UC COMBO

## University of Chicago COMputational Biology Outreach

spring newsletter

We wanted to share a few updates as we wrap up a very busy and successful spring season for UC COMBO!

This spring, we brought our phylogenetics booth to the **Pritzker STEM Fair**. The activity was very well attended, with students from 3-15 engaging with the material and learning how to build the Tree of Life using both morphological characteristics and DNA sequences.
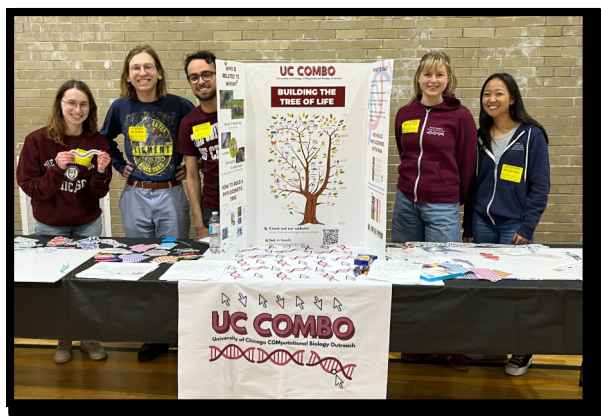
In March, we taught our new Phylogenetics workshop for the first time at **Lindblom Math and Science Academy**. Students learned phylogenetic concepts through coding tree-building algorithms, while also building foundational skills in R programming. The workshop was a great success, and we are excited to keep refining it based on this experience.

We also celebrated **National DNA Day** throughout the month of April by running workshops at several South Side schools, in collaboration with the Luca Lab and others in the HG department, who led a wet lab DNA extraction activity. Students explored the genetic code and had the opportunity to practice basic Python coding. Over the course of the month, we visited **City Elementary**, **St. Thomas the Apostle School**, and **Wadsworth STEM Elementary**, reaching **over 150 students!**

Thank you to everyone who volunteered to make these events possible!

This was one of UC COMBO's busiest seasons yet, and thanks to your help, **we reached more students across more schools than ever before**. We are so grateful for the time, energy, and enthusiasm you all brought to every event.

Upcoming Events

Looking ahead, we will be returning to the UChicago Cancer Center for our annual summer workshop on June 18. This year, we will run two separate sessions, each approximately three hours long. Please save the date if you are interested in helping out — more information will follow soon.

We're excited to introduce a new leadership position: **Teaching Chair**! This role will be all about helping our volunteers grow as educators. We envision that the Teaching Chair will lead efforts to train COMBO volunteers in teaching strategies and workshop delivery, and help to ensure our activities are as engaging and effective as possible. They'll also help us think creatively about how to share science in new and accessible ways. It's a flexible, collaborative position — and a great opportunity to build skills in leadership, communication, and pedagogy. **If this sounds like something you'd be interested in, we'd love to hear from you**!

If you are interested in taking on a leadership role, joining our Slack, or getting more involved, please feel free to reach out at uccompbio@gmail.com. We would love to have you join us as we plan for the year ahead.

We are excited to announce several leadership transitions:

🦋 **Liz Gibbons** has taken over as Director, succeeding Maggie Steiner.

🦋 **Daniel Araujo** has taken over from Jennifer Blanc as Communications Chair.

🦋 **Josh Sodicoff** has taken over from Liz Gibbons as Content Chair.

Congratulations to all, and thank you to our outgoing leaders for their dedication and hard work!

In addition, UC COMBO is now **officially a Registered Student Organization (RSO) at the University of Chicago!** This new status opens up many opportunities for growth and support, and we are excited for what's ahead.

Who are we?

We are a group of graduate students, postdocs, researchers, and professors at the University of Chicago. We are passionate about sharing our love of computational biology with Chicago area middle and high school students!

What do we do?

We run single and multi-day interactive workshops that both introduce students to foundational programming concepts through real-world biological problems and expose them to careers in the biomedical sciences. Our workshops feature short lectures on computational biology, guided and project-based coding sessions where students work through interactive workbooks, and talks by a diverse scientists at UChicago about their research and path to becoming a scientist. We have workshops designed for both middle and high school students and can customize to fit the needs of potential partners.

What's our mission?

As the scale of data grows, computational skills are increasingly important in all areas of biological sciences. However, coding and computational science often appear "scary" and unapproachable to students and it's often difficult to know where to start! Our mission is two-fold. First, we aim to demystify coding by providing guided workbooks that require no pre-installation and focus on real-world problems in biology rather than syntax and rote memorization. Second, we hope to inspire the next generation of diverse scientists by exposing students to a wide-array of career paths in computational biology and demonstrating the importance of computational skills across disciplines.