

WELCOME TO PUBS!

Physical **U**nderpinnings of **B**iological **S**ystems - 2017

<http://kampmannlab.ucsf.edu/pubs-2017>

Faculty



Robert Newberry
PUBS fellow,
Course coordinator



Martin Kampmann
Instructor
646-549-3673



Sy Redding
Co-instructor



Seemay Chou
Co-instructor



Hani Goodarzi
Co-instructor



Eric Chow
Sequencing



Delaine Larsen
Microscopy



Joe DeRisi
Instructor
emeritus

TAs



Taylor Arhar



Alison Maxwell



Dan Schwarz



Doug Wassarman



Taia Wu

The alpha-Team

TA: Alison



Yessica



Jenna



Nish



Adam

Rub-a-dub-dub 4 geeks in PUBS

TA: Doug



Andrew



Taylor



Jean



Kyle

Yeast mode

TA: Taia



Erik



Matt



Gracie



Lakshmi

Buds

TA: Dan



Jared



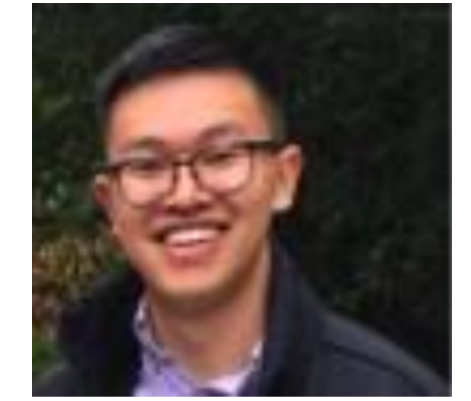
Snow



Christa

Aged Neuron Merge

TA: Taylor



Daniel



Maureen



George

PUBS is an experiment

EDUCATIONFORUM

GRADUATE EDUCATION

Interdisciplinary Graduate Training in Teaching Labs

Intensive, short-term courses meld students and faculty and new techniques in pursuit of genuine research questions.

**Ronald D. Vale,^{1,2,3*} Joseph DeRisi,^{2,3} Rob Phillips,⁴ R. Dyché Mullins,^{1,2} Clare Waterman,^{1,5}
Timothy J. Mitchison^{1,5}**

Science 21 December 2012:
Vol. 338 no. 6114 pp. 1542-1543
DOI: 10.1126/science.1216570


Undergraduate
student





Graduate
student

Consuming knowledge

Producing knowledge

 eLIFE
elifesciences.org

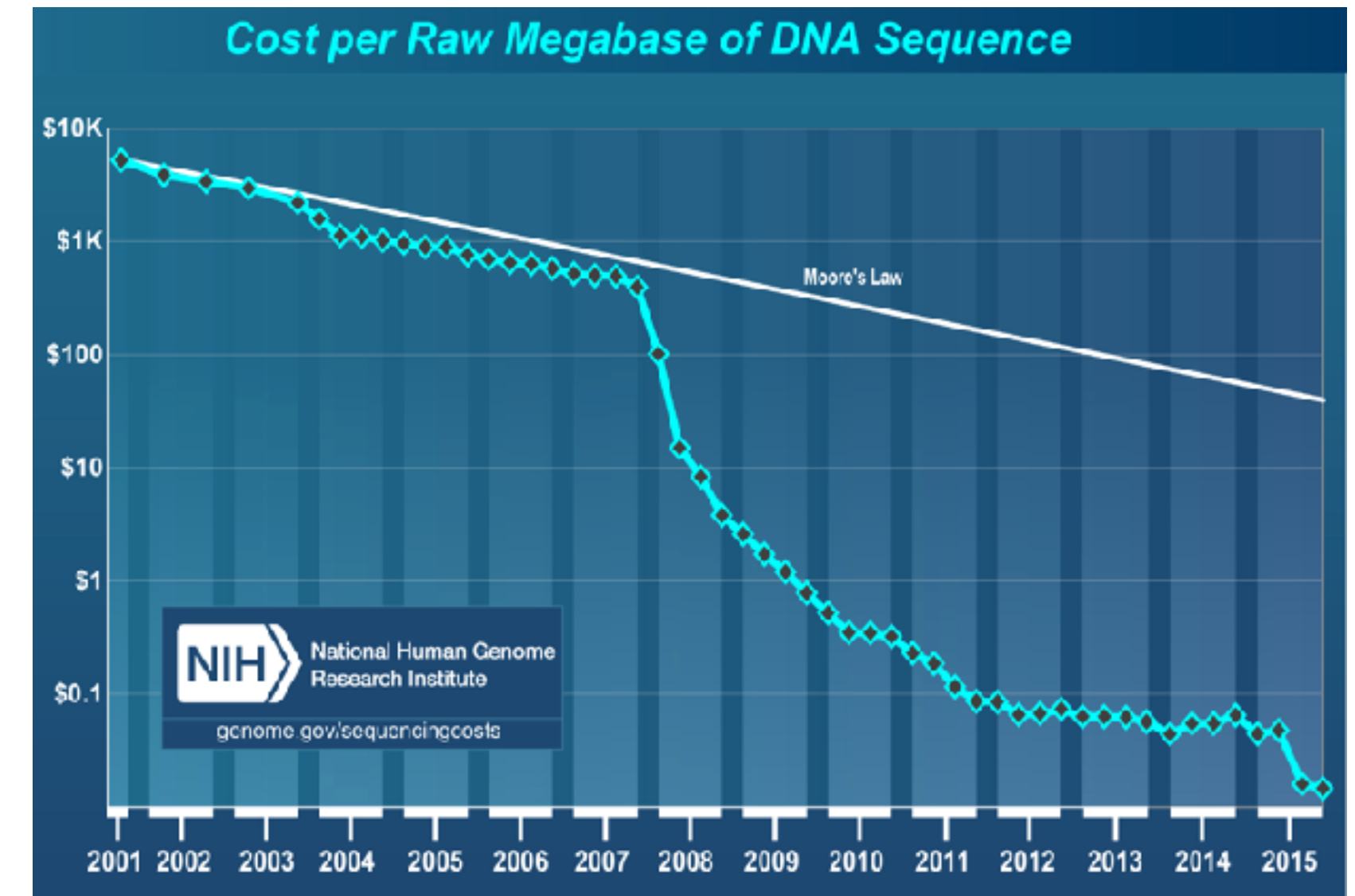
RESEARCH ARTICLE |  | 

Determination of ubiquitin fitness landscapes under different chemical stresses in a classroom setting

David Mavor¹, Kyle Barlow², Samuel Thompson¹, Benjamin A Barad¹, Alain R Bonny¹, Clinton L Carlo², Garrett Gaskins², Zairan Liu¹, Laura Deming³, Seth D Axen², Elena Caceres², Weilin Chen², Adolfo Cuesta⁴, Rachel E Gate², Evan M Green¹, Kaitlin R Hulce⁴, Weiyue Ji¹, Lillian R Kenner¹, Bruk Mensa⁴, Leanna S Morinishi², Steven M Moss⁴, Marco Mravic¹, Ryan K Muir⁴, Stefan Niekamp¹, Chimno I Nnadi⁴, Eugene Palovcak¹, Erin M Poss⁴, Tyler D Ross¹, Eugenia C Salcedo⁴, Stephanie K See⁴, Meena Subramaniam², Allison W Wong⁴, Jennifer Li⁵, Kurt S Thorn⁶, Shane Ó Conchúir⁷, Benjamin P Roscoe⁸, Eric D Chow^{6,9}, Joseph L DeRisi^{3,6}, Tanja Kortemme⁷, Daniel N Bolon⁸, James S Fraser^{7*}

Key aspects of PUBS

- Team-based
- Interdisciplinary
- Experiments + Bioinformatics
- Big Data
- Thinking about biology - and its physical basis



Class components

- Experiments
- Data analysis
- Journal club
- Protocol talks
- Faculty lectures
- Presentations
- Final presentation: Oct 26 (TBC)



George

Class policies

- Course website: <http://kampmannlab.ucsf.edu/pubs-2017>
- Show up - on time!
- Some experimental steps happen outside class hours - coordinate with your team
- Planned absences: let Martin know by 9/20
- Absence due to sickness: let us know before the class
- Final presentation (10/26, TBC): mandatory
- Complete online course “Laboratory Safety for Researchers” by 9/19, 1 pm:
<https://learningcenter.ucsfmedicalcenter.org/>
Email your training transcript to your TA

Secret tips for success

TOP SECRET

- Communicate
- Set priorities
- Connect the dots
- Hypothesis-driven data analysis



Maya Angelou

“I've learned that people will forget what you said,
people will forget what you did,
but people will never forget how you made them feel.”