Keenan Graham

http://keenangraham.github.io

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EXPERIENCE

Department of Genetics, Stanford University School of Medicine — *Laboratory Director: Mike Cherry, Ph.D.*

May 2017 - Present

- **Develop software** (backend, frontend, pipelines, external scripts) and wrangle data at the **ENCODE Data Coordination Center**.

Department of Microbiology and Parasitology, Genova Diagnostics — *Laboratory Director: James Kelton, Ph.D.*

2013 - April 2017

- Visualize and perform **complex analysis on clinical data with Python** and Jupyter notebook.
- Examine more than 20,000 patient samples for **intestinal protozoa and parasitic helminths/ova**.

Department of Clinical Genetics, Fullerton Genetics Center, Mission Hospital — *Laboratory Director: Jack Tarleton, Ph.D., FACMG*

2013 **(Volunteer Project)**

- Identify novel mutations in the *CLCN1* gene leading to myotonia congenita and **correct inconsistencies between lookup table of point mutations and raw DNA exon sequences of the gene.**

Department of Epidemiology, UNC Chapel Hill Gillings School of Global Public Health — *Principal Investigator: Carla Cerami Hand, M.D./Ph.D.*

2010 - 2011

- Determine parasitemia in blood samples infected with the malaria parasite *Plasmodium falciparum* and isolate the non-erythropoietic, tissue-protective erythropoietin heteroreceptor.
- **Senior research thesis based on experiments performed in this laboratory.**

EDUCATION

University of North Carolina at Chapel Hill, Chapel Hill, NC — *Bachelor of Science in Biology*

2011

TECHNICAL SKILLS

Data analysis and software development **in Python** and JavaScript

Custom dashboards with **D3.js**, HTML, CSS, Jupyter Notebooks, and Markdown

Database creation and **querying in SQL**

Web applications with Flask/Django, React

Git, Bash, and AWS

LABORATORY SKILLS

Diagnostic parasitology and microscopy

Bacterial culture and antibiotic sensitivity assays

MALDI-TOF mass spectrometry

Western blot

PCR and DNA sequencing

INTERESTS

Bioinformatics

Hierarchical **Bayesian analysis and statistical modelling**

Interactive data visualization

Machine/deep learning