## Johns Hopkins University Open Source Programs Office (OSPO) 2022 Annual Report

Throughout 2022 the Open Source Programs Office (OSPO) at Johns Hopkins University continued its support for the research, teaching, and collaboration aims of the university by participating in and providing resources to the open source software, projects, and communities at JHU and beyond. Specifically, the OSPO:

- Supported the ongoing development of the Public Access Submission System (PASS) software application and took steps toward building an open source community to sustain the project. The first of two major project initiatives completed in 2022 was to establish PASS as an Eclipse Foundation open source project. The Eclipse Foundation is a worldwide non-profit organization known for management of the Eclipse platform as well as many other open source communities. Transitioning to the Eclipse Foundation provided PASS with access to expertise in engineering, community management, and organizational governance. These resources will allow the project to collaborate more effectively with agencies and institutions utilizing a well-established working group model. The second major initiative was a significant upgrade to the underlying server components of the PASS architecture. These changes established a well-defined API (Application Programming Interface), simplified the deployment model, and consolidated application components to simplify system management. These two major initiatives together set the stage for PASS to both expand its user community and collaborate more effectively with institutions seeking to solve similar problems. In the Fall of 2022, the Eclipse PASS project team presented at the Coalition for Networked Information (CNI) Member Meeting. This presentation included a demonstration of the application's current capabilities, an overview of recent work and planned roadmap, as well as a discussion of PASS's suitability to assist with recently released federal guidance.
- Supported the "Semesters of Code" undergraduate course during the Fall 2022 semester by mentoring 4 students as they participated in the open source Public Access Submission System (PASS) project. As in prior years, this course was taught by Stephen Walli, an executive at Microsoft, with a major focus on software engineering in the context of open source projects. Students mentored were participating in the course from both Johns Hopkins University and the University of Galway in Ireland.
- Formalized JHU's relationship with GitHub (which is owned by Microsoft) by collaborating with the Whiting School of Engineering to become a member of GitHub's Campus program. Being part of GitHub Campus provides enterprise-level management and administration of GitHub organizations, repositories, and users. This arrangement also provides GitHub Education benefits, such as the use of GitHub Codespaces, to JHU faculty, staff, and students. Participation in the GitHub Campus program also provides an annual savings of \$50,000.
- Continued to provide operational support to open source projects across Johns Hopkins as they utilize GitHub tools.

- Began conversations with GitLab (a competitor to GitHub) to provide open source projects at JHU with access to GitLab resources through the GitLab for Education program. Negotiations are still under way, but GitLab has already made adjustments to the program's terms of service at the OSPO's request, which suggests a willingness to collaborate.
- Provided references and introductions to open source community practitioners and experts for the Observational Health Data Sciences and Informatics (OHDSI) community led by Paul Nagy at the Johns Hopkins School of Medicine. These experts provided guidance in open source community development and governance.
- Facilitated discussions and provided guidance on topics such as open source licensing, community development, and technology transfer for a new open source project created by Advanced Research Computing at Hopkins (ARCH). The project, mProv (Multi Provisioner), supports large scale inventory management and provisioning of compute nodes in a high-performance compute environment.
- Continued collaboration with the OSPO++ network of university OSPOs by participating in discussions such as how OSPOs function in an academic environment, how open source is taught in universities, and open source security.

In the summer of 2022, the founder of the JHU OSPO, Sayeed Choudhury, left JHU to begin a new role building the Open Source Programs Office at Carnegie Mellon University. Prior to leaving JHU, Choudhury hired Bill Branan as the Senior Manager of the Digital Research and Curation Center, which includes the OSPO. The continued work of the OSPO described above, despite the disruption inherent in this transition, demonstrates the resiliency of this office and the staff in the Sheridan Libraries that support it. The year ended on a positive note with the approval of a new full-time Program Manager position for the OSPO. This new role will significantly increase the capacity of the JHU OSPO to collaborate with those involved in open source at JHU, nationally, and globally.

The number of OSPOs at US academic institutions grew to six in 2022, up from three in 2021. All of these were started with funding from the Alfred P. Sloan Foundation. In January of 2023, a new call for letters of inquiry was released by Sloan to provide funding of up to \$750,000 per institution interested in creating and sustaining an OSPO. This is likely to continue the trend of OSPO proliferation. JHU is well positioned to benefit from the continued interest and funding as the OSPO ecosystem grows.