UCSF Clinical & Translational Sciences Training Program:

Clinical Research Informatics Postdoctoral (CRISP) Fellowship

https://crisp.ucsf.edu

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University of California, San Francisco
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Clinical Research Informatics involves the use of informatics in the discovery and management of new knowledge relating to health and disease. It includes management of information related to clinical trials and secondary research use of clinical data.

https://amia.org/about-amia/why-informatics/informatics-research-and-practice
Highlights

Clinical research informatics: a growing subspecialization of biomedical informatics

Lucila Ohno-Machado
Editor-in-Chief

Editorial

The maturation of clinical research informatics as a subdomain of biomedical informatics

Suzanne Bakken
Five Domains of Biomedical Informatics (American Medical Informatics Association)
Overlap between clinical informatics, clinical research informatics and clinical research

Clinical Research Informatics: Combining research and operations in a learning healthcare system
## CRISP Components

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td><img src="image1" alt="People Meeting" /></td>
<td>Conduct a mentored research project.</td>
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<tr>
<td><img src="image2" alt="Person Standing and Screen" /></td>
<td>Attend weekly didactic sessions with <strong>UCSF (ACGME) Clinical Informatics Fellows</strong>.</td>
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<tr>
<td><img src="image3" alt="Video Call" /></td>
<td>Participate in weekly work-in-progress sessions with the <strong>UCSF Quality and Informatics Lab</strong>.</td>
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<tr>
<td><img src="image4" alt="Hands Clapping" /></td>
<td>Join monthly <strong>Fellows Advancement Skills Training in Clinical Research (FAST-CaR)</strong> career development sessions.</td>
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<tr>
<td><img src="image5" alt="Lung" /></td>
<td>Continue clinical practice (20% effort).</td>
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<tr>
<td><img src="image6" alt="Desk and Document" /></td>
<td>Complete coursework.</td>
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### Courses

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<tr>
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<th>CRISP Program Recommended Courses</th>
<th>Certificate in Health Data Science (CiHDaS)</th>
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<td></td>
<td><a href="https://crisp.ucsf.edu">https://crisp.ucsf.edu</a></td>
<td><a href="https://epibiostat.ucsf.edu/certificate-health-data-science">https://epibiostat.ucsf.edu/certificate-health-data-science</a></td>
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**Summer**
- Responsible Conduct of Research (EPI 201)
- **Designing Clinical Research (EPI 202)**
- Introduction to Programming in R (BIOSTAT 213)
- Introduction to the Science of Big Data (BIOSTAT 202)

**Fall**
- Clinical Epidemiology (EPI 204)
- Biostatistics for Clinical Research I (BIOSTAT 200)
- Advanced Programming in R (BIOSTAT 214)
- TICR Program Seminar
- Epidemiologic Methods I (EPI 203)
- Biostatistics for Clinical Research I (BIOSTAT 200)
- Advanced Programming in R (BIOSTAT 214)
- Data Science Program Seminar

**Spring**
- Use of EHR Data for Research (EPI 231)
- Publishing and Presenting Clinical Research (EPI 212)
- Biostatistics for Clinical Research III (BIOSTAT 209)
- TICR Program Seminar
- Advanced Machine Learning for Biomedical Sciences (DATASCi 225)
- Biostatistics for Clinical Research III (BIOSTAT 209)
- Data Science Program Seminar

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<tr>
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<th>15 courses, 31 credits</th>
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<tbody>
<tr>
<td></td>
<td>13 courses, 28.5 credits</td>
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Eligibility

• U.S. citizen or permanent resident

• Doctoral degree

• Clinical license in a healthcare profession (medicine, nursing, pharmacy, dentistry, psychology, physical therapy, acupuncture, podiatry)

• Fewer than three years of prior funding through institutional or individual NRSA postdoctoral grants

• Applicant department must commit to covering approximately 30% ($40,000/year) of the costs
Fellowship covers ~$100,000

Applicant's department covers ~$40,000

**Annual Cost of CRISP Program**

**Department must cover:**

- UCSF housing supplement (about $14,000/year)
- Difference between UCSF and NIH pay scales
- Uncovered tuition ($0 - $10,000/year)
- Miscellaneous expenses (e.g., travel, conference registration)
# Application Review Criteria

## Track Record
- Background and prior training:
- Area(s) of expertise:
- Number of coauthored publications since 2015:
- Number of first author publications since 2015:
- Number of grants (if any):

## Research Plan
- Scientific strength
- Clinical importance
- Feasibility

## Training Plan
- Commitment of the proposed mentors
- Proposed coursework

## Resources
- Workstation
- Computer
- Analytic support
- Conferences

## Likelihood of Pursuing Academic Career
CRISP Fellows 2021-2023

Mohamed Seedahmed MD MPH
Pulmonary & Critical Care Medicine

Rachael Stovall MD
Rheumatology

Jonathan Witonsky MD MAS
Pediatric Allergy & Immunology

TL1-TR001871 from the National Center for Advancing Translational Science (NCATS)
CRISP
(UNIVERSITY RESEARCH INFORMATICS POSTDOCTORAL) FELLOWSHIP

APPLICATION DEADLINE:
MARCH 1, 2023
OFFERS EXTENDED:
APRIL 15, 2023
FELLOWSHIP BEGINS:
JULY 1, 2023

What is Clinical Research Informatics?

Clinical Research Informatics is one of five informatics subspecialties defined by the American Medical Informatics Society. It encompasses the technology, processes, principles, and practices required for clinical research involving human subjects and their data.

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Learn more at:
https://crisp.ucsf.edu