



DEB/Biotech Program Science Communication Internship for DEB282

Objectives

- Create fact-based, engaging digital content on research topics in biotechnology for general audiences.
- Develop transferrable professional skills in science communication (topical research, interviewing, writing, illustrating, editing, producing video lectures) and project management.

Internship Format

- Internship credit will be awarded for a minimum of 400 hours effort over the course of ~3-12 months (flexible timeline). **Sci comm blog topic(s) must be different from the intern's dissertation research topic(s).**
- DEB students will enroll in DEB282 (~7-12 units) via normal processes and submit a final report for grading to the course instructor, Prof. Abhaya Dandekar (see <https://deb.ucdavis.edu/internships>). *(Note: Please inquire with Biotech Program manager, Jacki Balderama [jbalderama@ucdavis.edu] about the course CRN# for the quarter you will complete this project, or if you will be filing your dissertation soon, register immediately and receive an Incomplete grade which will be updated during your final/filing fee quarter.)*
- Dr. Jamison-McClung will serve as the DEB Sci Comm Internship mentor, provide guidance/editorial oversight on individual projects, and share related training opportunities and resources. Plan to discuss blog topics with her before commencing your research and writing.

Blog Format and Minimum Sci Comm Output for Course Credit

- ~3000 words submitted to Dr. Jamison-McClung for review, edit suggestions, and final posting on the Biotech Program blog <https://biotech.ucdavis.edu/blog>. The expectation will be for interns to write three or more complete blog posts ranging from ~500 to ~1000 words in length. If you'd like to write one long post or create a series of related short blogs, please discuss your plans with Dr. Jamison-McClung before beginning to write.
- For each blog post:
 - Suggest ~3-4 key terms that will be used to tag the post for online searches.
 - Reference one or more peer-reviewed journal articles, in addition to popular media articles, government reports, white papers, patents, or other scientific literature (e. g., ~3 in-depth blogs [1000+ words/3+ peer-reviewed sources each] to ~6 shorter blogs [500+ words/1+ peer-reviewed sources each]). The reference list will be posted with the blog.
 - Create/produce **three or more original visual media** items (e. g., photos, figures, infographics) to accompany each blog – **one item should be a primary image or thumbnail** to place at the top of the blog (no caption, square shape) and **two items should enhance the blog content** (have captions, any shape). Visual media should be your own creative work and not derived from copywritten/protected media. If using software, such as BioRender, to create figures, make sure to include their required legal statement within the image or blog caption. If using a figure from a publication you authored, please send along the citation information to include in the caption.
 - Images should be **~500Kb-2MB in size** (3MB size limit, file formats .png, .jpg, .jpeg, .gif).
 - A short caption for the two content images should be submitted with the blog.
 - Indicate which media item should be placed at the top of the blog as the “main image”, as well as preferences for where to insert the other two media items within the text.
 - Note: special characters, superscript font and subscript font do not translate in the Site Farm web environment, so try to think of workarounds for these characters. For more on Site Farm guidelines, please see their instructions: [Prepping images | SiteFarm \(ucdavis.edu\)](https://www.sitefarm.ucdavis.edu/prepping-images).

Editorial Oversight

Dr. Jamison-McClung will provide editorial oversight for the **Endoplasmic Biotech-You-Learn Blog** and all content created for the DEB/Biotech Program Science Communication Internship. The DEB Executive Committee will serve as arbiter (via majority vote) of any disputes that may arise regarding content suitability for internship credit or public posting. All submitted content may be posted/archived on Biotechnology Program social media and website platforms.

Toolkits and Tips for Getting Started

- Review the [UC Davis Social Media Policy and Guidelines | Brand Communications Guide](#)
- Review the [AAAS Communication Toolkit | American Association for the Advancement of Science \(AAAS\)](#) to learn more about science communication goals and best practices.
- Start blogging by writing about a biotech-related topic you know and love.
- Write about topics that are currently capturing the public imagination and impacting public policy (e.g., COVID-19 strategies for vaccine development, “test and trace”, social distancing)
- Assume your general audience (campus colleagues, policy makers, community members, K-14 educators and students) has a minimum ~6th-8th grade understanding of science basics (parts of a cell and human physiology/organ systems, DNA as the “blueprint of life”, kinetic vs. potential energy, gravity, friction, and simple machines, basic structures of an atom, layout of the periodic table, life cycles of familiar insects and animals, nutrient flows via plant photosynthesis and food webs, our solar system and the Earth’s seasons, water cycles, nutrient cycles, etc.). For reference, see the California Department of Education Next Generation Science Standards (NGSS) - [NGSS for California Public Schools, K-12 - Science \(CA Dept of Education\)](#).

Other Helpful Resources

Below, I have listed a selection of researchers, journalists, bloggers, and professional organizations for more sci comm tips and inspiration. Caveat - this is sampling of a large body of publicly available work and “how to” advice on science communication, so feel free to explore other resources.

Infographics and Graphical Abstracts

- [BioRender - YouTube](#)
- [Infographics - American Chemical Society \(acs.org\)](#)
- LABIOTECH Infographics: <https://www.labiotech.eu/infographics/>
- Biofortified Infographics: <https://biofortified.org/info/>

- [Egghead Blog \(ucdavis.edu\)](#)
- [Science Says - Science REALLY Says \(ucdavis.edu\)](#)
- [News, Magazine, Experts and Media Resources | UC Davis](#)

Science Organizations – News Stories and Blogs

- [News from Science | AAAS](#)
- [Blogs - PLOS](#)

Campus Communicators

- C. Titus Brown, [Living in an Ivory Basement \(idyll.org\)](#)
- Jonathon Eisen, [The Tree of Life \(phylogenomics.blogspot.com\)](#)
- Kathy Keatley Garvey, [Bug Squad - Agriculture and Natural Resources Blogs \(ucanr.edu\)](#)
- Paul Knopfler, [Stem Cell Blog & Resources | Paul Knoepfler UC Davis - The Niche \(ipsell.com\)](#)
- Alison Van Eenennaam, [Biobeef Blog – Thoughts of public sector animal geneticist – all views are my own \(ucdavis.edu\)](#)