# CHCRUS

ANNUAL REPORT 2021

# MESSAGE FROM THE EXECUTIVE DIRECTOR

Greetings to CHORUS Members, Partners, and Friends,

As an organization, CHORUS is dedicated to making open research work for a diverse group of stakeholders across the scientific and scholarly research ecosystem. This ongoing effort is undertaken by focusing on four key areas of community advancement:

- Increasing Open Access Compliance
- Connecting Stakeholder Communities
- Improving Publications Metadata
- Developing Data Metrics

CHORUS and its partners accomplished much relating to these core efforts in 2021, including:

- Adding 782,968 new publication records to the CHORUS tracked index, an increase of 20% compared to prior year's figure.
- Partnering in the Show US the Data summit, an initiative organized by CHORUS and the Coleridge Initiative to source the best machine learning solutions for discovering trends in the research use of publicly funded datasets.
- Convening a series of successful forums with cross-industry stakeholders to increase awareness, engage dialogue, identify shared concerns and opportunities, and promote industry collaboration that will advance metadata infrastructure needs.

We invite you to explore the many other ongoing and completed projects in the pages that follow. CHORUS continues its mission to enable, support, and improve the infrastructure of open research for the benefit of society. In this spirit, we thank CHORUS members and partners for their ongoing collaborative support and look forward to the new partnerships and initiatives ahead.

Stay safe and stay in touch!

Howard Ratner Executive Director, CHORUS

# OUR MISSION

CHORUS is creating a future where the output from funded research is easily and permanently discoverable, accessible, and verifiable by anyone in the world. By providing the necessary metadata infrastructure and governance to enable a smooth, low-friction interface between funders, authors, institutions, and publishers in a distributed network environment, CHORUS can minimize open and public access compliance burdens while increasing access to literature and data in support of funder mandates worldwide.

# MAKING OPEN RESEARCH WORK

CHORUS connects funders, publishers, institutions, and the public from across the open research ecosystem to share knowledge, develop solutions, advance innovation, and support collective efforts.

#### WHAT WE DO

- Provide trusted information about the outputs of funded research
- Help funders, institutions, publishers, and the public see, find, and understand the status of the outputs of funded research
- Identify research outputs that are easily and permanently discoverable and accessible by anyone in the world
- Minimize compliance burdens for researchers, institutions, funders, and publishers
- Deliver optimized search and dashboard services for monitoring and compliance

#### **OPEN RESEARCH PRINCIPLES**

Open research is concerned with making scientific research more transparent, more collaborative, and more efficient — the same goals that led to the creation of CHORUS nine years ago. In 2021, CHORUS developed the following set of open research principles that we are asking our members and other organizations to sign on to.

- 1. We believe in sustainable Open Access practices and workflows.
- 2. We believe that it should be easy for researchers to understand how publishing in our publications will support them in complying with funder OA mandates.
- 3. We believe users should be directed to the best version of an article available to them, ideally the Version of Record on the publisher site, where they may find essential context, tools, and information.
- 4. We believe all parties should be able to track funded research literature with minimal administrative overheads.
- 5. We believe data associated with research, as well as methods and code, should comply with relevant FAIR principles, taking into account differences between fields and categories of research objects.

# 2021 ACHIEVEMENTS

#### Scaling OA Compliance

- Increased the number of DOIs identified as publicly accessible on publisher sites by enhancing our auditing services to include GetFTR and Unpaywall results
- Developed a set of guiding principles in support of open research through our society engagement program
- Negotiated terms for a funder participation agreement with NASA in December

#### **Developing Data Metrics**

• Launched the *Show Us the Data* initiative in conjunction with the Coleridge Initiative by conducting workshops and coordinating and moderating the October 2021 Summit with over 500 registrants

Connect Stakeholders Make Open Research Work Develop Data Metrics Improve Metadata Quality

CHORUS 2021 Goals

- Worked with the American Geophysical Union (AGU) on phase 1 of a two-year National Science Foundation (NSF) grant designed to further open data citation best practices, and to ensure that NSF earth science data is publicly accessible, linked to publications and grants, and credited
- Created the Software Citation Index working with AGU and Force 11

#### Improving Metadata Quality

- Analyzed and identified gaps in metadata coverage for member publishers, the Japan Science & Technology Agency (JST), Smithsonian Institution, United States Agency for International Development (USAID), and National Institute of Standards and Technology (NIST)
- Monitored and promoted the CHORUS Data Availability Policies Index
- Developed plans to include Research Organization Registries (RoRs) within the CHORUS system to help our institutional subscribers, funder partners, and publisher members identify research institutions

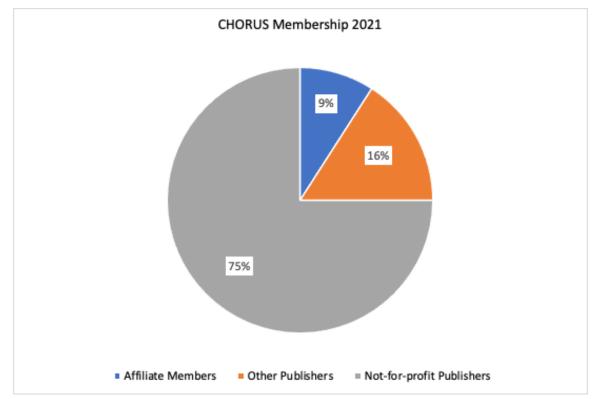
#### Connecting Stakeholders

- Convened successful forums with cross-industry stakeholders to increase awareness, engage dialogue, identify shared concerns and opportunities, and promote industry collaboration to advance data infrastructure needs
- Conducted workshops on full-text harvesting for Japanese institutions in collaboration with the Japan Science and Technology Agency and the Coleridge Initiative
- Our CHORUS working groups continue to meet regularly with stakeholders.
- Fostered an excellent working relationship with DataCite via our Memorandum of Understanding (MOU)
- Signed MOU with ChemRxiv to advance discoverability of preprints associated with funded research
- Engaged with our community through presentations by both staff and the CHORUS Academic Working Group to help them understand compliance and metadata issues related to funded research

# CHORUS COMMUNITY

#### **Membership**

CHORUS membership is composed of publishers, industry organizations and vendors that support the publishing enterprise. Our publisher members are diverse, representing scientific societies, commercial publishers and academic presses. They are both large and small, offering both open access and subscription models, and the majority are nonprofits.



#### **Funding Agencies**

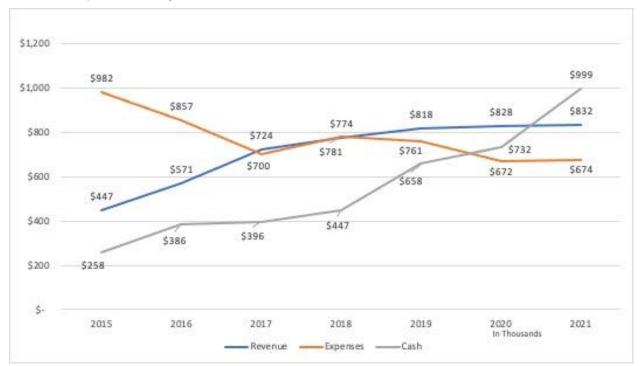
CHORUS now provides comprehensive data and tracking information on the published research of 11 funding agencies. CHORUS publisher members have an obligation to identify articles reporting on funded research from these agencies and are obligated to make either accepted manuscripts or version of records of these identified articles open after an embargo period or immediately according to their license terms.

#### Institutional Subscribers

Eleven Academic and Research Institutions in the US and Japan subscribed to the CHORUS Institution Dashboard service in 2021 to help them track faculty output and open access compliance for content and datasets reporting on funded research.

## FINANCIAL OVERVIEW

The majority of CHORUS' revenue comes from membership. Additional contributions from our institutional and agency dashboard services, forum sponsorships, and grant awards help to diversify revenue streams.



# CHORUS BOARD OF DIRECTORS, DECEMBER 2021

Alix Vance, AIP Publishing (Chair) Robert Harington, American Mathematical Society (Secretary) John Ochs, American Chemical Society (Treasurer) Howard Ratner, CHORUS (Ex-Officio) Nick Campbell, Springer Nature Mark Doyle, American Physical Society Ann Gabriel, Elsevier Jonathan Glover, Wiley Joshua Horowitz, Association for Computing Machinery Michael Levine-Clark, University of Denver Dawn Melley, Institute of Electrical and Electronics Engineers Jenny Peng, Oxford University Press Judy Russell, University of Florida, Gainesville Will Schweitzer, Silverchair Science + Communications Christopher Straub, GeoScienceWorld Diane Sullenberger, Proceedings of the National Academy of Sciences

## CHORUS STAFF

Howard Ratner, Executive Director Tara Packer, Program Management Mark Robertson, Asia-Pacific Development

### Contact Us

CHORUS (CHOR, Inc.) 72 Dreyer Avenue Staten Island, New York 10314 USA

<u>info@chorusaccess.org</u>

Learn more at <u>www.chorusaccess.org</u>