

We are empowering the community with simple, easy to use biomarker resources that deliver big health wins through clear insights and quick actions. Our cutting edge scientific program brings key biomarkers to test for at your fingertips, which can catch issues before the fire starts. Backed by science this knowledge empowers everyone. Join our translational science academy to take charge of your health.

Biomarkers reveal hidden health signals like inflammation or heart risks via advanced but accessible tests, enabling proactive steps over reactive care. We take complex biology and deliver it in one page guides. This democratizes advanced health science for everyone, no expertise needed.

*Heart health Module: a focus on coronary artery health.*

### **Program Overview**

Learn how to take charge of your own health through specialized testing, personalized results and real world insight.

#### **Session 1** -Understanding the testing

- \* Duration:1.5 hours
- \* Learn how to get the testing step by step
- \* Understand why this testing matters for personalized prevention and long term wellness

#### **Session 2**-Personalized Results and Real World Insights

- \* Duration:1.5 hours
- \* Scheduled after your results are in-usually within 2 weeks
- \* Group Setting for personalized result interpretation (anonymized)
- \* Learn if your results suggest a sense of urgency
- \* What should the next steps be? Not urgent-retest in a year, somewhat urgent next test steps and clinician, very urgent see clinician immediately
- \* Discuss real world meaning and shared student experiences
- \* Learn how these real world student bio-pattern connections can guide your next steps toward practical solutions

### **Investment**

- \* Group sessions \$100/hr (Total \$300 for both sessions)
- \* Optional one one one Session 2 (200/hr)

### **Syllabus**

1. Anatomy of a blood vessel
2. Physiology of the blood vessel
3. Pathophysiology of the blood vessel
4. System imbalances that can cause coronary artery disease
5. Cutting edge advanced biomarkers to test
6. Where to get the biomarkers
7. Tricks to have the advanced cardio biomarker panels paid for by insurance
8. Genes associated with coronary artery health
9. How do genes connect with biomarkers that can be tested (shows potential predisposition)
10. Tracking heart health with wearables
11. Tracking heart health with advanced blood pressure home devices
12. Current interventions (Pharmaceuticals, herbs, supplement, nutrition)
13. Cutting edge cardiologists that can help you on your heart health journey

Heart disease remains a quintessential silent killer, characterized by insidious progression of atherosclerosis, microvascular dysfunction, and electrophysiological instability that often evades symptomatic detection until acute coronary syndrome or sudden cardiac death manifests. However, this stealth can be unraveled through multimodal, longitudinal surveillance integrating advanced laboratory lipid tests, including lipidomic profiling, natriuretic peptides, metabolic and inflammatory markers in addition to ambulatory monitoring of wearables. This translational fusion of real-time expression data from wearables with genomic baselines and hemodynamic/phenotypical metrics enables predictive modeling of major adverse cardiovascular events (MACE), facilitating preemptive pharmacotherapy, lifestyle optimization, and risk stratification at the individual level, thereby abrogating the lethality of subclinical disease trajectories (Baracalu, 2026; Liu, 2025; Ji, 2022; Hosseini, 2025; Genomics PR Newswire)

Burlacu A, Brinza C, Geman O, Karppa M, Hemanth DJ. Heart rate variability as a dual-use digital biomarker: integrating clinical, AI, and operational perspectives on human performance and resilience. *BMC Cardiovasc Disord.* 2026 Jan 24;26(1):87. doi: 10.1186/s12872-026-05543-z. PMID: 41580586; PMCID: PMC12849089.

Genomics PR Newswire <https://www.prnewswire.com/news-releases/genomics-plc-publishes-clinical-trial-results-demonstrating-successful-integration-and-clinical-utility-of-integrated-risk-scores-combining-polygenic-and-clinical-risk-of-cardiovascular-disease-in-nhs-primary-care-302049512.html>.

Hosseini K, Anaraki N, Dastjerdi P, Kazemian S, Hasanzad M, Alkhoul M, Alam M, Nasir K, Rana JS, Bhatt AB. Bridging Genomics to Cardiology Clinical Practice: Artificial Intelligence in Optimizing Polygenic Risk Scores: A Systematic Review. *JACC Adv.* 2025 Jun;4(6 Pt 2):101803. doi: 10.1016/j.jacadv.2025.101803. PMID: 40579068; PMCID: PMC12277611.

Ji F, Zhou M, Zhu H, Jiang Z, Li Q, Ouyang X, Lv Y, Zhang S, Wu T, Li L. Integrative Proteomic Analysis of Multiple Posttranslational Modifications in Inflammatory Response. *Genomics Proteomics Bioinformatics.* 2022 Feb;20(1):163-176. doi: 10.1016/j.gpb.2020.11.004. Epub 2021 Mar 2. PMID: 33662623; PMCID: PMC9510875.

Liu S, Cui Y, Chen M. Heart rate variability: a multidimensional perspective from physiological marker to brain-heart axis disorders prediction. *Front Cardiovasc Med.* 2025 Nov 6;12:1630668. doi: 10.3389/fevm.2025.1630668. PMID: 41282340; PMCID: PMC12630126.