 2: enroll in the course
  - If you have a Canvas Catalog account, enter your credentials
  - Otherwise, create a free account by following the page prompts
- Step 3: access the course and navigate the modules

- Home
- Login
- Dashboard
- Calendar
- Inbox
- History
- Help

- Assignments
- Pages
- Files
- Syllabus
- Quizzes
- Modules
- Collaborations

# UTHealth Adult Cardiovascular Genomics Certificate Program



- Course Info
- 🗄️ Modules
- + Core Competencies
- Glossary Terms and Concepts

*Welcome!*

## ▶ Course Overview

The UTHealth Cardiovascular Genomics Certificate program consists of a series of an online educational modules about the genetics and genomics of adult onset cardiovascular diseases. This course is intended for healthcare providers who do not have specialized training in genetics. By focusing on adult cardiovascular genetics, we intend to address disparities in access to genomic education, which have been largely confined to pediatric and cancer genetics programs.

The case-based genomics modules may be taken individually for continuing education credit or completed entirely for the stand-alone Cardiovascular Genomics certificate. Furthermore, individuals can also apply these courses toward the MS Degree in Clinical Research.

## 👥 Contacts



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<https://uthealth.instructure.com/courses/361>



# Adult Cardiovascular Genomics Modules: Future Plans

- R25 Application to NHGRI submitted 1/2022
  - Expand to one-week livestreamed course
  - Include Polygenic Risk Scores, Enhanced Genetic Counseling, ELSI
  - Integration with online modules
  - Additional content and faculty participation – contributions from community
- Presentations at AHA and ACC
- Publicize to target learners
- Summarize learner metrics from surveys and longitudinal feedback on use of genomic data in clinical practice
- Publication of manuscript

# Adult Cardiovascular Genomics Project Group: Variant Interpretation Tool

- Point-of-care variant interpretation app for clinicians
- Developed in response to the NOSI CTSA supplemental funding
- Enter variant information, receive instant clinical guidance
- Curated variants and guideline-based recommendations
- Goal: increase use of genomic information in routine clinical practice

Go to: [https://redcap.uth.tmc.edu/plugins/HTAD\\_app/index825.php#](https://redcap.uth.tmc.edu/plugins/HTAD_app/index825.php#)

# Adult Cardiovascular Genomics Project Group: Variant Interpretation Tool

- We are expanding the app to include new diagnostic categories: Cardiomyopathies, Hyperlipidemias, LQTS, and more
- If you have genetic expertise in these areas, we need your help!
  - Variant curation
  - Clinical recommendations (fill in our template)
- Please contact [Siddharth.K.Prakash@uth.tmc.edu](mailto:Siddharth.K.Prakash@uth.tmc.edu) for more info

Go to: [https://redcap.uth.tmc.edu/plugins/HTAD\\_app/index825.php#](https://redcap.uth.tmc.edu/plugins/HTAD_app/index825.php#)

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