

external academic and industry partners.

As part of the Joint Integrative Clinical Medicine (JICM) portfolio, research efforts at the CAMD is divided into two major focus areas, (1) Clinical Molecular Research and Support (CMRS) and (2) Advanced Engineering Research and Development (AERD). The goal of these areas is to support the Military Health System and external partners in their molecular, genetic, and proteomic requirements, while applying innovative engineering principles and approaches to improve existing diagnostic, therapeutic, and clinical capabilities. Furthermore, the CAMD serves as the coordination arm to support internal and extramural collaborators in translating cutting-edge concepts and technologies into material and knowledge products.

CAPABILITIES

Personnel

CAMD is staffed with a highly qualified team of scientists, research coordinators, certified laboratory technicians, and an Air Force Non-Commissioned Officer in Charge (NCOIC).

Protocol Monitoring

CAMD scientists procure funding to support 59th MDW/ST, Air Force (AF), and Department of Defense (DoD) missions. Laboratory technicians generate data and assist writing research reports and manuscripts. Research coordinators support protocol development and management, assist with Institutional Review Board (IRB) and Institutional Animal Care and Use Committee (IACUC) submissions.

External Collaborations/Support

Through collaborative agreements, the CAMD provides scientific and regulatory expertise to both internal and external investigators in the development of innovative research projects that align with the requirements of the 59th MDW/ST, AF, and the DoD. Additionally, the CAMD offers opportunities for graduate, post-graduate, and GME/SAUSHEC students to develop research-based competencies.

Administrative/Internal Support

The CAMD has the support of the following internal accredited 59th MDW organizations:

- Institutional Review Board (IRB)
- Institutional Animal Care and Use Committee (IACUC)
- Office of Research and Technology Applications (ORTA)



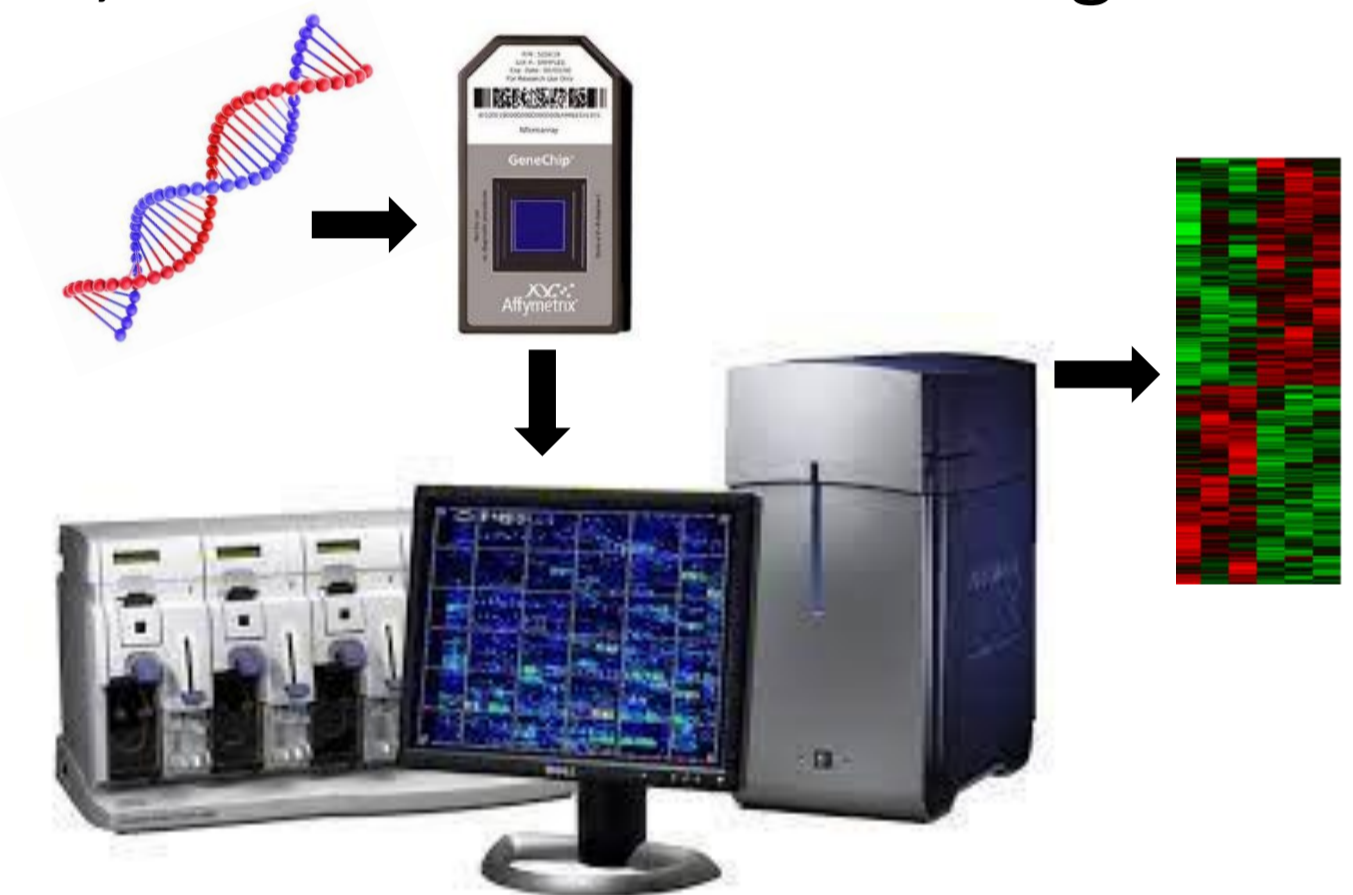
Evaluation of Novel Molecular Point-of-Care Diagnostics

Evaluation of innovative molecular-based diagnostics and other biotechnologies to assess their viability to improve military health outcomes.



Molecular-based Approach to Disease and Injury

Characterizations, identification, and quantification of physiological disease-specific biomarkers using existing or custom genetic, proteomic, and metabolomic strategies.



Regenerative Medicine

Primary and stem cell-based therapies, and alternative engineered materials for the restoration of traumatically injured hard or soft tissue leading to long-term cost savings.



Precision Care Medicine

Comprehensive scientific and technical support for the development and evaluation of biomarkers for personalized medicine diagnostics and therapies.



No federal endorsement of collaborators outside of the Department of Defense intended.