# Nicholas G. Spano

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## EDUCATION

PhD **University of California, Berkeley**
Integrative Biology, expected May 2020
***Testing the Sporormiella indicator to clarify Quaternary plant-herbivore dynamics***
Anthony Barnosky (chair), Cynthia Looy, and Thomas Bruns

BS **University of Minnesota, Duluth**
Geological Sciences, Departmental Honors, 2014
***Discovery of Mount Mazama cryptotephra in Lake Superior: implications and potential applications***
Thomas Johnson

## RESEARCH INTERESTS

Conservation, (ice age) ecology, environmental science/studies, and geology.

## SKILLS

Sediment analyses; teaching courses related to biology, conservation, environmental science, and geology; GIS; programming in R.

## TEACHING EXPERIENCE

**Graduate Student Instructor, University of California, Berkeley**

**Behavioral Ecology with Laboratory** 2017, 2019
In-depth examination of the ecological and evolutionary bases for behavioral diversity; lab, discussion, and field components.

**General Human Anatomy Laboratory** 2017-2018
Functional anatomy lab with models, cadavers, and histological slides.

**Principles of Conservation Biology** 2016
A survey of the principles and practices of conservation biology; lab- and discussion-based.

**Evolutionary Biogeography**
Exploration of how biogeographic processes influence the evolution of species, communities, and ecosystems; discussion-based with readings and presentations from biogeographic literature.

**Bioethics and Society** 2015
Exploration of the ethical dilemmas arising from recent advances in the biological

sciences; case-study-based discussion.

**Americans and the Global Forest**

Case studies challenging students to think about how natural resource management and human values affect forest ecosystems around the world.

**General Biology Laboratory** 2014

General introduction to plant development, form, and function; population genetics, ecology, and evolution.

**Teaching Assistant, University of Minnesota, Duluth**

**Earth History Laboratory** 2014

The historical development of the science of geology, nature of the geologic record, fossils, the geologic time scale, and tectonic evolution of continents and ocean basins; fossil-identification-based lab.

**Geologic Principles for Civil Engineers** 2012, 2013

Laboratory on rock and mineral identification.

## SCHOLARLY DEVELOPMENT

### Scholarships and Grants

| | | |
|---|---|---|
| $919 | Graduate Student Research Grant, Geological Society of America | 2018 |
| $3,000 | Grad Student Award Research Grant, UC Museum of Paleontology | 2018 & 2016 |
| $1,750 | Graduate Research Award, Dept. of Integrative Biology, UC Berkeley | |
| $2,350 | Field Camp Scholarship, Dept. of Geological Sciences, UMN Duluth | 2014 |
| $1,000 | National Undergrad Scholarship, American Institute of Professional Geologists | |
| $500 | Scholarship for Field Study, National Association of Geoscience Teachers | |

### Publications

- N.G. Spano, C.S. Lane, S.W. Francis, and T.C. Johnson, Discovery of Mount Mazama cryptotephra in Lake Superior (North America): Implications and potential applications, *Geology*, DOI: https://doi.org/10.1130/G39394.1.

### Presentations

- Spano, N.G., Zhang, Z., Holt, E., Blake, S.E., Garcialuna, P., Sysiong, P., 2016, Mammalian Taphonomic Environment of Pleistocene Fossil Lake, Oregon. *Society of Vertebrate Paleontology Abstracts with Programs*. p. 229.
- Spano, N., Lindsey, E., Villavicencio, N., & Barnosky, A. 2016. The Ecological Consequences of late-Quaternary Megafaunal Extirpations in Southern Brazil. *American Quaternary Association Abstracts with Programs*. p.49.
- Spano, N., Brown, E., & Deocampo, D. 2013. Rates of Chemical Weathering Inferred from Tasmanian Lake Sediments. *Geological Society of America Abstracts with Programs*. v. 45, no. 7, p.781.
- Francis, S., Spano, N., & Johnson, T. 2013. Mazama Ash Used for Precise Chronostratigraphy of Lake Superior Sediment Cores. *Geological Society of America Abstracts with Programs*. v. 45, no. 7, p.781.
- Spano, N. et al. 2012. Modern and Fossil Biota of Blue Hole Five, San Salvador Island, Bahamas: *Geological Society of America Abstracts with Programs*. v. 44, no. 7, p.279.

## PROFESSIONAL AFFILIATIONS, TRAINING, AND CERTIFICATES

### Affiliations

***American Quaternary Association*** 2016-present
***Society of Vertebrate Paleontology*** 2015-present
***Geological Society of America*** 2012-present

### Training

***GIS: QGIS, Google Earth Engine, geospatial data in R, etc.*** 2014-present
***Python Fundamentals*** 2017
***LaTeX Fundamentals***
***Data Carpentry: Spreadsheets, OpenRefine, SQL, R, and Python*** 2016
University of California, Berkeley
***Drilling and Coring Summer Institute***
University of Minnesota, Minneapolis

### Certificates

***Graduate Certificate in GIS and Technology*** expected 2020
***Certificate in Teaching and Learning in Higher Education***
***Graduate Assembly Multicultural Education Certificate Program*** 2016
University of California, Berkeley

## SCIENCE OUTREACH

### Public talks

***Big Ideas About Big Animals*** June and September, 2018
A discussion on what makes big animals ecologically special, how they have shaped ecosystems for millions of years, and what the recent extinctions of many big animals mean for conservation today.
***The Last Ice Age*** June, 2018
How have the landscapes of California been shaped by the ice ages and what does that mean for California's charismatic wildlife?

### University of California Museum of Paleontology 2015-present

***California Academy of Sciences NightLife***
Promoting paleontology outreach with specimens presented at the California Academy of Sciences, San Francisco.
***Bay Area Science Festival***
Annual event at At&T Park in San Francisco promoting paleontology outreach to the greater San Francisco Bay Area community.
***Cal Day***
Annual UC Berkeley open-house highlighting outreach and research.

### Community Resources for Science 2014-present

***Be A Scientist Program***
Mentored 7th grade students at Willard Middle School, Berkeley, CA to design, carry out, and report independent scientific investigations over seven weeks.
***Family Science Night***

Assisting primary school students and their families in the East Bay Area, CA engage in hands-on science activities.

***Bay Area Scientists In Schools***

Led free, in-class science lessons to elementary students in Berkeley and Oakland, CA.

**Lake Superior Zoo** 2012-2014

***Docent***

Presented live animals and zoological materials in Duluth, MN to promote the understanding, appreciation, and conservation of animals.

## UNIVERSITY PROFESSIONAL SERVICE

***Treasurer, Society for Conservation Biology*** 2015-present

***Integrative Biology Graduate Student Association Representative*** 2016-2017
University of California, Berkeley

***Undergraduate Representative, Department of Geological Sciences*** 2013-2014
University of Minnesota, Duluth

## REFERENCES

Professor Anthony Barnosky, Chair
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