ONLINE DIDACTIC COURSE MODULES (ALL SCHOLARS)

Cancer Genomics Research Introductory Overview - The basics of cancer genome sequencing including consent process, sample collection, overview of sequencing methodologies, analyses and clinical implications of sequencing in cancer.

Outcomes Research Introductory Overview - An overview of the basic aspects of outcomes research including definition of outcomes research, research design, identifying appropriate data sources, methodologic challenges, stakeholder engagement and Federal policies.

Clinical Research Design - Topics include the basics of clinical research, formulating hypotheses, choosing the study subjects, planning the measurements and accounting for precision and accuracy, estimating sample size and power, designing and observational study, designing a clinical trial, secondary data analysis, designing data collection instruments, and writing a research proposal.

Academic Career Development - The goal of this module is to discuss factors that contribute to the success of independent researchers. Topics will include building a research network, time management, laboratory management and work/life balance.

Grant Writing - This module will teach scholars how to organize and present a sound research plan that accurately reflects the ideas and direction of the proposed research activities, develop and justify budgeted proposed research activities, avoid common grant-writing mistakes and discuss peer review process in grant evaluation.

IN PERSON TRAINING (ALL SCHOLARS)

Bench Fundamentals in Translational Research - A five-day workshop on the bench fundamentals in translational research, which will introduce scholars to the core principals of translational research.

SPECIALIZED TRACK ONLINE MODULES (SCHOLARS PICK ONE)

Cancer Genomics Advanced Course Module - Covers Cancer Genomics in greater detail. Topics will include: the genetic basis of disease, biostatistics and statistical genomics, tissue banking and consent, genome/transcriptome sequencing, genotyping and gene expression analysis, pharmacogenomics, epigenetics and cancer genomics.

Outcomes Research Advanced Course Module - This course will enable the scholars to obtain the knowledge and skill to design, implement, and evaluate an observational outcomes research project in a clinical or health delivery system pertaining to cancer care. Key components will include: methods for the design, analysis, and interpretation of observational studies including cohort and case-control studies, understanding measures of health disease status and treatment interventions encountered in clinical effectiveness and outcomes research, effective utilization of methods for instrument development, assessment of reliability and validity.

This program is supported by the National Cancer Institute of the National Institutes of Health, Grant Number R25CA190190 PI: Ramaswamy Govindan, MD

BENEFITS

ONLINE LEARNING
• Modules are completed at your own pace, in one to two years, modules will not exceed 320 hours.

IN PERSON TRAINING
• One week long hands on lab technique session.
• Ongoing mentoring that includes hands-on research training experiences.

FUNDING
• $1000 funding to be used toward research-related expenses or travel to scientific meetings.
This R25 education program applies state-of-the-art techniques to educate postdoctoral researchers in the emerging disciplines of cancer genomics and outcome research for cancer prevention, treatment and control.

APPLICANT ELIGIBILITY

Level of Education
STRENGTH Program scholars must possess a MD or PhD

Citizenship
Eligible applicants must be citizens or non-citizen nationals of the United States, or have been lawfully admitted to the United States for permanent residence and have in their possession an Alien Registration Receipt Card (I-151 or I-551) or other legal verification of admission for permanent residence.

Institutional Affiliations
The STRENGTH Program is an opportunity for Residents, Fellows and Jr. Faculty.

Mentor Support
STRENGTH Program scholars must have the support of a mentor from the approved Mentor List.

Applications and additional information may be found at: crtc.wustl.edu

CANCER GENOMICS & OUTCOMES RESEARCH

STRENGTH PROGRAM

For more information or to apply, please contact:

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