Lehigh Valley Health Network
Summer Research Scholar Program 2014

Notes:
- Positions are either research or quality improvement projects AND include any ancillary responsibilities as determined by the project mentor.
- Semester standing includes completion of the Spring 2014 semester. For example, at the start of the research scholar program in June, 2014, if you completed two years of college studies, you would be considered a junior.
- Acceptable majors may include similar or comparable majors to those listed for each position.

Available Positions

Analysis of COMLEX-USA and USMLE scores in Emergency Medicine Residency Applications
Department of Emergency Medicine
Number of positions: 1
Minimum required semester standing: Junior
Acceptable majors: Biology, Pre-medicine, epidemiology, statistics

Robotic surgery education and outreach
Gynecologic Oncology
Number of positions: 1
Minimum required semester standing: Sophomore
Acceptable majors: Any

Scholarly Works Repository
Medical Library Services
Number of positions: 1
Minimum required semester standing: Sophomore
Acceptable majors: Library Science, Writing/Journalism, Law/Copyright, History of Medicine, Business Management, Information Management

Impact of continuing medical education on physicians’ quality of care
Division of Education (Continuing Medical Education)
Number of positions: 1
Minimum required semester standing: Sophomore
Acceptable majors: Education, liberal arts, pre-medicine, life sciences

EPIC integrated medical records systems and corporate training
EPIC Team
Number of positions: 1
Minimum required semester standing: Sophomore
Acceptable majors: Computer science, information technology, education, business

Communication and engagement in chronic disease management and care management initiatives
Populytics
Number of positions: 1
Minimum required semester standing: Sophomore
Acceptable majors: Communication, IT, Health Care Policy or Administration, Nursing, Business
Fall prevention in older adults  
*Department of Emergency Medicine*  
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Biology, Pre-Medicine, Epidemiology, Statistics.

LVHN oral health program  
*Department of Dental Medicine*  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Pre-Health Profession, Biology, Chemistry, Natural Science.

Hospital-based dentistry  
*Department of Dental Medicine*  
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Pre-Health Profession, Biology, Biochemistry, Chemistry, Natural Science.

Hospital-based dentistry 2  
*Department of Dental Medicine*  
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Pre-Health Profession, Biology, Biochemistry, Chemistry, Natural Science.

Assessment and measurement of awareness and knowledge of network initiatives  
*Organizational Development*  
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Psychology (I/O), Human Resources, Health Care Administration, Business

Teaching competencies and impact on medical students  
*Division of Education (Medical Education)*  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Pre-medicine, Biology, Biochemistry, Chemistry, Education

Length of the Second Stage of Labor and Risk of Preterm Delivery in Subsequent Pregnancy  
*Department of Obstetrics and Gynecology, Division of Maternal Fetal Medicine*  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Biology, Life Sciences, Chemistry, Mathematics, any liberal arts

Typologies of personality and its relationship to childhood trauma, self-esteem, and a measure of hopelessness and suicidality  
*Department of Psychiatry*  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Psychology, Biology
Hospital simulation training  
*Division of Education (Simulation Center)*
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Pre-medicine, Biology, Biochemistry, Chemistry, Education, Computer Science, Instructional Technology or Health Information Systems degree.

Application of Toyota Lean Methodology  
*SPPI*
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Engineering

Transformation of primary care practices into patient centered medical homes  
*Department of Family Medicine*
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Pre-medicine, Nursing, Psychology, Sociology, Public Health, Public Administration, Healthcare Management

Retrospective review of cardiac surgery patients, lead extraction patients, and ascending aortic aneurysm resection  
*Heart and Vascular Center*
Number of positions: 2  
Minimum required semester standing: Junior  
Acceptable majors: life or physical sciences, engineering

Reorganization of the Burn and Wound Centers  
*Patient Care Services Administration*
*Heart and Vascular Center*
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Human Resources, Project Management, Business, Health Care

Network diabetes quality improvement projects  
*Department of Medicine, Inpatient Diabetes*
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Nursing, pre-med, health science, public health, pharmacy.

Outcomes of patients who have had a TeleID consult vs. transfer to LVH for treatment  
*Telehealth*
Number of positions: 2  
Minimum required semester standing: Junior  
Acceptable majors: Biology, Pre-medicine, Public Health, Nursing, Pre-Pharmacy

Analysis of outcomes of patients that received extracorporeal membrane oxygenation (ECMO) as a treatment for the acute respiratory distress syndrome  
*Department of Medicine*
Number of positions: 1  
Minimum required semester standing: Senior  
Acceptable majors: Biology, Chemistry, Physics, Engineering majors
Analysis of surgical and operating room procedural variations in order to identify opportunities for standardization.

*Department of Surgery / Perioperative Health*

- Number of positions: 1
- Minimum required semester standing: Senior
- Acceptable majors: Finance, Accounting, Healthcare Administration, Business

Design and/or development of learning-based digital simulations through the use of graphic design software and a game-engine-driven virtual world platform

*Division of Education*

- Number of positions: 1
- Minimum required semester standing: Sophomore
- Acceptable majors: Graphic design, Web design, Computer Science, Instructional Design/Technology, or equivalent

Optimizing health network operations

*Administration*

- Number of positions: 1
- Minimum required semester standing: Sophomore
- Acceptable majors: Healthcare Administration or related field

Impact of a dual enrollment program in healthcare

*Division of Education*

- Number of positions: 1
- Minimum required semester standing: Sophomore
- Acceptable majors: Education, liberal arts, pre-medicine, life sciences

Metrics and ROI analyses of medical education programs

*Division of Education*

- Number of positions: 1
- Minimum required semester standing: Sophomore
- Acceptable majors: Business, engineering, statistics, or related fields

Obstructive hypertrophic cardiomyopathy undergoing septal myectomy

*Department of Surgery*

- Number of positions: 1
- Minimum required semester standing: Sophomore
- Acceptable majors: Biology, Nursing, Premedical, Pre-professional

Pre-hospital triage of geriatric patients and falls from a standing position

*Department of Surgery*

- Number of positions: 1
- Minimum required semester standing: Sophomore
- Acceptable majors: Pre-med, Nursing, Pre-professional, Physical therapy, Biology

Creation of patient skill topics include cervical collars, Thoraco-Lumbo-Sacral Orthosis, and caring for a foley catheter at home

*Division of Education (Patient Education)*

- Number of positions: 1
- Minimum required semester standing: Sophomore
- Acceptable majors: Graphic art, video/media design, life sciences, liberal arts
Autopsies and forensic pathology in PA and the future of forensic medicine in Health Network Laboratories  
Department of Forensic Pathology  
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Pre-med, forensic science, biology, chemistry or biochemistry.

Frequency of three human pathogens in local tick population  
Department of Infectious Disease  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Biology, microbiology, epidemiology, medical sciences

Use of feedback from patient comments to encourage improved provider communication  
Department of Medicine  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Communication, Marketing, Math, Pre-healthcare

Development and evaluation of video education for diabetes patient care  
Division of Education (eLearning)  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Graphic art, video/media design, life sciences, liberal arts

Use of robotic surgery in urology, thoracic, gynecology, and general surgery  
Department of Surgery  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Biology, chemistry, pre-medicine, health care, nursing

Medication justification and sensory room evaluation  
Department of Behavioral Health Science  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Biology, chemistry, pre-medicine, nursing, psychology

Clinical decision support: perioperative blood conservation  
Department of Anesthesiology  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Pre-medicine, biology, chemistry, life sciences

A Real Time Cloud Based Vehicle to Evaluate Perception of Quality following Total Knee Arthroplasty  
Department of Anesthesiology  
Number of positions: 1  
Minimum required semester standing: Sophomore  
Acceptable majors: Pre-medicine, biology, chemistry, life sciences

Baby friendly hospital designation research, program, and curriculum development  
Patient Care Services  
Number of positions: 1  
Minimum required semester standing: Junior  
Acceptable majors: Nursing, community health, education
Ongoing Quiet ICU project and pressure ulcer research
*Intensive Care Unit Muhlenberg*
Number of positions: 1
Minimum required semester standing: Junior
Acceptable majors: Nursing or any healthcare related field

The utilization of Adaptive Support Ventilation (ASV) in ICU patients
*Respiratory Care*
Number of positions: 1
Minimum required semester standing: Junior
Acceptable majors: Pre-medicine, nursing, physician assistant

Gender Disparity in Clinical Research Participation
*Department of Emergency Medicine*
Number of positions: 1
Minimum required semester standing: Junior
Acceptable majors: Biology, Pre-medicine, epidemiology, statistics, other healthcare related fields

Establishing the value of using medication reconciliation technicians to improve the continuum of care and prevent medication errors
*Pharmacy*
Number of positions: 1
Minimum required semester standing: Junior
Acceptable majors: Pre-medicine, nursing, life sciences, physician assistant, other healthcare related fields.

Study and cost analysis of LVHN Information Services fiber infrastructure
*Information Services Infrastructure (I/S)*
Number of positions: 1
Minimum required semester standing: Junior
Acceptable majors: Computer network or computer science