

Z. Irene Ying

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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

M.A. molecular biology, Princeton University, Princeton, NJ

B.A biology, California Institute of Technology, Pasadena, CA

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.
- 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
- 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.

Experience

Scientific Technical Editor (Contractor), 10/2024–09/2025

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

- Edited 10+ reports describing \$11,000,000,000+ of ongoing, planned, and recommended federal R&D in areas including AI/ML, digital health, digital twins, and cybersecurity
- Coordinated with 20+ stakeholders including the National Science Foundation, the White House Office of Science and Technology Policy, and other federal departments/agencies to edit and publish R&D strategic plans and other technical documents
- 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), 10/2020–09/2024

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

- Wrote and edited blog posts, releases, and other content describing regulations on biomedical research funding (\$26,308,000,000 in FY2024) for NIH grants website (2,000,000+ users/year)
- Coordinated content development and successful launch of a website covering NIH policies regulating scientific data sharing (300,000+ visitors in first 1.5 years).
- 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 2,000,000+ 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
- Received 2023 NIH Director's Award

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

University of Hawai'i at Mānoa, Honolulu, HI

- Edited a white paper detailing scientific, technical and legal specifications of the United Nations-led SMART cables project; paper 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

- Conducted literature reviews and interviews to write 15+ press releases on scientific research findings, receiving media coverage including in the New York Times, Los Angeles Times, the Washington Post, National Geographic, New Scientist and Popular Science
- Ran social media campaigns supporting annual Giving Day campaigns (~\$200,000/year)
- Managed social media platforms to increase total follower number by 1,000k+
- Interviewed donors, alumni, faculty, students and staff for 75+ features and profiles

Technical Writer, 12/2015—10/2016

Phase Change, Golden, CO

- Recorded and edited four training videos for a B2B SaaS AI coding assistant platform
- Performed literature reviews, interviewed engineers, and conducted independent research to write three technical papers describing mathematical and compiler specifications of software
- Coordinated video blogging and social media strategy

Technical Writer (Freelancer), 6/2016—10/2016

SomaLogic, Boulder, CO

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

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

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.
- Wrote nomination package that won 2015 R&D 100 and Editor's Choice Awards
- Project managed, created, and distributed 50+ periodic e-newsletters explaining the benefits of wind, water, and solar energy to developers, policymakers, and researchers
- Edited 50+ scientific manuscripts for submission to peer-reviewed journals
- 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