

Title: TBA

Date: Mar 28, 2018 09:00 AM

URL: <http://pirsa.org/18030108>

Abstract:

Exploring the Dark Matter of Science

Thomas Landrain
Just One Giant Lab

Open Research Workshop
Perimeter Institute for Theoretical Physics - 280418



Life as a kit

Build your own cell with
Synthetic Biology 2.0
The next generation
of bioengineering

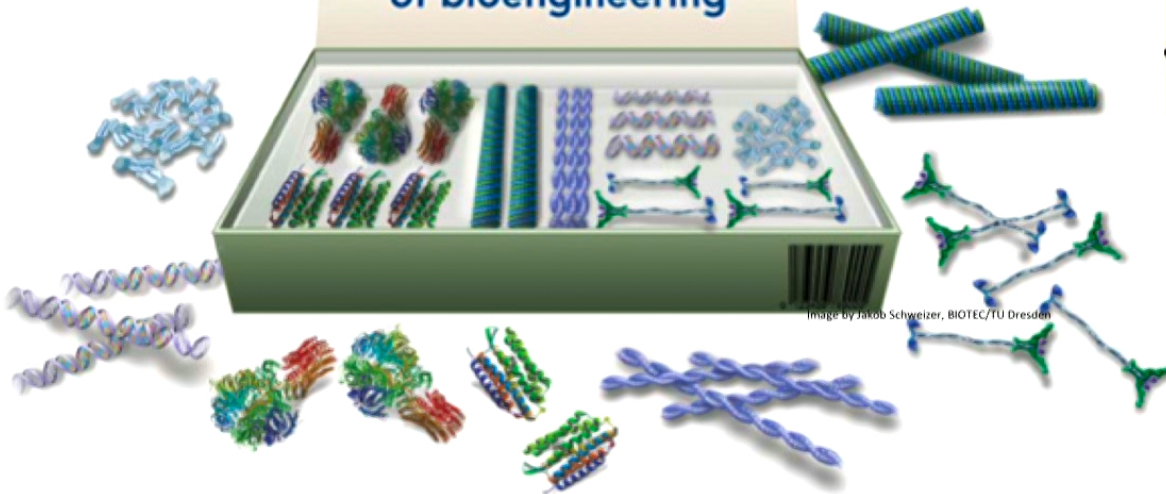
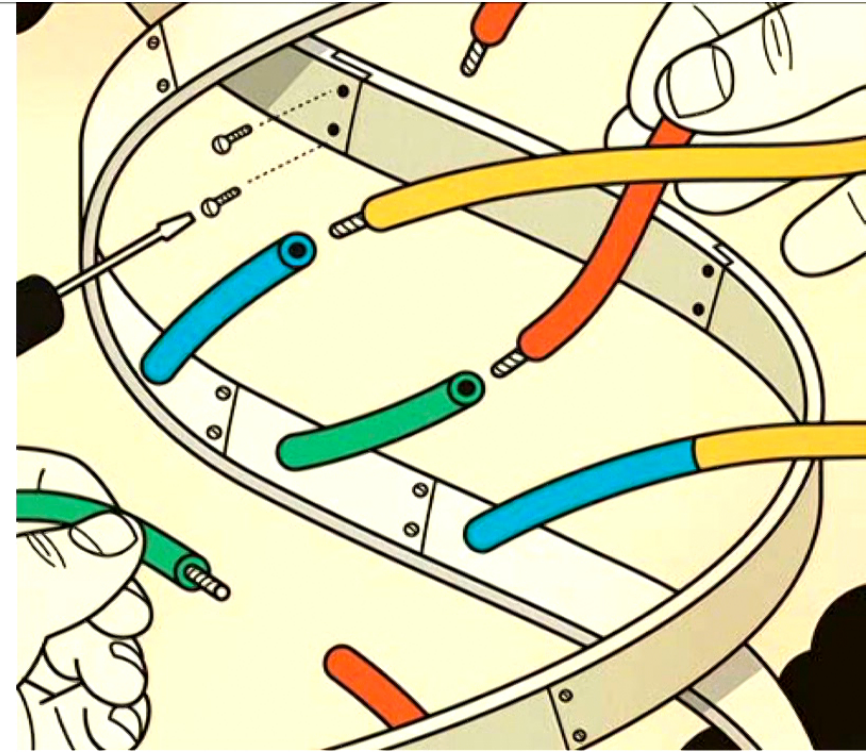
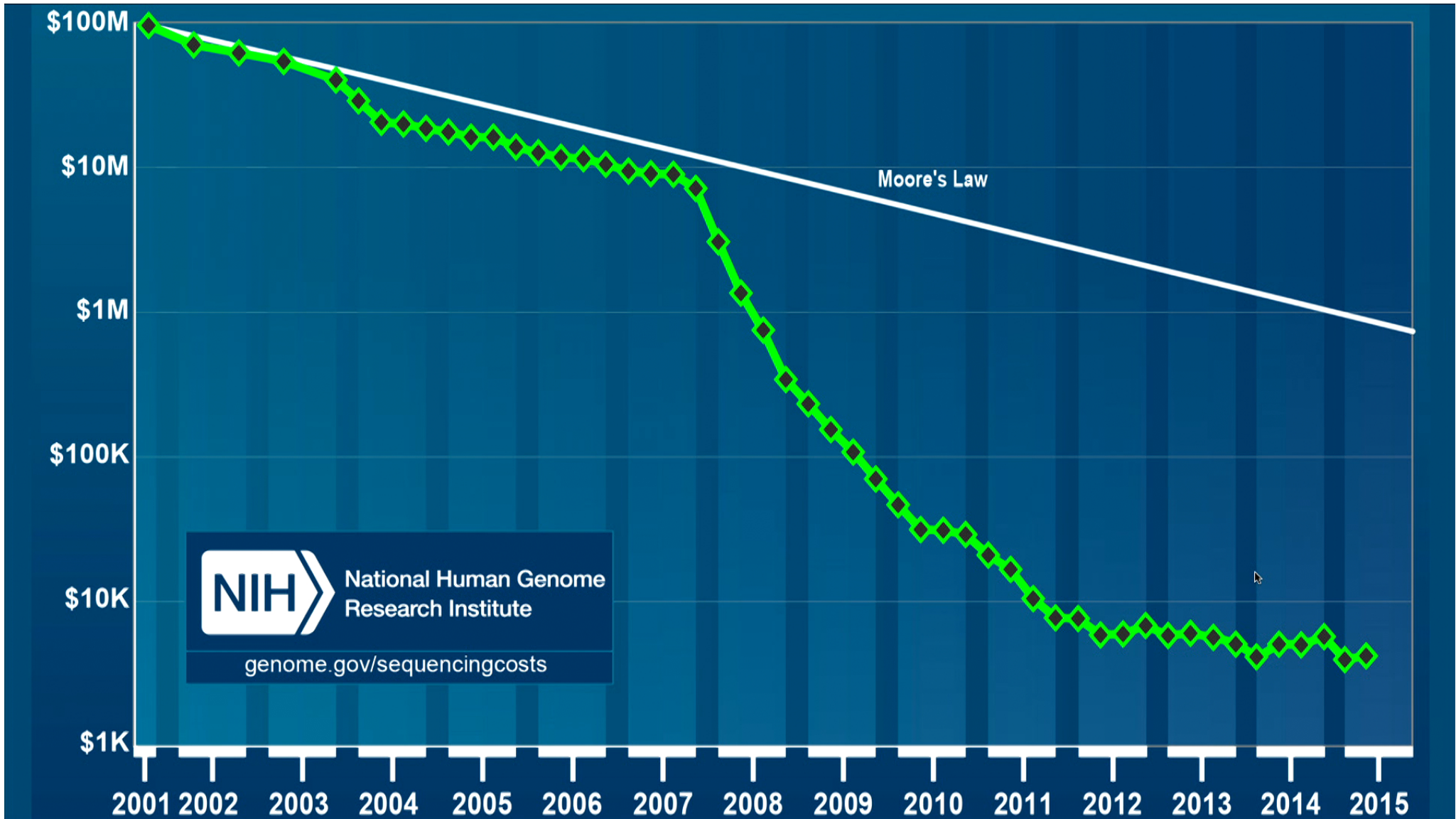
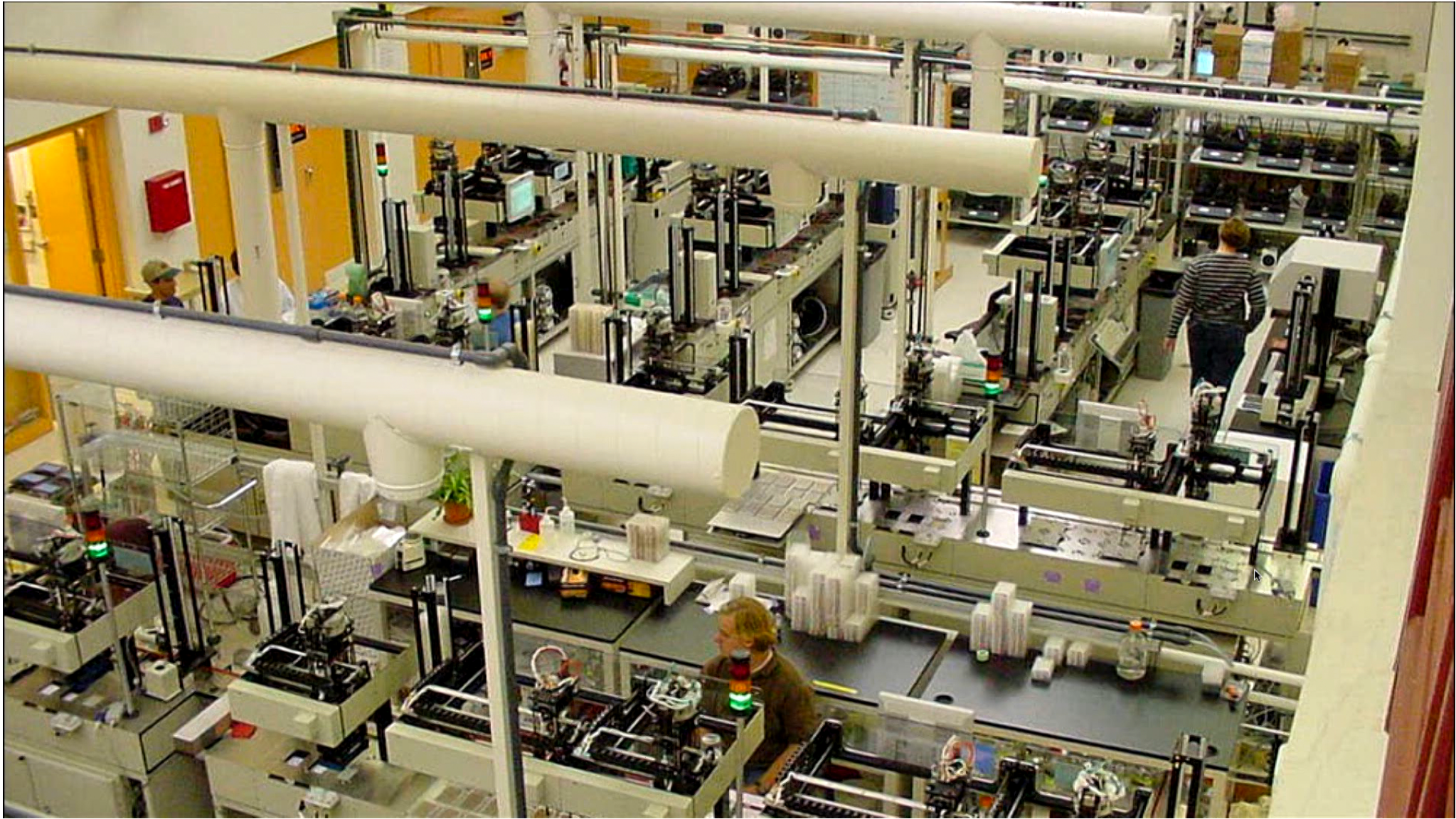
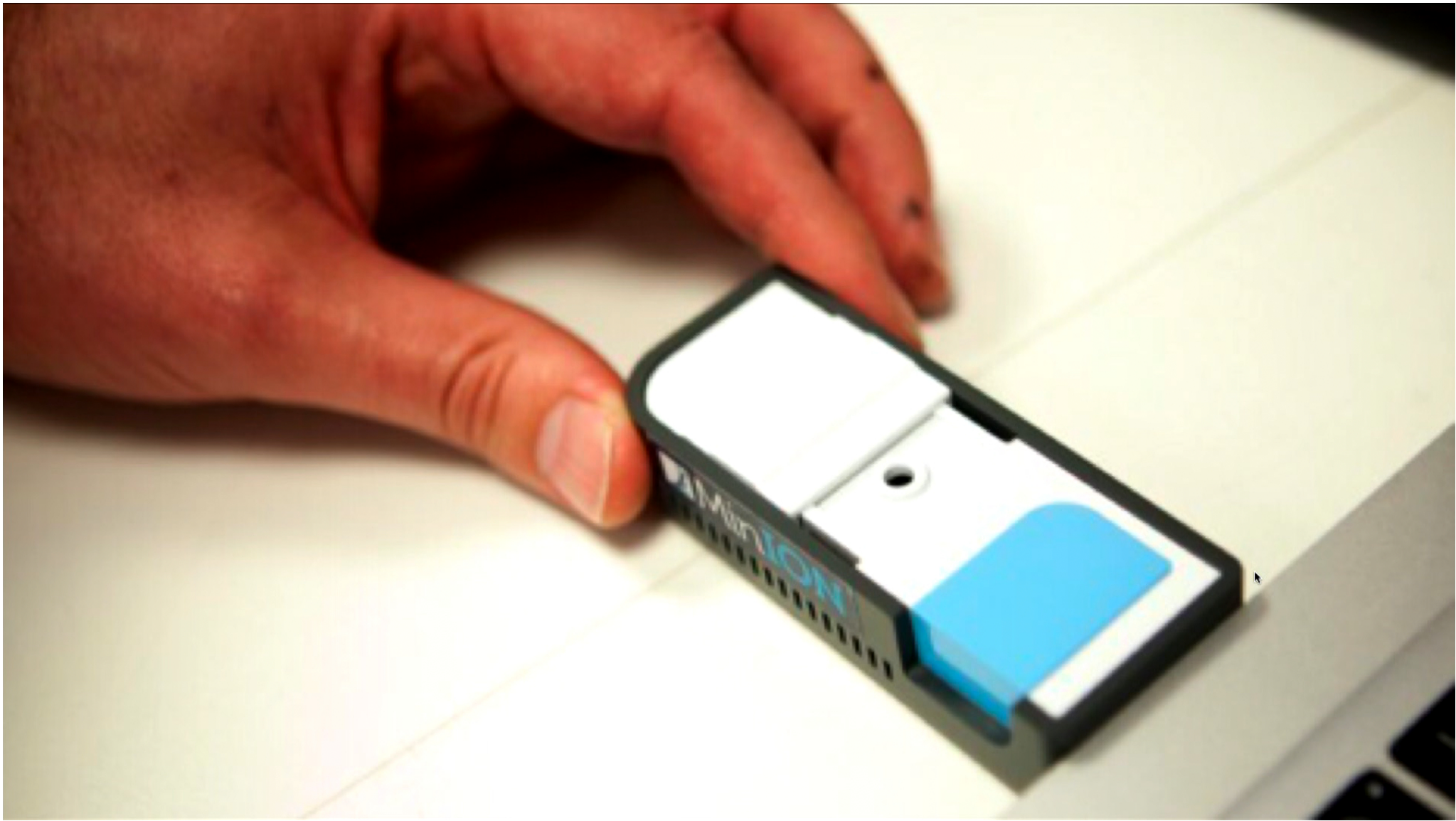


Image by Jakob Schweizer, BIOTEC/TU Dresden







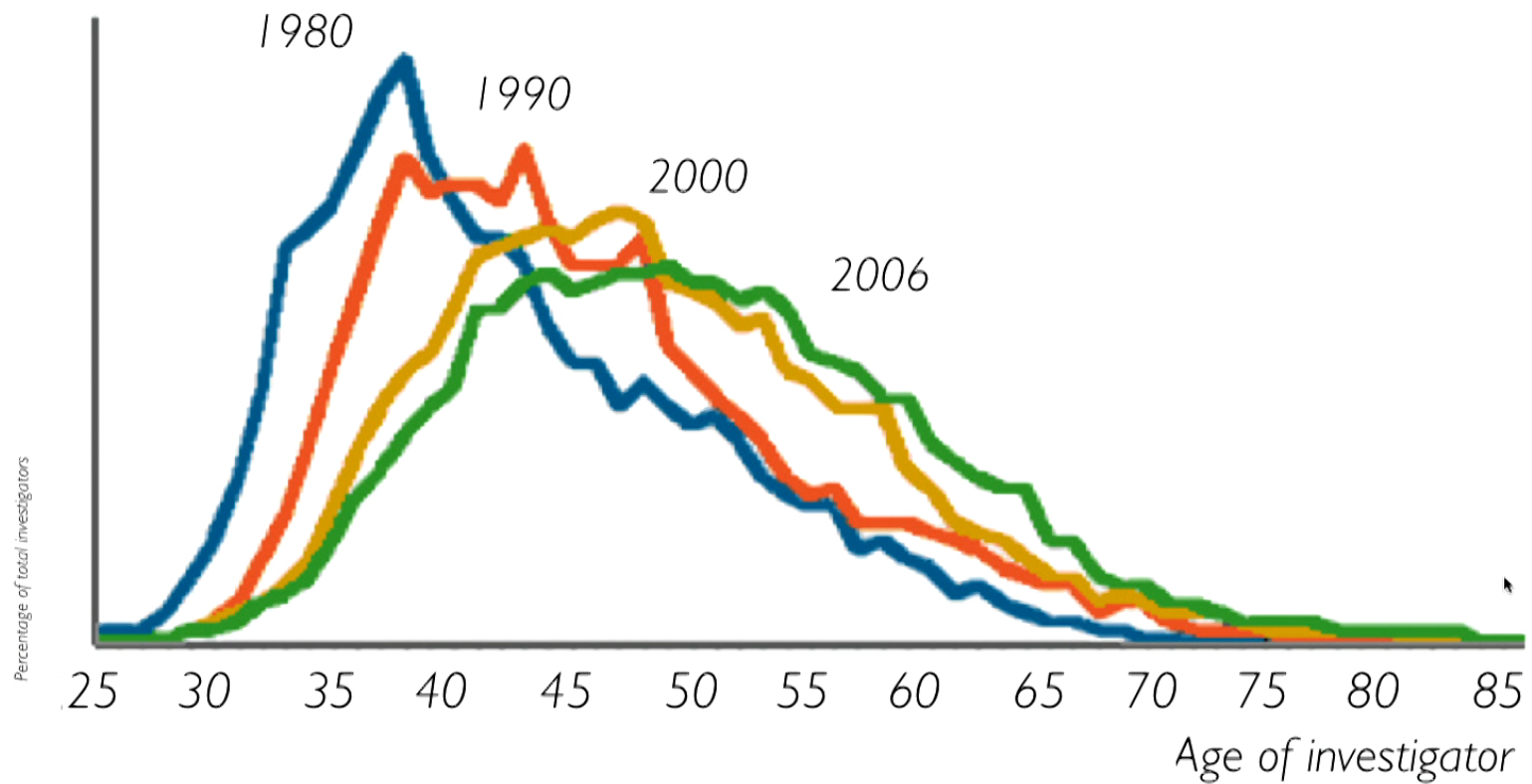




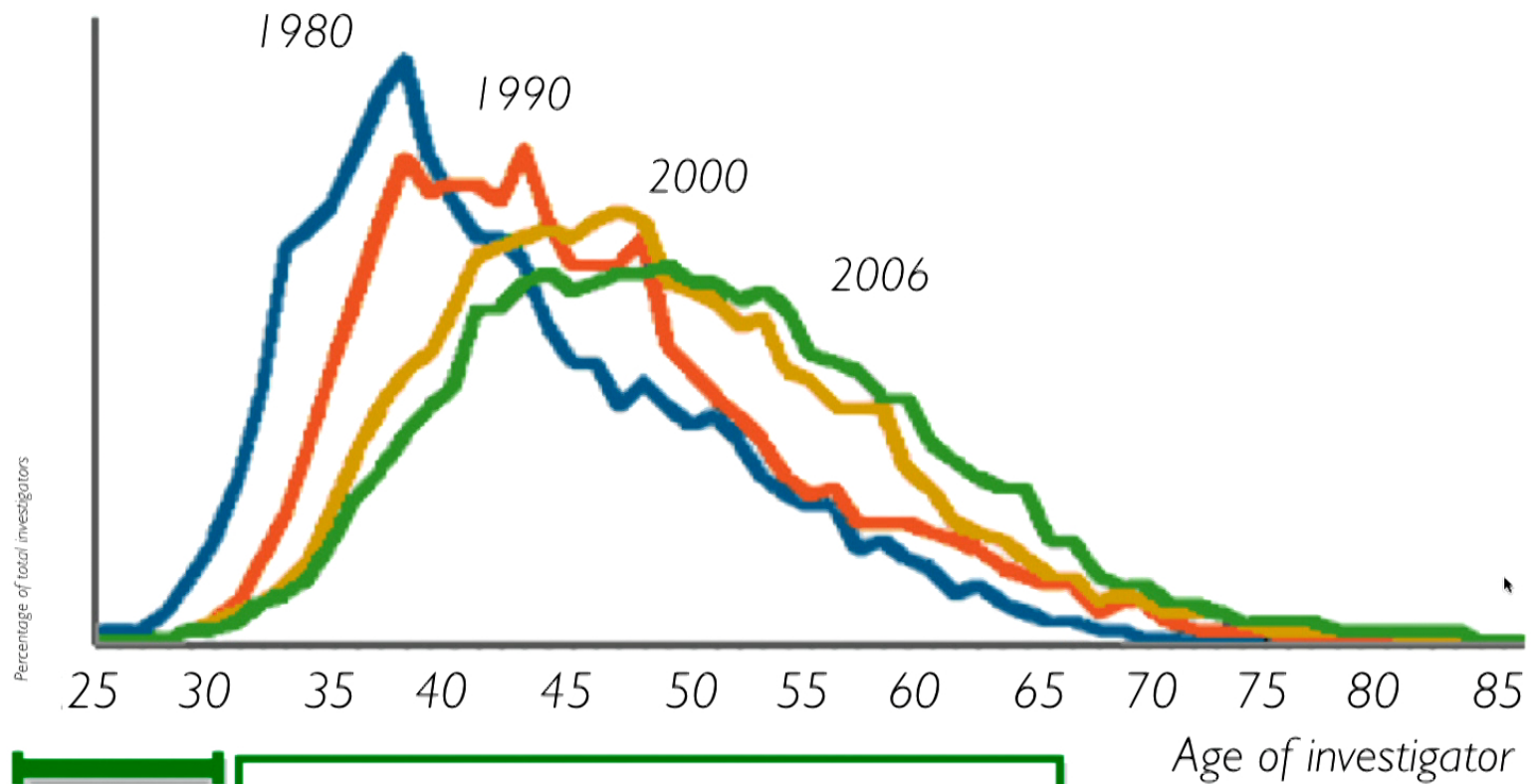




Age Distribution Of Independent Investigator Receiving NIH Grants



Age Distribution Of Independent Investigator Receiving NIH Grants



■ Darwin circles the world and formulates the theory of evolution

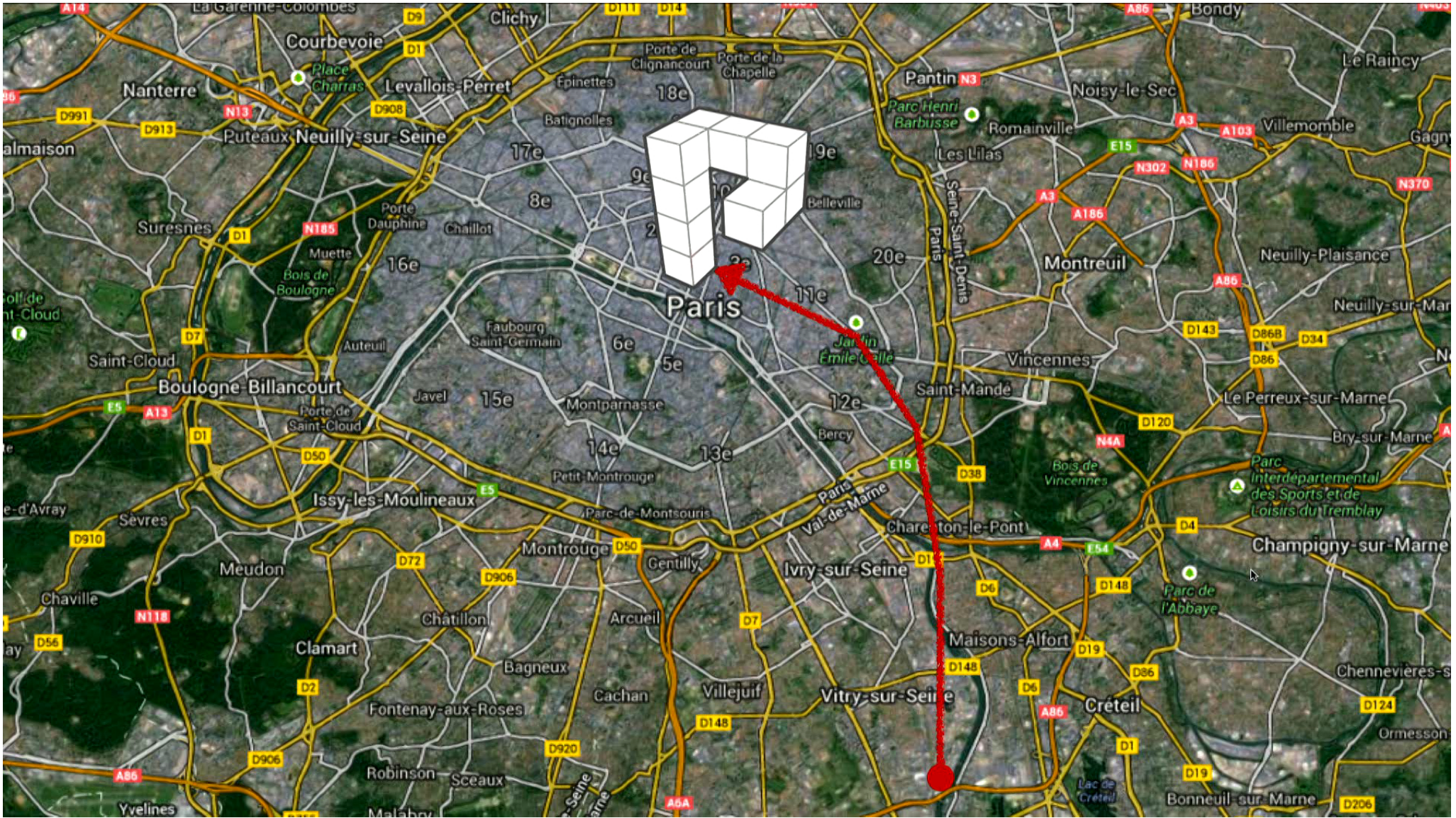














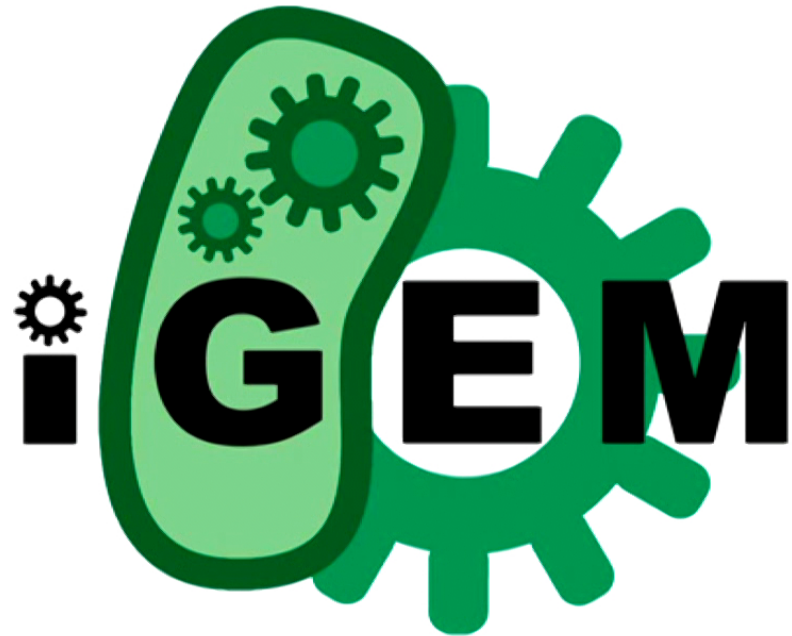
THE AGE OF COMMUNITIES



enne Piggott : Eolienne pour usage personnel ou celui d' une petite communauté. Créée par Hugh Piggott











Who's downloading pirated papers?

EVERYONE

In rich and poor countries, researchers turn to the Sci-Hub website.

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011100010 0100010 1 0010101 001101110 0111010 0 1 0 0001011
0100 1 1 0 1 0 0100 0 0 1 0 0 0 0 1 1
0011 0 0 0 0 1 1001 1 1 0 1 1 1 1 0 0
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Exploring New Paths to Cancer Research : #Open #Data #Science



GO TO: EPIDEMIUM.CC



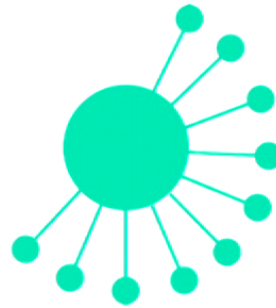


Values

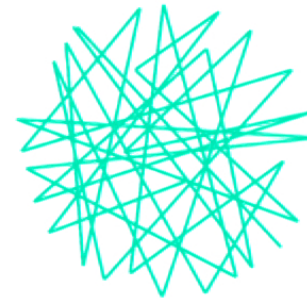
Reproducible science is good, replicated science is better !



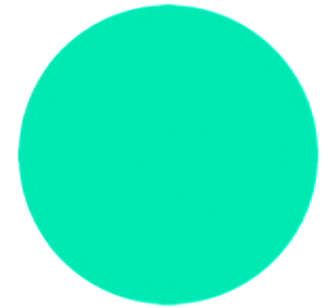
openness



collaborative



transdisciplinarity

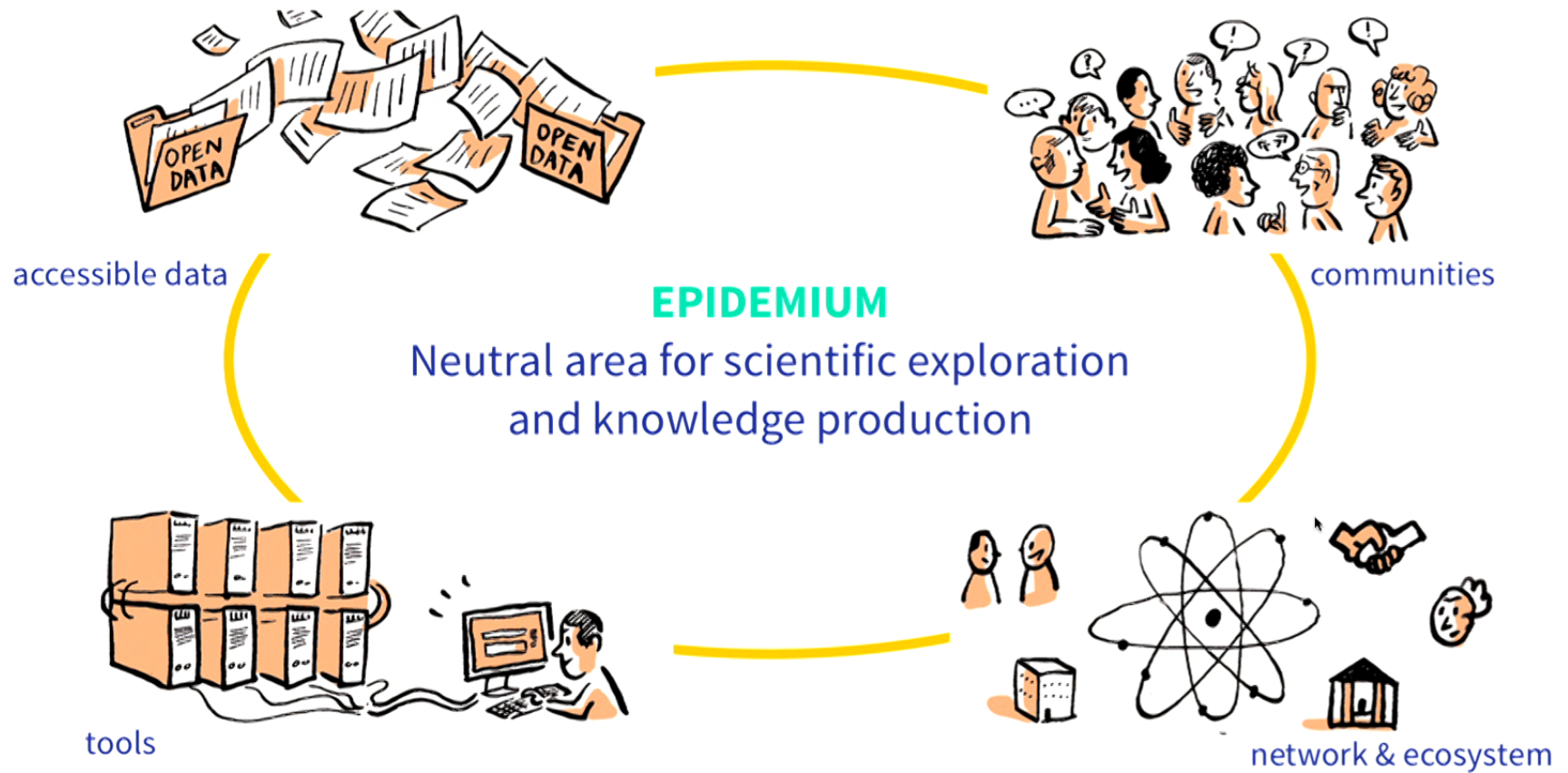


independence

#Open Science #Open Access #Open Data #Open Methodology
#Open Source #Open Review #Open Education



Work as a platform





Expected outcomes



Fuel researchers with tools



Bring healthcare professionals **solutions**



Give patients **answers**



Network of supporting partners

Program partners



stim



JoGL

Technical & data partners



Paris-Saclay
Center for Data Science

Supporting organisations



<+>
HACKING HEALTH



Hack your phd



latitudes
exploring tech
for good

Media partners

Usbek & Rica



An Open Science & Collaborative Program



4 Challenges

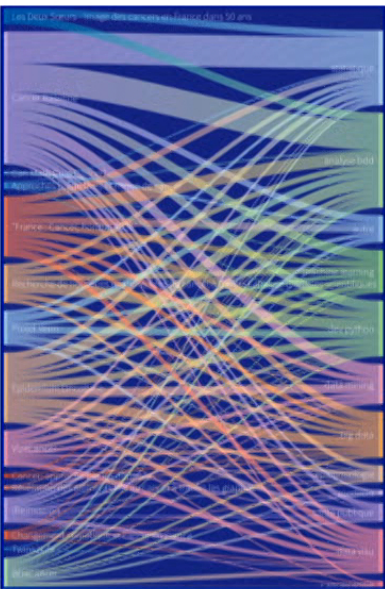
15 projects / 8 finalists

20+ Events



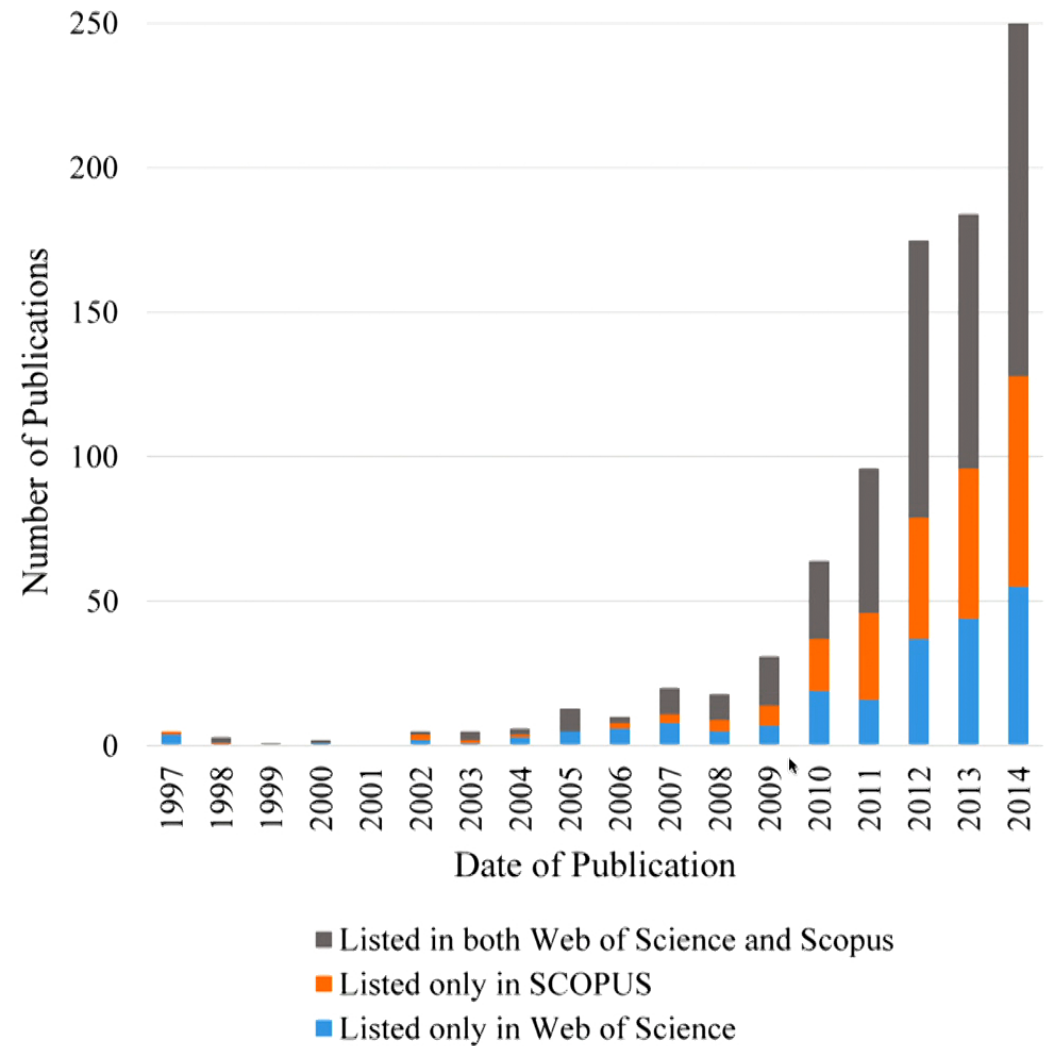
21 000+ Open Data Set Selected

3600+ Contributions



Global Trend

Zooniverse: >1.3M players (2007)
Foldit: >250 000 players (2008)
iGEM: >10 000 persons (2004)
La Paillasse: >3 000 persons (2011)
DIYbio: >2 000 persons (2008)
Epidemium: >300 persons (2015)
Academic labs: 5-50 persons





dépasser les frontières



950
laboratoires

et



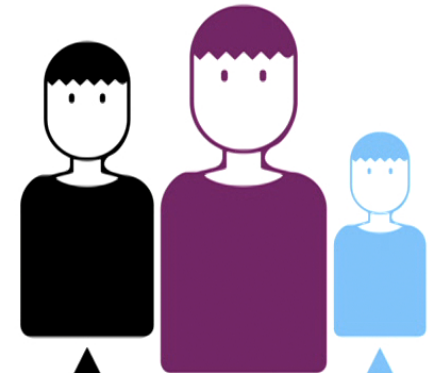
133
unités de service



des unités de recherche et de service sont en partenariat avec supérieur et de recherche et d'autres organismes nationaux (

→ Source : Labintel au 31/12/2015 – traitement CNRS/SAP2S

31 944
personnels



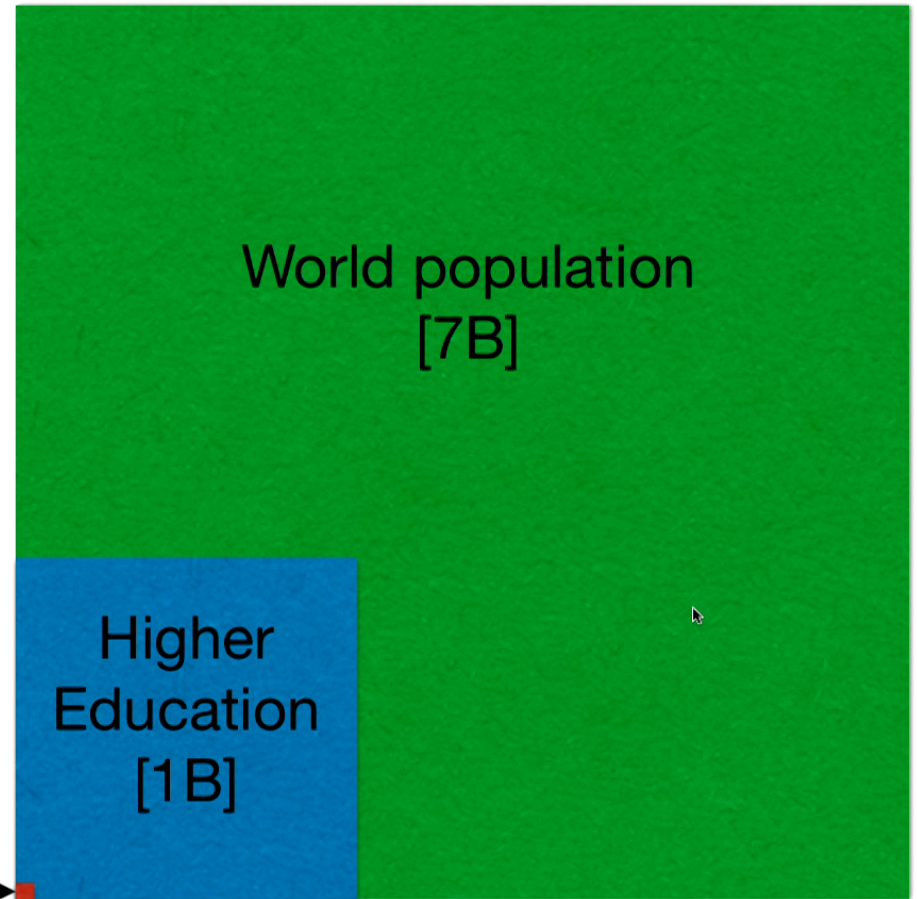
11 106
chercheur-e-s
titulaires

7 327
non titulaires
de droit
public

13 511
ingénieur-e-s et
technicien-ne-s
(personnels
permanents et CDI)

→ Source : Sirhus au 31/12/2015 ; traitement CNRS/DRH/OMES

Active researchers [8M]



gaaana PRODUCT ABOUT MEMBERS BLOG | [Call for Funders](#)


Transforming research funding

Gaaana is a platform and community for next generation grant distribution

[SEE HOW WE DO IT](#)

Open Science Framework

A scholarly commons to connect the entire research cycle



ResearchGate

Advance your research

Discover scientific knowledge, and make your research visible.

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ACADEMIA LOG IN

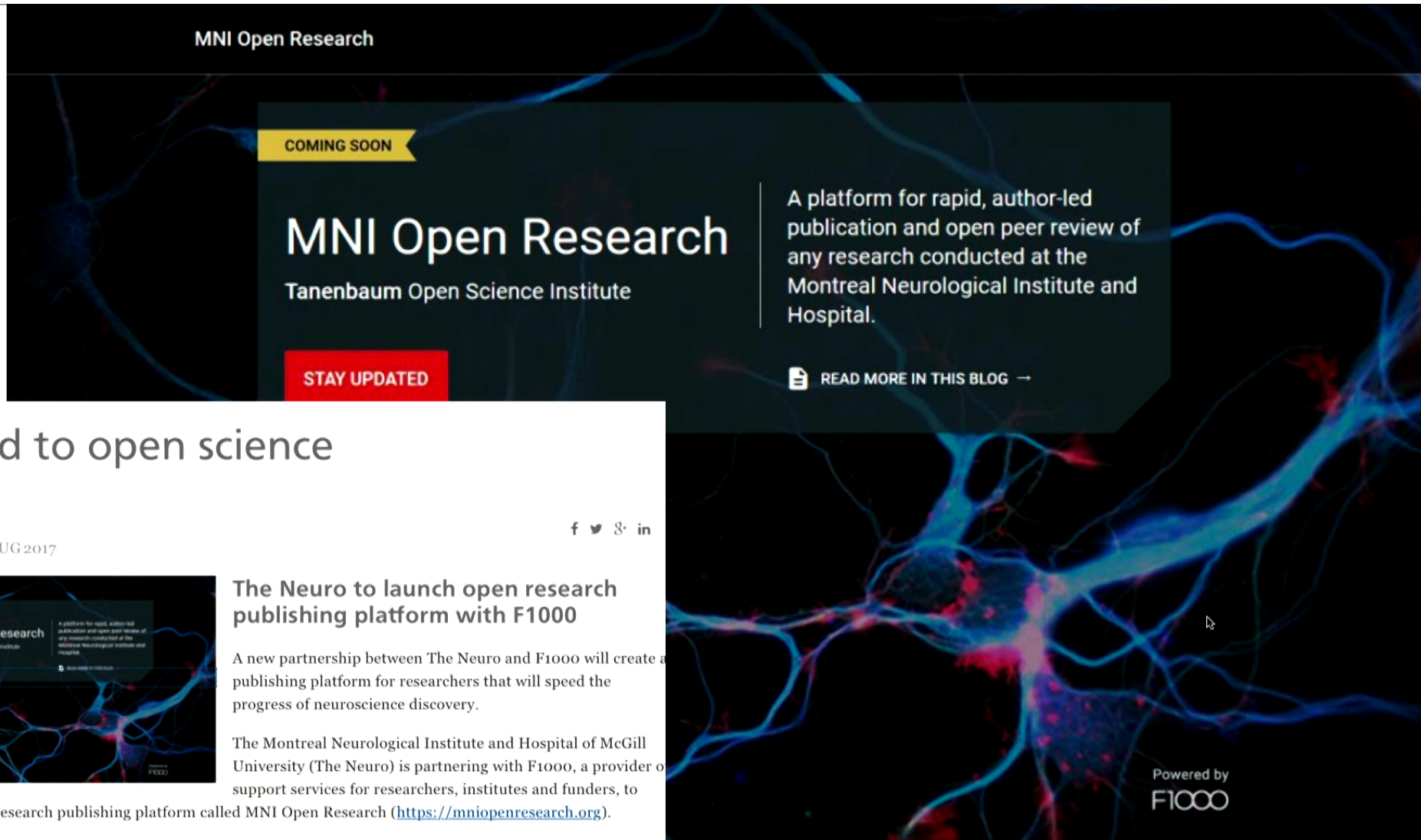
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MNI Open Research

COMING SOON

MNI Open Research

Tanenbaum Open Science Institute

STAY UPDATED

A platform for rapid, author-led publication and open peer review of any research conducted at the Montreal Neurological Institute and Hospital.

READ MORE IN THIS BLOG →

Onward to open science

News

PUBLISHED: 30 AUG 2017

f t & in

The Neuro to launch open research publishing platform with F1000

A new partnership between The Neuro and F1000 will create a publishing platform for researchers that will speed the progress of neuroscience discovery.

The Montreal Neurological Institute and Hospital of McGill University (The Neuro) is partnering with F1000, a provider of support services for researchers, institutes and funders, to create a new open research publishing platform called MNI Open Research (<https://mniopenresearch.org>).

MNI Open Research will allow Neuro researchers to publish research outputs within days of submission. Through this platform, invited peer-review will take place on an open basis, ensuring transparency. All data involved in



Search Results

Filter

Tool Types

- Laboratory Tools (34)
- Data (22)
- Software (22)
- Imaging Instrumentation (19)
- Reagents (18)
- Model Organisms (6)
- Therapeutic (1)

Labs and Teams

- Janelia Experimental Technology (31)
- Grigorieff Lab (17)
- Svoboda Lab (11)
- Looger Lab (9)
- Rubin Lab (9)
- Betzig Lab (6)
- Cui Lab (6)
- FlyLight (6)
- FlyEM (5)
- GENIE (5)
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Application/Experiment

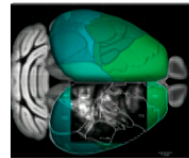
- Imaging (52)
- Behavioral Neuroscience (16)
- CryoEM (13)
- ...

122 Results

Showing 1-10 of 122 results

[Search](#) Sort Order: [Relevance](#) Items per page: [10](#)

TOOLS



2 Photon Random Access Mesoscope

Researchers at HHMI Janelia Research Campus have designed and built a 2-photon random access mesoscope (2p-RAM) that provides rapid access for imaging anywhere within a large tissue volume....

TOOLS

3D iPalm

This invention combines interferometry and photoactivated localization microscopy (PALM) to create a new light microscopy technique that provides sub 20-nm, three-dimensional localization....

TOOLS

AAV-Flex

Help fund the next wave of scientific research

Start an Experiment



"This solution helps close
Bill Gates

20



The number of published scientific research papers funded exclusively by crowdfunded projects on experiment.com



\$1.5 million

The amount raised in one of the largest science crowdfunding campaigns, a project to create the first publicly accessible space telescope

\$6,306

The average sum raised by successful science projects on experiment.com¹





OPEN SOURCE MALARIA

Looking for New Medicines

Just One Giant Lab

Bringing the power of communities to Open Research & Innovation



Because

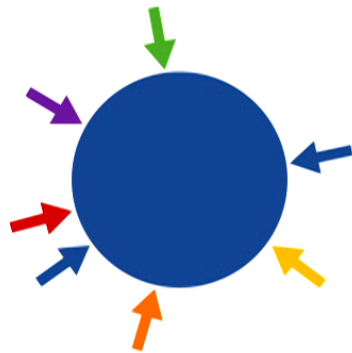
There is no monopoly on great ideas

JOGL'S VALUES

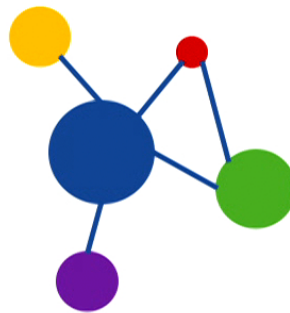
Research and Innovation need a new deal
To call forth the power of communities, these are the core JOGL values:



Open



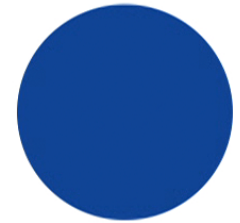
Inclusive



Collaborative



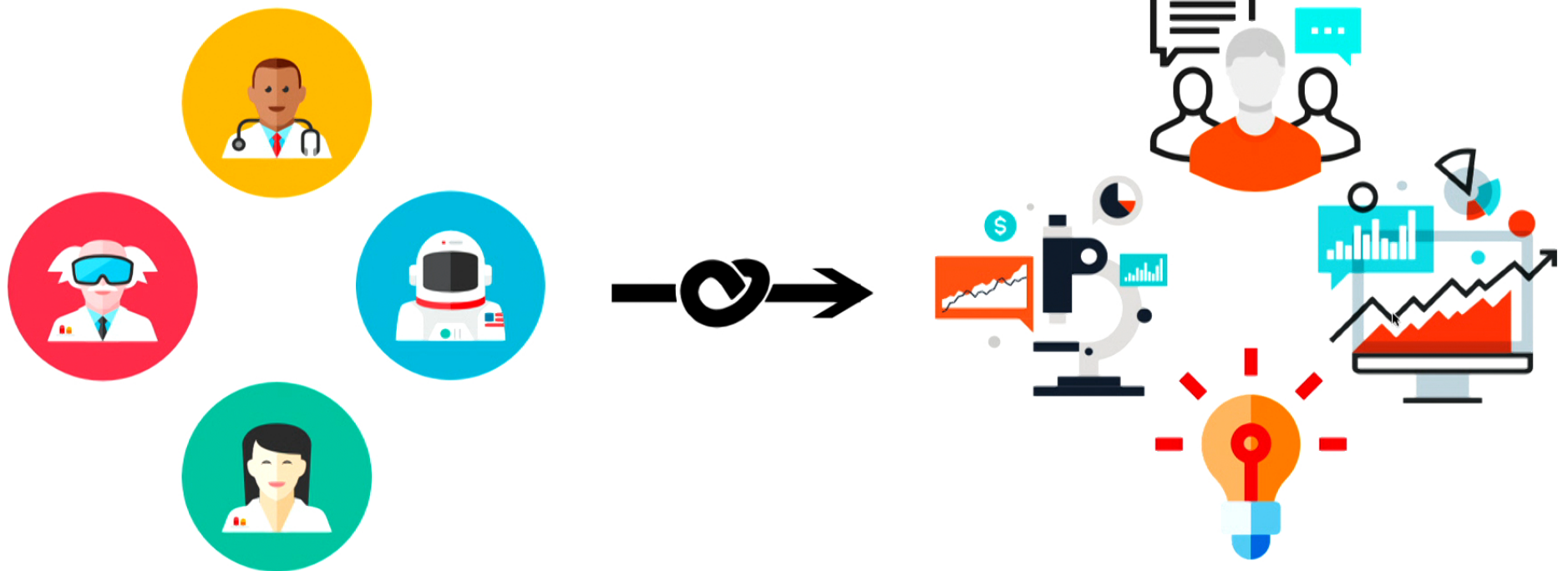
Transdisciplinary



Independent

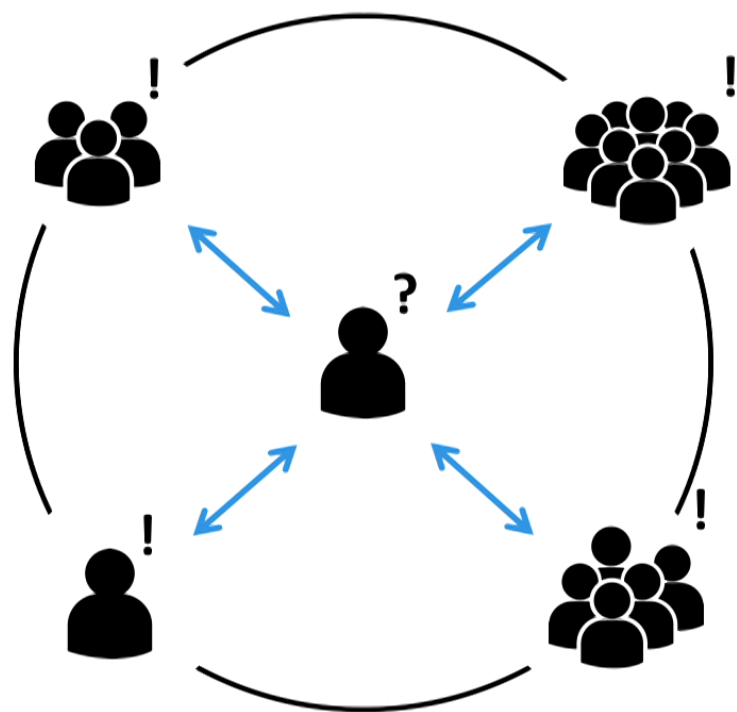
WHAT IS JOGL? : THE PROBLEM

Too many important projects don't get enough the support they deserve
Too many potentially impactful ideas don't get tested because of a lack of resources



JOGL'S VALUE CHAIN

Just One Giant Lab provides a new experience of doing Science through inclusive and open research and innovation



Mentorship



Creativity



Time



Data



Validation



Recognition



Resources



Assistance

JOGL'S PILLARS

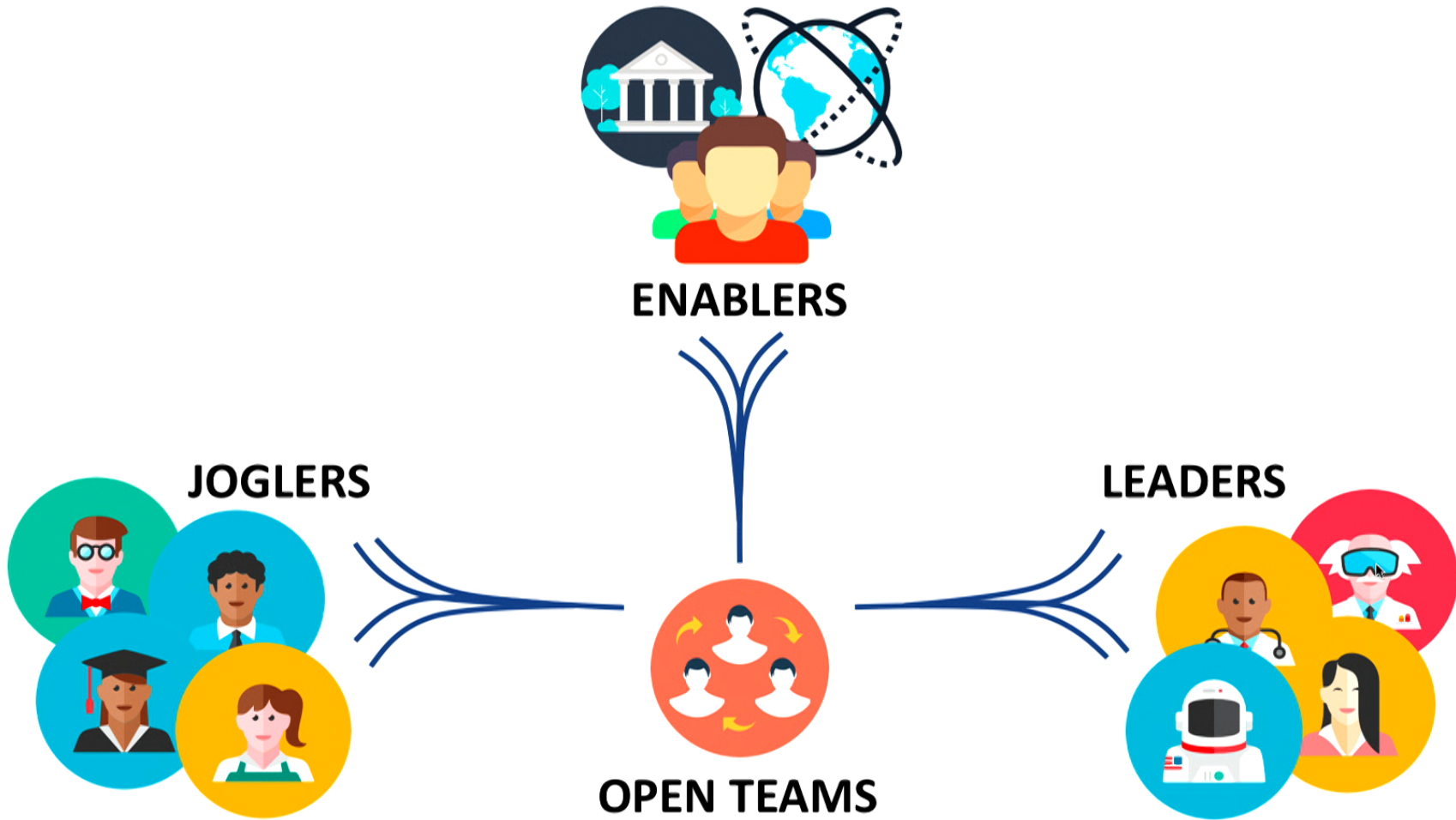
- **Science of Science**
- **Modular and Open Platform**
- **Research Institute as a Service**
- **JOGL is a program of JOGL**

LEADERS ARE KEY FOR LONG-TERM IMPACT

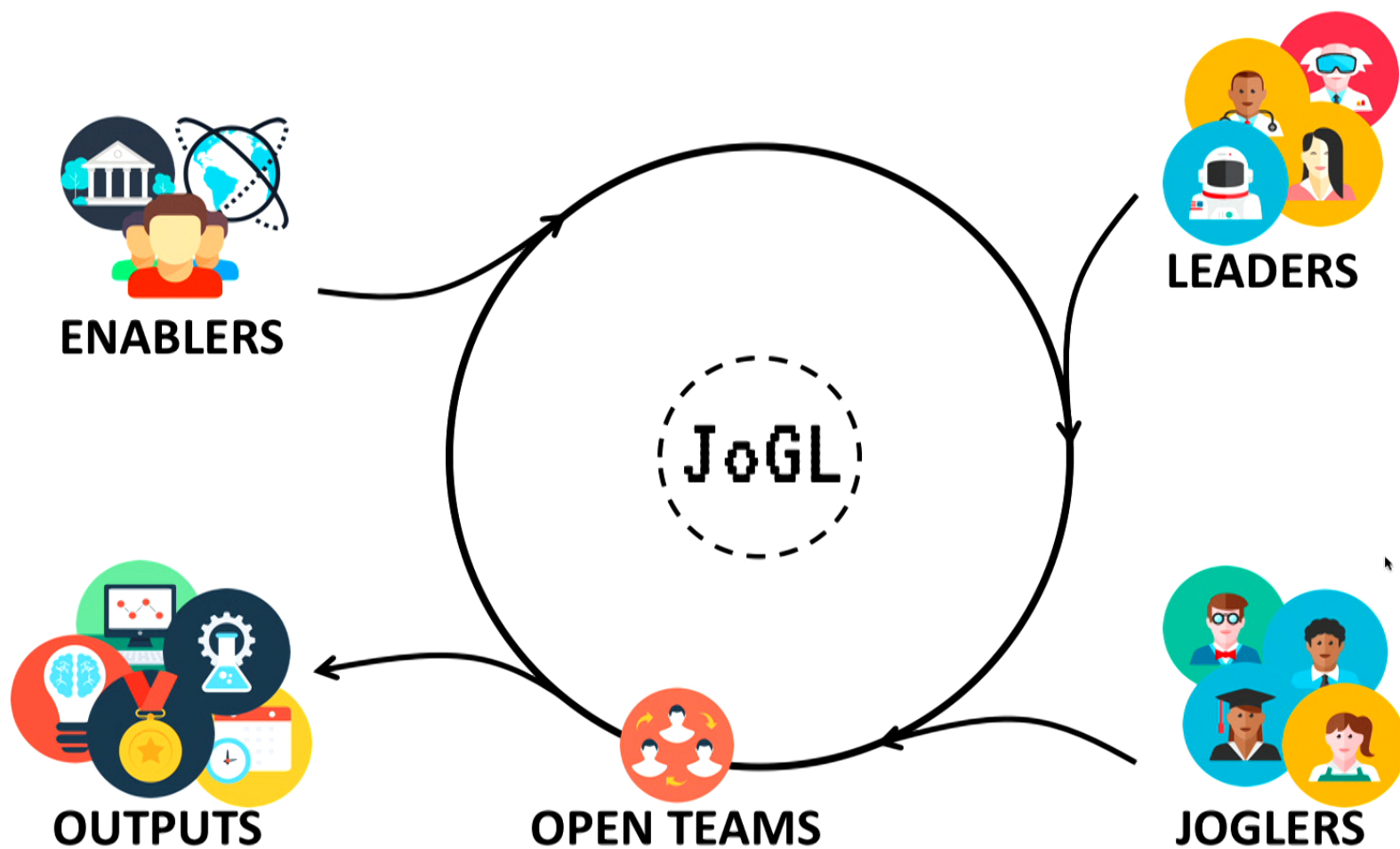
We give leaders the opportunity to express what they need for their vision to happen

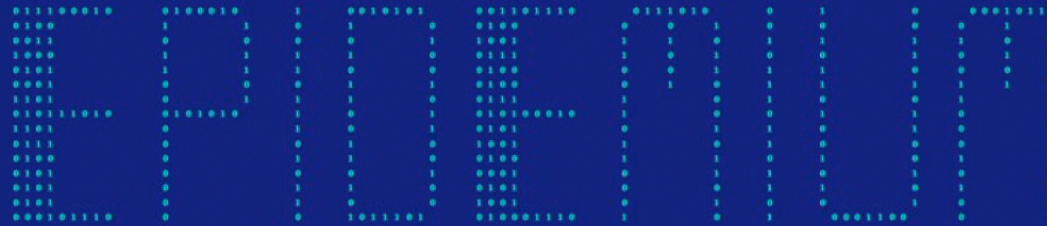


THE CORE OF JOGL: OPEN TEAMS



ROADMAP FOR A JOGL RESEARCH PROGRAM





Joining Epidemium means being part of a dynamic and varied community of people from all around the world, entering an ecosystem of experts and partners, but also having access to datasets and technical tools that we made available.

Discover the different tools!



Chat



Git



Drive



Wiki



IDEA (Intuitive Datavizualisation for Epidemiologic Analysis)



IDEA is a collaborative platform that allow every enthusiast to explore, comment and share prediction results/data with their community. With the help of machine learning, IDEA will offer to untrained/unskilled users/medical professionals the best data manipulation and visualization. IDEA is a new way, for the scientific community, to search together.

Follow

7 Members 11 Followers 0 Task

Associated skills

- Graphics
- Mathematics
- Statistics
- HTML
- NOSQL
- Query Languages
- Geographic Information Systems
- Machine learning
- Data visualization

see more members

- Chat
- Git
- Drive
- Wiki

1

Milestone in progress **final goal** No task left!

Work in progress!

due in 2 months

2

Milestone in progress **State of the art** No task left!

We need to review the scientific literature about this question to frame our question accurately.

- Description
- Activity
- Members

Give me a task!

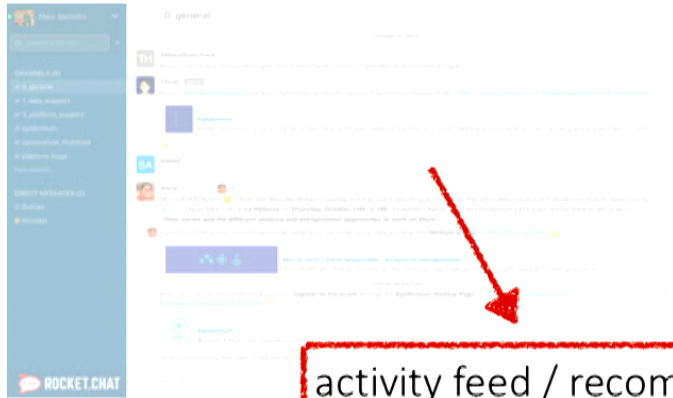
Join Team



chat



code



activity feed / recommendation system



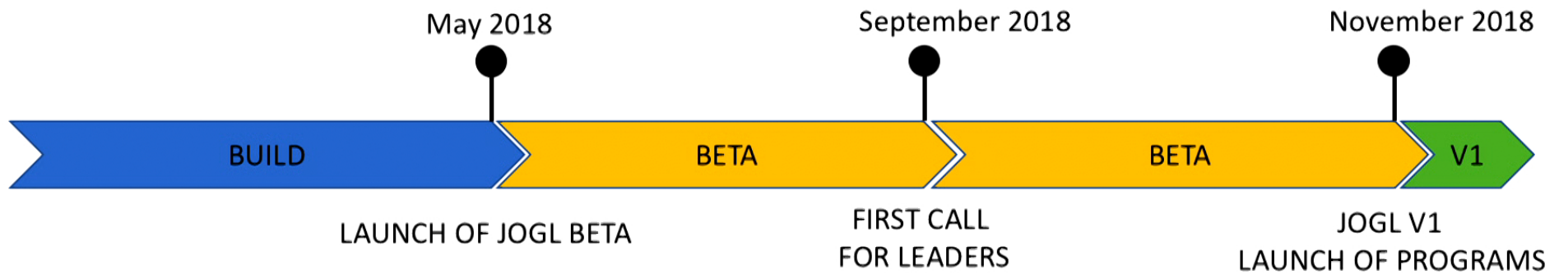
documentation



file sharing



JoGL



WHO WOULD LIKE TO JOIN THE EXPERIMENT ? <3

JoGL



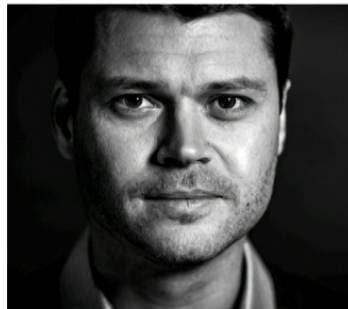
Thomas Landrain



Marc Santolini
Network Science
Institute



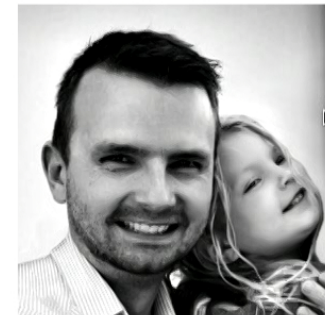
Leo Blondel
Harvard



Olivier de Fresnoy



Mehdi Benchoufi
APHP



Bodo Hoenen