Engaging Science, Technology, and Society (ESTS) Journal Application to
LYRASIS Open Access Community Investment Program (OACIP)

"Elevator Pitch"

Engaging Science, Technology, and Society (ESTS) is a peer-reviewed, diamond open access (OA) journal of the Society for the Social Studies of Science (4S). Recognizing a need for a Science and Technology Studies (STS) journal that is open, to both a broad readership and authors engaged in the production of knowledge about science and technology in their social contexts, 4S established *ESTS* in 2015. Today, the journal is known as a venue for cultivating, evaluating, and sharing cutting-edge research in the social studies of science, technology, and medicine in transnational contexts. *ESTS* publishes peer reviewed research articles, thematic collections, and a wide variety of short-form writing aimed at engaging both scholarly as well as broader audiences. An ethos of experimentation and engagement with diverse topics and audiences sets the journal apart in the field.

As a society-run, diamond OA journal *ESTS* is uniquely positioned as a venue for community building. This ethic of community growth characterizes all aspects of the journal: from editorial practices to infrastructural development, and from content publication to the broader initiatives that it undertakes. In a context where the role of scholarly journals is increasingly instrumentalized through corporate-led valuation systems, the journal's editorship sees community-building as an especially important value to affirm. It also views *ESTS* as contributing to growing awareness amongst 4S members and next-generation leaders on the importance, opportunities, and challenges of OA scholarly-led publishing and supporting infrastructure.

All editorial support for *ESTS* (from initial screening and peer-review management, to copyediting, production, and promotion of journal content) is provided by an editorial collective (EC), led by an Editor-in-Chief with support from an active editorial board, a half-time managing director and two quarter-time editorial assistants. At present, the journal is fully funded by the 4S, whose revenue is generated through its annual conference and professional membership dues.

Through the OACIP, *ESTS* seeks support to enhance its infrastructural contributions to open access publishing and data sharing, and its abilities to editorially support its increasingly diverse community of authors, reviewers, and readers. Incoming contributions will be used to cover approximately half of the journal's annual operating costs, develop an operating reserve, and the costs for administering the OACIP program. This is $40,000 per year or $200,000 for the five-year term of this fundraising cycle.

Resource Overview

1. Description and mission of resource

Engaging Science, Technology, and Society (ESTS), published by the Society for Social Studies of Science (4S), is a vibrant, fully open access (OA) journal for cultivating, evaluating, and sharing cutting-edge research in the social studies of science, technology, and medicine in transnational contexts. Established in 2015, *ESTS* publishes peer-reviewed research articles, thematic collections, and a wide variety of short-form writing aimed at engaging both scholarly as well as broader audiences.

Starting with Volume 7 (2021), *ESTS* came under the editorship of a new transnational editorial collective (EC). Under this collective, *ESTS* continues to publish work that represents the full range of STS scholarship. The EC is also making concerted efforts toward:

Strengthening Transnational STS: STS journals published in English have largely accompanied the emergence and consolidation of the field in the United States and Western Europe. However, the world of STS is much more diverse and globally distributed. *ESTS* reflects this diversity through its transnationally organized editorial collective and editorial board. It also seeks to actively engage with authors and reviewers from different geographical regions and intellectual traditions. We encourage contributors to identify issues that are experienced and dealt with in different ways in various localities, and foster comparisons across borders. In doing so, we hope to enrich the dialogue between established and emerging intellectual currents in STS, and extend the journal's audiences and impact in transnational contexts.

Deepening Open Access (OA): OA facilitates democratic access to knowledge, a value we cherish. We want to extend *ESTS*'s OA infrastructure, by making it a space for experimentation (through e.g. data sharing, open peer review, and collaborative writing), in order to explore the full potential of OA scholarship. Our digital repositories, with transparent governance mechanisms, call scholars to experiment with data sharing, re-use, and reinterpretation, as well as to publish a set of non-conventional scholarly outputs, such as short-form writing, multimedia content, and pedagogical repositories.

Building STS Communities and Audiences: ESTS wants to convene a diversity of STS traditions and practitioners from across the globe to ensure STS vitality and relevance. *ESTS* is not only a venue for intellectual exchange but also a place for *engaged* STS.

Cultivating Scholarship on STS Pedagogies: ESTS is committed to promoting scholarship on STS pedagogies. Recognizing teaching as a form of scholarship, we seek to make visible the work of STS scholars in translating STS theories toward education in and outside of the classroom and building STS curricula and programs in a variety of institutional contexts.

2. Publishing history

ESTS has been fully digital and OA since it was established in 2015. From 2015-20 (volumes 1 to 6), the journal followed a model of continuous publication in one annual volume. Starting 2021, the journal is following an issue-based model of

publication. Volume 7 (2021) comprised two issues. Starting with Volume 8 (2022), the journal intends to publish three annual issues. Issues 8.1 and 8.2 were published in June and September 2022 respectively, with preparations underway to publish Issue 8.3 in December 2022.

ESTS has sought to support diverse forms of publication since its inception. Volumes 1-6 offered the possibility of publishing across seven different categories of long-form and short-form writing, publishing not only research articles, but also aiming to foster a wide range of publications that could reflect on the scholarly field of STS as well as make the field relevant to broader audiences. Starting with Volume 7, these categories have been streamlined into three: *Original Research Articles* (long-form research-based manuscripts), *Engagements* (experimental genre encouraging reflections on the field of STS in a variety of formats), and *Perspectives* (short essays that crisply synthesize STS scholarship of relevance to particular societal issues). *ESTS* also publishes *Thematic Collections* that can include contributions on shared thematics across genres. The journal has also experimented with publishing audio content, featuring an interview with Professor Sharon Traweek in the form of its original audio recording as well as an abridged transcript in Issue 7.2 (December 2021). Efforts to publish diverse forms of research data (text, audio, video) are currently underway, and the first of such efforts have been published as part of issue 8.2. Publications in volumes 1-6 have been in PDF format only; starting with volume 7, *ESTS* began publishing in HTML and PDF formats.

3. Peer review process

All content in *ESTS* undergoes peer review. *Original Research Articles* undergo double-blind peer review; *Engagements* submissions undergo single-blind peer review; *Perspectives* submissions are editorially reviewed, occasionally drawing in members of the journal's editorial board into the review process. If it is not possible to maintain a double-blind review process, *Original Research Articles* may be subjected to a single-blind review process. *ESTS* is also committed to experimenting with different forms of scholarly publication. This may involve having to innovate new forms of peer review as well. As and when such situations arise, the journal's editorial team will work with the authors to identify appropriate forms of review for their submissions.

4. Snapshot of resource and society/publisher finances and governance

ESTS publishing policies have been developed in alignment with guidance provided by the Committee on Publication Ethics (COPE). Journal policies, including those about decision making, publishing ethics, open access, and privacy, are reviewed and updated annually and clearly documented on the *ESTS* website. *ESTS* editor/s are appointed by and report to 4S's Publications Committee, and submit an annual report to the 4S Council (via the Publications Committee) prior to the society's (4S) annual conference.

Currently, the journal is fully funded by 4S. Annual costs incurred by the journal pay for a half-time managing editor, an honorarium for the EC, and the journal's infrastructure (web-hosting, content management system (OJS), communication platforms to support coordination within the editorial team). Annual costs for the journal for 2021 were about $55,000. An additional sum of $20,000 was approved by 4S Council for 2022 to hire two quarter-time editorial assistants to support journal activities.

4S is registered in the United States as a 501(c)(3) non-profit organization, and has been tax exempt since 1991. *ESTS* is funded through the society's main income stream, which include annual membership dues and registration fees for its annual conference. Conferences are located virtually and in-person all over the world and range from 1-3k people per annum. 4S advances and supports scholarship primarily through its two peer-reviewed journals (*Engaging Science, Technology, and Society (ESTS)* and *Science, Technology & Human Values (ST&HV)*) and handbook, an active blog (42 posts in the last year), an online community (@4sWeb with over 8,000 followers), and an annual conference. 4S also supports and reviews the development of reports and resolutions relevant to academics and the broader society, and gives several annual prizes for exemplary STS contributions in various formats (i.e. book, journal articles and other contributions that lie outside the usual academic publication formats).

4S produces and distributes to its members a monthly newsletter – Technoscience – that lists announcements, job opportunities, conferences and other items of interest to the STS community, and has a Twitter channel (@4sWeb) as another social media channel for news and announcements, which also distributes the social media news from the *ESTS* twitter channel (@estsjournal). 4S maintains a website (www.4sonline.org) that lists information and other resources relevant to STS.

The society is governed by a Charter developed and ratified in 1975. The Charter is updated as necessary with the endorsement of a majority of the voting membership. The following guidelines and policies are posted on the 4S website: Conflict of Interest Guidelines for Prize Committees (2021), 4S Events Ethics Policy (2019), Immigration Policy and Scholarly Work (2003). The society is governed by a twelve-person Council and a President who is elected for a two-year term. The council is assisted by an elected Secretary and Treasurer, and an appointed Managing Director. 4S supports a graduate student section for science & technology studies (Society for Social Studies of Science Student Section–6S) and includes three student representatives (two with voting privileges) on its governing council.

5. Current business model of resource

ESTS has followed a diamond OA model of publication since its inception. All *ESTS* content is available freely on the journal's website upon publication and authors do not have to pay any Author Publication Charges (APCs) in order to publish with the journal. The journal is fully funded by the 4S.

6. Summary of funding request

Through the OACIP, *ESTS* seeks support to enhance its infrastructural contributions to open access publishing and data sharing, and its abilities to editorially support its increasingly diverse community of authors, reviewers, and readers. Incoming contributions will be used to cover approximately half of the journal's annual operating costs, develop an operating reserve, and the costs for administering the OACIP program. This is $40,000 per year or $200,000 for the five-year term of this fundraising cycle. We imagine soliciting five-year commitments for annual contributions ranging from $250 – $1,000+.

7. **Reasons for seeking funding for transition to OA or continued support for OA publication**

ESTS is a diamond OA journal, fully financially supported by the 4S. It has become an important service that 4S offers to its membership, and increasingly, as a free and open publication, to the broader community of STS scholars around the world. As our readership has expanded, we aspire to secure diverse support for the journal so that we can improve our editorial capacity, offer new kinds of content to our readers, better support our authors, reviewers, and readers, and contribute to the development of open access scholarly publishing infrastructure.

We seek funding to build a strong financial foundation upon which to further develop the community and technological infrastructure of the journal, devote resources to initiatives for exploring and expanding the possibilities of scholarly publication and Open Data in the social sciences, and support the development and publication of scholarship by and for a more diverse array of authors.

Impact

8. **Disciplinary impact**

In 2016 *ESTS* added DOIs, indexing with DOAJ, and CrossRef and Google Scholar as referral pathways, then ESCi in 2018. *ESTS* is also indexed in some national journal indexes, such as the UGC Care list in India, which enable authors to receive academic recognition in their local institutional contexts.

Infrastructure work between 2021–22 has focused on the website's ranking and visibility, security, and accessibility. As a consequence of the infrastructuring, it is no surprise to note that Volume 7.1 has the highest Google ratings of the journal since 2015, logging traffic of 4k users in October 2021. The all new (GDPR compliant) newsletter has click-through rates that are higher than average in several sectors (i.e. science, computing, media, and pedagogy) through Mailchimp's ratings. These are all measures that enable *ESTS* to gain clickable rates, a critical step prior to and essential for applying for further indexes in the future (like IDSS, EBSCO and WoS). The EC intends to investigate the question of indexing extending further in 2022, recognizing that this is a key requirement for scholars in the Global South to publish in *ESTS*.

According to data from lens.org, 197 articles published in *ESTS* between 2015 and 2021 have collectively been cited in scholarly journals 1,269 times.

9. **Diversity, equity, and inclusion impact**

The new editorship has been developing a transnational strategy which is just beginning to show early impacts in relation to publication data. Under the new editorship, Volume 7 is more diverse (i.e. transnational) in representation of lead authors than the previous volume showing a reversal of trends seen in Volume 6 and the implementation of the transnational strategy of the editorial collective from the get-go (see figures 1 and 2). Volume 6 had 22 lead authors from 7 countries with 41 items (CA, DE, GB, FR, IN, KR, US) whereas Volume 7 had lead authors from 10 countries with 22 items (AU, CH, DE, DK, EC, JP, IN, NO, UK, US). When looking at Volume 7's co-authorship there are 52 authors in total from additional countries: TK, BR, and NZ. Since 2021 the journal now tracks co-author data to gain a better understanding of authorship patterns in *ESTS*.

Volume 7 Genres	Engagements	Perspectives	Editorials	Research Articles	Total
Australia	1	-	-	-	1
Denmark	1	-	-	-	1
Ecuador	2	-	-	-	2
Germany	1	-	-	1	2
India	-	1	2	-	3
Japan	1	-	-	-	1
Norway	1	-	-	-	1
Switzerland	-	-	-	1	1
United Kingdom	-	-	-	1	1
United States	6	-	-	3	9
Total	13	1	2	6	22

Figure 1. Volume 7—publication of genres by country of lead authorship (Source estsjournal.org, 2021).
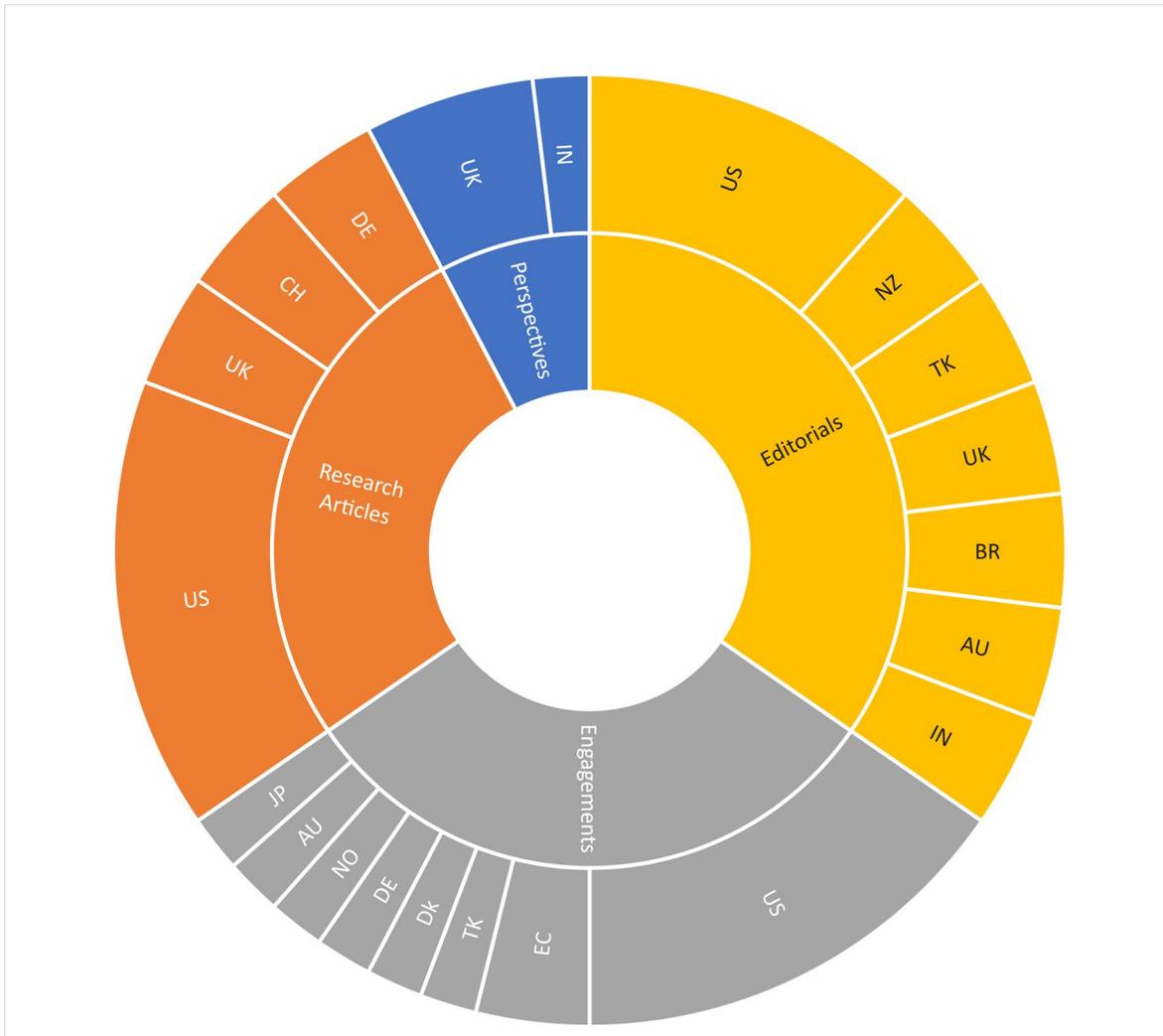
Figure 2. Data for Volume 7—publication of genres by country for ALL authorship (Source estsjournal.org, 2021).

Volume 6 Genres	United States	Canada	Great Britain	Germany	France	India	Korea	Total
Critical Engagements	3	2	1	1	-	-	-	7
Considering Concepts	3	-	-	-	-	-	-	3
Thematic Collections	14	1	-	-	-	-	-	15
Research Articles	8	1	1	1	1	-	1	13
Editorials	2	-	-	-	-	-	-	2
Total	30	4	1	2	1	1	1	40

Figure 3. Volume 6—publication of genres by country of lead authorship (Source *ESTS*'s OJS system, 2020).
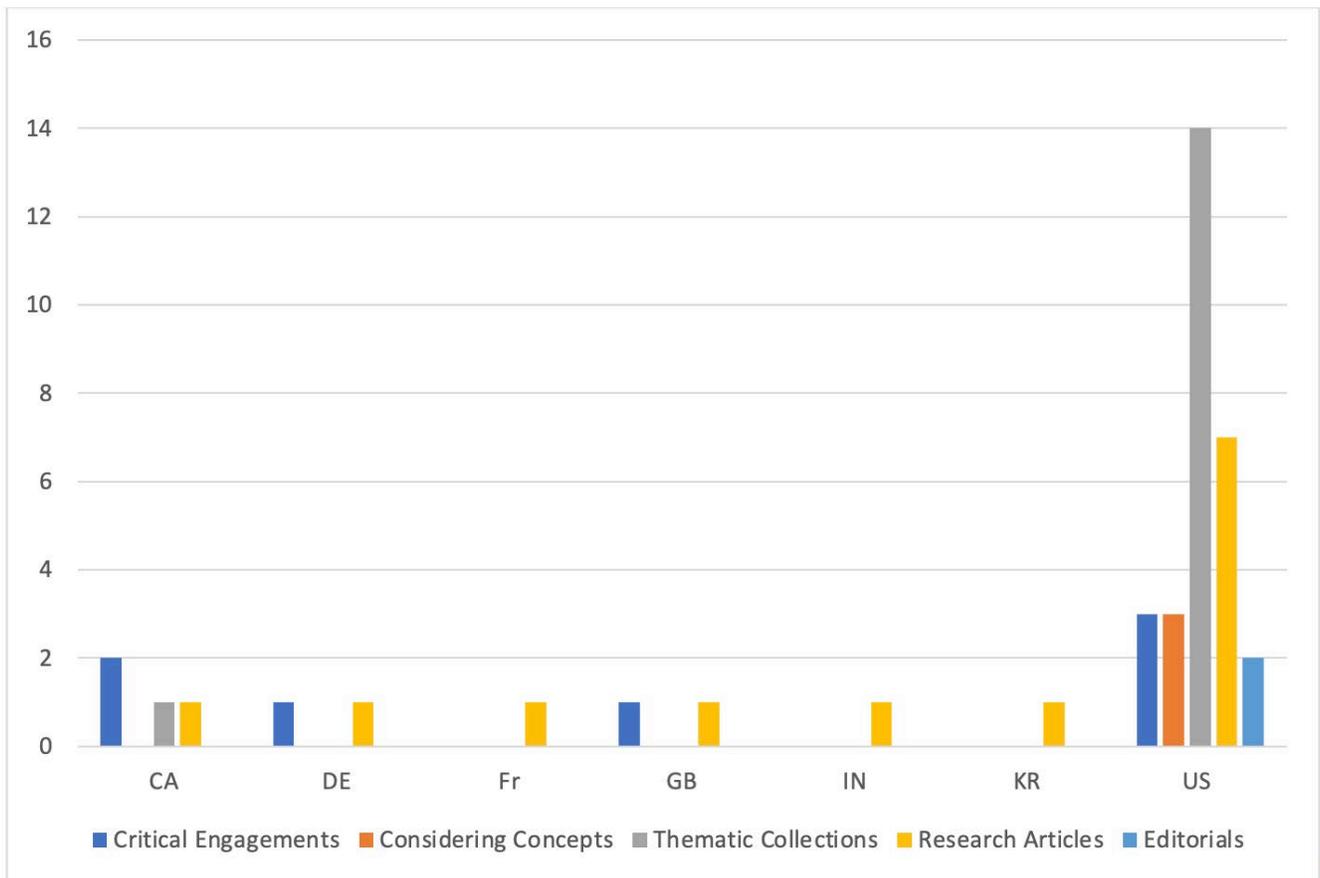
Figure 4. Data for Volume 6—publication of genres by country of lead authorship (Source *ESTS*'s OJS system, 2020).

The editorship has created opportunities for early-career scholars and the advancement of scholarship within and beyond the university setting, i.e. scholars publishing in Volume 7 wrote from beyond the university settings, from national science centres, or working as diversity consultants for academic institutions.

The editorship is also beginning to conceptualize and develop a transnational reviewer database that will help expand the journal community.

The editorship itself is also highly diversified. The editorial team of the journals includes members from Argentina, Australia, Brazil, India, the Netherlands, New Zealand, Turkey, the United Kingdom, and the United States. The journal's editorial board is even more diverse, it presently includes 31 globally distributed scholars across various career stages.

The website had an entire overhaul of its user-experience and a redesign that is content first, fully responsive and accessible to create fairer access of content and resources.

The labor it takes to publish the journal is now measured and can enable the journal to estimate its annual output by issue modeling. This process helps gain insights into making this process for authors more equitable in terms of fairly distributing labor costs at a range of academic career levels (see issue modeling figures in the editorial for issue 7.2).

10. Indicators of faculty impact or student success

ESTS has published award winning authors, with a 2020 paper by Daniel Cumming winning the Nicholas C. Mullins Prize awarded by the 4S for "exemplary graduate student scholarship" in STS.

The journal has begun an editorial training programme with two editorial assistants hired in June 2022 (to work remotely from Amsterdam and Buenos Aires) with the aim of cultivating future editorial capacity in the field. Discussions to further develop professionalization opportunities for graduate students to work with *ESTS* are currently underway.

As Figure 6 depicts, the journal tracks its authorship in terms of their career level and institutional locations, aiming to understand different ways in which the editorial team might better support *ESTS* authors as we continue to further diversify.

Volume 7	Lead-Author	All Authors
Student (other)	0	2
PhD Candidate	1	5
Postdoc Fellow / Researcher	2	4
Assistant Professor	4	11
Associate Professor	1	6
Professor other	10	14
Other / Independent	4	10
Total	22	52

Figure 5. Lead–author and all author data across career categories. (Source estsjournal.org).
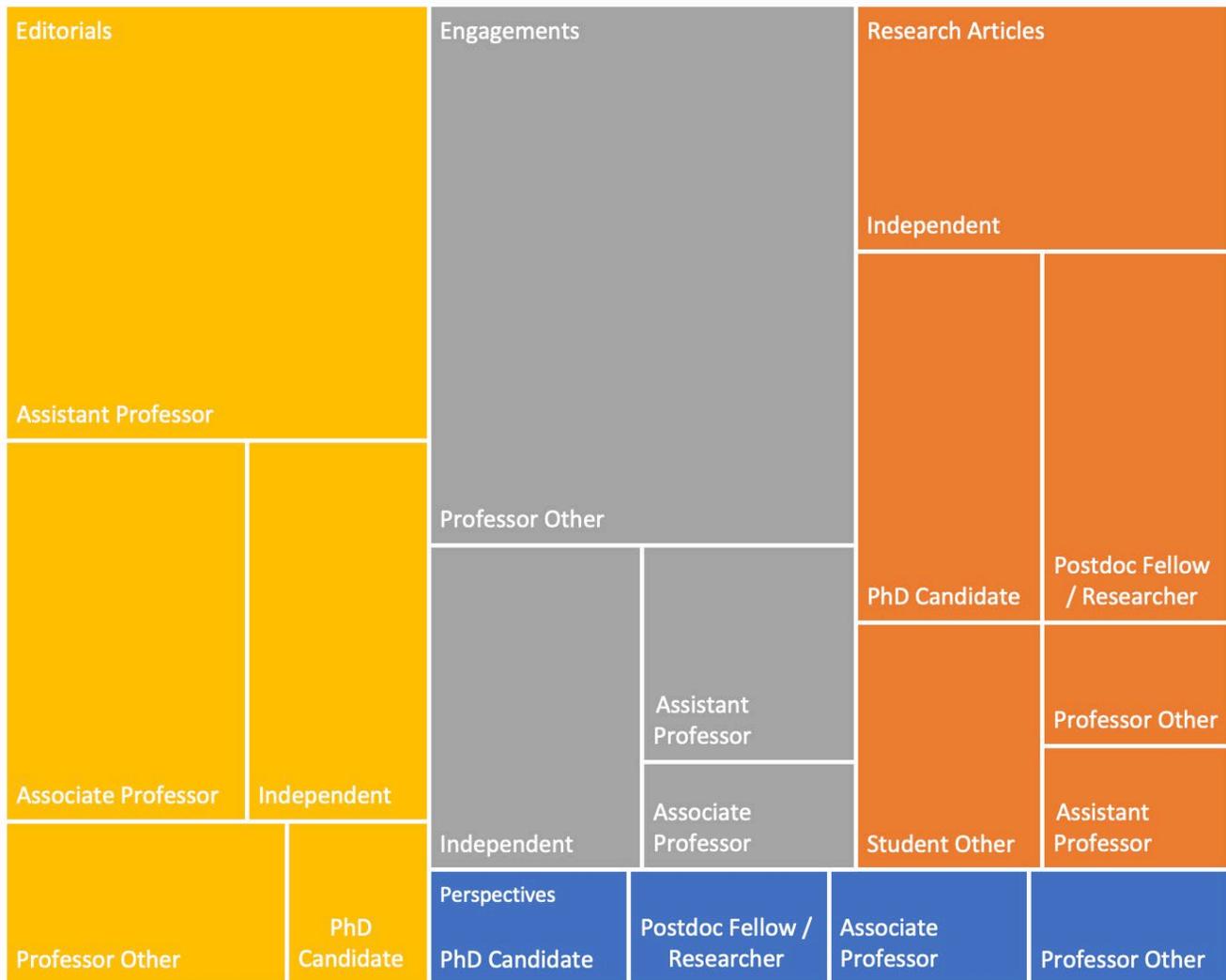
Figure 6. Volume 7 – publication of genres by ALL author's employment (Source *ESTS*'s OJS system). The "Student Other" category includes one undergrad and one master's level student.
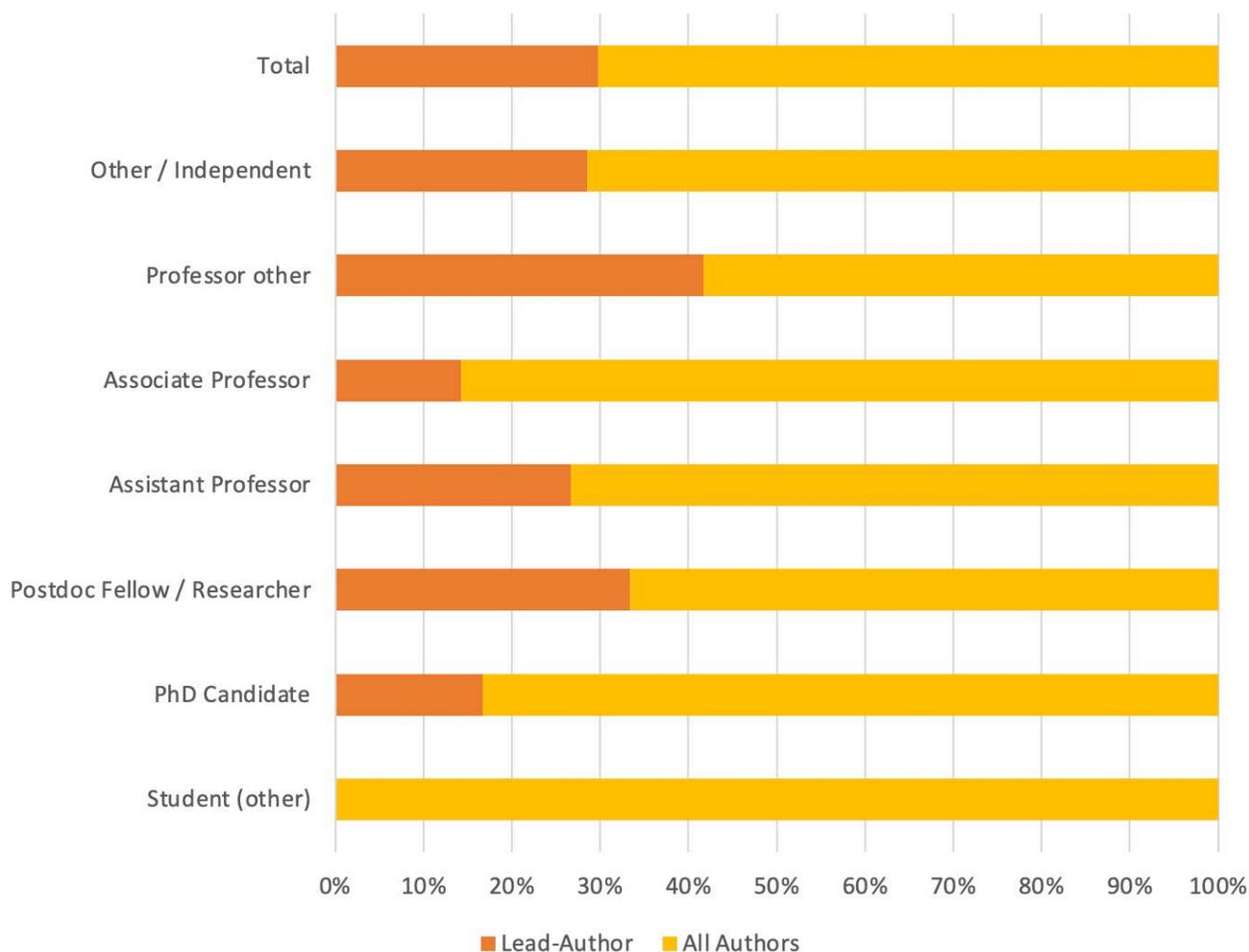
Figure 7. Volume 7—authorship by career category, as a comparison of lead-author to co-author data. (Source estsjournal.org).

11. Indication of improved access to unique content or services not otherwise available

An accessibility study was undertaken in conjunction with a comparative review based on the 2019 reader survey, both of which have been made public as supplemental materials. From mid-2020, a data strategy plan was developed and implemented (including a measurement plan for reviewing social media and internet-based traffic as pathways to impact). *ESTS* is now promoted via Twitter (with a transnational schedule), Mailchimp newsletter, and in the society-wide newsletter (Technoscience). *ESTS* is committed to sharing knowledge and resources about OA publishing and infrastructure: the EC have been (and will continue) using the *ESTS* editorial space to share learnings about OA scholarly publishing infrastructure. Various resources that the editorship has developed will also be shared widely via a GitHub repository that it plans to set up.

Organization & Governance

12. Whether investment carries governance input

The *ESTS* editorial collective has been appointed by the Publications Committee under the authority of the Council of the Society for Social Studies of Science (4S). The editorial collective is accountable to the Publications Committee and the Council. Sponsorship does not grant any input into editorial or governance matters. However, we are committed to transparency. We issue an annual report, which describes our publication activities in detail. Moreover, as we have previously noted, the 4S is registered as a 501(c)(3) non-profit organization in the United States, and its filings containing financial information are available to the public.

13. Commitment to advancing social justice and diversity

The new editorial collective holds a shared and strong commitment to advancing the intersectional diversity of the journal across multiple scales. We have made concerted efforts to diversify the composition of our editorial board, peer reviewers, authors, and readers, understand limitations imposed by publishing in English language and figure out ways in which to better connect with scholars and scholarship in languages other than English, and partner in initiatives aimed at cultivating and supporting greater regional and intellectual diversity in STS. We believe that sharing and creating knowledge across difference can lead to new insights and we encourage contributors to identify and engage with issues that are experienced and dealt with in different ways in different localities.

14. Author rights retention & licensing

Authors of all content published in *ESTS* retain the copyright to their work, and agree to license them under the [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0)](#) license. All papers in *ESTS* become available immediately upon publication, and readers are allowed to read, download, copy, distribute, print, search, or link to the full texts of its articles, and use them for any other lawful purpose, in accordance with the Creative Commons license.

15. Compliance with relevant technical standards

ESTS adheres to publication guidelines provided by the Committee on Publication Ethics (COPE). The journal also satisfies relevant criteria and is indexed with the Directory of Open Access Journals (DOAJ). LOCKSS preservation for *ESTS* has been enabled since the journal's content management system was upgraded in April 2021. At this time, the journal's website was also redesigned to be compliant with W3C guidance for accessibility and is now fully accessible across devices (desktop, tablet, and mobile screens).

16. Commitment to innovation and research & development

Since its inception, *ESTS* has been known as a space for experimentation and cutting-edge STS scholarship. Close attention to the labor and infrastructure necessary to support everyday journal activities as well as experiments in scholarly publishing has been a defining aspect of the work of our editorial team. We are documenting our attempts at and learnings from infrastructuring the journal through our editorials ([here](#), [here](#), [here](#), and [here](#)) on an ongoing basis, hoping to grow awareness about OA publishing among STS scholars.

From mid-2020, a data strategy plan was developed and implemented. Over 12.5k spam users were deleted, increased Captcha codes added for security, and the journal now explicitly asks for consent for sign-up to *ESTS*'s mailing list (sign-up for newsletters is embedded into the "Contact Us" webpage). This has been an example of best practice leading the Public Knowledge Project (PKP)—the provider of *ESTS*'s content management system, Open Journal Systems (OJS)—to share this process with other journals. In June 2022, PKP recommended *ESTS* to a journal that is currently operationalised via a major publisher that aims to become OA. Thus, within a short span of two years, the journal's editorship has established *ESTS* a model for infrastructural innovation to support OA publishing.

Under the current editorial team, the journal has also established new lines of innovation and experimentation in scholarly publishing. For example, we have been developing the technical platform, processes, and workflows to publish source and supplemental data to accompany *ESTS* manuscripts. Our first publication of a manuscript with linked ethnographic data has been published as part of issue 8.2. As we learn and develop the necessary infrastructure to publish open ethnographic data through the journal, we have also been keen to share back these learnings, insights, and resources with others in the scholarly communications community. For example, our [recent editorial](#) documents our approach to and learnings from developing data publication infrastructure for STS and allied fields. We also recently joined an online community forum of social science journal editors ([Journal Editors Discussion Interface](#)) concerned in particular with data preservation and sharing and will be hosting an open data publishing workshop at the upcoming annual society conference. We also intend to establish a Github repository to freely share various workflow documents, templates, and customized coding modules that we have developed in order to strengthen the OA publishing ecology.

17. Demonstration of operational and financial stability, or a plan for such

Since it was established, *ESTS* has come into its own as a respected journal in the field of STS, and is gaining increased recognition for its scholarly innovations. We are fortunate to have the steady and enthusiastic support of the 4S and the STS community globally.

During the last two years, the journal successfully transitioned to a new editorial team and a new website, embarked on Open Data initiatives and the development of pedagogical resources, and organized events to support the international diversification of our community. We have come through these changes with a stronger and more transparent set of editorial policies and governance practices, documented in our annual reports.