BioEYES Summary 2021-2022

In September 2021, the School District of Philadelphia came back to their classrooms, some grades in-person for the first time in over a year. As teachers, students, and staff were navigating this return, we didn't have as many schools as normal signing up for BioEYES from Sept-Nov. However, teachers were ecstatic that we could do the lab in person again. By mid-winter we saw a significant ramping up of our programming and we cruised through spring completely booked. We also had the pleasure of working with some new schools and new faces, two of which are part of SDP’s Acceleration Network, which is a group of lower performing city schools that have been targeted to receive extra support and resources.

### BioEYES Totals 2021-2022

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<tr>
<td>Schools</td>
<td>34</td>
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<tr>
<td>Classroom Teachers</td>
<td>72</td>
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<tr>
<td>Students</td>
<td>3,580</td>
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With the purchase of two new Leica EZ4W microscopes, we were able to take embryo observations to the next level. These microscopes plug directly into the teacher’s smartboard, allowing the whole class to view a petri dish of zebrafish embryos on a large screen at once. Much excitement and discussion was generated by these scopes. The added feature of being wireless also allowed students to view what's under the scope on their phones, after they download the free Leica Airlab app. Several schools tried out this feature.

Replication efforts from the past year were realized this March when the lab of Dr. Florence Marlow, at Mt. Sinai in NYC, launched a BioEYES site! Penn’s BioEYES team hosted and trained Mt. Sinai’s newly hired Outreach Educator at a local west Philadelphia middle school (pictured at left). Shortly thereafter we traveled up to NYC and accompanied Mt. Sinai’s OE to her first school as she piloted the program with a middle school in Harlem. Mt. Sinai had continued success throughout the spring both with recruiting schools and implementing the program at the new schools.
We began the “Meet a Scientist” Zoom talks last year, as an enhancement to select BioEYES weeks, and continued to offer that to schools this year. They were very popular! These talks featured one or more UPenn scientists who volunteered their time to virtually meet with BioEYES classes to share with students why they got into science, how to prepare for a career in science, and what their current research entails. Students were introduced to research done with zebrafish, mice, viruses, and proteins. The 20 volunteers worked with 9 schools, 14 teachers, and saw over 900 students, for a total of 47 volunteered hours. This was a 47% increase in volunteer hours from last year and a 54% increase in number of students who were given this type of career exposure!

We would like to thank all of the volunteers listed below…

Dr. Ronen Marmorstein  Dr. Caitlyn Bowman
Stephen Carro          Zarin Tabassum
Leon Palao III        Mike Noji
Hannah Kim            Trevor Griesman
JiaBei Lin            Hana Odeh
Kyle Barrie           Kevin Mears
Fred Fregoso          Jessica Brandt
Andrew Marques        Megan Blair
Sarah Gardner         Kristen Lynch
Rachel Braun          Samantha Sustek