School of Visual Arts, Sep 24, 2018

#### From Chat Room to Living Room to Laboratory

In 2009, a group met in a living room to explore their interest in biotechnology. Within a year, co-founders **Nurit Bar-Shai** (artist), **Dr. Ellen Jorgensen** (biologist), **Daniel Grushkin** (journalist), **Dr. Russell Durrett**, and **Dr. Oliver Medvedik** opened Genspace, the first-ever community biotechnology laboratory in downtown Brooklyn.





### Making it Official: Incorporation as Nonprofit

From Articles of Incorporation, 2010

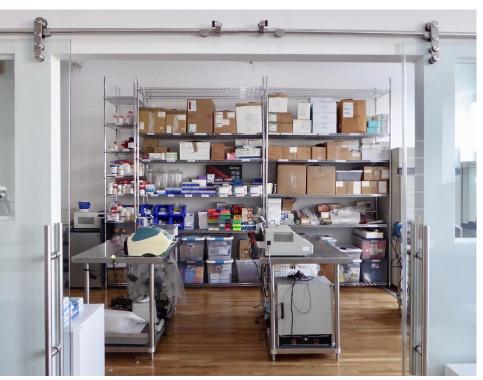
The purposes for which the corporation is formed are as follows:

**To promote awareness and educate** the public about the value of molecular biology both inside and outside of traditional educational and research settings.

To encourage the pursuit of biology within a safe, transparent and inviting laboratory environment.

**To create new practices** that decrease the cost and increase the accessibility of biological research. **To identify and pursue worthwhile projects** that may benefit mankind and the planet but have been ignored for economic or political reasons.

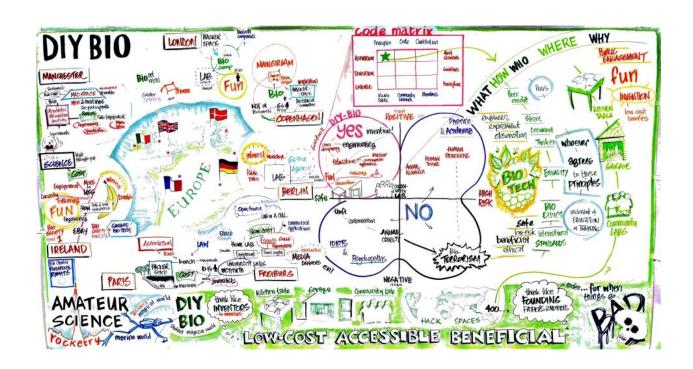
#### Welcome to the Lab





#### Buzzwords

- 'Biohacker'
- 'DIY Biology'
  - See diybio.org
  - More than 125 around the world
- 'Community Biology Lab'



#### Community Biology Lab

Who are the communities that our lab serves?

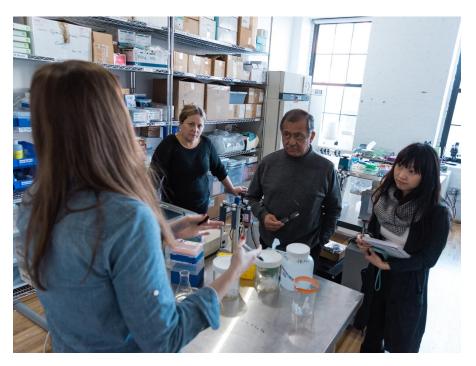
- High School Students
  - Six month Biorocket Program
  - Tailored Workshops and Programs
  - Some memberships
- College Students
  - Scholars Program
  - Biodesign Challenge
- Adults
  - Membership
  - Classes
- Families, All Ages
  - Public programs in our space
  - Outreach



#### **Education: Adults**

#### Classes

- Comprehensive Intro Classes
- Advanced Techniques such as CRISPR
- Bioart and biodesign
- Bioinformatics
- Ethics/History/Culture surrounding Biology
- Membership
  - Community
  - Individual
  - Business



### Education: College Students

- Scholars Program
  - Currently with FIT
  - Science Mentoring for student research projects
- Biodesign Challenge
  - Genspace Alumni
  - University-level design competition



### **Education: High School Students**

- Six month Biorocket Program
  - Part of American Museum of Natural History Science Research Mentoring Consortium
  - Funded by Pinkerton Foundation
- Tailored Workshops and Programs
  - One-off workshops to supplement school curriculum
  - Year-round program developed with science teachers
  - Public schools, charter schools, private schools
- Some memberships



#### Education: All Ages + Families

- Public Programs in our Space
  - DNA Barcoding Nights
- Outreach
  - Partners with Brooklyn Bridge Park
    Conservancy, Green-Wood Cemetery,
    Pioneer Works, NYCxDesign,
    Understory, and more



#### **Education: Social Media**





genspacenyc Hello! My name is David and I'm a Microbiology researcher turned photographer and the new Science Communication Ambassador at Genspace.

Our mission is to provide an open-access lab for the general population and promote scientific literacy through a hands-on approach. To that end, I aim to share the stories found within our lab to better connect with you all, our community.

I'll present you with a personal view of our lab benches, our parties, and our events. You'll also get a better understanding of the rest of our team as well as our community members. Follow along as I explore Genspace and the greater







genspacenyc A fancy photography system

This complex contraption consists of many different parts working in conjunction. There's a light source, the lamp on top, this is what we use to activate the genes we are manipulating. Next comes a filter to isolate the wavelengths of light that work to activate our genes the best.

Below that is a converging lens to concentrate the light a little better for our system. A little below that is a 35mm slide that contains the image we are trying to reproduce. After that you find another lens to focus the light inside our makeshift photo-incubator. Inside that incubator we do our best to minimize interference from address the barreless of the control of the control







3 DAYS AGO

Log in to like or comment.

# Membership: Individuals, Scientists





### Membership: Individuals, Artists + Designers





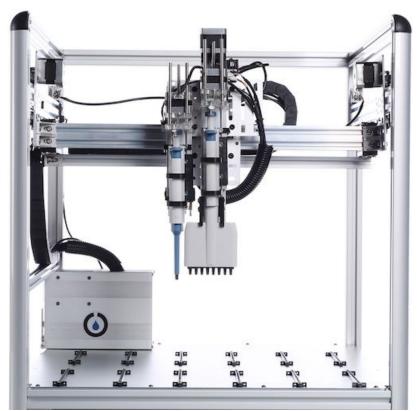
# Membership: Individuals, Hobbyists





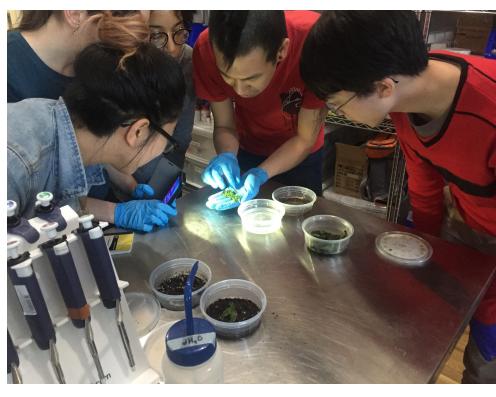
#### Membership: Entrepreneurs





# Membership: Community Projects



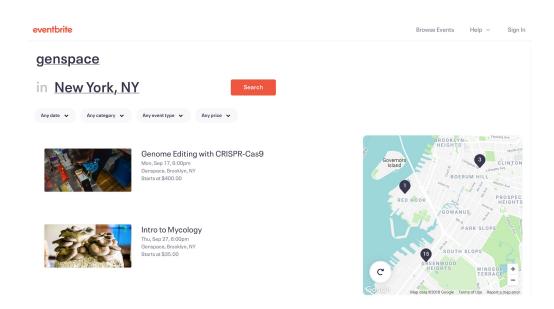


#### **Digital Properties**

Digital properties have built and keep our community growing!

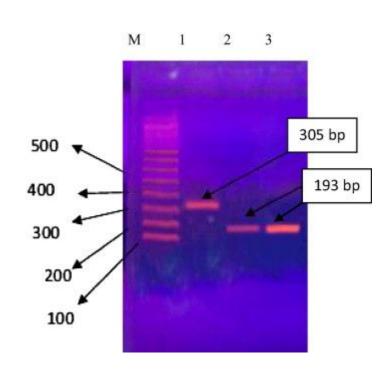
#### 2009-2018

- 1. DIYBio.org
- 2. Facebook
- 3. Twitter
- 4. Instagram
- 5. Mailchimp
- 6. Eventbrite



# A note on our current logo



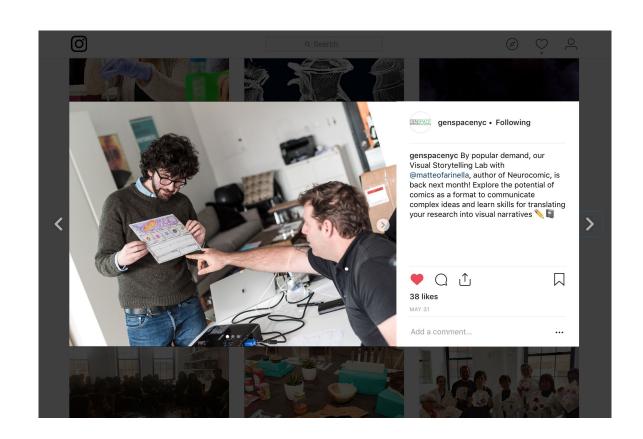


#### Target Audience

Who do we want to connect with?

Who are we connecting with well?

Who are we missing?





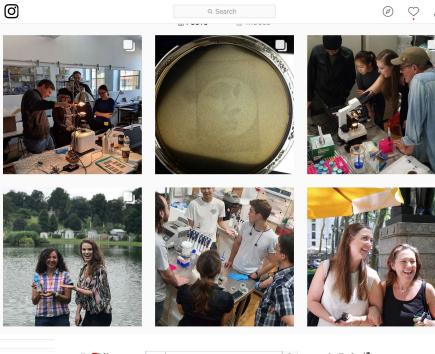
#### FIRST OPINION

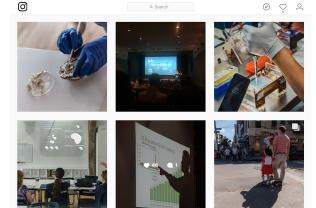
# Biohackers are about open-access to science, not DIY pandemics. Stop misrepresenting us

By DANIEL GRUSHKIN / JUNE 4, 2018













#### Social Media

#### How do we use it?

- 1. Promotional- for events and classes
- 2. News from/for our members
- 3. Storytelling + Educational
- Connecting with + supporting our broader communities in the arts and sciences
- 5. Supporting sister organizations and sharing relevant/viral content

#### **Newsletters**

#### Newsletters sent via Mailchimp

- ~20% Open Rate
- ~4K Subscibers

#### Anatomy of Mailout

- Logo
- Picture
- Summary
- Potential news or big content
- Class dates with images and summaries
- Contact Us

It's back-to-school season and we're celebrating at Genspace! Join us in the lab for one of our many classes this fall: we have a full roster of our classic introductory biohacker courses such as the <u>Biotech Crash Course</u> and <u>Genome Editing with CRISPR-cas9</u>, as well as exciting new additions including Introduction to <u>Mycology</u>, <u>Building an Internet-Connected Lab</u>, and <u>Peer Review</u>, a free monthly Journal Club.

Take a class at Genspace!



Biotech Crash Course Starting September 22

This introductory course covers the basic techniques that facilitated the biotechnology revolution, and will show you where it is headed in the near future. Learn about the fundamental characteristics of DNA and how we can take advantage of these to cut and paste DNA, making lots of copies of specific DNA sequences, or assembling new DNA sequences into a new genetic



Genome Editing with CRISPR-cas9

Starting October 9

Want to learn how to do hands-on genome editing? In this class you will learn to culture and work with Brewer's Yeast and get hands on experience with two CRISPR-Cas9 genome editing systems, one for gene deletion and another for inserting the gene for a fluorescent protein.

More info here »

#### Website

Green = Doing this now; Yellow = Sorta Doing This Now; Red = Not Doing This Now

- Education
  - Tell Story of Genspace
  - Serve as First Point of Education about Biology, The Lab, DIY Bio, and what we do
- Development
  - Solicit Donations
  - Highlight News and Announcements
  - Facilitate Newsletter Signups and Social Media Follows
- Programming
  - Sell Classes + Facilitate Signups
  - Sell Events + Facilitate Signups
- Membership
  - Sell Membership + Facilitate Applications
  - Promote Members and their work

#### **Mood Board Dreams**













## Questions?



"We're in our lab coats. Now what?"