

Agenda

- Overview of the Glowing Plant project
- Introduction to Crowdfunding
- The broader DIY Biology movement

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Core Team

Omri Amirav-Drory



Vision & Tech Lead

- PhD in biochemistry from Tel-Aviv University
- Fulbright postdoctoral research fellow at Stanford University
- Founder and CEO of Genome Compiler

Antony Evans



Project Manager

- MA in mathematics from University of Cambridge
- MBA from INSEAD
- GSP11 at Singularity University
- Worked at Bain & Company

Kyle Taylor

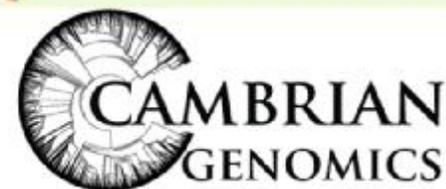


Plant Science Guru

- Major in Agriculture Biochemistry at Iowa State University
- PhD in Cell and Molecular Biology at Stanford University
- Teaches Introduction to Molecular Cell Biology at Biocurious

Strategic Partners

Autodesk Research



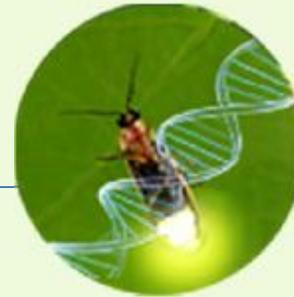


A brief history of glowing plants



1986

Researchers make first glowing plant, but requires addition of luciferin



1989

Luciferase-luciferin gene system sequenced



2010

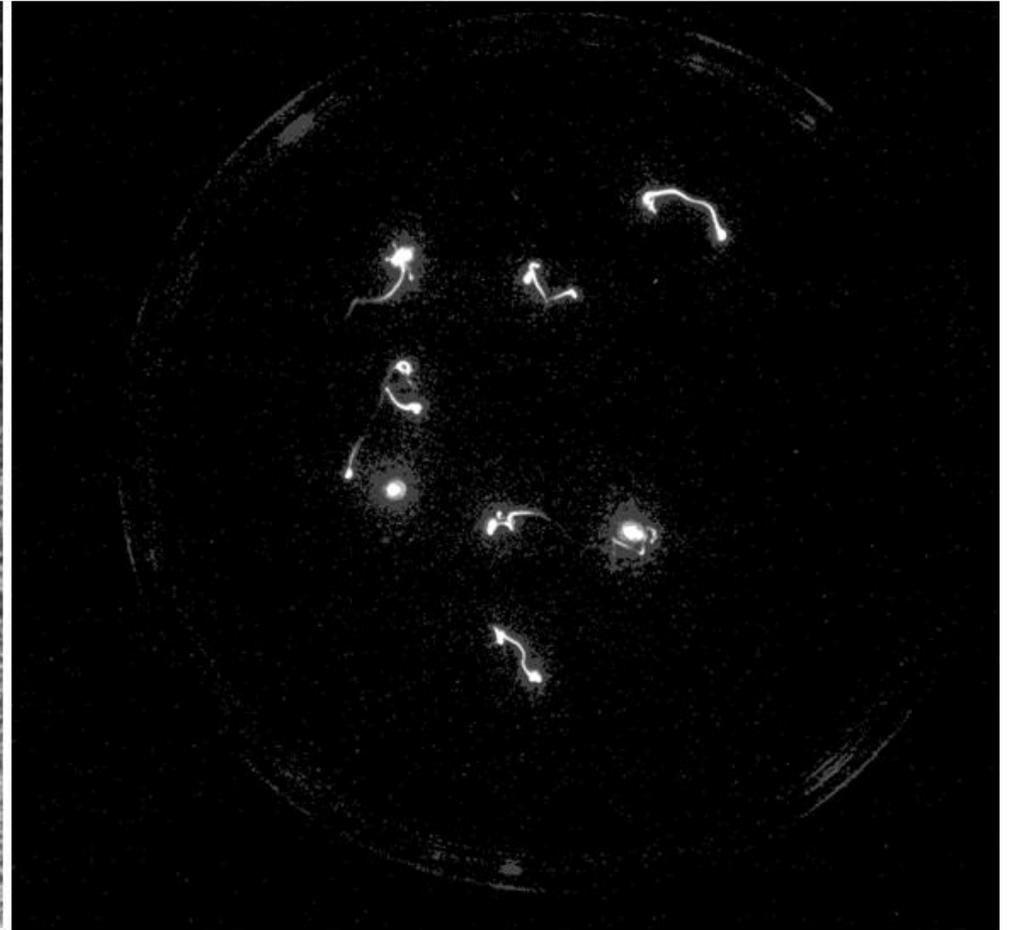
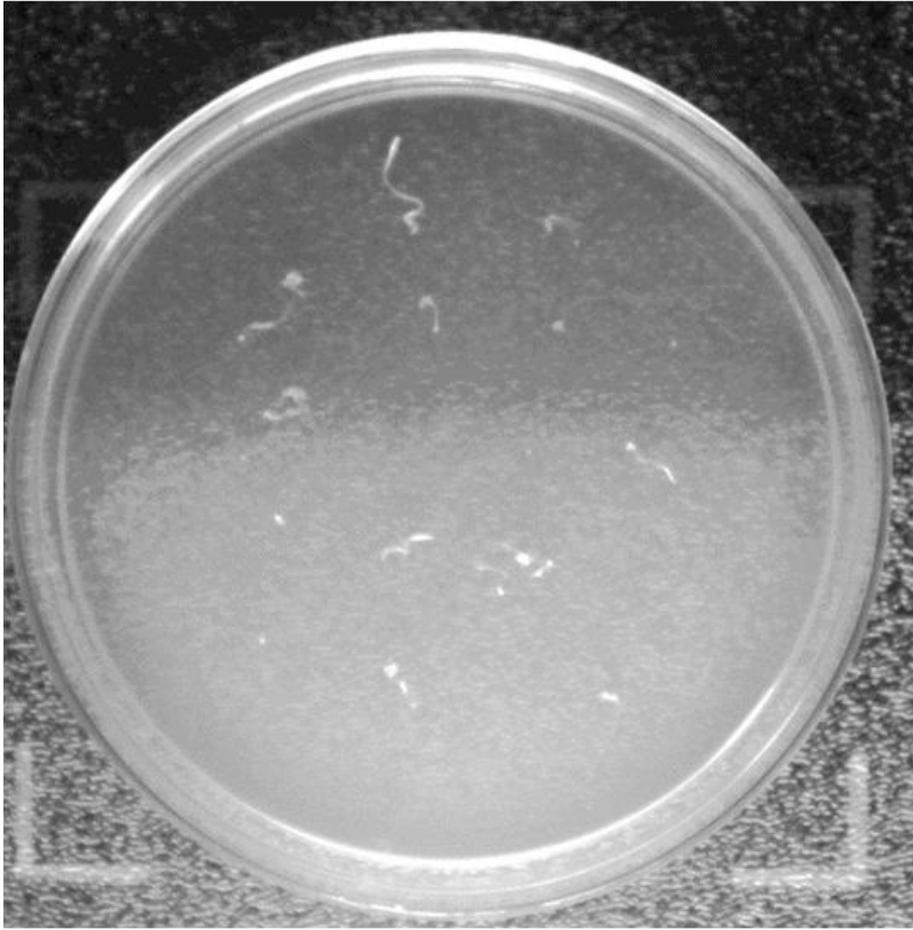
Genes added at State University of New York to make luciferin resulting in plant which dimly glows



2013

University of Cambridge iGem team create super glowy bacteria by recycling luciferase











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A Little Money



By pooling small contributions of money...



A Lot of People



..from groups of people who share common interests...



The Power of Crowdfunding



...everyone has the power to achieve financial goals!

Key Players	Launch date	Fund's raised to date	Notes
 KICKSTARTER	April 2009	\$801MM	§ Highly selective § No longer allows GMO's as rewards
 indiegogo	January 2008	\$193MM	§ Open platform with few restrictions
 microryza	June 2012	< \$0.3MM	§ Focused on science research § No rewards
 AngelList	Sept 2013	Unknown	§ Enables equity investments
Stealth	Nov 2013	0	§ Dedicated to synthetic biology

Glowing Plants: Natural Lighting with no Electricity

by Antony Evans

Home

Updates **22**

Backers **8,433**

Comments **730**

San Francisco, CA

Technology

Funded! This project successfully raised its funding goal on Jun 6.



8,433

backers

\$484,013

pledged of \$65,000 goal

0

seconds to go

Funding period

Apr 23, 2013 - Jun 6, 2013



Raymond McCauley is a backer.



Project by
Antony Evans
San Francisco, CA

[Contact me](#)

Share **27,856**

Tweet

Embed

\$25

T-shirt



Get one of these American Apparel Crew t-shirts

\$40

Glowing plant seeds



Glowing Plant seeds of Arabidopsis. Show off how cool syn bio is to your friends or use them as a night light

\$65

Vase



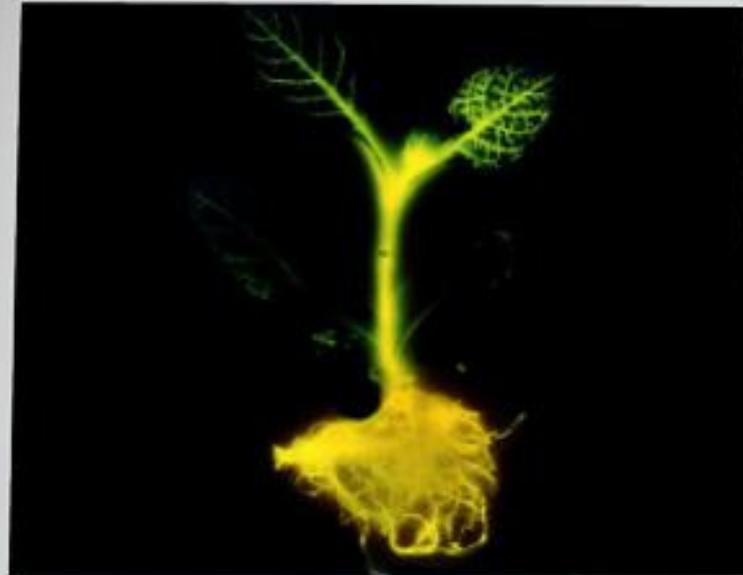
+ glowing plant
seeds!



A unique vase which turns those old light bulbs into something useful

\$90

Book: How to make a glowing plant



How to make a glowing plant

How to design a gene sequence using Genome Compiler



\$150

Glowing Plant



A young glowing plant. Show off how cool Synthetic Biology is to your friends or use it as a nightlight.

Please note these plants are not for human or animal consumption

Get a glowing rose with this reward if we reach our \$400k stretch goal

\$250

Maker Kit



A maker kit so that you can genetically transform your own plant at home or at a lab like Biocurious or Genspace. The kit will contain the following:

\$500

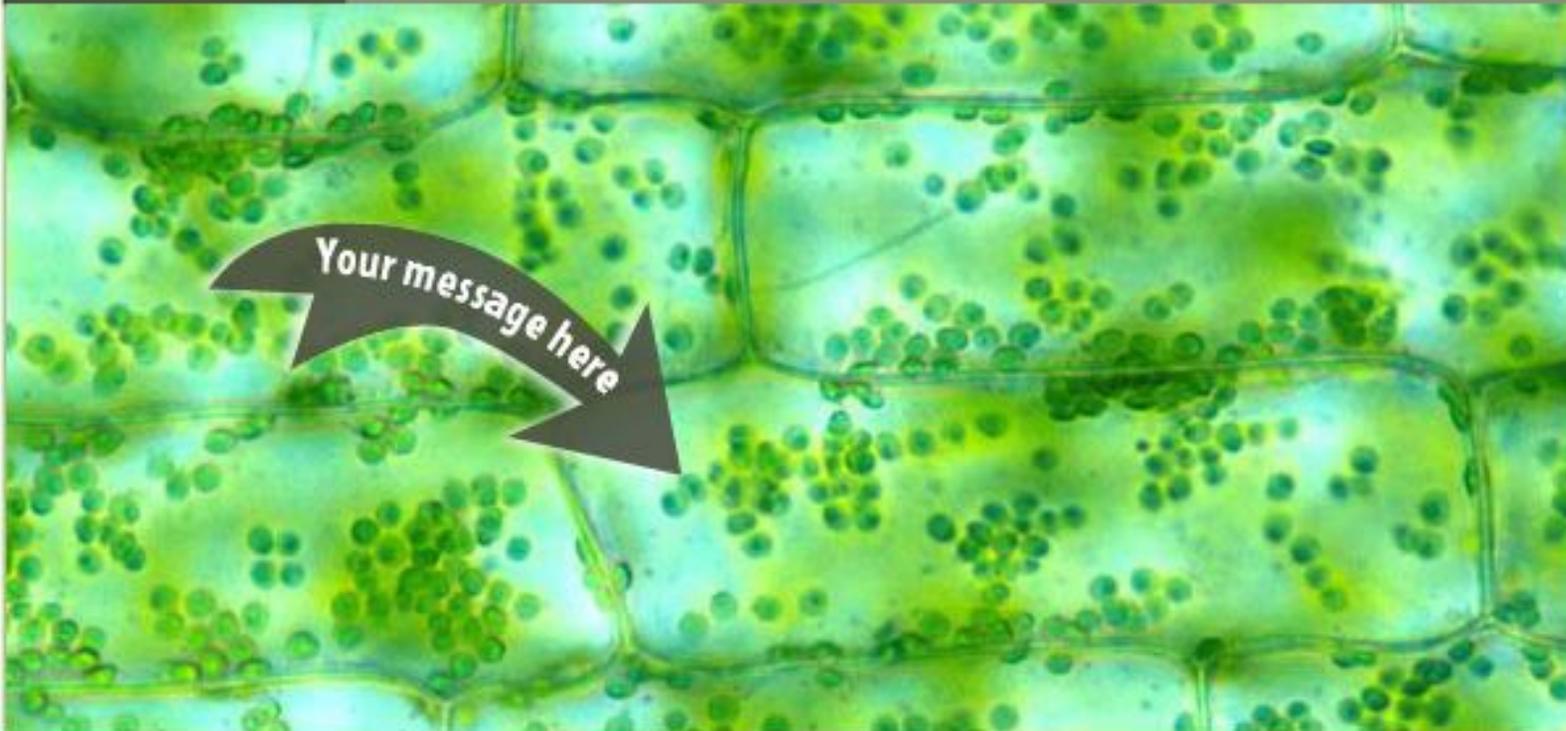
Message in DNA



A vial containing DNA printed with a message. Write a message of up to 140 characters and we will convert it into DNA using Craig Venters ASCII->DNA translation table. Use it to tell someone you love them, hide a message for your kids to decode when they grow up or whatever you can imagine - be creative!

\$10,000

The grand-daddy of prizes!



Send us a short message (up to 30 characters) and we will translate the message into DNA and include it in the sequence we insert into the plant. Be remembered in this historic project

TC TechCrunch

The Washington Post

**SCIENTIFIC
AMERICAN**

THE WALL STREET JOURNAL.

Mashable

nature



SingularityHUB

Science. Technology. The Future of Mankind.

**BBC
NEWS**

FAST COMPANY

TIME

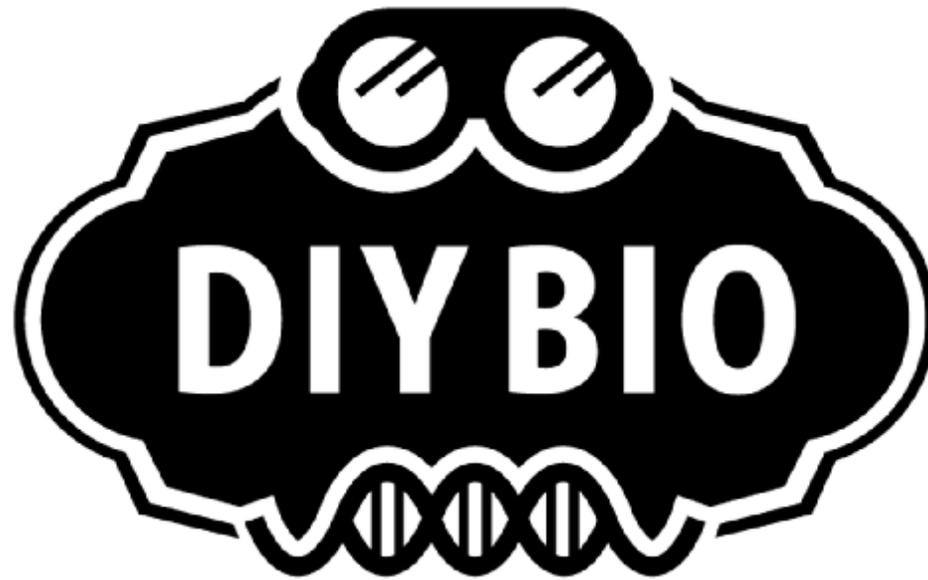
*The
New York
Times*

WIRED

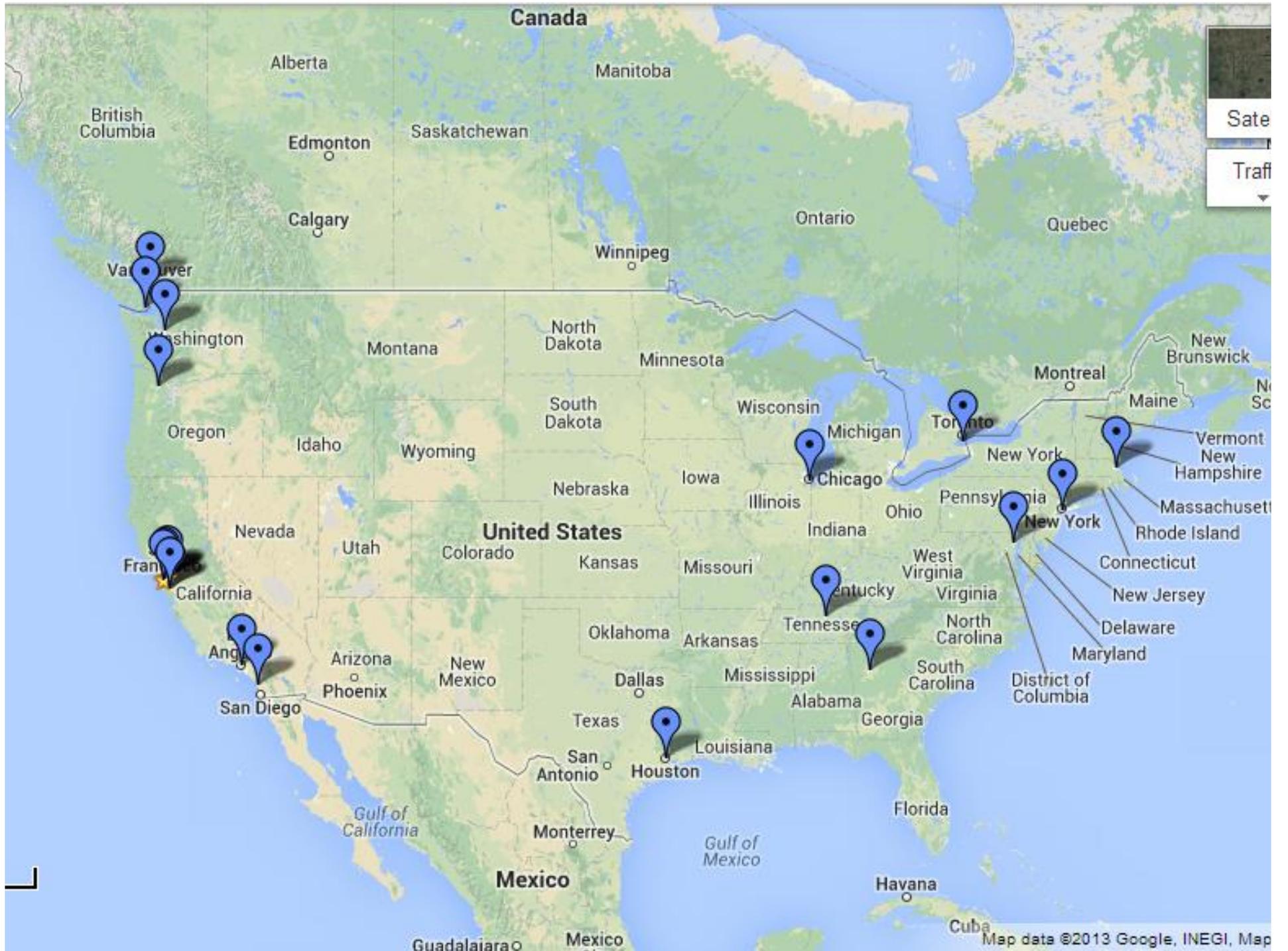
Forbes

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Science? Innovation?
Education?
Community?





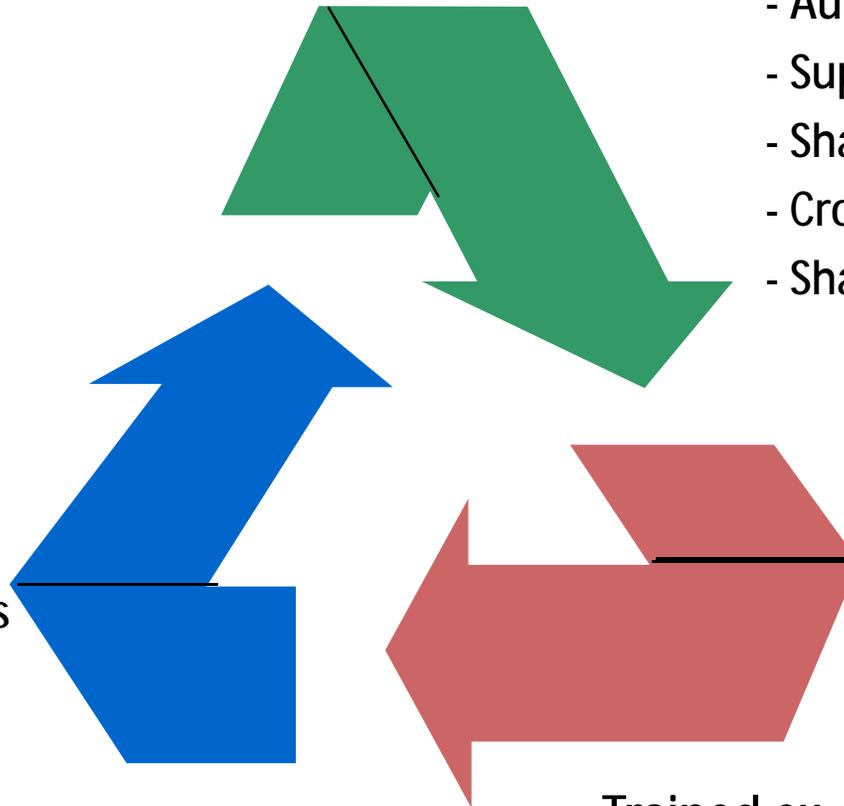




Supply side drivers

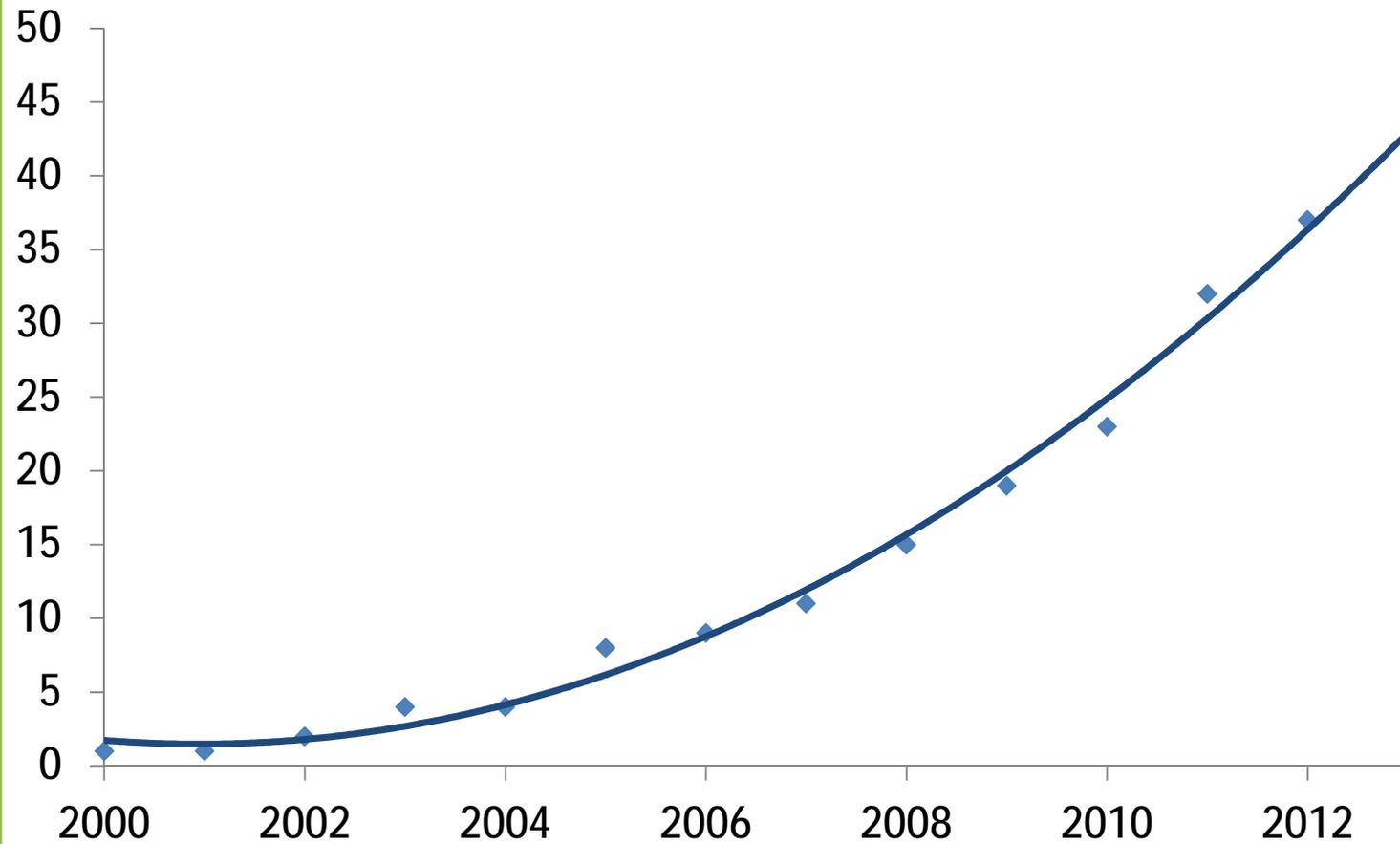
- Rise of community labs
 - Autonomy
 - Supportive community
 - Shared equipment
 - Crowdfunding
 - Shared knowledge

- Falling costs
 - DNA reading
 - DNA writing
 - Open source parts



- Trained ex-academics
 - Long path to tenure
 - Reduced grant funding
 - Alternative career

Number of Synthetic Biology companies founded by year





Blog: www.glowingplant.com

Kickstarter: www.glowingplant.com/kickstarter

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