

# The Synapse: Intercollegiate science magazine

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## Front Matter

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# Staff

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*Web Design* Elena Hartley  
*Cover Art* Claire Segura

## Writers

Ivan Aidun  
Ave Bisesi  
Rachael Branscomb  
Christine Craddock  
Monica Dix  
Ally Fulton  
Emma Hahn  
Jayla Johnson  
Carson McCann  
Rachel Reardon  
Lauren Rhodes  
Liv Scott  
Zoe Swann  
Leah Treidler  
Joy Udoh

## Artists

Maria Altier  
Della Copes-Finke  
Rachel Dan  
Linnea Fraser  
Elena Hartley  
Megan Herrmann  
Emily Herrold  
Mikaela Hoffman  
Steven Mentzer  
Emilia Omerberg  
Lauren Rhodes  
Liv Scott  
Claire Segura  
Zimeng Xiang

## Content Editors

Lameya Aamir  
Victoria Albacete  
Alyssa Altheimer  
Chloe Deshusses  
Shana Li  
Allison Murphy  
Tara Santora  
Jane Sedlak  
Anah Soble  
Julia Utset

## Copy Editors

Victoria Albacete  
Alyssa Altheimer  
Lauren Bladeau  
Caroline Lawlor  
Shana Li  
Jessica Moskowitz  
Allison Murphy  
Brooke Ortel  
Rachel Reardon  
Tara Santora  
Jane Sedlak

## Layout Editors

Rachel Dan  
Monica Dix  
Lukas Griffin  
Elena Hartley  
Kirsten Huring  
Han Shao  
Yue Yu

## Photographers

Victoria Albacete



## Welcome

to the Orientation '17 edition of *The Synapse*, Oberlin's intercollegiate science journalism magazine produced in partnership with Denison University! Whether you are a returning student or a first year, we're excited to share the excellent student-created scientific writing and eye-catching artwork in this issue with you.

In the past few months, there have been ups and downs for science worldwide — while innovative gene therapy procedures have been approved by the FDA to treat various cancers, a fear of vaccines lingers in some parts of the world; even as countries around the globe reaffirm their commitments to the Paris Accords, scientists present research that nearly half the coral reef communities on Earth are dying due to ocean acidification and warming. In this issue of *The Synapse*, student scientists and artists present the wonders of our planet and its inhabitants in the hope that you will be moved to observe the universe around you a little more closely and with a little more care.

On April 22, 2017, over 600 marches for science were held throughout the United States to, among other reasons, protest the president's proposed budget cuts to government science institutions such as the National Institute of Health and Environmental Protection Agency. However, the March for Science is not a one-time event, but a movement. The organization's goals include humanizing science, partnering with the public, and advocating for inclusive and accessible science.

Scientists need to make noise. Scientific fact and the scientific method are more important than political ideology. By prioritizing ideology, we risk the health of humanity, the existence of millions of species, and the habitability of the planet itself. Historically, the scientific community has had a certain level of quiet reserve, believing that despite changing popular opinions, truth will win in the end — but we no longer have time to be quiet. In delaying more aggressive action to

reduce greenhouse gas emissions and deforestation, humanity may have missed our window to slow or halt the worldwide climate consequences of global climate change.

While considering political wrongdoings affecting the world of science in the present, we also must acknowledge problems within the scientific community, both currently and in the past. We at *The Synapse* recognize that advances in Western science and the scientific method have an incredibly complex history intersecting with, in large part, racism and sexism; it is important to address these issues and history to grow and strengthen the scientific community and the work of individual scientists and researchers. To that end, we invite you to peruse Ave Bisesi's *The Nature of Knowledge*, an investigation of the pervasive history of colonialism in the development of the scientific method. In addition, Lauren Rhodes' interview with Oberlin College Assistant Professor of Environmental Studies Dr. Chie Sakakibara explores the professor's climate research with the Iñupiaq People in Alaska.

Finally, we would like to send our best wishes to our new Denison administrators: Managing Editor Rachel Reardon, Treasurer Carson McCann, Art Coordinator Emily Herrold, and Liaison Jayla Johnson.

We hope you enjoy this collaborative work between student artists and scientists, and encourage you to keep investigating the universe and contributing to it in ways uniquely suited to you.

Victoria Albacete & Tara Santora  
Editors-in-Chief

Interested in joining our team?

Email: [synapse@oberlin.edu](mailto:synapse@oberlin.edu)

Visit: [synapsemagazine.org](http://synapsemagazine.org)

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Joy Udoh is a third year Neuroscience major from Nigeria and has worked with *The Synapse* for the past year as a writer, content editor, and campus distributor. In addition to her work with the magazine, Joy has been voted Class President for the junior class, is a certified mediator through the Office of the Ombudsperson, and acts as the secretary for the African Students' Association. After graduating from Oberlin, she plans to go to medical school and potentially specialize in pediatric neurology. Joy enjoys spinning scientific jargon into something engaging and easy to understand for any audience, and she certainly does it successfully in her article for this issue: *Special Agent Ricin!*



Emilia Omerberg is a 2017 Oberlin College graduate from San Francisco with a double major in Biology and Environmental Studies and a minor in Chemistry. During her senior year she was a contributing artist to *The Synapse*, including for this issue's interview with Paul Rich. Emilia is interested in wildlife conservation, especially regarding fish. She currently has an internship with the U.S. Geological Survey to perform research at the Lake Erie fishery. Specifically, Emilia works on diet analysis, water sampling, age sampling, and invasive species research for species such as the grass carp. This past summer she was in Utah working for the Department of Natural Resources as a cutthroat trout intern.



Rachel Reardon is a third year Biology major and Chemistry minor at Denison University from Midland, Michigan. She has been a writer and copy editor for the past two issues of *The Synapse* and, beginning next issue, will be Denison's new Managing Editor. She values the engagement of students in dialogue about scientific research and changing the way we see the world because of it. Rachel is also a Resident Assistant and a research assistant in the Biology Department, as well as a member of the Alpha Epsilon Delta pre-med society, Kappa Alpha Theta sorority, and the Newman Catholic Club. After Denison, Rachel may attend medical school, potentially through an M.D./Ph.D. program.



A Denver, Colorado native, Rachael Branscomb is a third year Biology major with both Chemistry and Anthropology minors. She's worked with *The Synapse* as a copy editor and has written articles for our past two issues, in addition to her article *Bloodletting, Buboes, and Body Snatching* that you'll find in the pages of Issue 13. After she graduates from Oberlin, Rachael plans to take a gap year in order to work as an EMT or mountain guide and then intends to attend medical school to become a pediatrician. On campus, she is part of the Oberlin chapter of the American Medical Student Association (AMSA), plays Quidditch, and rides with the equestrian team.