

Fall 2017

BUGSS

A place for creative biology



BUGSS 5th Anniversary Party and Open House!

Saturday October 7th from 12-5 PM

It seems like just yesterday, but in fact it's been five years since BUGSS was established! Please join us to celebrate this milestone. We'll have tours of the lab, updates on member projects, a presentation from our high school iGEM team, lab activities for the family, and food and drinks.

Our open house is part of **Baltimore Innovation Week.**

Check out the other exciting activities:
<http://2017.baltimoreinnovationweek.com/>

Have you seen our new website???

We're delighted to have a new website at www.bugssonline.org

The new site has greater functionality and should make it easier to find information and keep up with activities at your community lab. Thanks to Ryan Hammond for designing and constructing the new site!

Sign up for Volunteer Opportunities

One new feature of our website allows you to sign up for volunteer activities online. Check out available openings and sign up –we'd be delighted to have you join in the fun activities to keep creative science flourishing in Baltimore.

Event
planner

Lab mentor

Lab tour
guide

Community
outreach

Social media

Office
assistant

Blogger

Lab
assistant

Recent Happenings

Summer 2017

Thanks to all of our recent seminar speakers!

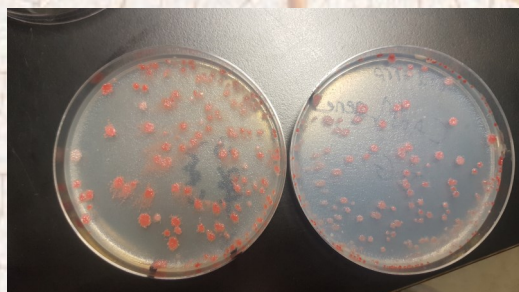
Science Communication Workshop-Learn the hook in your research! Dr. Nick Puts and Dr. David Linden, JHMI
Synthetic Biology Edit-A-Thon for Wikipedia !

"Black Fungi Getting us to Space" Dr. Radames Cordero, Johns Hopkins Bloomberg School of Public Health
"Open Mic" night at BUGSS! Tell YOUR Science Story

Missed a talk? Watch them on YouTube! <http://tinyurl.com/y9jzuw6t>

Build-a-Gene

We had a great time learning about CRISPR gene editing technology: where the system occurs in nature, how it can be used for experiments and medical therapies, and the ethics associated with this unprecedented ability to change DNA! We had great success editing yeast to survive on a toxic drug (right)



Patterson Park Public Charter School

It was a joy to have Youth Works members from the Southeast Collaborative visit with us to try their hands at agar art and purification of plasmid DNA!



iGEM Baltimore BioCrew team

The Baltimore BioCrew iGEM team has grown this year to 15 incredible young research scientists. At our Boot Camp in July, members of last years team taught their new teammates the fundamental techniques of synthetic biology. Each member became a mini-expert on an aspect of their project: using bacteria to address the problem of microplastics in our water. The team met with the Waterfront Partnership to learn about how plastics impact our local community and delivered a presentation for scientists and the general public at the Institute for Marine and Environmental Technology downtown Baltimore. **Let's wish them well as they compete at the Giant Jamboree in early November in Boston!**

Can you help send the team to the
international iGEM Jamboree
where they will present their work?

Donations can be made at:
<http://tinyurl.com/y7ujtb4r>



Upcoming Classes

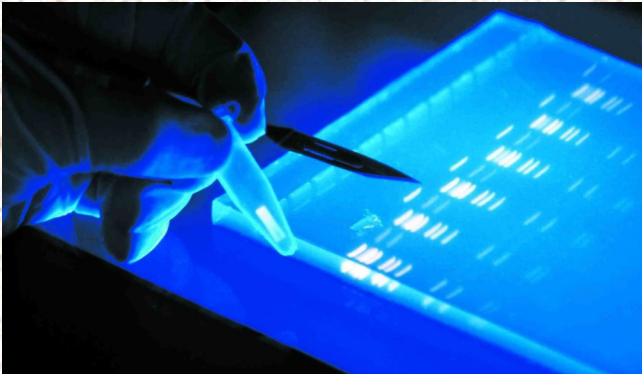
Fall 2017

Molecular Biotechnology Boot Camp

Gain the knowledge base and laboratory skills necessary to carry out a project in molecular or synthetic biology. A project-based course where you will purify genomic DNA, isolate a specific gene from that genomic DNA, clone that gene, and make the protein that gene encodes.

Sat October 21-November 18th (5 weeks)
10 AM-2 PM

\$130 for members / \$195 for community members/ \$325 for non-members



And for the first time....

Molecular Biotechnology Boot Camp for Home School Students

Our premiere course in molecular and synthetic biology geared for high school students. Online material with relevant experimental protocols and background reading will round out the course and provide participants with a solid foundation .

Tuesdays and Thursdays from 4-6PM
October 7th-November 2nd

\$130 for members / \$325 for non-members

Have you heard that scholarships are available for BUGSS courses?

Thanks to the Northrup Grumman Employees Choice Organization, partial and full scholarships are available.
Apply at: <http://tinyurl.com/y7q2x7v6>

Lab Skills Nights

Short courses to learn fundamental lab techniques.
Earn a digital badge with Credly!

Restriction Digestion

Learn how to cut the covalent bonds of DNA

Thurs Sept 14 or Sept 28 at 7 PM

Polymerase Chain Reaction and Primer Design

Amplify and isolate specific DNA sequences

Thurs Oct 12 or Oct 26 at 7 PM

Gel Electrophoresis

Separate and visualize DNA fragments
Thurs November 9 or Nov 23 at 7 PM



**Contact us for more
Information about any
upcoming events**

Email: info@bugssonline.org

**SIGN UP ON EVENTBRITE:
[HTTPS://WWW.EVENTBRITE.COM/O/
BALTIMORE-UNDER-GROUND-SCIENCE-
SPACE-4318633291](https://www.eventbrite.com/o/baltimore-under-ground-science-space-4318633291)**

Upcoming Events

Fall 2017

A Plastic World: Are microplastics choking our environment?

What can we do to stop from drowning in plastic waste? For a start, come to BUGSS to learn about microplastics: the causes, the problem, and potential solutions. **A panel discussion** with Julie Lawson, Executive Director of Trash Free Maryland, Jason Rolfe and Carlie Herring of the NOAA Marine Debris Program, and Alterra Sanchez of the University of Maryland environmental chemistry program.

Friday September 22nd at 7 PM



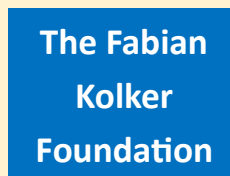
The Science of Brewing at Monument City Brewing Co.

Join us at our neighbors, Monument City Brewing at 1 N. Haven St. Visit their taproom where we'll look at various strains of beer yeast under the microscope. A perfect opportunity to bring a friend for the festivities and stop by our open house at the same time at the BUGSS lab!

Thursday September 28 from 5-8 PM



Thank you to our supporters for their generous donations!



These supporters are invaluable in helping to strengthen BUGSS, but as a community lab, **YOUR support is essential** for BUGSS to be able to continue to nurture creative and original science projects and provide cutting-edge science education directly to the general public. **Please consider a donation** to help BUGSS continue to provide the same high quality programs. Every contribution helps us bridge the gap between science and the public. **This type of science could not occur anywhere else!** www.bugssonline.org/donate

Connect with us!

www.bugssonline.org

Email: info@bugssonline.org

[@BUGSSlab](#) on Twitter, Facebook, Instagram

Visit us in the lab!

101 N. Haven St, Suite 105, Baltimore MD



Gift Certificate

Looking ahead to the holiday season? A gift certificate to a BUGSS class for your spouse, employee, niece, or inquisitive next-door neighbor makes a great gift. Help to support your local community lab while giving a unique and thoughtful gift! Contact info@bugssonline.org