

#### Introduction to R

Harvard Chan Bioinformatics Core

April 20th, 2017

http://tinyurl.com/hbc-intro-R-hndc

**Sponsored by HNDC** 



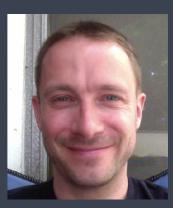
Shannan Ho Sui



John Hutchinson



Brad Chapman



Rory Kirchner



Meeta Mistry



Radhika Khetani



Mary Piper



Lorena Pantano



Michael Steinbaugh



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Peter Kraft



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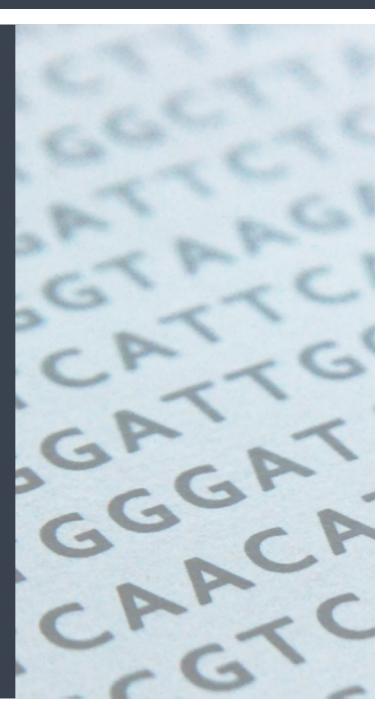
Peter Kraft

Class Introductions!

### Consulting

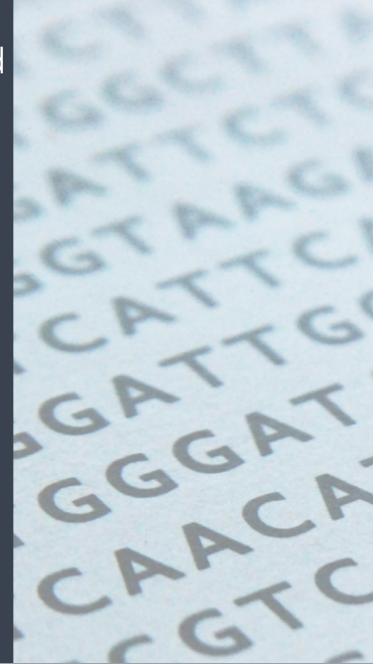
- RNA-seq, small RNA-seq and ChIP-seq analysis
- Genome-wide methylation
- WGS, resequencing, exome-seq and CNV studies
- Quality assurance and analysis of gene expression arrays
- Functional enrichment analysis
- Grant support

HBC consulting: bioinformatics@hsph.harvard.edu



## Training

- Short workshops on introductory, intermediate and advanced topics related to NGS data analysis
- In-depth courses (8- or 12-day formats)



HBC training: hbctraining@hsph.harvard.edu











NIEHS
Bioinformatics
Core

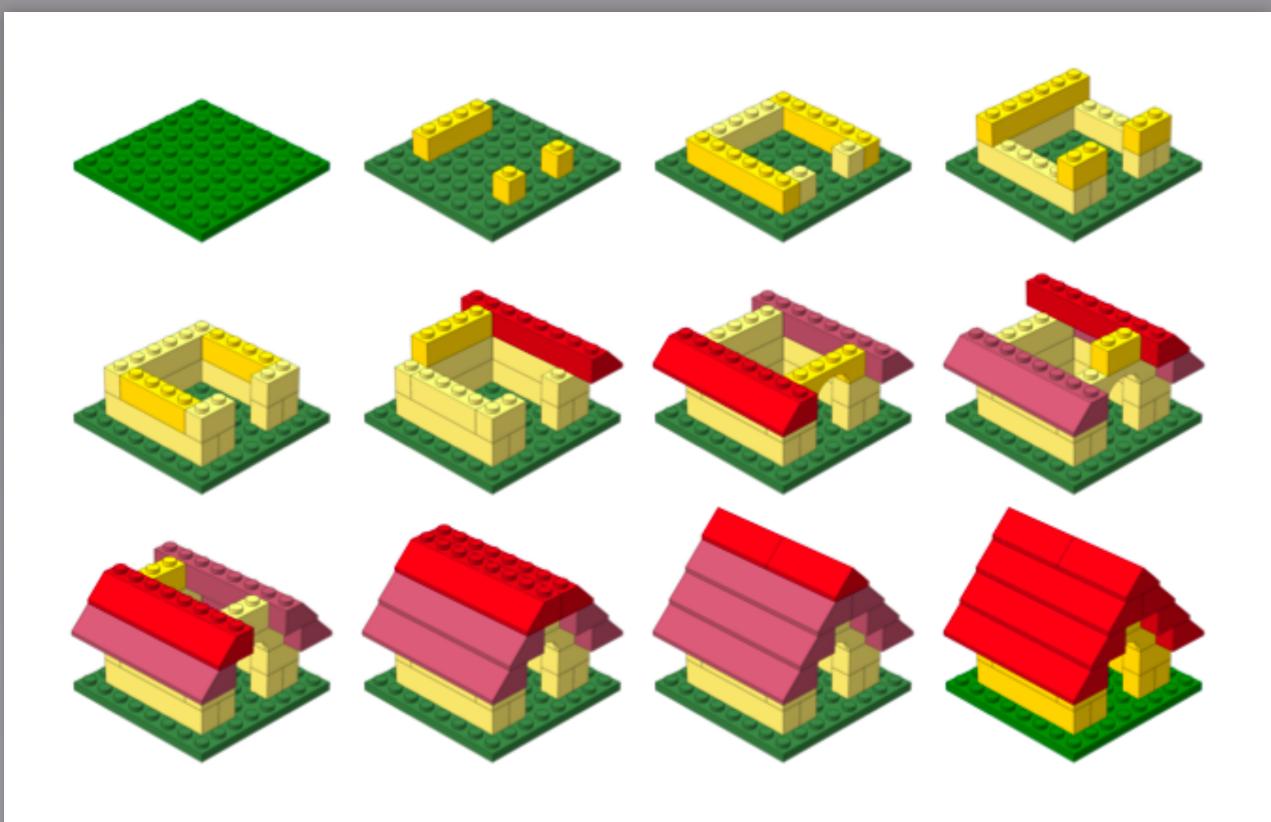
Center for Stem
Cell
Bioinformatics

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Catalyst
Bioinformatics
Consulting

<u>Harvard</u> <u>NeuroDiscovery</u> <u>Center</u>

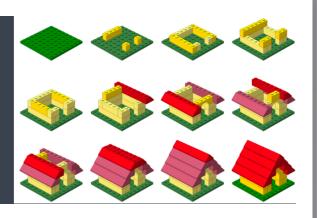
HMS
Tools &
Technology

Workshop Scope...



# Learning R

## Learning Objectives



- Become comfortable with RStudio (a graphical interface for R)
- ✓ Fluently interact with R using RStudio
- ✓ Become familiar with R syntax
- Understand data structures in R
- ✓ Inspect and manipulate data structures
- Install packages and use functions in R
- Visualize data using simple and complex plotting methods

### Contact us!

HBC training team: <a href="mailto:hbctraining@hsph.harvard.edu">hbctraining@hsph.harvard.edu</a>

HBC consulting: bioinformatics@hsph.harvard.edu

**Twitter** 

@bioinfocore