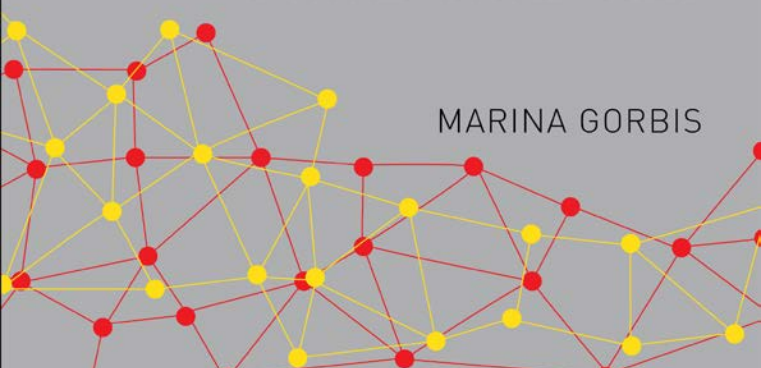




# THE NATURE OF THE FUTURE

DISPATCHES FROM  
THE **SOCIALSTRUCTURED WORLD**

MARINA GORBIS



**Marina Gorbis**

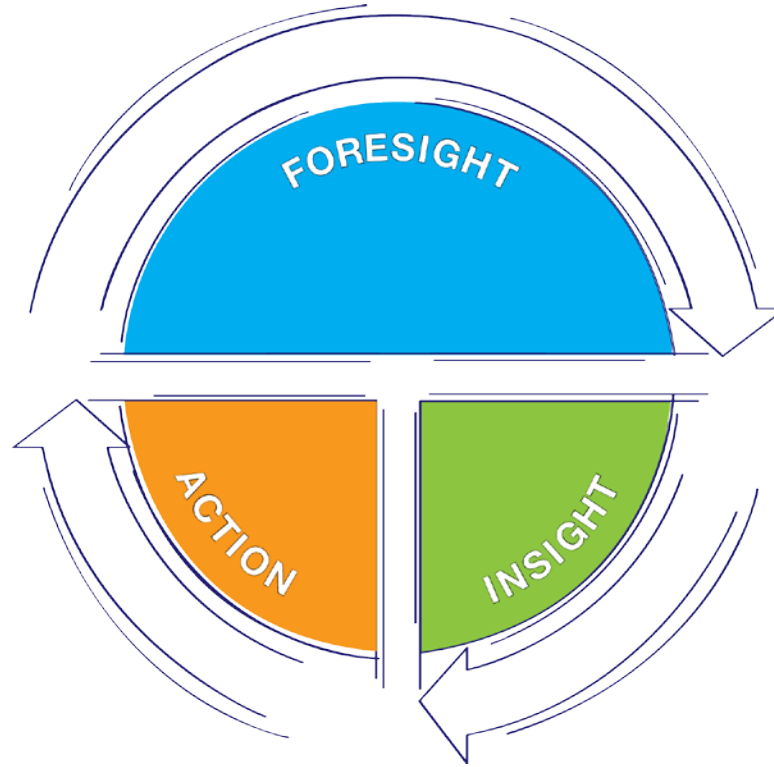
Executive Director  
INSTITUTE FOR THE FUTURE



@mgorbis

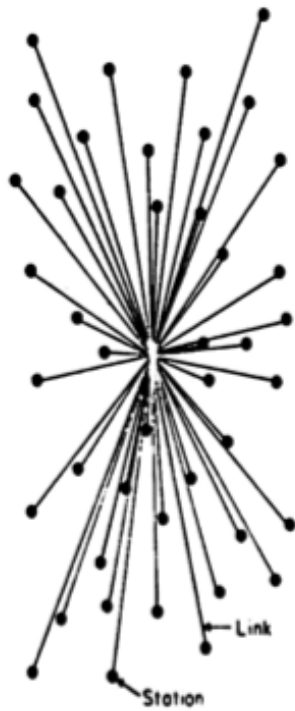
mgorbis@iftf.org

# foresight to insight to action

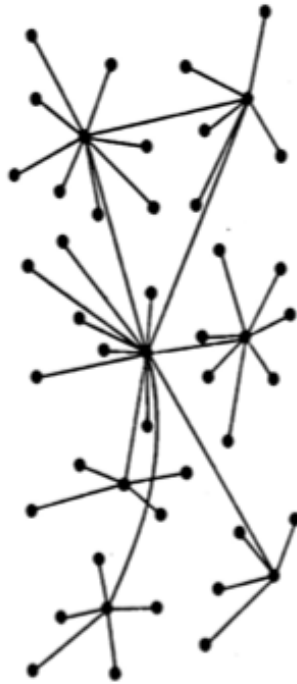


# two-curve framework

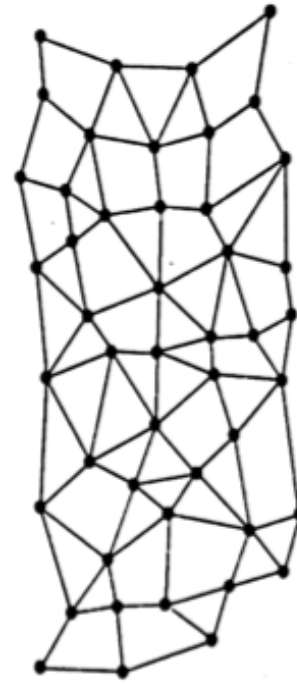




CENTRALIZED  
(A)



DECENTRALIZED  
(B)



DISTRIBUTED  
(C)

## Paul Baran, On Distributed Communications, 1964

# why organization?

## The Nature of the Firm

By R. H. COASE

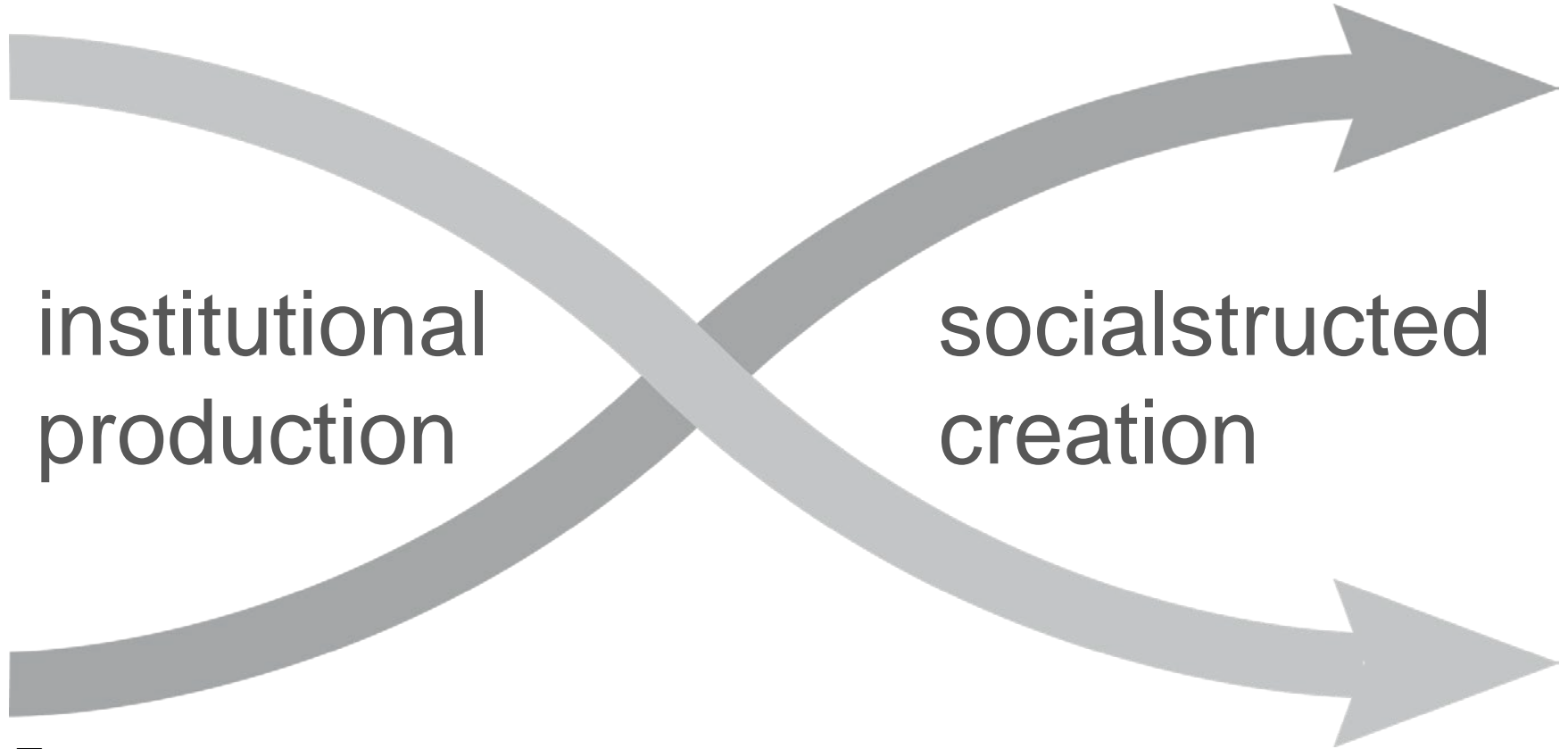
ECONOMIC theory has suffered in the past from a failure to state clearly its assumptions. Economists in building up a theory have often omitted to examine the foundations on which it was erected. This examination is, however, essential not only to prevent the misunderstanding and needless controversy which arise from a lack of knowledge of the assumptions on which a theory is based, but also because of the extreme importance for economics of good judgment in choosing between rival sets of assumptions. For instance, it is suggested that the use of the word "firm" in economics may be different from the use of the term by the "plain man."<sup>1</sup> Since there is apparently a trend in economic theory towards starting analysis with the individual firm and not with the industry,<sup>2</sup> it is all the more necessary not only that a clear definition of the word "firm" should be given but that its difference from a firm in the "real world," if it exists, should be made clear. Mrs. Robinson has said that "the two questions to be asked of a set of assumptions in economics are: Are they tractable? and: Do they correspond with the real world?"<sup>3</sup> Though, as Mrs. Robinson points out, "more often one set will be manageable and the other realistic," yet there may well be branches of theory where assumptions may be both manageable and realistic. It is hoped to show in the following paper that a definition of a firm may be obtained which is not only realistic in that it corresponds to what is meant by a firm in the real world, but is tractable by two of the most powerful instruments of economic analysis developed by Marshall, the idea of the margin and that of

“The main reason why it is profitable to establish a firm is ... the cost of using a price mechanism (transaction costs)...”

—*Ronald Coase,*  
The Nature of The Firm, 1937

institutions are a technology  
**and this technology is being  
disrupted ...**

# two-curve framework

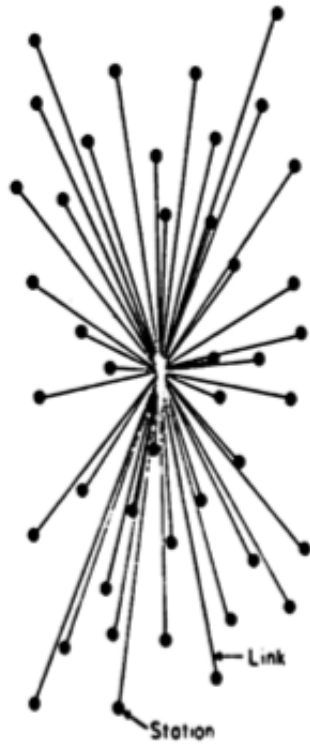




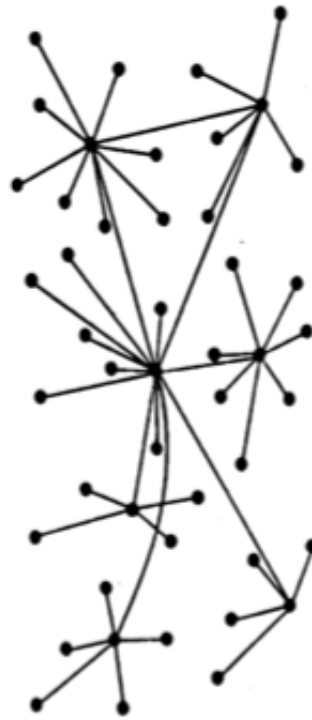
# SOCIALSTRUCTURING:

creating value by aggregating micro contributions by large networks using social tools and technologies

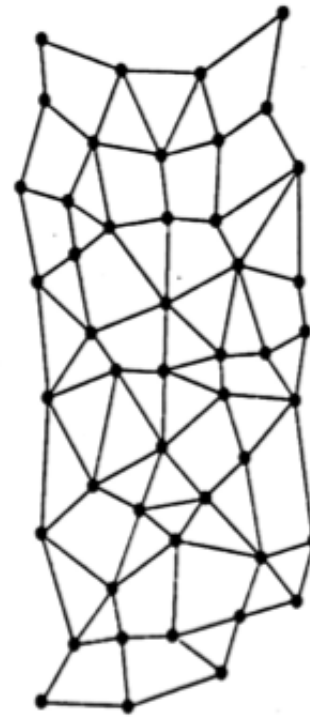




organizations



platforms



socialstructured  
creation

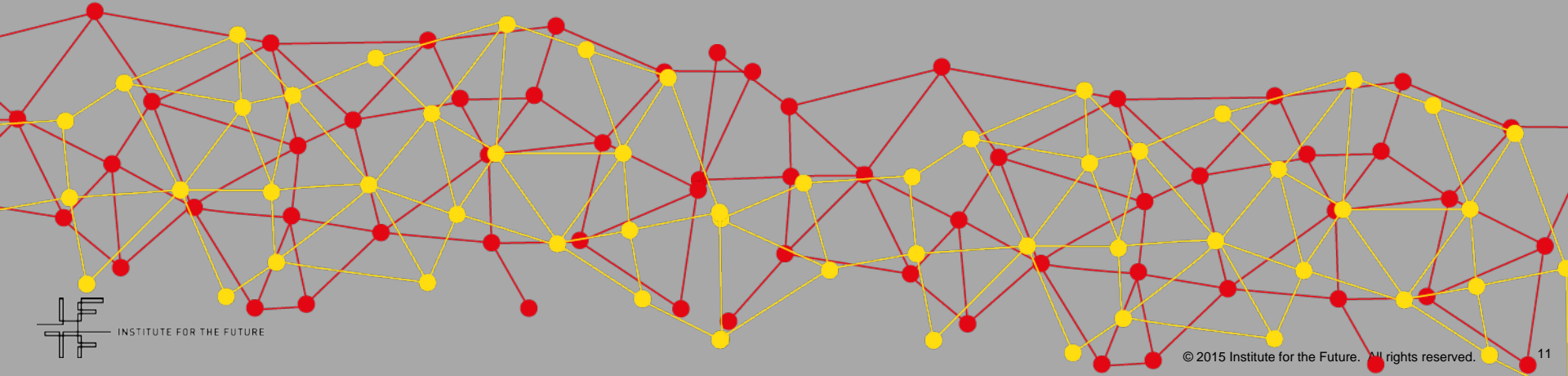


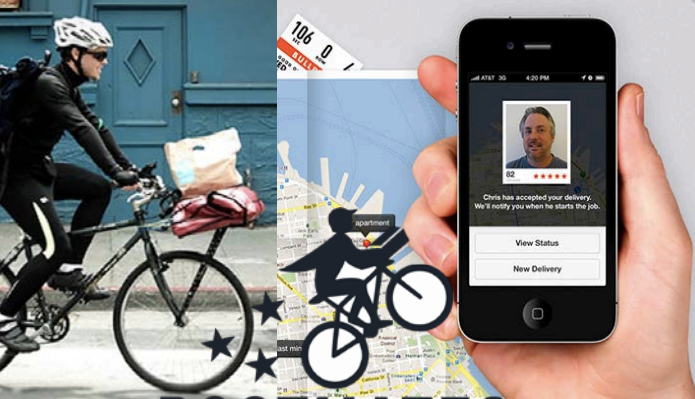
# Start an UBER for X Mobile Venture Today!

Recovery Trucks  
Weed Delivery  
Coders  
Plumbers  
Couriers  
UBER for >> Strippers  
Tutors  
Mechanics



# socialstructured work: new worker archetypes





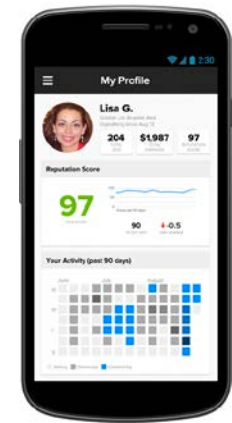
## Microworker

Work is a string of tasks that shape the rhythm of work in any given day. These workers move in and out of multiple microwork platforms

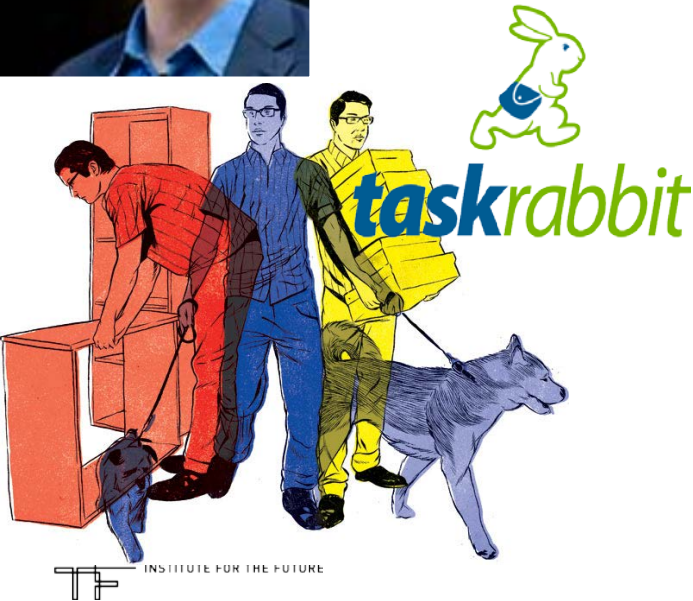
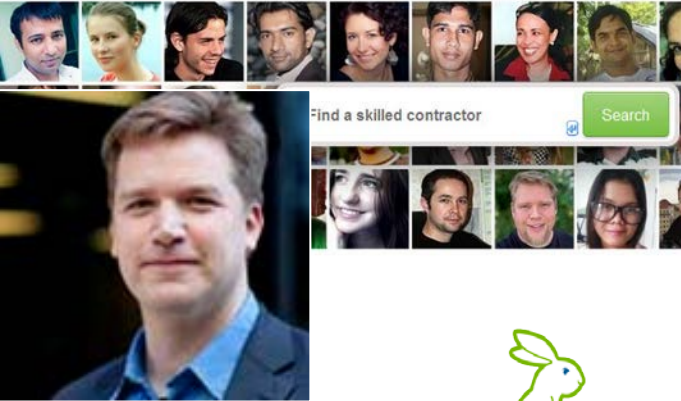


## Platform Maker

The “recombiners” – they train, code, and find creative solutions to streamline processes and enable disruption







## Amplified Entrepreneur

Work is an adventure for these self-starters, who reject career ladders and organize work as a series of passion-driven projects



**NOISEBRIDGE**



INSTITUTE FOR THE FUTURE

## Dream Builder

Balancing jobs and careers that pay the rent with passion projects and big dreams that make the future



The Red Victorian is a hotel, residence, and social club for creative thinkers and innovators.



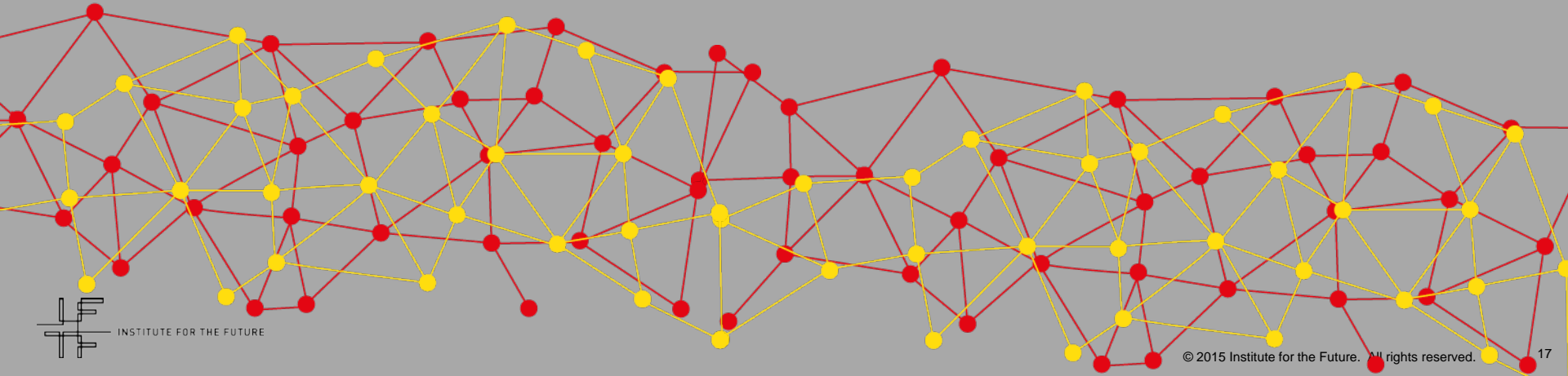
The Embassy Network  
*Be at Home Across the  
Globe*

## Culture Hacker

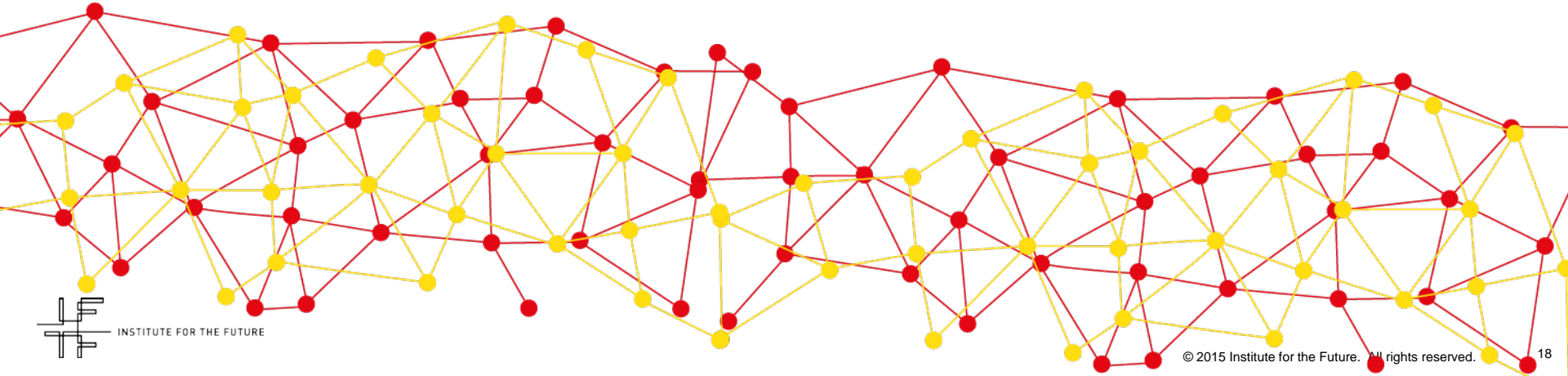
Hacking culture to break down divisions between work and life, colleagues and friends, profession and family



# socialstructured science: everyone's a scientist



# lightweight research tools



# The New York Times

NEW YORK, SUNDAY, DECEMBER 15, 2010

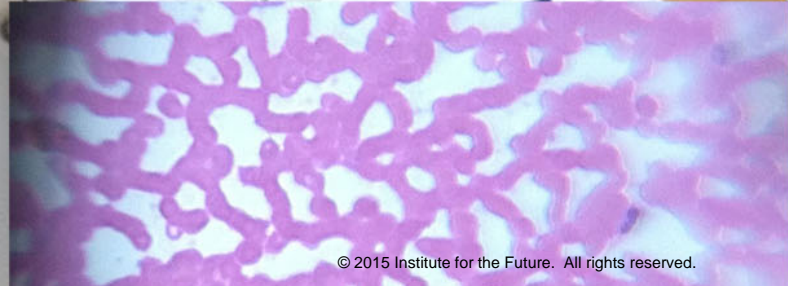
## Home Labs on the Rise for the Fun of Science

By Peter Wayner

One day Kathy Ceceri noticed a tick on her arm and started to worry that it was the kind that carried Lyme disease. So she went to her home lab, put the tiny arachnid under her microscope, which is connected to her computer through a U.S.B. cable, and studied the image.









585812

15632

# Quantified Self



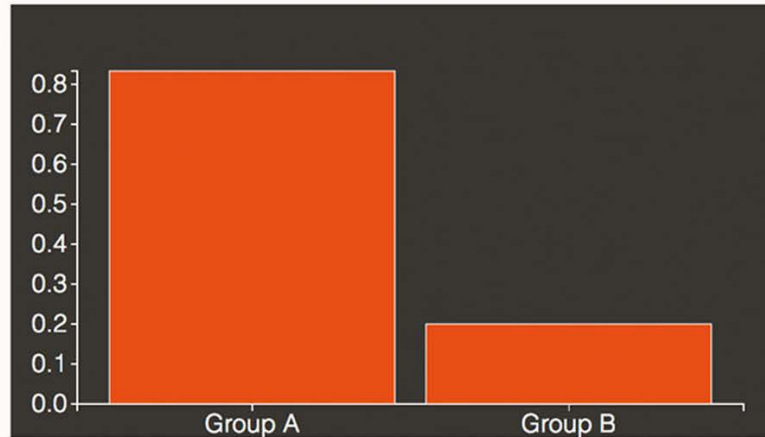
# RANDOMISE ME



## Recruiting Trial

- ☐ Do my new trainers make me run faster?

### TRIAL RESULTS



Number of  
observations: 11

P-value for Pearson's  
Chi-squared test 0.135573053751





# SPACEHACK

a directory of ways to participate in space exploration

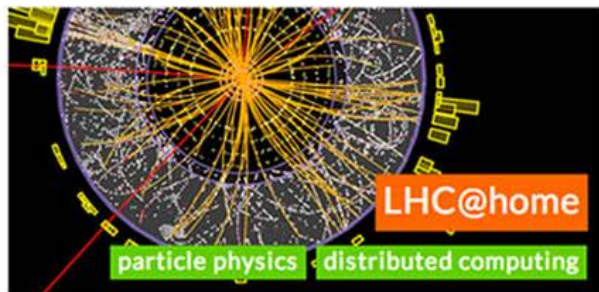
data analysis

distributed computing

education

open source

competition



By donating your computer's idle time, you can help particle physicists study the nature of dark matter, antimatter and mass in our universe. LHC@home is a distributed computing project that helps scientists compare theories with experiments in the search for new fundamental particles. By contributing spare...



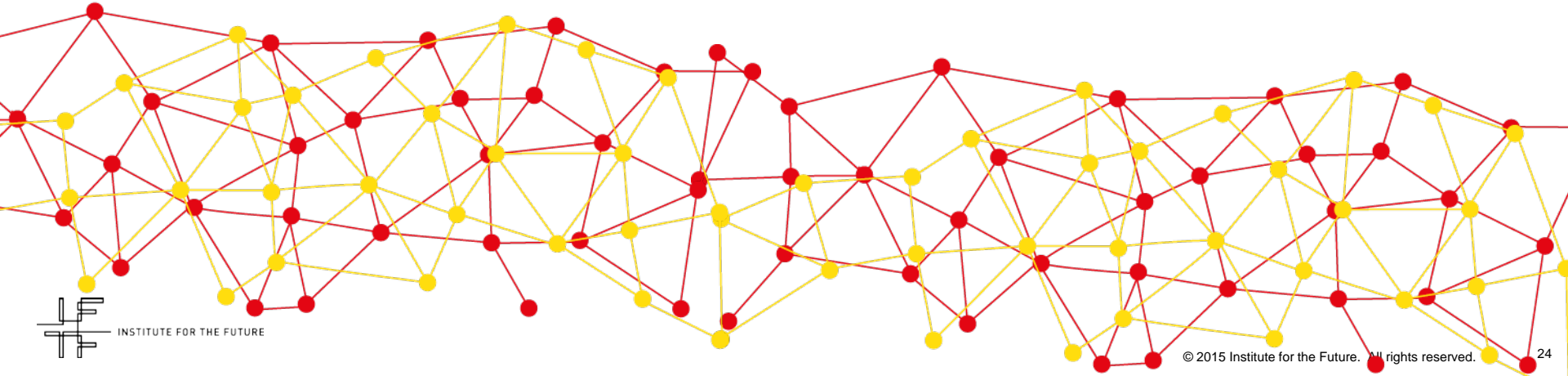
A competition to create innovative energy storage for lunar rovers to use during their 14-day-long lunar night. Energy storage solutions will be tested in temperatures as low as -177 Celsius and as high as 25 Celsius. Phase 2 of the competition will also expose energy storage solutions to low pressures in addition to...



An open source 3D interactive world viewer created by NASA's Learning Technologies project, released in mid-2004. It is now developed by NASA staff and open source community developers. World Wind lets you zoom from satellite altitude into any place on Earth. Leveraging Landsat satellite imagery and Shuttle Radar...

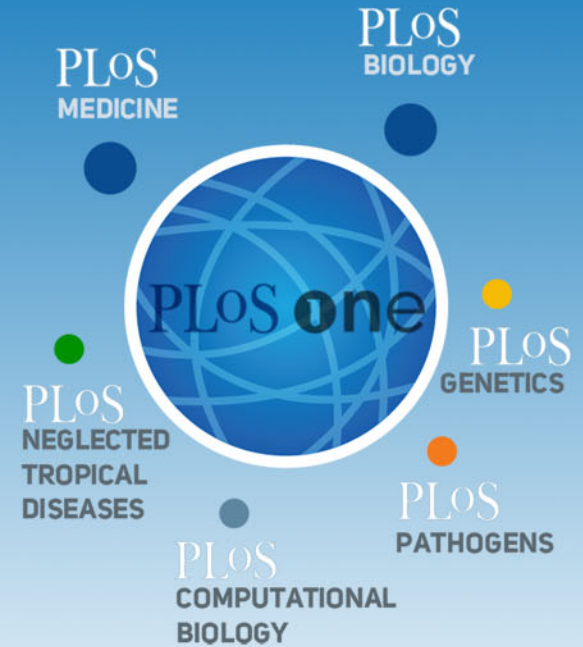
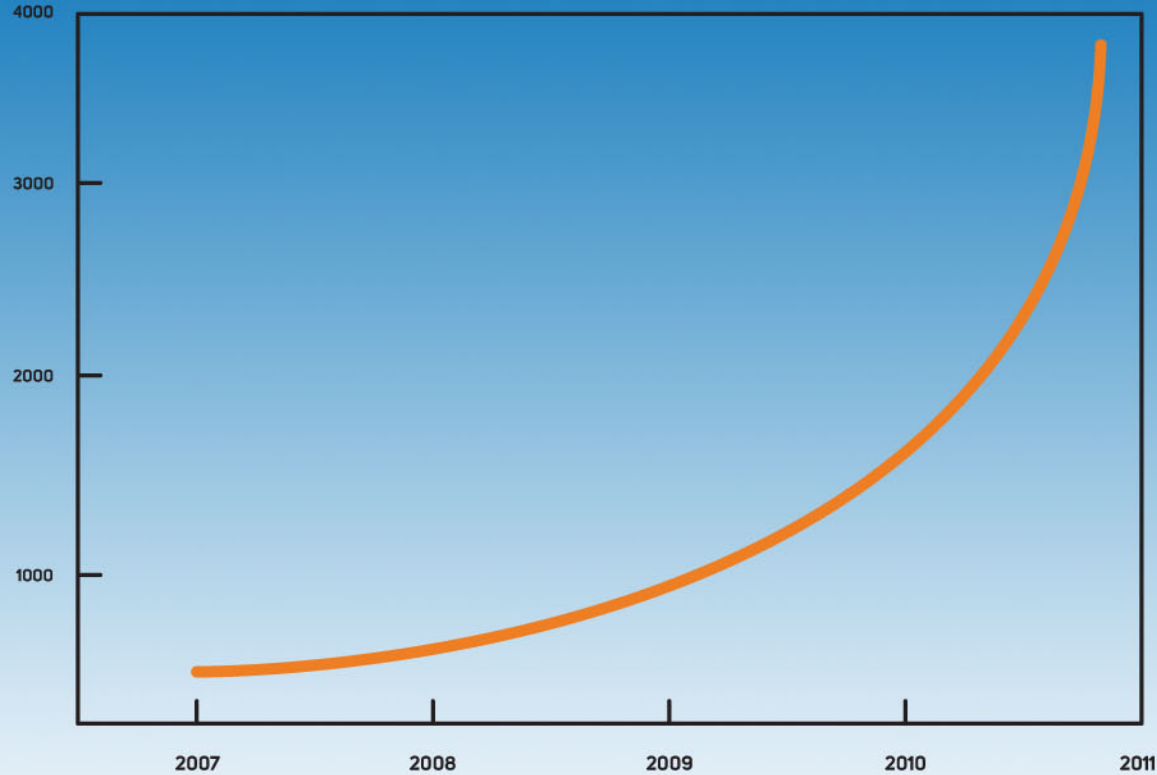


# open science data



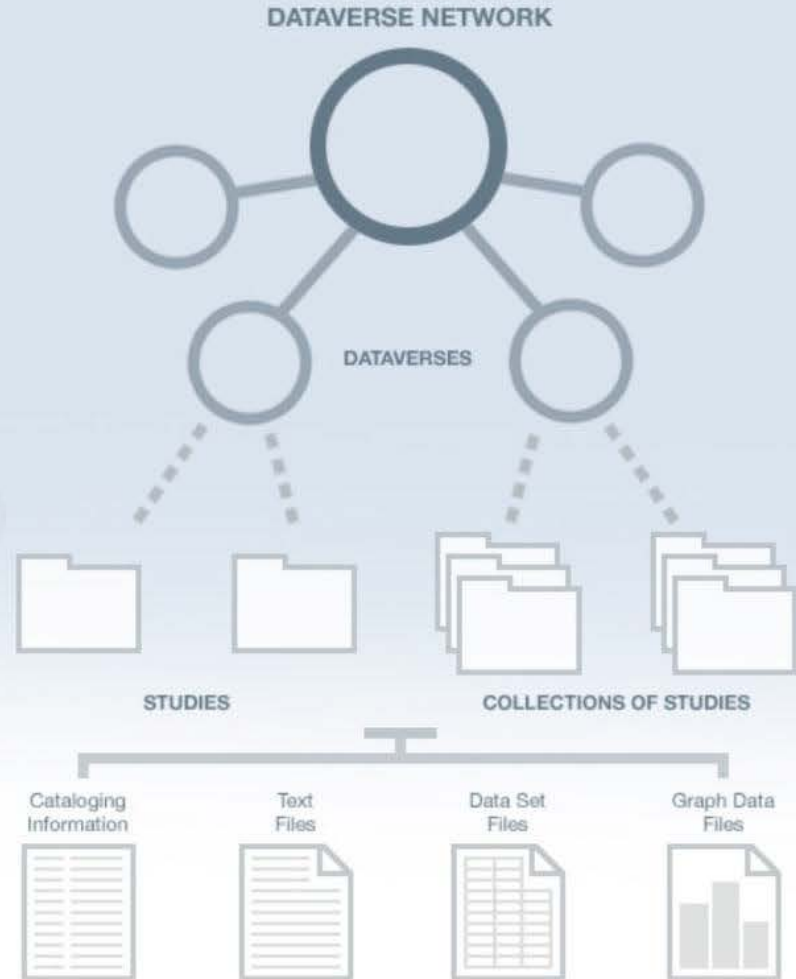


## Publications by PLoS ONE per quarter since launch



A repository for research data that takes care of long term preservation and good archival practices, while researchers can share, keep control of and get recognition for their data.

Supports the sharing of open data and enables reproducible research.





# benchfly

## HOT VIDEO PROTOCOLS!



Life Cycle of a Hazardous Waste Bottle



Welcome to BenchFly



How Do You Say Hoechst?



Centrifuge Vacuum Problems



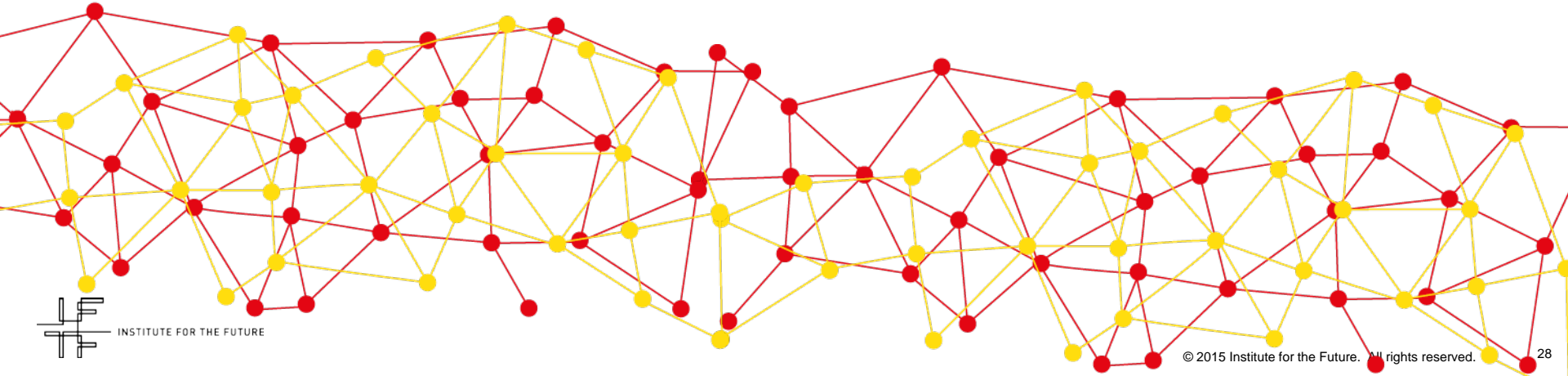
How to Use Graduated Cylinders



How to Perform Colony PCR



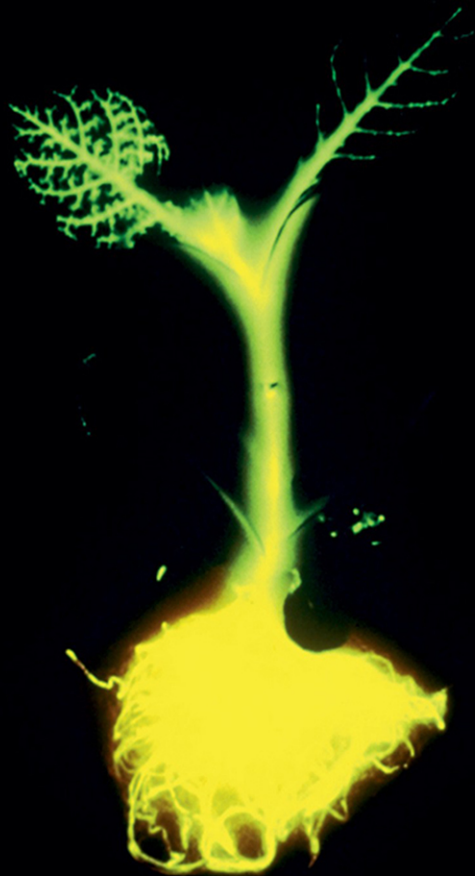
# crowdfunding platforms for science



# GLOWING PLANT PROJECT



INSTITUTE FOR THE FUTURE



**KICKSTARTER**

**8,433**

backers

**\$484,013**

backers



# microryza

*grow the next generation of ideas*



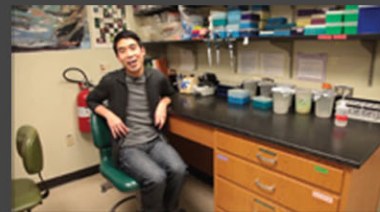
## You Can Help Fund Real Scientific Research



Microryza is a crowdfunding platform for research. Individuals pool their money until the funding goal is reached.

You'll get to see experiments unfold with updates and progress from the lab and have a chance to interact directly with the researchers.

At the end of the project, you will receive access to the results in a beautiful, online format.



# GEORGIA TECH STARTER

A NEW WAY TO FUND SCIENTIFIC RESEARCH

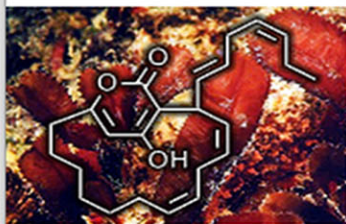
[Learn More](#)

SCIENCE  
ENGINEERING

LET YOUR INNOVATIVE LIGHT SHINE

By: Julia Kubanek

## Accelerating Discovery of...



By: Jennifer Leavey

## Honey Bees Get Wired



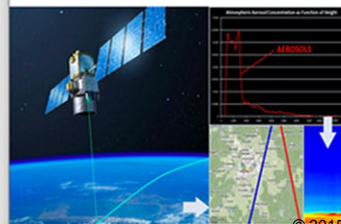
By: Daniel Goldman

## Robosaur Walks!



By: Gary Gimmestad

## Lasers in Space: Improving Air...

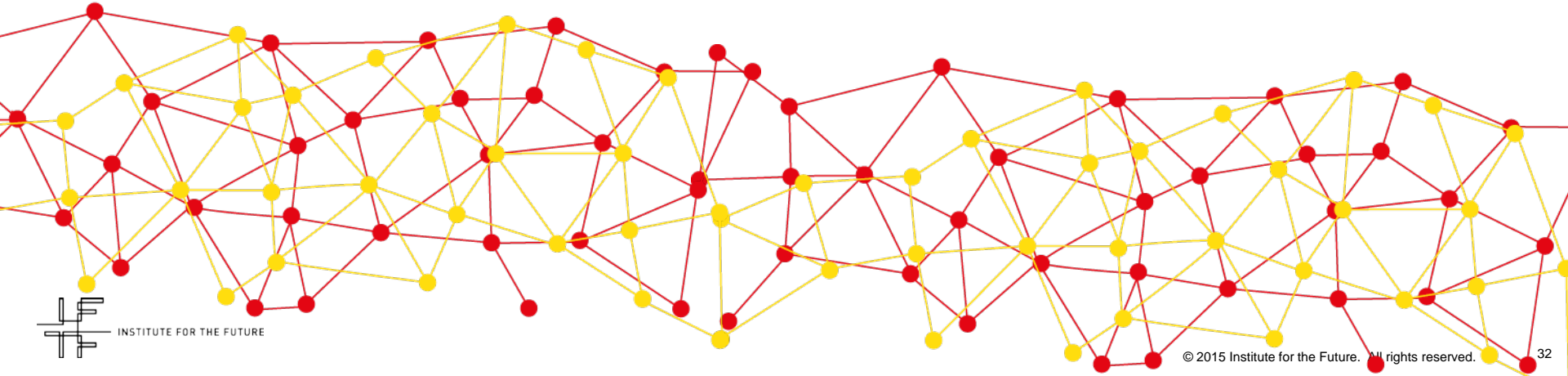


By: David Garton

## Coral Reefs and Antarctic Storms



# alternative science communities









New York City's Community Biolab

## Student Programs

Science competitions, student internships, and more!



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TORMACH

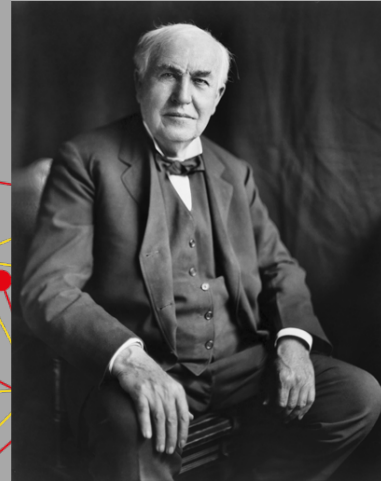
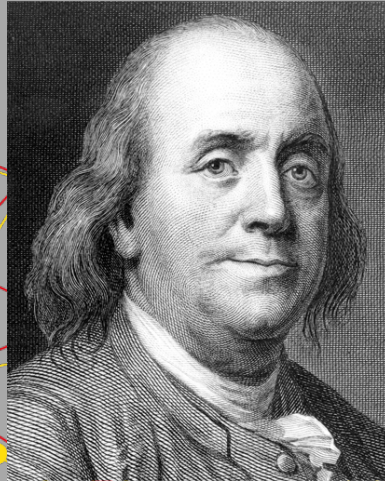
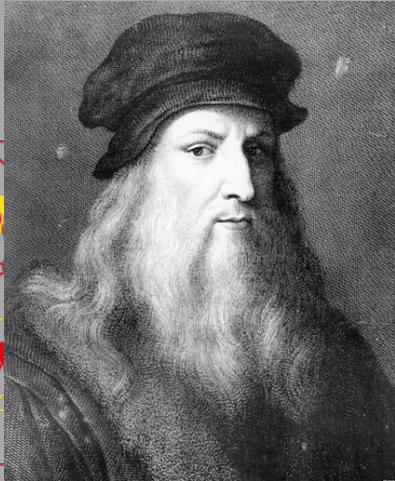
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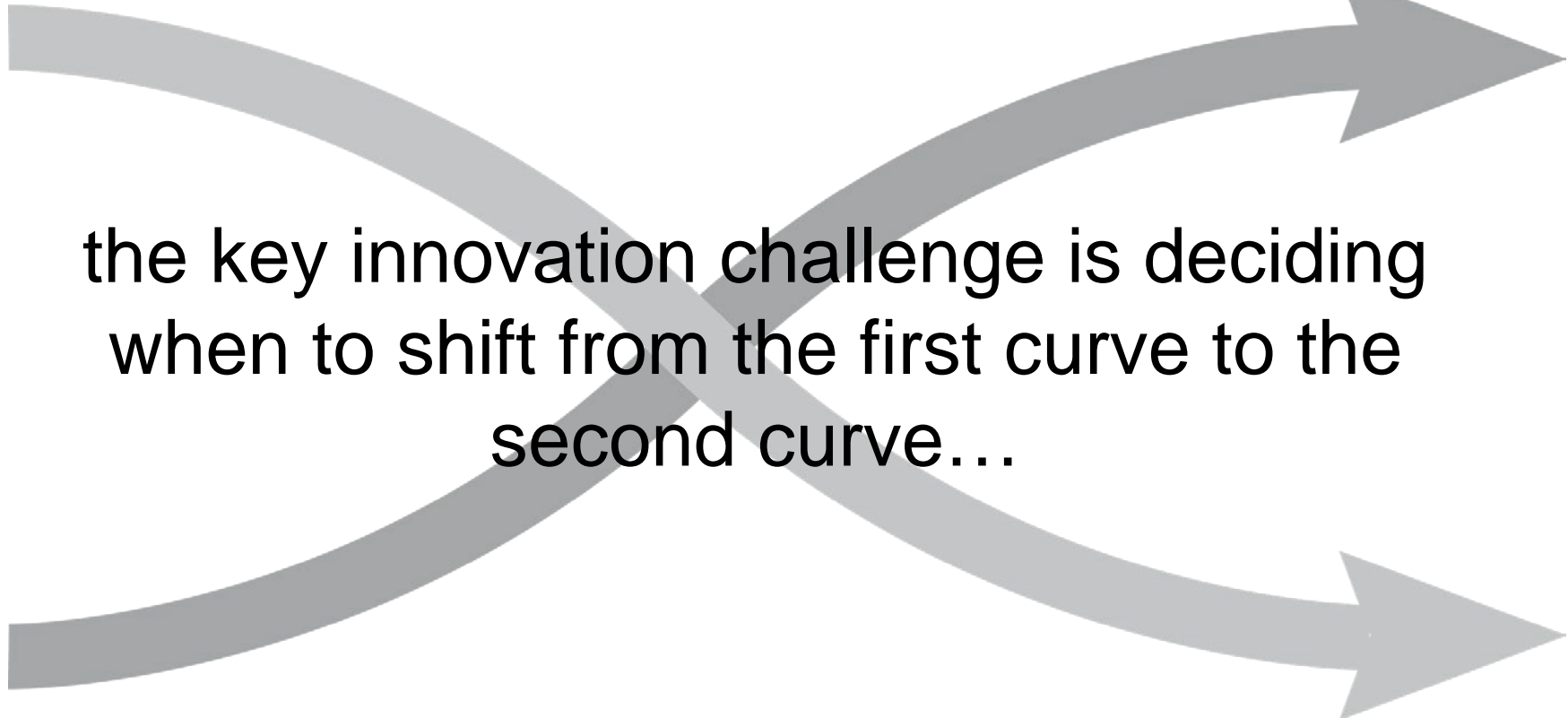
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science was not always done  
through large institutions



# when to jump the curve



the key innovation challenge is deciding  
when to shift from the first curve to the  
second curve...



# TEN-YEAR FORECAST 2015

# ECONOMIES OF THE FUTURE

Contact: Sean Ness | [sness@iftf.org](mailto:sness@iftf.org)

