

Z. Irene Ying

Scientific communicator with Master's Degree in biology and 10 years of experience including federal, biotech, and academic sectors. Expert at creating content explaining complex technical topics through web, print, and social media. Portfolio: www.ireneying.net

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

Communications Specialist (Contractor), 10/2020–Present

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

Coordinated, wrote, and proofread content to support NIH's external and internal users; developed and executed communication plans to support strategic NIH goals. Received 2023 NIH Director's Award.

- Coordinated content development and launch of [NIH – Data Sharing](#), a website covering core NIH sharing policies (300k+ visitors in first 1.5 years).
- Supported the [NIH Virtual Seminar on Program Funding and Grants Administration](#) (20,000+ registrants) with QC, editing transcripts, and technical support
- Wrote, edited, posted, and moderated content for NIH's [Extramural Nexus Blog](#) (348,000+ subscribers)
- Performed ongoing maintenance and QC of [NIH Office of Extramural Research](#) (2.8M visitors in 2023) and [NIH Sharing](#) (200k visitors in 2023)
- Edited 100+ webpages and files including PDFs and Microsoft Word/PowerPoint for Section 508 compliance
- Prepared and 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](#).

- Wrote 15+ news releases on technical topics, 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
- Edited 50+ scientific manuscripts from research staff for submission to peer-reviewed publications
- Produced brochures, fliers, fact sheets, press releases, blog posts and other outreach publications to elevate the laboratory's accomplishments
- 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