WILEY ▪ Partner Solutions

Spotlight Series

Solutions and Services for the Future of Scholarly Publishing

Q&A with Alberto Pepe
Co-Founder of Authorea

Alberto Pepe is the Director of Strategy and Innovation at Wiley. Alberto co-founded Authorea, now a part of Wiley Partner Solutions. We caught up with him to find out what's currently happening in our effort to bring open access to scholarly publishing.

Alberto, thank you for allowing us a peek into your mind as the co-founder/creator of Authorea.

Please tell us a bit about your current role, your professional experience, and what gave you the idea for Authorea.

I currently work in innovation and strategy with Wiley Partner Solutions, specifically within workflow and community solutions. My team works on products and tools for our society and publisher partners and users, and my focus is on preprints, open science, and reproducibility. We're working to reshape and reimagine the future of scientific publishing.

At the very start of my career, I was an active researcher, working at the intersection of physics and computer science. For about 12 years I worked in research settings at CERN in Switzerland, doing particle physics research and publishing papers. I left my postdoc about 10 years ago to start Authorea. In my years as a researcher, I had found a very interesting problem: it was hard for me to collaborate with other researchers and get our work published as fast and transparently as possible. The purpose of Authorea was to fill that gap. And so began the second part of my career: I was an entrepreneur, running a company, raising venture capital, and growing Authorea from zero to 200,000 users.

In 2018 Authorea was acquired by Wiley, and since then I've been working in a new role as Director of Strategy and Innovation— running Authorea, of course, but also running a number of other projects and initiatives in the space of open science, open research, and reproducibility.

What do you love about your job and working in scientific publishing?

Working in scientific publishing is exciting because scientific research is only valuable and useful if it is disseminated in the best possible way. I believe science publishing is at a pivotal moment— enabling open data and fully reproducible, interactive research to the public and other scientists is becoming a necessity and I am proud to be working specifically in the enablement of this next generation scientific publishing at Wiley.

Tell us the origin story of Authorea.

Authorea was born from my own frustration with the way I was writing research papers. Initially it was a tool to write papers with other researchers. It was a collaborative editing platform and interface to allow researchers around the world to work together on one project— a little like Google Docs or a Microsoft Word environment, but on steroids, for research papers. Authorea could include almost anything you could imagine: bibliographies, references, citations, tables, figures, data, and more.

Then we added other tools for technical writers using LaTeX, which is a document preparation system for high-quality typesetting. It is most often used for medium-to-large technical or scientific documents. On top of that we added tools to enable a new way of doing research: computational notebooks such as Jupyter notebooks to be included in a research paper, data visualizations and interactive figures. We wanted to create a new kind of experience for authors, and also for readers, that would enable research to be much more interactive, dynamic, and pleasant to read and interact with.

That's the foundation of Authorea: an enablement tool for authors to create new kinds of research together in a much more seamless way to advance research, writing, and publishing into the future.

Later, we found that a lot of researchers were writing, submitting, and getting published in a journal, but also wanted to share their research as fast as possible. So we had the idea to enable the production and writing of preprints. Preprints are early-stage research outputs, essentially the early draft of a research paper. By doing this, we also became a place where authors could not just write collaboratively but then also open their draft and make it a preprint, which is then assigned a Digital Object Identifier (DOI) and becomes part of the scholarly record. We quickly became a repository for preprints. We have about 30,000 preprints now, 2.5 years after the functionality was enabled.

What do you think are the key features that Authorea offers?

The fundamental feature of Authorea is collaborative editing. You can start a new research project, a paper, a preprint, a blog post. You can even write class or lecture notes. You can insert snippets of LaTeX and create beautiful documents alongside your group of researchers.

The next most important, fundamental feature is that it is HTML first. So you're not ever writing in a Word document or a PDF; you're always writing in HTML. At any point in time you can enable an XML representation of the content, and then export it into any format you want.

Thanks to the native HTML structure of content in Authorea, you can also easily export it and push it to other systems, such as ScholarOne or eJournalPress (another Wiley Partner Solutions product)

We built Authorea as a tool for researchers, so it has a lot of research-specific capabilities. You can add your data, computational notebooks, visualizations, videos, and audio, and so you can create research outputs that are much more multimedia and much more dynamic and interactive.

Besides the editing side, Authorea has tools for managing content and users, to enable new ways to create collections and communities that create and share content internally and externally. These are used mostly by research groups, departments, and classes, as well as by societies or publishers that manage a group of users so they can work together and publish to a portal, a repository of their content.

Talk about the power of Authorea communities and why they are important.

Authorea communities are how research groups, labs, departments, all the members come together to create content in collaboration and then also publish that content internally. It can be a place for communities to come together and create content together and then send it to screening, or as a place for, say, a university library to publish their content or journal. That's the basic idea of a community: bringing people together and enabling them to create content collaboratively and publish it in a portal.

What do you think sets Authorea apart from other software solutions for researchers?

The biggest differentiator from other authoring and editing tools is that Authorea is built for research and for research content. It's designed to make researchers' lives easy. If they want to add a citation, they click a button and type in the name of the author or the title, and automatically they can pull in the citation without having to use a reference management system. That is a differentiator, and it's also a killer feature of the application that really makes a lot of researchers happy.

Another differentiator is the fact that you can author, edit, publish, and share your research in the same place. Whereas in Google Docs or Microsoft Word you can create content, but not publish your content or submit it to journals. So Authorea is both an editing environment and a platform for publishing and sharing with your community, or with your members of your group.

A platform that we get compared to a lot is Overleaf. What sets us apart is that Overleaf is built specifically around LaTeX, which tends to be used in math, physics, and computer science, whereas Authorea is not constrained to users of LaTeX, so it offers researchers in the humanities and social sciences a modern research-based authoring and editing tool as well.

The AGU's portfolio of journals are also integrated with the platform, which allows the AGU to run their initial production stages, including submission systems and preprint server, in conjunction with eJournalPress.

When an author submits to the AGU, they are using a platform through Authorea that is more than just uploading and hosting the PDF in a generic repository; it's a service that comes with interactive figures, technology and data visualization, and support for computational notebooks. So we're also helping the AGU indirectly, because the AGU is now perceived as a more advanced player that is doing preprints in a more innovative way.

So we help directly through the products and tools we provide to the publisher or society, and indirectly by just offering the authors that interact with them a more modern, innovative experience.

What does Authorea's evolution look like in 2023 and beyond?

We're in the process of extending and expanding the offering of the Authorea collections, which enables partners, societies, and publishers to run and power their preprints, conference proceedings, or any other kind of portal repository using Authorea technology, so they can accept more types of content.

Conferences—that's an area we want to move towards, to enable publishers and societies to host their conference content very easily as part of an Authorea collection. We will be rolling out a full and powerful offering for, let's say, anything that is not a traditional peer-reviewed publication type, whether it's a blog post, conference series, or a preprint. We want publishers and societies to be able to handle these other content types in way that is easy for them and the readers.

Then we'll be looking to improve the experience for end users. So, for authors who are writing content on Authorea, this still feels a little far-fetched, but we are looking at experimenting with artificial intelligence and other kinds of machine learning techniques as part of the editing process. Something that would more easily enable the author to write or rewrite specific parts of an article.

The future of research writing is also a future that will have more automation, and machines will help in writing and crafting research content. We're working on, what I believe is a new killer feature. It involves plugging more AI into the process of writing the content itself.

Stay up to date with news and content from Wiley Partner Solutions. wiley.com/partner-solutions

WILEY · Partner Solutions

Q&A Alberto Pepe

Alberto Pepe is a Director of Strategy and Innovation at Wiley. He focuses on the development and promotion of open science tools and initiatives. Alberto holds degrees in Astrophysics, Information Systems, and Computer Science from Harvard University, UCLA, and University College London. For his Ph.D. work he was awarded with the Best Dissertation Award by the American Society for Information Science and Technology. Prior to starting his Ph.D., Alberto worked in the Information Technology Department of CERN, in Geneva, Switzerland, where he developed digital library tools and promoted Open Access and reproducible research among particle physicists. In 2013, Alberto co-founded Authorea, a platform for the creation and dissemination of preprints and open research outputs, now part of Wiley Partner Solutions.

When asked to share three interesting facts about himself Alberto said, *"I love hiking the high Sierras of Northern California for extended periods of time; I meditate; I am starting to write a book."*

Thank you, Alberto, for this interview and for sharing your experience and insight into what is happening with Authorea and how it continues to help authors and researchers thrive.

The leading collaborative platform to read, write, and publish research
With Authorea you can
- Create preprints in one click at submission
- Build portals to collaborate on, manage, screen, and publish research outputs
- Run your content portal on your own domain URL, with custom branding and DOIs
- Go beyond the traditional PDF and offer interactive figures, live data, and computational notebooks

Email your questions to <u>Hi@Authorea.com</u> or chat with us at <u>wiley.com/partner-solutions</u>.