

Z. Irene Ying | Science Writer

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Science writer with Master's Degree in molecular biology and experience developing, editing, and publishing documents in topics including biomedical research and AI/ML. Reached audiences of 300,000+ through web, print, and social media. 10 years of experience including federal, biotech, and academic sectors.

Education

- **Princeton University**, Princeton, NJ
Master's Degree in molecular biology, 09/2010
- **California Institute of Technology**, Pasadena, CA
Bachelor's Degree in biology, 06/2006

Skills

- Media & Publishing: LaTeX, Adobe Photoshop, Illustrator, InDesign, Premiere Pro
- Web: Drupal, HTML, CSS, iModules, WordPress, Blogger
- Social media: X/Twitter, Facebook, Instagram, LinkedIn
- Microsoft Office: Word, PowerPoint, Excel
- Editing: Associated Press Stylebook, APA, Section 508 compliance

Publications

Bhagwat A., Ying ZI., and Smith A. (2014) Evaluation of Ribosomal RNA Removal Protocols for *Salmonella* RNA-Seq Projects. *Advances in Microbiology*, **4**, 25-32. DOI: [10.4236/aim.2014.41006](https://doi.org/10.4236/aim.2014.41006).

Hu Y, Boyd-Graber J, Daumé H, and Ying ZI. (2013) [Binary to Bushy: Bayesian Hierarchical Clustering with the Beta Coalescent](#). *Neural Information Processing Systems*. **2013**:1079-1087.

Bhagwat AA, Ying ZI, Karns J, and Smith A. (2013) Determining RNA quality for NextGen sequencing: some exceptions to the gold standard rule of 23S to 16S rRNA ratio. *Microbiology Discovery*, **1**. DOI: [10.7243/2052-6180-1-10](https://doi.org/10.7243/2052-6180-1-10)

Ju C, Yoon GM, Shemansky JM, Lin DY, Ying ZI, Chang J, Garrett WM, Kessenbrock M, Groth G, Tucker ML, Cooper B, Kieber JJ, Chang C. (2012) CTR1 phosphorylates the central regulator EIN2 to control ethylene hormone signaling from the ER membrane to the nucleus in Arabidopsis. *PNAS*, **109** (47):19486-91. DOI: [10.1073/pnas.1214848109](https://doi.org/10.1073/pnas.1214848109).

Experience

Scientific Technical Editor (Contractor), 10/2024–Present

**The Networking and Information Technology Research and Development (NITRD) Program,
Washington, DC**

Coordinated the editing and publication of 10+ federal scientific reports on topics including digital health, AI/ML, big data, robotics, autonomous systems, cybersecurity, digital twins, privacy, and wireless spectrum for NITRD, a program operating under the White House Office of Science and Technology Policy.

- Coordinated with 20+ stakeholders to edit and publish 10+ strategic plans, technical reports, public notices, and other federal-level publications, ensuring compliance with federal guidelines and internal standards
- Edited 20+ internal documents including newsletters, reports, and federal submissions for quality and accuracy
- Developed new written style guide to ensure quality and consistency of internal and external publications

Communications Specialist (Contractor), 10/2020–9/2024

U.S. National Institutes of Health (NIH), Bethesda, MD

Developed, edited, and coordinated publication of 100+ pieces of biomedical research policy content to support NIH's external/internal users and strategic goals. Received 2023 NIH Director's Award.

- On a daily basis, coordinated 3+ projects with stakeholders across multiple cross-functional federal offices to successfully meet multiple shifting deadlines
- Developed and edited 100+ content pieces on NIH's regulatory policies on research grants for quality and accuracy
- Coordinated content development and successful launch of a website covering NIH policies regulating scientific data sharing (300k+ visitors in first 1.5 years).
- Led successful migration of website providing NIH policy on sharing scientific publications
- Wrote, edited, posted, and moderated regulatory policy content for NIH's Extramural Nexus Blog (348,000+ subscribers)
- Performed ongoing maintenance and QC of NIH website with 2M+ annual users
- Edited 100+ webpages and files including PDFs and Microsoft Word/PowerPoint for Section 508 compliance
- Prepared and successfully submitted Paperwork Reduction Act clearance for 4 forms
- Assisted in responding to congressional/federal inquiries and audits

Science Writer/Editor, 5/2019–11/2020 (Freelancer)

University of Hawai'i at Mānoa, Honolulu, HI

Wrote and edited scientific content to support [NASA's SMART cables project](#), a United Nations-led effort to integrate environmental sensors onto undersea cables for tsunami warning and climate monitoring.

- Edited a white paper detailing scientific, technical and legal specifications of SMART cables, published in *Frontiers in Marine Science* in August 2019

- Translated technical material into lay language for an article promoting SMART cables published in the trade journal *Submarine Telecoms Industry Report*
- Edited three posters for presentation at OceanObs19, an international ocean observation conference
- Took minutes during executive committee and plenary group meetings to produce reports for the Chair and Secretariat of the Joint Task Force

Communications Coordinator, 11/2016—5/2019

University of Maryland, College Park, MD

Managed social media channels and profiled newsworthy research news, people, and events at the university's [College of Computer, Mathematical, and Natural Sciences](#).

- Conducted literature reviews and interviews to write 15+ press releases on research findings, receiving nationwide media coverage including in the *New York Times*, *Los Angeles Times*, the *Washington Post*, *National Geographic*, *New Scientist* and *Popular Science*
- Interviewed donors, alumni, faculty, students and staff for 75+ features and profiles
- Launched college's Instagram account in addition to conceiving and posting content to college's social media accounts; total follower number increased 1000+
- Produced e-newsletters sent to more than 30,000 alumni, students, faculty and staff
- Monitored press and news for alumni relations and college leadership
- Posted and maintained digital content on Drupal-based college website
- Contributed to writing and planning for college's biannual print magazine

Technical Writer, 12/2015—10/2016

[Phase Change](#), Golden, CO

Conceived, produced, wrote, and edited content to support scientific communication and technical documentation for an artificial intelligence software company.

- Coordinated video blogging and social media strategy
- Recorded and edited four training videos for new engineers
- Interviewed engineers and conducted independent research to write three technical papers describing the mathematical and compiler specifications of software modules
- Conceived and led development of an in-house style guide and glossary
- Wrote and coded content in HTML, CSS, and PHP to maintain, edit and design WordPress-based company [website](#)

Technical Writer, 6/2016—10/2016 (Independent Contractor)

[SomaLogic](#), Boulder, CO

Documented statistical methods and data specifications of a biotechnology company's protein biomarker discovery and clinical diagnostics platform.

- Wrote a new reference document and created graphics describing statistical methods for analyzing data yielded by company's products

- Revised 2 reference documents describing statistical procedures and technical specifications for company's products
- Developed an internal style guide to support consistent terminology in documentation for internal audiences as well as users of company's product

Communications Specialist, 8/2014—8/2015 (Contractor)

National Renewable Energy Laboratory, Golden, CO

Supported renewable energy engineers by writing, editing, and managing technical publications for audiences including policymakers, engineers and the general public.

- Project managed, created, and distributed 50+ periodic e-newsletters to business developers, policymakers and researchers
- Produced brochures, fliers, fact sheets, press releases, blog posts and other outreach publications to elevate the laboratory's accomplishments
- Edited 50+ scientific manuscripts from research staff for submission to peer-reviewed publications
- Edited 100+ webpages in Drupal-based content management system
- Edited 100+ papers, presentations and marketing pieces for AP style
- Wrote nomination package for NREL-developed biofuel that won both the 2015 R&D 100 and Editor's Choice Awards
- Created posts for Facebook and Twitter to promote events, researchers and accomplishments