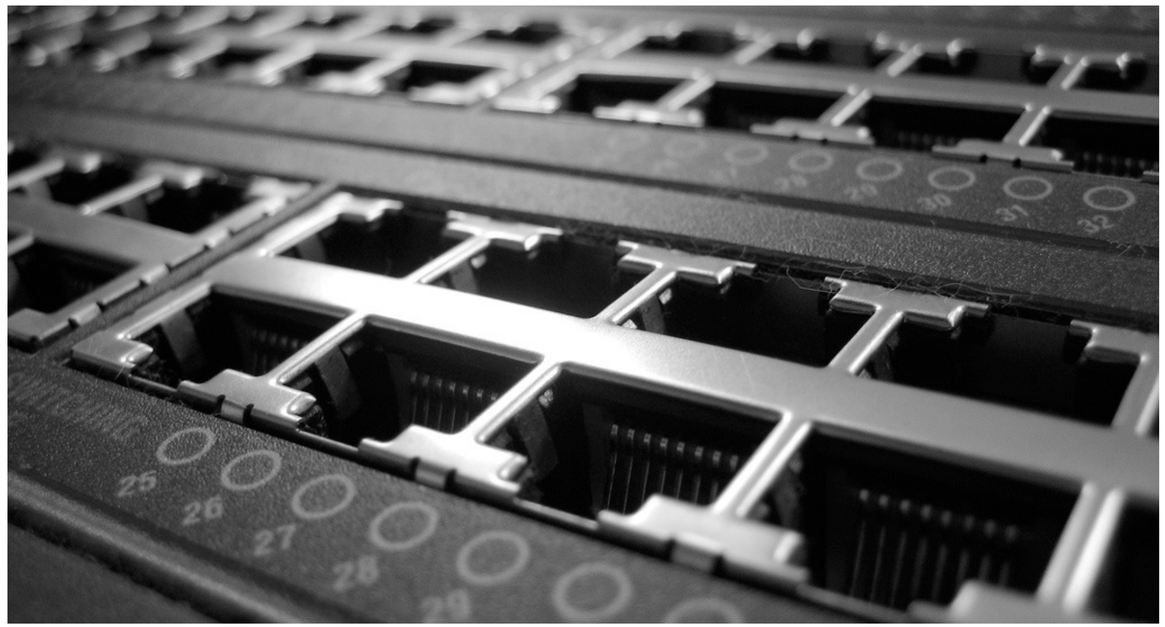
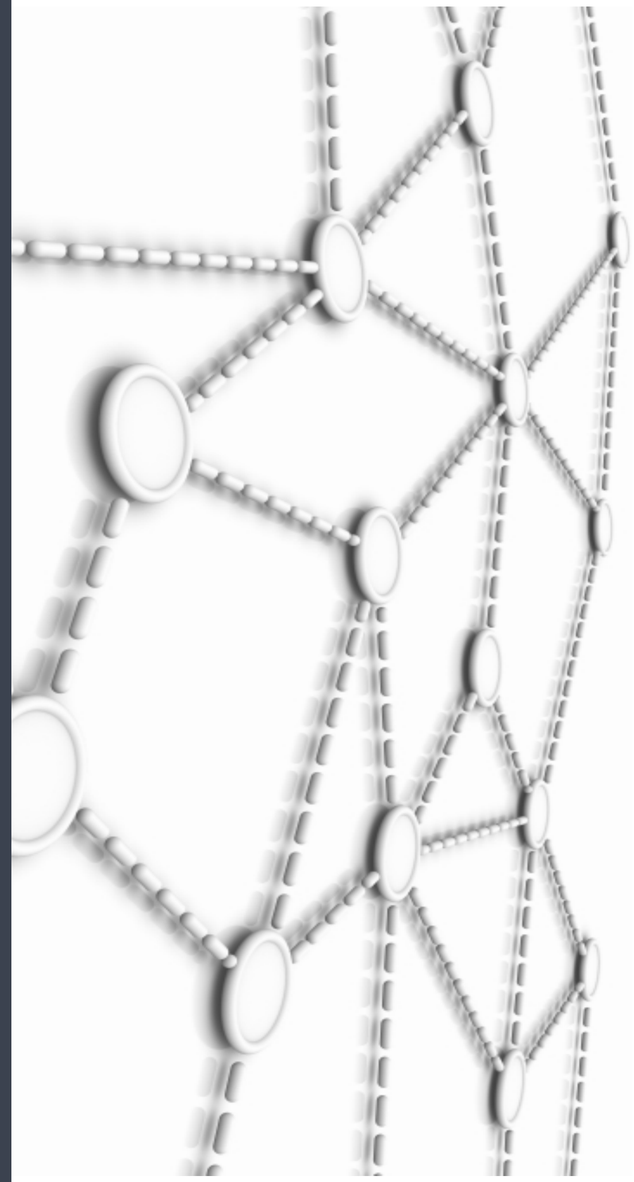


NGS data analysis course: ~~Winter~~ *Spring?* 2016

Harvard Chan Bioinformatics Core (HBC)

Course: Learning Objectives

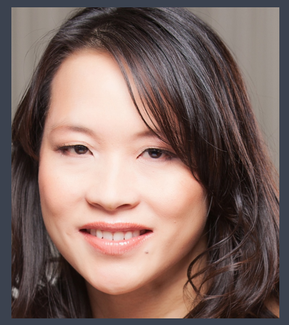


- ✓ Comprehend the nature of Next-Generation Sequencing (NGS) data
  - ✦ Multiple technologies
  - ✦ Caveats
  - ✦ Options and strategies
- ✓ Understand how tools and workflows for NGS-based analysis work
- ✓ Utilize these tools and workflows
  - ✦ Big data = Big Computational Requirements; what does this really entail?
  - ✦ UNIX command-line interface
  - ✦ R

Learning objectives

- ✓ Implement best practices
  - ✦ Experimental design
  - ✦ Quality control and Assessment
  - ✦ Reproducibility
- ✓ Become a resource for your group

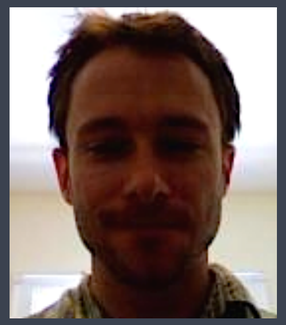
Learning objectives



Shannan Ho Sui

John Hutchinson

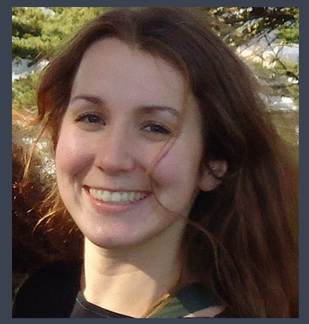
Brad Chapman



Rory Kirchner

Meeta Mistry

Radhika Khetani



Mary Piper

Lorena Pantano

Oliver Hofmann

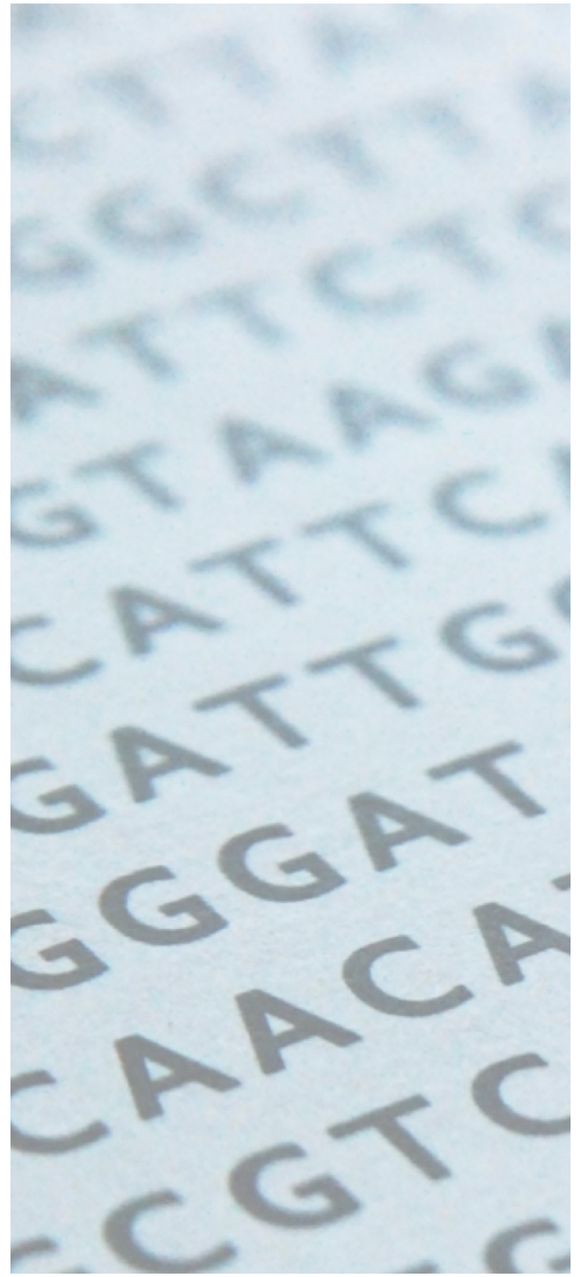
Peter Kraft

Harvard Chan Bioinformatics Core

Services offered by HBC

Consulting:

- RNA-seq, small RNA-seq and ChIP-seq
- Genome-wide methylation
- WGS, resequencing, exome-seq and structural variantion
- Gene expression arrays (microarrays)
- Functional enrichment
- Grant support



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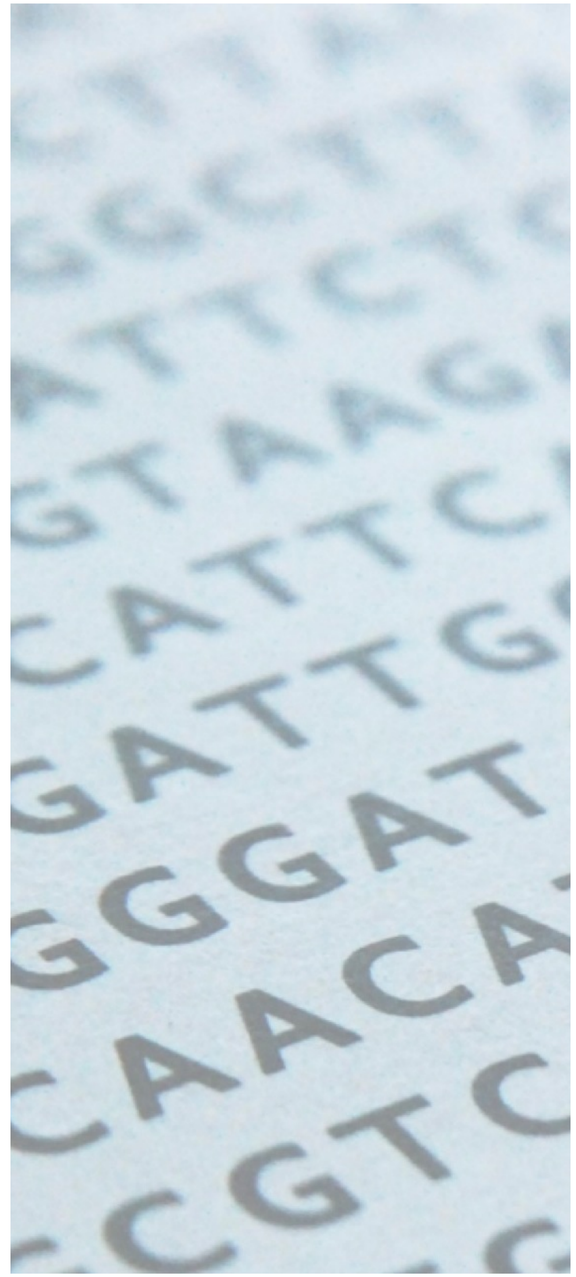
NGS-focused bioinformatics training:

Galaxy-based NGS analysis, Introductory and intermediate R,

Introductory Python, Introduction to Unix and HPC,

In-depth courses, and other.



HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH

HARVARD STEM CELL INSTITUTE

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THE HARVARD CLINICAL AND TRANSLATIONAL SCIENCE CENTER

HARVARD MEDICAL SCHOOL

NIEHS / CFAR Bioinformatics Core

Center for Stem Cell Bioinformatics

Harvard Catalyst Bioinformatics Consulting

HMS Tools & Technology

Harvard NeuroDiscovery Center

Want more information?

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Training email: hbctraining@hsph.harvard.edu

Website: http://bioinformatics.sph.harvard.edu

Twitter: @bioinfocore

Boswell, Sarah

Chatterjee, Nirmalya

Chopra, Sameer

de Esch, Celine

Doupe, David

Ettou, Sandrine

Hu, Dan

Kathrein, Katie

Lobbardi, Riadh

Malleshaiah, Mohan

Paschini, Margherita

Renthal, William

Rood, Benjamin

Rupaimoole, Rajesha

Scheffer, Deborah

Shah, Manasvi

Tan, Catherine

Zaborowski, Mikolaj

Zerbato, Madeleine

Zuccaro, Emanuela

Variant Calling session (+Github): April 28th and 29th

Exit Survey: http://tinyurl.com/NGS-course-exit-survey

5:30 is *beer time*

at the *Squealing Pig*

on Smith st. across Huntington ave.