

Nicole Haloupek

Ph.D., Molecular and Cell Biology

nicolehaloupek.com

Education and Research Experience:

Ph.D., Molecular and Cell Biology

University of California, Berkeley

(Aug. 2012–Dec. 2017)

- Received the National Science Foundation's Graduate Research Fellowship
- Conducted structural biology research on innate immunity under Prof. Eva Nogales
- Published research in *Science* (co-first author)
- Contributed chapter to *Methods in Enzymology* book series (first author)

B.S., Biochemistry

Temple University

(Aug. 2008–May 2012)

- Graduated *magna cum laude* with distinction in major
- Conducted physical chemistry research under Prof. Eric Borguet
- Conducted biochemistry and biophysics research under Prof. Parkson Chong
- Published research in *Biophysical Journal* (third author)

Professional Experience:

Science Writer

American Association for Cancer Research

(June 2019–present)

- Wrote approximately 25 articles (summaries, news, editorials, etc.) per month for the journal *Cancer Discovery* about recent developments in cancer research
- Reviewed medical literature to develop ideas for new content
- Edited manuscript proofs to ensure scientific accuracy and correct language usage
- Created posts for social media and identified images to accompany articles

Self-Employed

(Aug. 2015–present)

- Wrote articles for print and online outlets for specialized and general audiences
- Pitched article topics, acquired images, collaborated with design teams to generate infographics and illustrations, and used WordPress to format content
- Wrote approximately 100 articles for the Genetics Society of America, including features, press releases, researcher bios, research briefs, and more
- Produced press releases, research summaries, and researcher bios for the Gruber Foundation about their prize winners in neuroscience and genetics
- Published articles in *Business Insider*, *Mental Floss*, *Greatist*, *Genes to Genomes*, *Berkeley Science Review*, *GENETICS*, *Berkeley Optometry Magazine*, and more
- Contributed a section to an upcoming popular-science book by *Mental Floss*
- Contributed a chapter to a volume of the instructional book series *Methods in Enzymology* based on techniques developed during my doctoral research

Editor in Chief

Berkeley Science Review Blog (Aug. 2016–Dec. 2017)

- Implemented new editing protocols and quality standards
- Recruited and trained writers, editors, and designers
- Edited, copyedited, factchecked, and formatted over 40 articles
- Interfaced with the design team to create illustrations and infographics for articles
- Used WordPress to format articles and other online content
- Composed Tweets and Facebook posts promoting new and evergreen articles

Print Editor

Berkeley Science Review (Aug. 2016–Dec. 2017)

- Edited and copyedited articles spanning three print magazine issues
- Organized and led editing workshops on topics including cutting length, removing jargon while maintaining accuracy and nuance, copyediting, and more
- Worked with other editors and the design team to ensure on-schedule printing
- Helped compose titles and promotional Twitter and Facebook posts for articles

Other Relevant Experience:

Organizer

Thriving in Science, University of California, Berkeley (May 2016–Dec. 2017)

- Position: Peer Group Coordinator
- Role: created promotional content for a program supporting mental wellbeing of graduate students and postdoctoral researchers, obtained placements for the promotional content in various publications, confidentially assigned participants to peer groups, provided periodic training for group leaders, and maintained the organization's WordPress-based website

Expanding Your Horizons at Berkeley (Sept. 2012–Mar. 2017)

- Position: Outreach Coordinator
- Role: promoted and helped to raise funds for conferences engaging hundreds of adolescent girls in science each year, secured facilities for conference activities, and participated in on-site coordination of events the day of each conference

Educator

University of California, Berkeley (Aug.–Dec. 2013; Jan.–May 2015)

- Position: Graduate Student Instructor
- Course: Biophysical Chemistry

Temple University (Jan.–May 2011)

- Position: Peer Instructor
- Course: Genetics

Math and Science Resource Center, Temple University (Aug. 2010–June 2012)

- Position: Undergraduate Tutor
- Subjects: biology, general and organic chemistry, mathematics

Mentor

MCB Graduate Network, University of California, Berkeley (Sept. 2016–Dec. 2016)

- Position: Graduate Mentor
- Role: provided guidance on all aspects of graduate-student life, such as career planning and maintaining work–life balance, for newer graduate students

Thriving in Science, University of California, Berkeley (Sept. 2014–Dec. 2017)

- Position: Peer Group Facilitator
- Role: moderated discussions among science Ph.D. students about career choices, navigating academia, and maintaining a healthy outlook through graduate school

Be a Scientist, Community Resources for Science (Sept. 2014–May 2015)

- Position: Middle-School Mentor
- Role: led groups of middle-school students through planning, executing, and analyzing their own scientific experiments as part of an educational program

Temple University (Aug. 2011–May 2012)

- Position: Student Advisor and Ombudsperson
- Role: mediated disputes between students and faculty members and provided career and academic advice to students in a safe, confidential environment

Research Publications:

Haloupek, N., Tenthorey, J. L., Grob, P., Vance, R. E., Nogales, E. (2019). Cryo-EM Studies of NAIP–NLRC4 Inflammasomes. *Methods in Enzymology*, 625, 177–204.

Tenthorey, J. L.*, **Haloupek, N.***, López-Blanco, J. R., Grob, P., Adamson, E., Hartenian, E., ... Vance, R. E. (2017). The structural basis of flagellin detection by NAIP5: A strategy to limit pathogen immune evasion. *Science*, 358(6365), 888–893.

***co-first authors**

Venegas, B., Zhu, W., **Haloupek, N. B.**, Lee, J., Zellhart, E., Sugár, I. P., ... Chong, P. L. (2012). Cholesterol superlattice modulates CA4P release from liposomes and CA4P cytotoxicity on mammary cancer cells. *Biophysical Journal*, 102(9), 2086–2094.

Awards and Honors:

Invited Speaker: Grounds for Science by Science at Cal (June 2018)
National Science Foundation Graduate Research Fellowship (Aug. 2013–July 2018)
Graduation Speaker: Temple University College of Science and Technology (May 2012)
American Chemical Society Analytical Chemistry Award (May 2012)
Honorable Mention, American Chemical Society YCC Poster Contest (May 2012)
Creative Arts, Research, and Scholarship Award (Aug. 2011)
Hazel M. Tomlinson, Ph.D. Memorial Scholarship for Chemistry (Aug. 2011)
Temple University Dean’s List (Aug. 2009–May 2012)