



Cold
Spring
Harbor
Laboratory

Advanced Sequencing Technologies & Bioinformatics Analysis (Virtual)

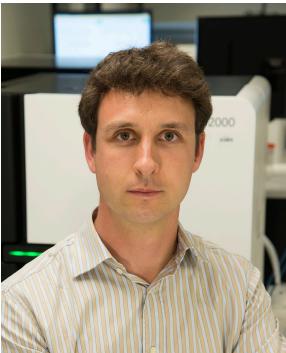
<http://meetings.cshl.edu/courses.html>

Introductions to Bioinformatics instructors



Malachi Griffith

Assistant Professor of Medicine
Assistant Professor of Genetics
Assistant Director, MGI



Obi Griffith

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Allegra Petti

Assistant Professor of Medicine



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PhD candidate



Kelsy Cotto
PhD candidate



Megan Richters
PhD candidate

PETTI LAB

sites.wustl.edu/pettilab



John Chamberlin
Graduate Student



Simone Longo
Graduate Student



griffithlab.org

rnabio.org genviz.org pmbio.org

 Washington University in St. Louis
SCHOOL OF MEDICINE

QUINLAN LAB @ UU

quinlanlab.org

 THE
UNIVERSITY
OF UTAH

rnabio.org

Introduction to SEQTEC Informatics – philosophy and goals

Do “the bioinformatics” for someone, and you help them for a day. Teach someone to do bioinformatics, and you help them for a lifetime.

- Ancient Chinese proverb

- Course goals
 - Learn concepts and develop skills for sequence analysis
 - Build the foundation for tackling your own analysis challenges
 - Learn to think like a bioinformatician
 - Have fun

Course outline

Monday - Introduction to technologies

Tuesday - Bioinformatics basics and NGS data fundamentals

Wednesday - RNAseq expression analysis

Thursday - RNAseq differential expression analysis and interpretation

Friday - Single cell RNAseq

Course format for a typical day

- Lecture
- BREAK
- Practical exercises
- Lunch
- Practical exercises
- BREAK
- Practical exercises
- Wrap-up and Q&A

Student poll

Not counting the pre-requisites and materials for this course:

- Do you consider yourself a bioinformatician?
- Are you familiar with linux/command line?
 - Intermediate?
 - Expert?
- Do you sometimes write code?
- Are you familiar with R?
 - Intermediate?
 - Expert?
- Do you use git/github?
- What organism do you work with?
- Are you interested in bulk RNAseq (Yes), scRNAseq (No), or both (thumbs up)?
- Who has a dual monitor setup?