

Whiplash
How to
Survive Our
Faster Future

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and
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Whiplash

“The future is already here ...
it’s just unevenly distributed.”

– William Gibson

ARRIVAL OF A TRAIN
AT LA CIOTAT

Lumière No. 853

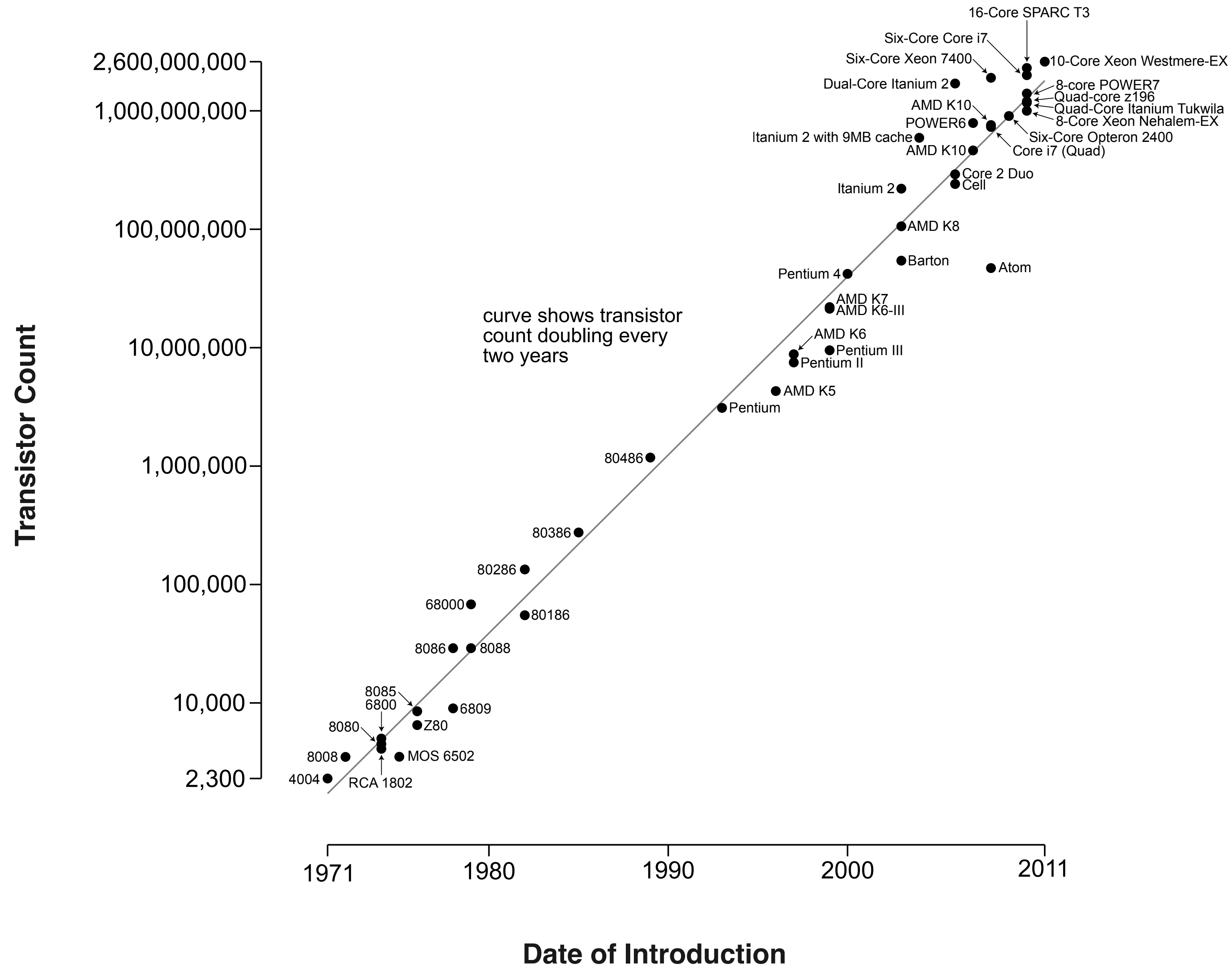


Crowdsourcing

The act of taking a job historically performed by professionals and outsourcing it to a large, undefined audience, generally—though not necessarily—using the Internet.

Moore's Law





Microprocessor transistor counts & Moore's Law

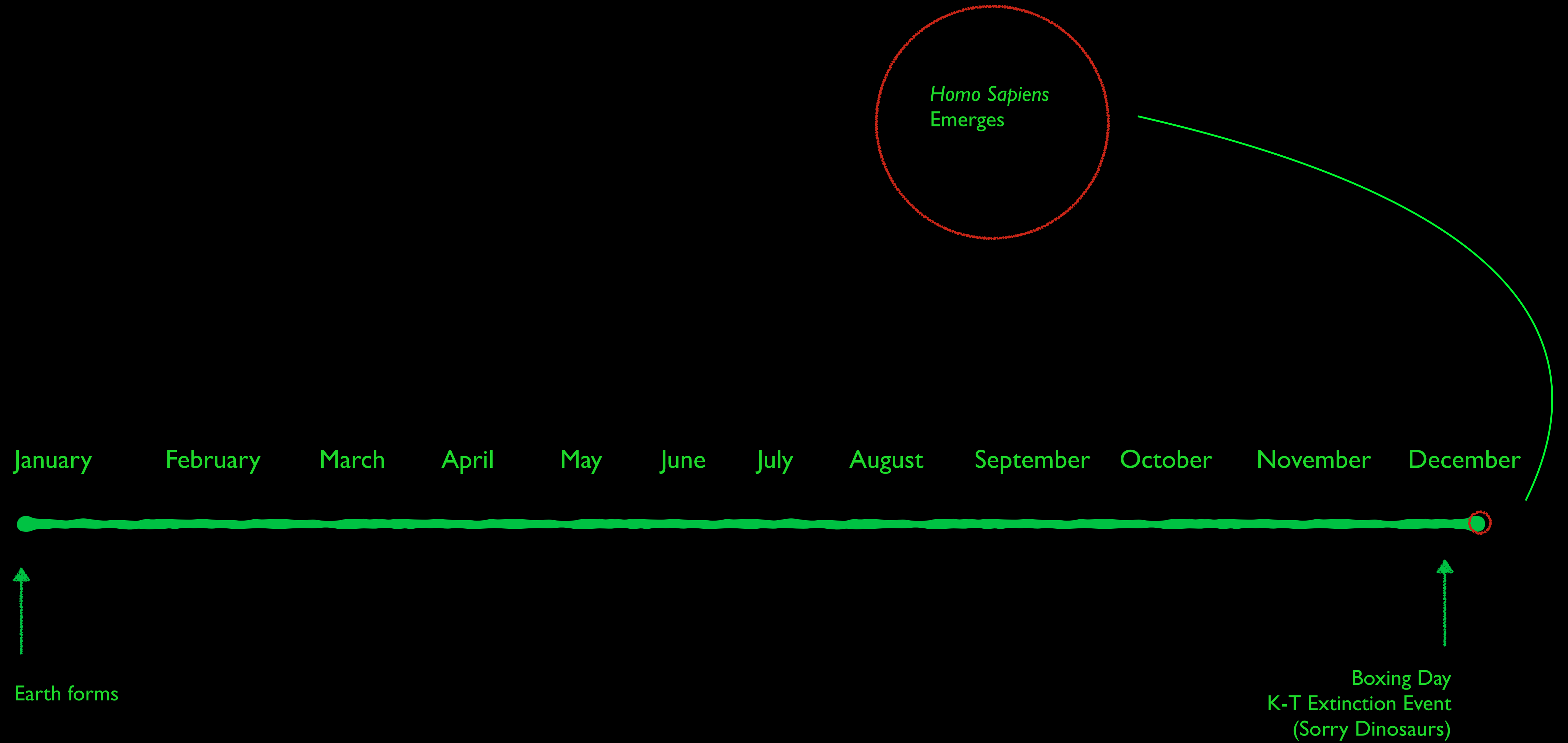
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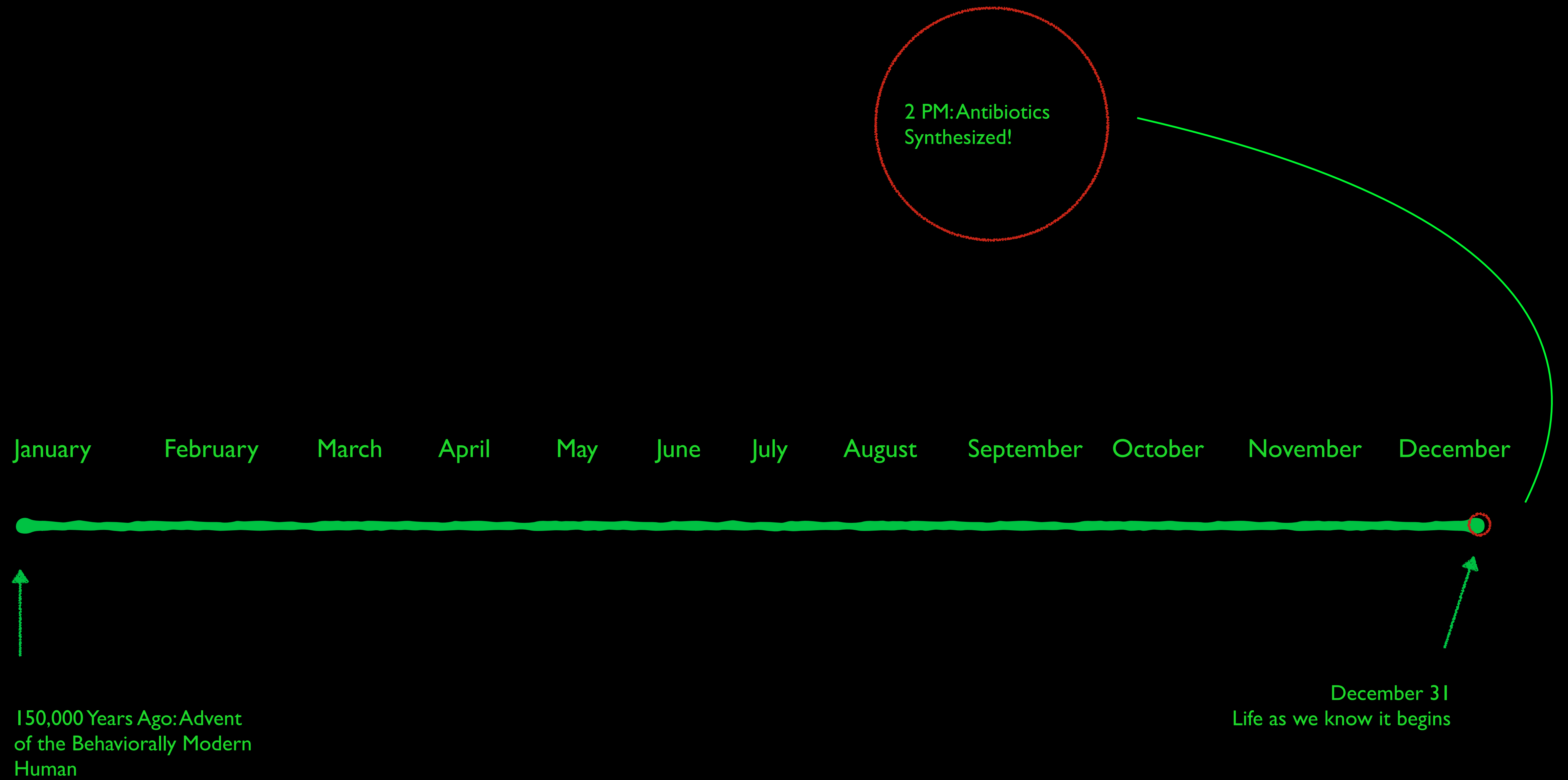
The Internet



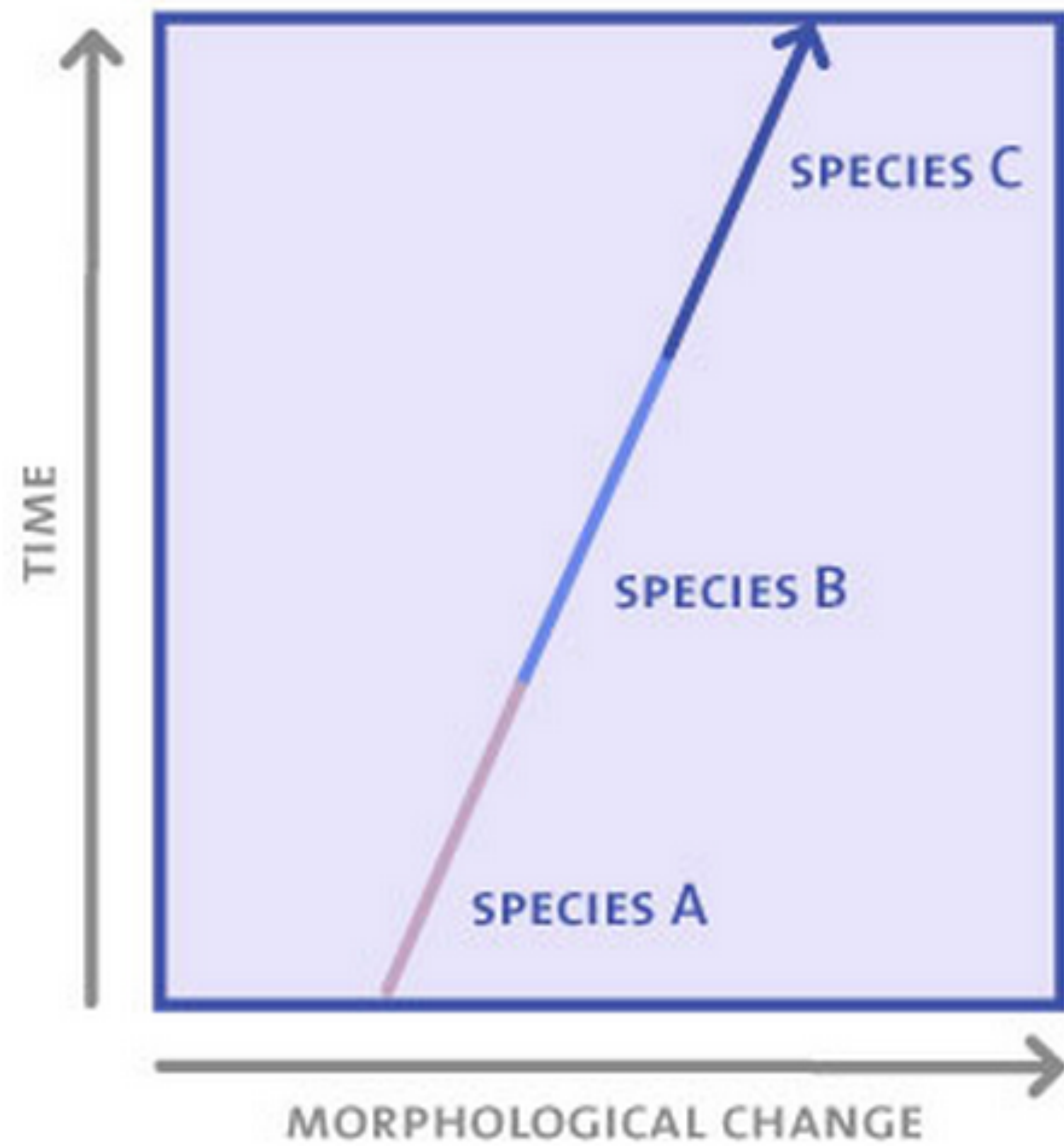
Pace of Change



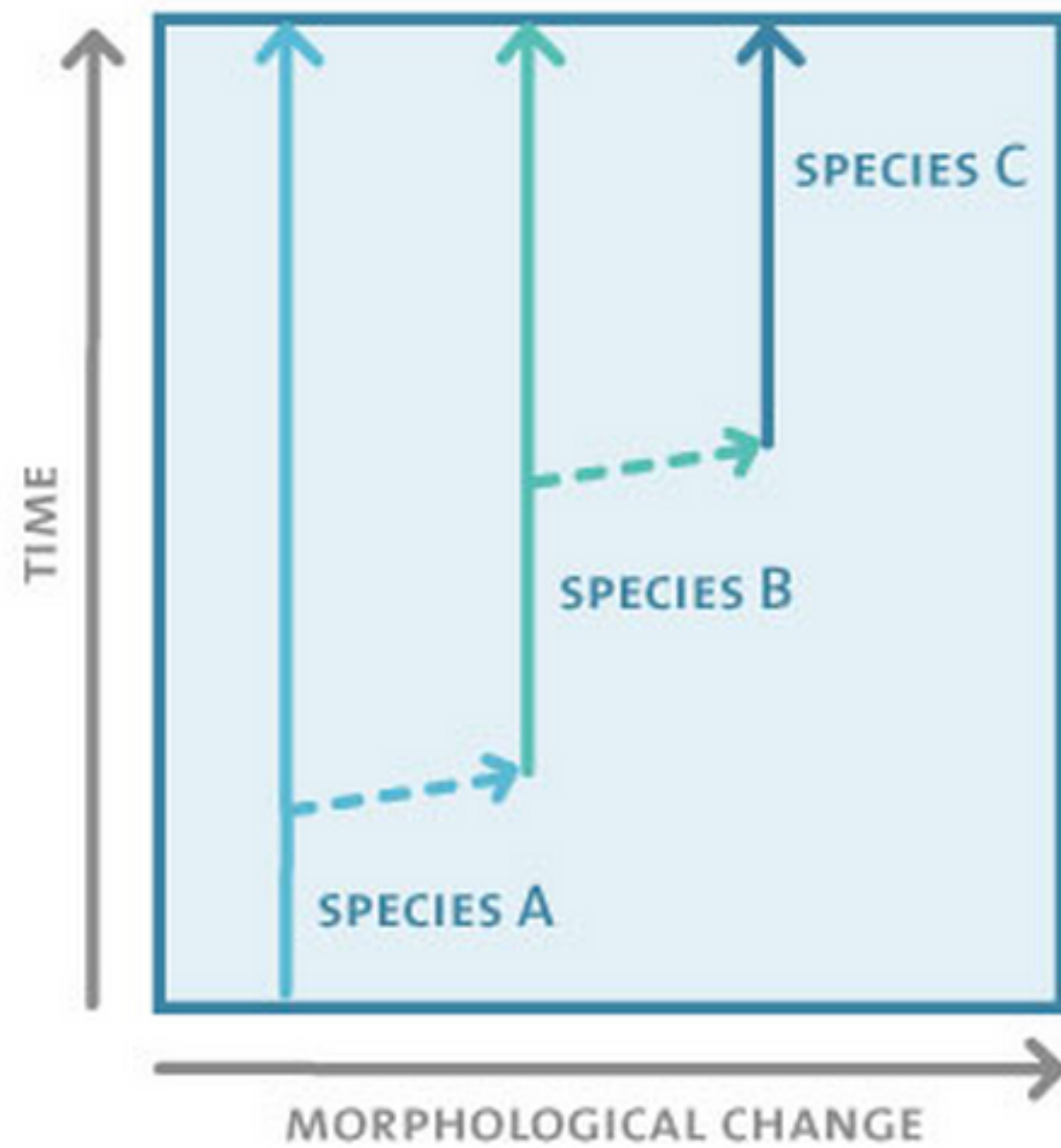




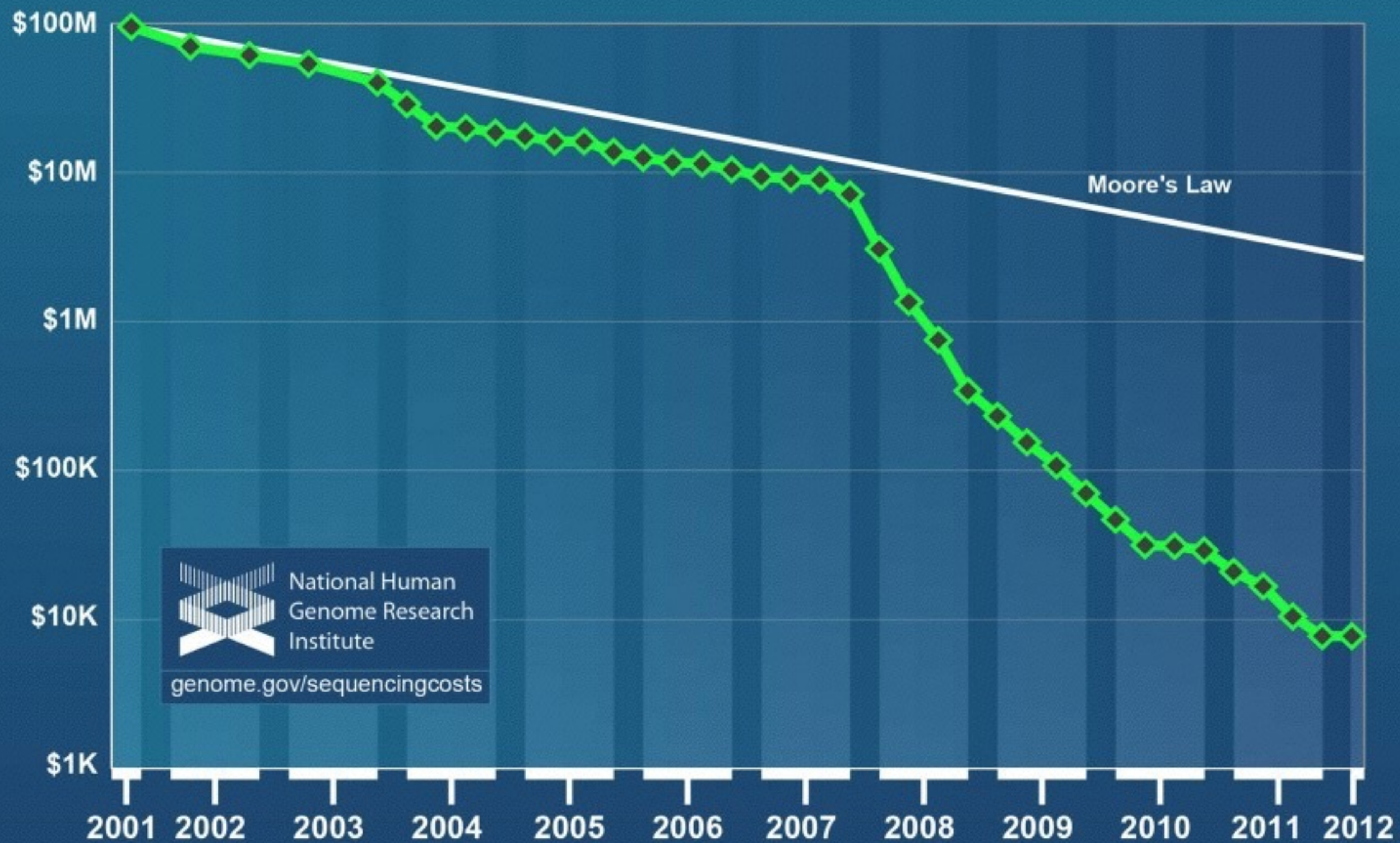
GRADUALISM



PUNCTUATED EQUILIBRIUM



Cost per Genome



The principles

Emergence Authority	Pull Push	Compasses Maps	Risk Safety	Disobedience Compliance
Practice Theory	Diversity Ability	Resilience Strength	Systems Objects	Learning Education

04

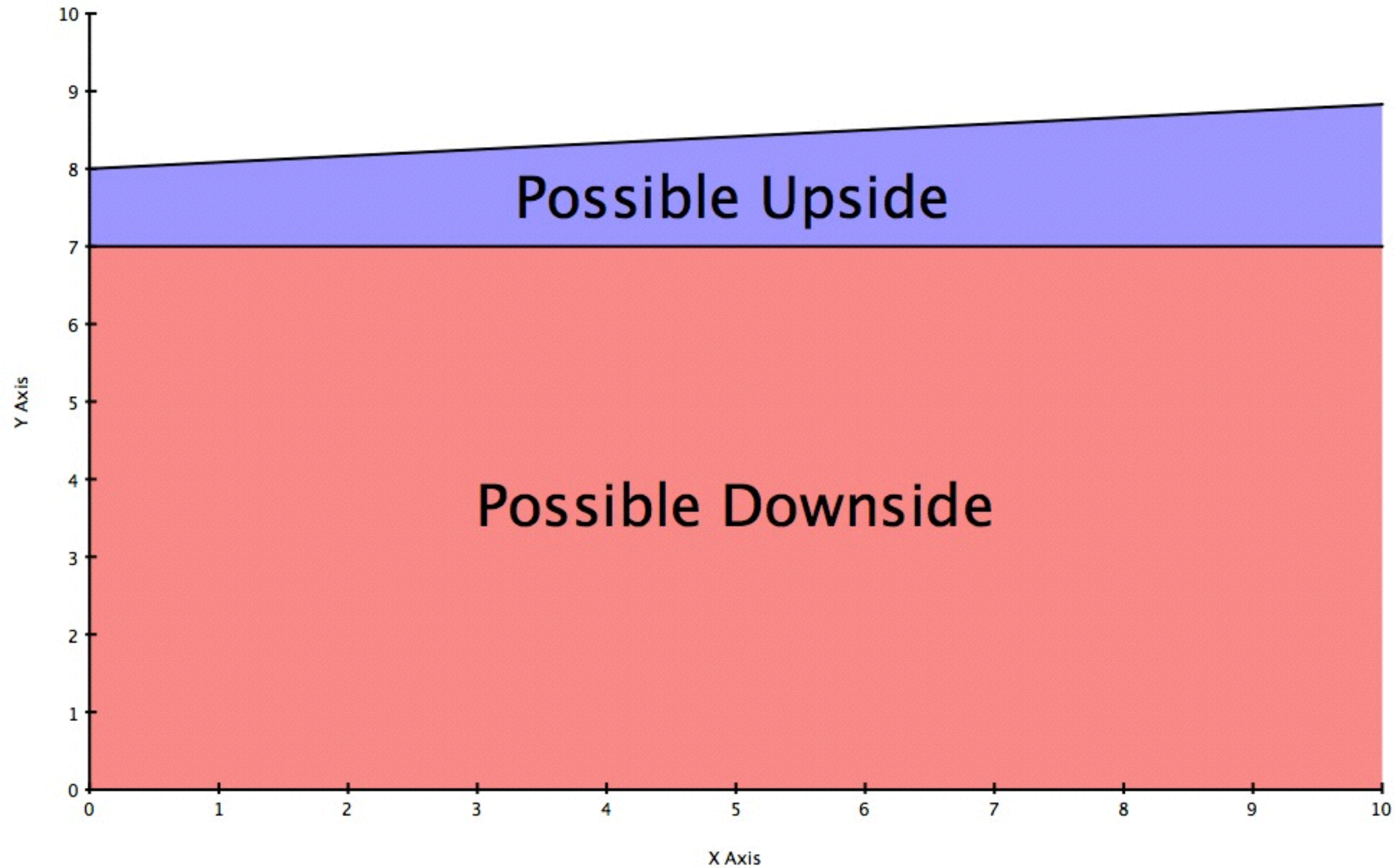
Risk

Safety

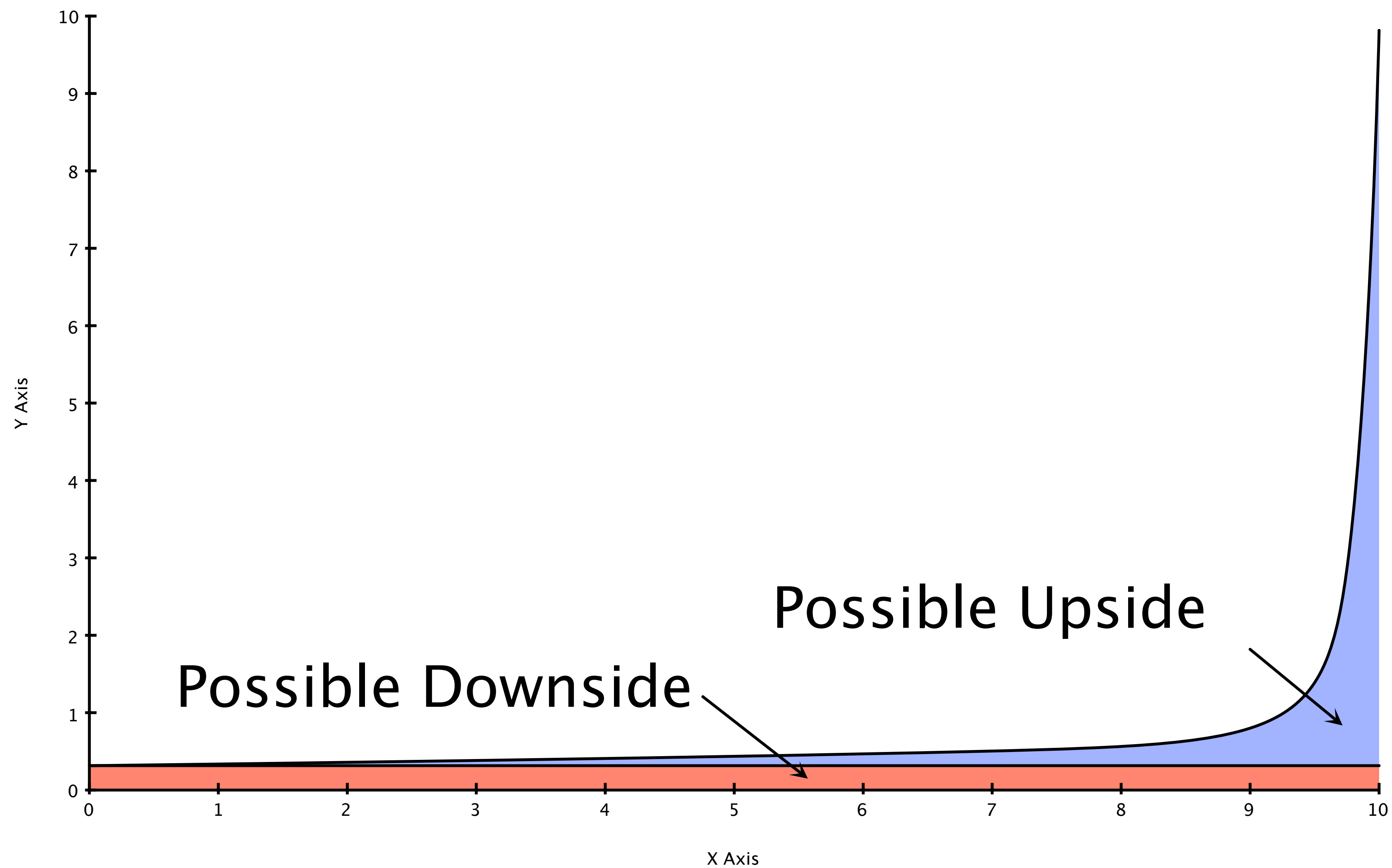
**Low-cost networks and computing
Free and open source software
=
Low cost of innovation**



Large Companies



Venture Investing





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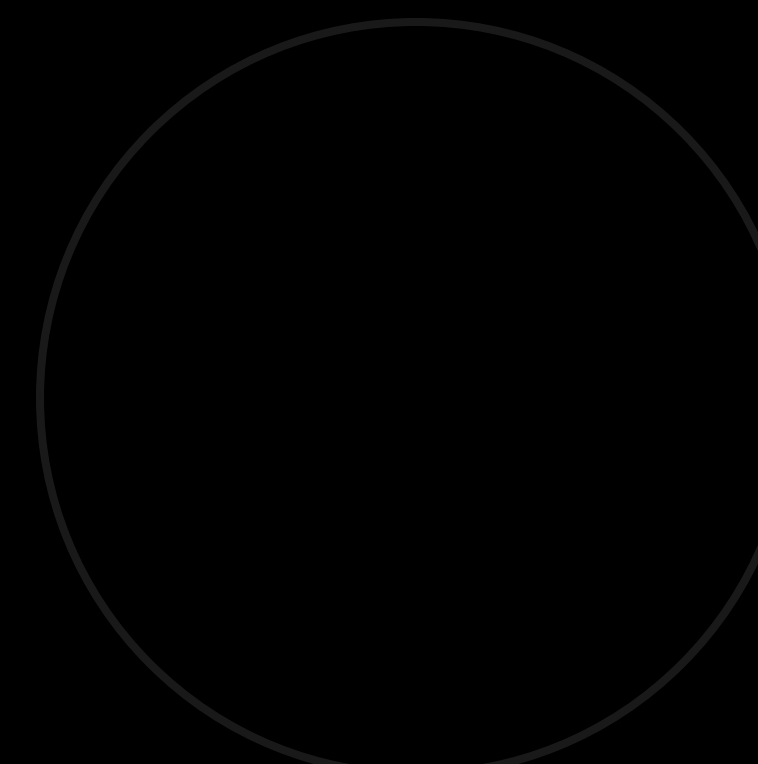
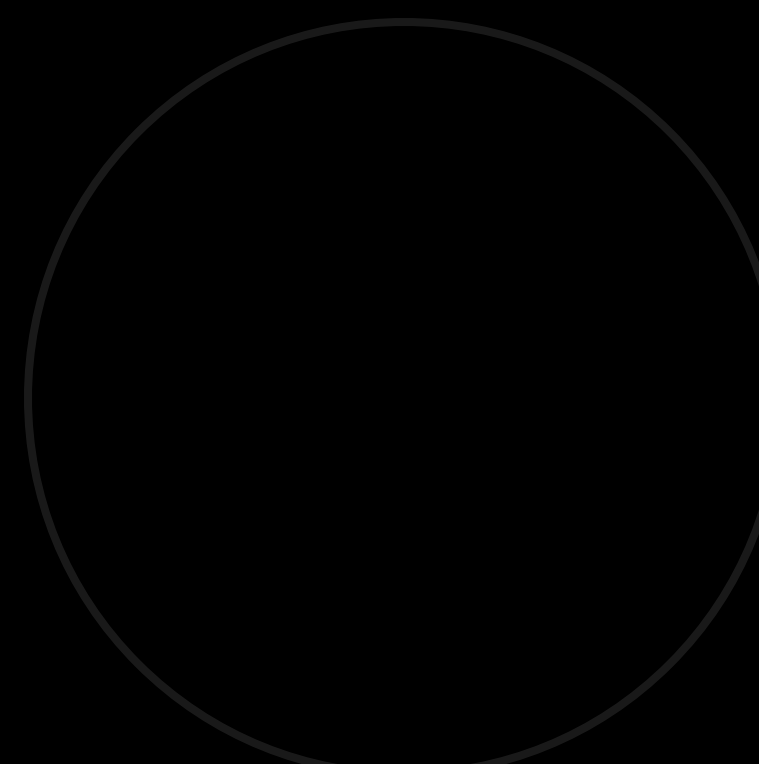




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02

Pull

Push



March 11, 2011

Experience



DIY



KICKSTARTER

Funding

Action

Development







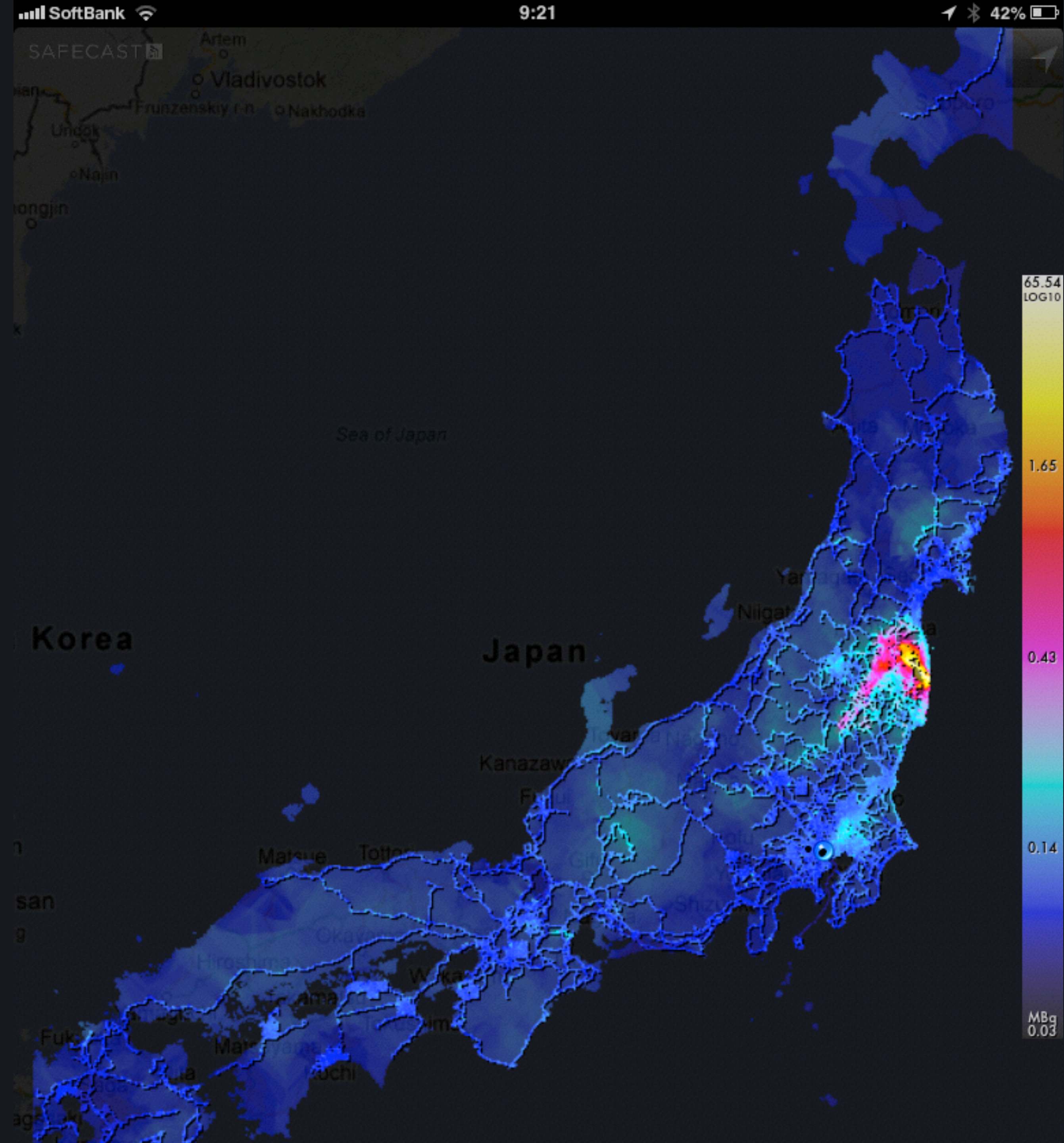
“bGeigie”

Mobile radiation
sensing device



Joichi Ito





07

Diversity

Ability

Shake sidechains to improve the protein.
Hotkey: S

Shake Sidechains Wiggle Backbone Clear Lods and Bands Reset Puzzle Mouse Help

▲ Actions ▶ History ▶ View ▶ File

Rank: 17 Score: 9092
48: Pro Peptide

▼ Group Competition

#	Group Name	Score
1	The Lone Folder	9388
2	Street Smarts	9367
3	Ellio's	9303
4	Berkeley	9255

▼ Player Competition

16	psen	-	9098
17	kathleen	9092	9092
18	versat82	-	9091
19	darktorres	-	9081
20	ccamico	9032	9066
21	mbyorkegren	-	9048
22	sliderson	-	9038

► Chat

Pull Tool

ARTICLE PREVIEW

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NATURE STRUCTURAL & MOLECULAR BIOLOGY | BRIEF COMMUNICATION

Crystal structure of a monomeric retroviral protease solved by protein folding game players






Firas Khatib, Frank DiMaio, Foldit Contender, **Foldit Void Crushers Group**, Maciej Kazmierczyk, Mirosław Gilski, Szymon Krzywda, Helena Zabranska, Iva Pichova, James Thompson, Zoran Popović, Mariusz Jaskolski & David Baker

[Affiliations](#) | [Contributions](#) | [Corresponding author](#)

Nature Structural & Molecular Biology **18**, 1175–1177 (2011) | doi:10.1038/nsmb.2119

Received 27 May 2011 | Accepted 08 July 2011 | Published online 18 September 2011

Following the failure of a wide range of attempts to solve the crystal structure of M-PMV retroviral protease by molecular replacement, we challenged players of the protein folding game Foldit to produce accurate models of the protein. Remarkably, Foldit players were able to generate models of sufficient quality for successful molecular replacement and subsequent structure determination. The refined structure provides new insights for the design of antiretroviral drugs.

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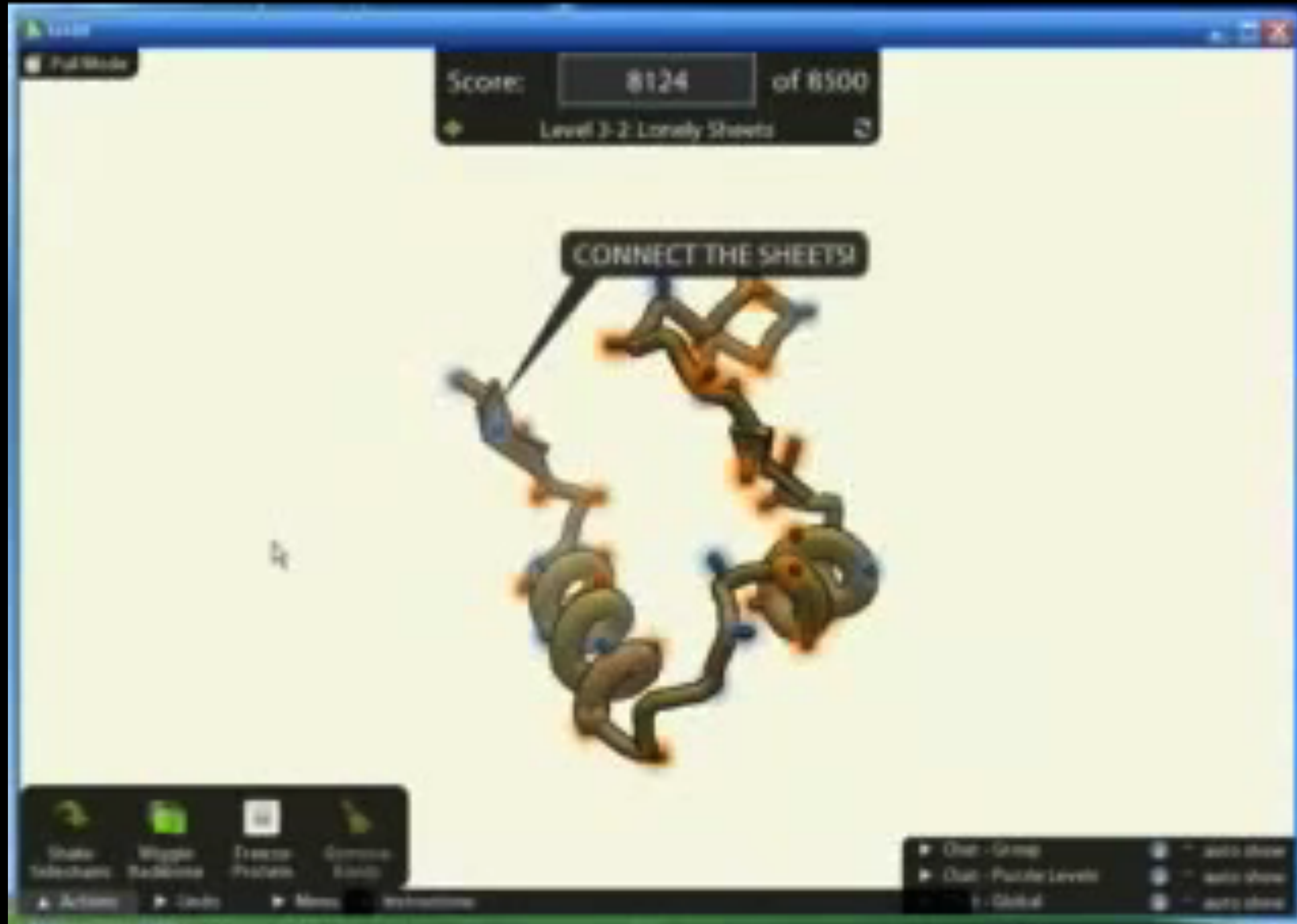
Assistant Professor, Pharmacology
Purdue University

Postdoctoral Fellow F / M
Universitaetsklinikum Carl Gustav Carus

Scientific Editor, Journal of General Physiology
The Rockefeller University

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Joy's Law:

“No matter who you are, most of the smartest people work for someone else.”

– Bill Joy, Co-Founder, Sun Microsystems

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There are 115 active challenges | [View All »](#)



Fast Rope Glove Device

Deadline: 12/17/2011 | 731 active solvers | Referral award: \$1,500 USD

\$15,000 USD



Systems to Monitor Institutional Corruption

Deadline: 11/08/2011 | 583 active solvers | Referral award: \$800 USD

\$8,000 USD



Quantitative Model to Aid Strategy Decisions When Applying Open Innovation

Deadline: 12/29/2011 | 513 active solvers | Referral award: \$3,000 USD

\$30,000 USD



Model the Functional Molecular Networks in a Cancer Cell

Deadline: 12/05/2011 | 446 active solvers | Referral award: \$10,000 USD

\$100,000 USD

NEWSFLASH

InnoCentive Becomes a GSA Schedule Contractor

Today we announced that we've been awarded a GSA Schedule 541 4G, Challenges and Competitions Services. Federal public sector organizations can now conveniently purchase InnoCentive's products and services via the GSA's web portal that streamlines purchasing from scheduled contractors. With this milestone, InnoCentive becomes the first solutions provider on the schedule with a multi-channel open innovation platform and professional Challenge development services.

Lakhani's Findings:

- One-Third of all Problems Solved
- Positive Correlation Between Success and Distance from Field
- Winners Knew the Answer in 20 Minutes