



U.S. Department of Veterans Affairs  
Veterans Health Administration



# DATA SCIENCE FELLOWSHIP

Through Our Big Data Scientist Training  
Enhancement Program

## Improving Patient Care Through Data Science

The Big Data Scientist Training Enhancement Program (BD-STEP) is a two-year fellowship opportunity offered through the National Cancer Institute (NCI) and the Veterans Health Administration (VHA) that uses data science to advance cancer research and patient care. Competitively selected postdoctoral fellows are placed in four VA medical centers across the country to work with clinicians and interdisciplinary researchers to address important patient-centered health challenges. Fellows have the unique opportunity to utilize the extensive VA health data infrastructure while gaining valuable exposure to the clinical environment.

**BD-STEP is  
accepting  
applications for  
the next cohort  
of data science  
fellows**

The complexity of oncology makes it a prime field for data-driven research projects with the potential to greatly improve patient care. Collaboration between NCI and VHA has provided an avenue to access rich, diverse cancer data resources, including diagnosis and treatment information from the VA Central Cancer Registry and longitudinal, clinical data from the VA's national healthcare system. The combination of data access, academic mentorship, and clinical guidance allows fellows to formulate and address clinically important questions in cancer research.



# IMPROVE CARE FOR OUR VETERANS WHILE YOU ENHANCE YOUR DATA SCIENCE SKILLS



## Why Apply?

BD-STEP fellows use data science to improve outcomes for cancer patients. The program offers aspiring healthcare data scientists access to unparalleled longitudinal datasets including diagnosis, treatment, molecular, and clinical information for large and diverse patient populations. BD-STEP fellows utilize these data to pursue important research questions, improving basic understanding of cancer while also improving clinical care. Over the course of their research, fellows receive mentorship from both academic and clinical advisors and leverage their VA and NCI/NIH connections to network with healthcare and data science experts across government, academia, and industry. This equips BD-STEP graduates with the diverse skillsets they need to pursue careers in healthcare data science.

## Who is Eligible?

**Applicants must meet all 3 criteria:**

### 1. POSTDOCTORAL RESEARCHERS

Applicants must have obtained a PhD in engineering, computer science, physical science, or other related disciplines, including:

- Engineering disciplines
- Computer Science
- Mathematics
- Physics
- Chemistry

### 2. COMPUTATIONAL SCIENTISTS

In addition to a history of collaboration and teamwork with strong communication skills, applicants must have:

- Experience in bioinformatics, modeling, or management of large data sets
- Strong background in advanced mathematics and statistics
- Proficiency in at least one programming language

### 3. US CITIZENS

Applicants must be US citizens to be hired within a VA facility. Non-citizens are also encouraged to apply, but are not eligible for VA stipend support.



## What is Needed?

- Curriculum Vitae (CV)
- Brief statement of interest (no more than one page) to include proposed research areas/topics
- Letter of support from academic mentor
- Rank order of BD-STEP sites: Boston, MA; Durham, NC; Houston, TX; and Palo Alto, CA

### **Note:**

*Enrolled fellows are hired by the VA with locality-adjusted stipends and benefits.*

## Questions?

### FOR MORE INFORMATION ABOUT THE PROGRAM, CONTACT:

Frank Meng, PhD  
BD-STEP Program Director, VHA  
[frank.meng2@va.gov](mailto:frank.meng2@va.gov)

Michelle Berny-Lang, PhD  
Program Director, NCI Center  
for Strategic Scientific Initiatives  
[michelle.berny-lang@nih.gov](mailto:michelle.berny-lang@nih.gov)

### LEARN MORE ONLINE:

[www.research.va.gov/naii/BD-STEP](http://www.research.va.gov/naii/BD-STEP)  
<https://cssi.cancer.gov/bd-step>

## Now Accepting Applications!

### SUBMIT TO:

[service.cancer.gov/bd-step](http://service.cancer.gov/bd-step)

*Accepting applications on a rolling basis, with cohorts to launch annually in October.*