



# HOW CALIFORNIA UNIVERSITY INCREASED PRODUCTIVITY WITH PROTOCOLS IO

A protocols.io Institutional Plan increases productivity, facilitates teaching, improves collaboration and recordkeeping, and accelerates progress across most research disciplines.

University of California (UC) is a system of public research universities in the US routinely ranked among the world's best. Founded in 1869, UC has established a reputation for pioneering research, innovation, and discovery.

UC signed up for a three-year institutional plan of protocols.io in June 2019. protocols.io is an online platform for developing and sharing research methods; its versatility ensures that it is an ideal tool for researchers in all disciplines that use a step-by-step methodology, from life sciences, engineering, chemistry, physics, data science, computer science, all the way through to the social sciences. And as an online platform that can be accessed by many users simultaneously, protocols.io is also an incredibly powerful and adaptable teaching resource.





## **SPRINGER NATURE**

### protocols.io/welcome-springernature

Signing up to protocols.io provides all researchers with a means to record all of the details of methods they devise or adjust. And for teachers, protocols.io provides a means to place a method online for all students to follow, either for a practical or theoretical lesson. Equally, students can be tasked with submitting their approach on the platform for evaluation. Ultimately, protocols.io provides a solution to some of the many challenges faced by universities today: to ensure reproducibility, open science, and to support researchers and teachers with adaptable tools.

#### For researchers:

Research teams collaborate with each other by creating or joining a group on protocols. io, where they develop and share methods, run through an approach, document and discuss results, track and manage tasks. Optimized methods and tweaks to methods that occur during the research process are recorded as they are developed. The protocols.io private collaborative workspace permits researchers to improve and implement those methods together in real-time. Having captured methods digitally online, this also facilitates the publication process as the method can then be made public, receive a DOI, and linked to from any resulting formal publications.

#### For teaching staff:

protocols.io is a very convenient didactic tool for use in class. Instructors create and share class materials and protocols with students. Whatever the topic being presented, teachers can share class materials with specific groups and/or users (teachers can also store their class plans on the platform). protocols.io helps teachers to share the materials in a clear, detailed, complete, step-by-step format complete with specific notes and references as and when relevant. Equally, protocols.io serves as a location where students can learn how to capture and record the details of whatever approach is being taught.

# Adoption of protocols.io for internal organization and tracking of methods

subsequently leads to better presentation, reporting, and optimally to more reproducible publications. And commenting and discussion functionality supports one-to-one or one-to-many interactions for researchers and teachers alike to engage and provide constructive feedback. We use protocols.io to share full protocols from our research with other scientists. We appreciate being able to share full protocols beyond abbreviated methods sections. The versioning of protocols is especially powerful so that we can identify the exact version of a protocol used in an experiment, which increases reproducibility.

Dr. Stephen Floor Assistant Professor University of California, San Franciso

Our Premium account enables an unlimited number of individuals and groups to use the platform for private methods. At UCSF, we saw the number of users double and the number of private protocols almost triple in the first seven months of our membership. We anticipate that this use will translate into more rigorous and reproducible research methods used by UC researchers.

Anneliese Taylor Head of Scholarly Communication, University of California San Franciso Library

### About protocols.io

A new and exciting addition to the Springer Nature portfolio: protocols.io empowers you to organize protocols, collaborate seamlessly, and get credit and recognition for method development.

#### Benefits:

- Support Collaboration
- Increase Discoverability
- Reproducibility
- Enable Reuse
- Credit & Recognition for Method Development
- Versioning
- Improved Materials & Methods
- Stewardship of Research Output
- Detailed Method Documentation & Preservation

A protocols.io Institutional Plan increases productivity, facilitates teaching, improves collaboration and recordkeeping, accelerates progress across most research disciplines, and fosters a culture of transparency and accountability.

For more information visit: protocols.io/welcome-springernature