Research, Research Support & Education at DQHS

Introduction to Research to MD1
September, 2020
DQHS Research

DQHS serves as the quantitative health sciences specialized cores to several UH and JABSOM infrastructure grants, e.g., U54 Ola HAWAII, P20 INBRE.

Department Faculty Research Interest:
https://qhs.jabsom.hawaii.edu/about-us/faculty-staff/faculty/

Bioinformatics Methodologic and Collaborative Research

Biostatistical Methodologic and Collaborative Research

Clinical Research

Basic Science Research

Healthcare Data Analytic Research
Biostatistics Consultation Clinic for Medical Trainees

Criteria & Requirements:

- The JABSOM medical trainee must be the research project’s Principal Investigator and will be the lead author of a subsequent publication
- Acknowledging the Barry & Virginia Weinman endowment (Dean’s support) & U54 Ola HAWAII grant (Biostatistics Core support) in all presentations/publications

Support Details:

- To develop scholarship and advance careers
- Started: Fall 2019 (JABSOM MEB 411H); Now through Zoom sessions
- Biostatistics Core faculty and staff, with assistance from MSCTR-QHS graduate student consultants (through their QHS 576 Biostatistical Consulting Practicum Course)
- Topics: study design, feasibility discussion, sample size determination, database development, data analysis advice, and preparation of the tables/figures and statistics section for presentation/manuscript; for selected projects, which have mutually agreed upon research design and data quality, limited additional analytic support will be provided on a first-come-first-served basis
Strengthened UME Biostatistics Education

• In previous years, two one-hour biostatistics lectures during MD7

• Starting in 2020 – 2021 (Proposal by DQHS; Approved by OME PEC in December 2019)
  - Three one-hour Biostatistics/Research Design lectures in MD1
  - An one-hour biostatistics journal club session each in MD2, MD3, MD4, and MD6
    ✓ Small groups (8 – 12 students), with one Ph.D. biostatistician
    ✓ Selected clinical papers matching the disease covered in the unit
    ✓ Cover and review key statistical topics in a sequential order
  - Compiled USMLE Step 1 Biostat/Epi practice questions
The Clinical and Translational Research (CTR) graduate program will prepare graduates with skills for successful careers in clinical and translational research and research support.

<table>
<thead>
<tr>
<th>Clinical Research (CR) Track</th>
<th>Quantitative Health Sciences (QHS) Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop knowledge and skills to investigate clinical research topics through coursework and research projects focused on research design, methodologies, quantitative methods, scientific writing, ethical issues, and the capacity in obtaining research funding.</td>
<td>Courses and research projects focus on biostatistical and bioinformatic methods development and application to improve population and individual health. Students will acquire big data skills and master the scientific principles and methodologies that underlie basic science, clinical, and translation research.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Career</th>
<th>Program Curricula</th>
</tr>
</thead>
</table>
| Research, research support, data analyst positions at:  
- Academia  
- Hospitals  
- Government agencies  
- Healthcare organizations  
- Pharmaceutical companies | - 2-year 34 total credit hours graduate program  
- Plan A (Thesis): 24 credits of didactic courses  
- Plan B (Capstone Project): 28 credits of didactic courses |

<table>
<thead>
<tr>
<th>How to Apply</th>
<th>For more Information</th>
</tr>
</thead>
</table>
| Visit [http://manoa.hawaii.edu/graduate/content/clinical-research](http://manoa.hawaii.edu/graduate/content/clinical-research) to either fill out an application or download a PDF form  
Application Deadline: May 30 | Phone: (808) 692-1840  
Email: GradCTR@hawaii.edu  
Web: [http://msctr.jabsom.hawaii.edu](http://msctr.jabsom.hawaii.edu) |
Selected DQHS Courses

- BIOM 640 Introduction to Clinical Research (3 credits)
- BIOM 644 Translational Research Methods (2 credits)
- BIOM 645 Clinical Protocol Development (3 credits)
- BIOM 654 Medical Genetics (2 credits)
- QHS 601 Biomedical Statistics I (3 credits; cross-listed with TRMD 655)
- QHS 602 Biomedical Statistics II (3 credits)
- QHS 610 Bioinformatics I (3 credits; cross-listed with TRMD 653)
- QHS 611 Bioinformatics II (3 credits)
- QHS 620 Introduction to Clinical Trials (2 credits)
- QHS 621 Design and Analysis of Clinical Trials (2 credits)
- QHS 650 Secondary Data Analysis (2 credits)
- QHS 651 Secondary Data Analysis Practicum (2 credits)

MSCTR Graduate Program Website: msctr.jabsom.hawaii.edu

Dean's Certificate of Distinction in Research: https://hslib.jabsom.hawaii.edu/cod/