#### Curriculum Vitae | 1 of 9

# ANDREW P. NOSAL, PH.D. (HE/HIM/ÉL)

Point Loma Nazarene University | 3900 Lomaland Drive, San Diego, CA | anosal@pointloma.edu

#### **EDUCATION**

- 2013 **Doctor of Philosophy (Ph.D.) in Marine Biology** Scripps Institution of Oceanography, UC – San Diego, La Jolla, CA, USA
- 2007 **Bachelor of Science (B.S.) in Biology with High Distinction (Honors)** Concentration in Environmental and Biological Conservation University of Virginia, Charlottesville, VA, USA

#### **TEACHING POSITIONS AND COURSES TAUGHT**

#### 2022 - Associate Professor of Biology

- Pres. Department of Biology, Point Loma Nazarene University, San Diego, CA, USA
  - BIO 1005 Ecology and Conservation Lecture and Lab (F22, F23)
    - BIO 2011 Ecological and Evolutionary Systems Lecture and Lab (S23)
    - BIO 2012 Organismal Biology Lecture and Lab (S23)
    - BIO 4083 Introduction to Geographic Information Systems (F23)

#### 2017 - Adjunct Assistant Professor

- 2022 Department of Environmental & Ocean Sciences, University of San Diego, San Diego, CA, USA
  - INST 352 Religion and Revolutionary Science (Su20, Su22 as study abroad class in Rome)
  - INST 458 Science Communication: Psychology and Environmental Literacy (S20)
  - EOSC 495 Senior Seminar (F20, S21, F21, S22)
  - EOSC 438 Animal Behavioral Ecology Lecture and Lab (S18, S19, S21, S22)
  - EOSC 300 Environmental Issues Lecture (S18, F18, S19, F19, S20, F20, F21)
  - EOSC 220 Introduction to Atmospheric and Ocean Sciences Lab (F17, S18, F18, S19, F19)
  - EOSC 123 Organisms and Ecosystems Lecture and Lab (F17, F18, F19, S20, F20, F21)
  - EOSC 121 Life in the Ocean Lecture and Lab (F17)

#### 2016 - Adjunct Assistant Professor

2017 Department of Natural Sciences, University of Saint Katherine, San Marcos, CA, USA

- BIO 100 Natural World: Biology Lecture (F16)
- CHE 100 Natural World: Chemistry Lecture (S17)
- BIO 105 Introductory Biology I Lecture and Lab (F16)
- BIO 110 Introductory Biology II Lecture and Lab (S17)
- BIO 305 Human Anatomy & Physiology I Lecture (F16)
- BIO 310 Human Anatomy & Physiology II Lecture (S17)

#### 2011 - Adjunct Professor (part-time)

- 2016 Department of Biology, University of San Diego, San Diego, CA, USA
  - BIOL 225 Introduction to Cellular Processes Lecture (S13)
  - BIOL 225L Introduction to Cellular Processes Lab (F11, S12, F12, F14, S15, F15, S16)
  - BIOL 221L Introduction to Organismal Diversity Lab (S11, F13, S14)

Department of Biology, MiraCosta College, Oceanside, CA, USA

BIO 101 General Biology Lecture (S11)

#### **RESEARCH POSITIONS**

#### 2016 - Visiting Assistant Researcher

Pres. Scripps Institution of Oceanography, UC - San Diego, La Jolla, CA, USA

#### Curriculum Vitae | 2 of 9

- 2016 IUCN Shark Specialist Group (SSG) Member Northeast Pacific Region
- Pres. International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC)
- 2013 DeLaCour Postdoctoral Fellow in Ecology and Conservation
- 2016 Birch Aquarium and Scripps Institution of Oceanography, UC San Diego, La Jolla, CA, USA
- 2008 NSF IGERT Visiting Scientist (*Project: Survey of Artisanal Shark Fisheries in Northern Chile*) Oceana – South America, Santiago, Chile

#### **RESEARCH FELLOWSHIPS**

2013	DeLaCour Postdoctoral Fellowship in Ecology and Conservation	\$150,000
2007	NSF Graduate Research Fellowship Program (GRFP)	\$121,500
2007	NSF Integrative Graduate Education and Research Traineeship (IGERT)	\$97,000

#### SCIENTIFIC (PEER-REVIEWED) PUBLICATIONS

- 2023 Gong AY, Nosal AP, Cartamil DC, Anderson JM, Bellquist LF, Ben-Aderet N, Blincow KM, Burns KS, Freedman RM, Logan RK, Lowe CG, Semmens BX, Stirling, White CF, Hastings PA. "Migration, aggregation, and philopatry of two nearshore elasmobranch species in the Southern California Bight. *Marine Ecology Progress Series* (in press).
- 2022 Goodman AZ, Papudeshi B, Doane MP, Mora M, Kerr E, Torres M, Nero Moffatt J, Lima L, Nosal AP, Dinsdale EA. "Epidermal microbiomes of leopard sharks (*Triakis semifasciata*) are consistent across captive and wild environments. *Microorganisms* 10(10): 2081 (doi: 10.3390/microorganisms10102081).
- 2022 Doane MP, Johnson CJ, Johri S, Kerr EN, Morris MM, Desantiago R, Turnlund AC, Goodman A, Mora M, Lima LF, **Nosal AP**, Dinsdale EA. "The epidermal microbiome within an aggregation of leopard sharks (*Triakis semifasciata*) has taxonomic flexibility with gene functional stability across three time-points." *Microbial Ecology* (doi: 10.1007/s00248-022-01969-y).
- Wegner NC, Portner EJ, Nguyen A, Bellquist L, Nosal AP, Pribyl AL, Stierhoff KL, Fischer P, Franke K, Vetter RD, Hastings PA, Semmens BX, Hyde JR. "Post-release survival and prolonged sub-lethal effects of capture and barotrauma on deep-dwelling rockfishes (genus *Sebastes*): Implications for fish management and conservation." *ICES Journal of Marine Science*: 78(9): 3230 3244.
- 2021 **Nosal AP**, Cartamil DP, Ammann AJ, Bellquist LF, Ben-Aderet NJ, Blincow KM, Burns ES, Chapman ED, Freedman RM, Klimley AP, Logan RK, Lowe CG, Semmens BX, White CF, Hastings PA. "Triennial migration and philopatry in the critically endangered soupfin shark (*Galeorhinus galeus*)." *Journal of Applied Ecology* (doi: 10.1111/1365-2664.13848). \*Featured as *Editor's Choice* by the *Journal of Applied Ecology* with Open Access
- 2020 Doane MP, Morris MM, Papudeshi B, Allen L, Pande D, Haggerty JM, Johri S, Turnlund AB, Peterson M, Kacev D, **Nosal AP**, et al. "The skin microbiome of elasmobranchs follows phylosymbiosis, but in teleost fishes, the microbiomes converge." *Microbiome* 8: 93.
- 2019 Nosal AP, Cartamil DC, Lam C, Wegner NC, Hastings PA. "Movement ecology of young-of-the-year blue sharks (*Prionace glauca*) and shortfin makos (*Isurus oxyrinchus*) within a putative binational nursery area." *Marine Ecology Progress Series* 623: 99 115.
- 2017 Ketchum JT, Slager CJ, Buckhorn ML, Nosal AP, Klimley AP. "Residency and long-distance movements of sevengill sharks (*Notorhynchus cepedianus*) tagged in San Francisco Bay. *Animal Biotelemetry* 5(26): 1 – 9. doi:10.1186/s40317-017-0141-z

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- 2017 Ho C, Joly K, Nosal AP, Lowe CG, Clark CM. "Predicting coordinated group movements of sharks with limited observations using AUVs." *Proceedings of the Association for Computing Machinery Symposium on Applied Computing*: 289 296. doi:10.1145/3019612.3019711
- 2016 Nosal AP, Chao Y, Farrara JD, Chai F, Hastings PA. "Olfaction contributes to pelagic navigation in a coastal shark." *PLoS ONE* 11(1): e0143758. doi:10.1371/journal.pone.0143758
- 2016 **Nosal AP**, Keenan EA, Hastings PA, Gneezy A. "The effect of background music in shark documentaries on viewers' perceptions of sharks." *PLoS ONE* 11(8): e0159279. doi:10.1371/journal.pone.0159279
- 2015 Barker AM, Nosal AP, Lewallen EA, Burton RS. "Genetic structure of leopard shark (*Triakis semifasciata*) populations along the Pacific coast of North America." *Journal of Experimental Marine Biology and Ecology* 472: 151 157.
- 2014 **Nosal AP**, Caillat A, Kisfaludy EK, Royer MA, Wegner NC. "Aggregation behavior and seasonal philopatry in male and female leopard sharks (*Triakis semifasciata*) along the open coast of southern California, USA." *Marine Ecology Progress Series* 499: 157 175.
- 2013 **Nosal AP**, Lewallen EA, Burton RS. "Multiple paternity in leopard shark (*Triakis semifasciata*) litters sampled from a predominantly female aggregation in La Jolla, California, USA." *Journal of Experimental Marine Biology and Ecology* 446: 110 114.
- 2013 **Nosal AP**, Cartamil DC, Long JW, Lührmann M, Wegner NC, Graham JB. "Demography and movement patterns of leopard sharks (*Triakis semifasciata*) aggregating near the head of a submarine canyon along the open coast of southern California, USA." *Environmental Biology of Fishes* 96: 865 878.

#### **RESEARCH GRANTS**

2023	RASP Grant	\$2,000
2021	Moore Family Foundation	\$100,000
2018	University of San Diego Faculty Research Grant	\$2,500
2018	Moore Family Foundation	\$300,000
2016	Link Family Foundation	\$22,800
2014	Moore Family Foundation	\$300,000
2014	Save Our Seas Foundation	\$4,500
2010	SeaWorld and Busch Gardens Conservation Fund	\$10,000
2009	Project AWARE Foundation	\$9,467
2009	Scripps Environmental Advocates	\$14,800
2009	PADI Foundation	\$3,000
2007 -	- Present: Other Private Research Grants	\$111,150
2007 -	- Present: Other Private Research Grants	\$111,150

#### **ORAL PRESENTATIONS AT CONFERENCES**

- 2023 Nosal AP, Cartamil DP, Bellquist LF, Blincow KM, Ben-Aderet NJ, Klinard NV, Mull CG, Semmens BX, Hastings PA. "Persistent shallow, low-amplitude diel vertical migration in tope sharks (*Galeorhinus galeus*)" 38th Meeting of the American Elasmobranch Society, Joint Meeting of Ichthyologists and Herpetologists, Norfolk, VA
- 2019 Nosal AP, Cartamil DP, Lam CH, Bellquist LF, Blincow KM, Burns ES, Ben-Aderet NJ, White CF, Logan RK, Freedman RM, Lowe CG, Semmens BX, Hastings PA. "Triennial philopatry in the Eastern North Pacific soupfin shark (Galeorhinus galeus)." *35th Meeting of the American Elasmobranch Society, Joint Meeting of Ichthyologists and Herpetologists, Snowbird, UT*

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- 2018 **Nosal AP**, Cartamil DP, Lam CH, Bellquist LF, Ben-Aderet NJ, White CF, Logan RK, Freedman RM, Lowe CG, Semmens BX, Hastings PA. "Movement Ecology of the Soupfin Shark (*Galeorhinus galeus*) in the Eastern North Pacific II." *3<sup>rd</sup> Sharks International Conference, João Pessoa, Paraíba, Brazil*
- 2017 **Nosal AP**, Cartamil DP, Lam CH, Bellquist LF, Ben-Aderet NJ, White CF, Logan RK, Freedman RM, Lowe CG, Semmens BX, Hastings PA. "Movement Ecology of the Soupfin Shark (*Galeorhinus galeus*) in the Eastern North Pacific I." 4<sup>th</sup> International Conference on Fish Telemetry, Cairns, Queensland, Australia
- 2016 **Nosal AP**, Cartamil DC, Lam C, Wegner NC, Hastings PA. "Movement ecology of juvenile blue (*Prionace glauca*) and shortfin mako sharks (*Isurus oxyrinchus*) off southern California and Baja California, Mexico." 32<sup>nd</sup> Annual Meeting of the American Elasmobranch Society, Joint Meeting of Ichthyologists and Herpetologists, New Orleans, LA
- 2015 Nosal AP, Yanagitsuru Y, Hyde JR, Hastings PA, Wegner NC. "Hypoxia tolerance in the bocaccio rockfish (Sebastes paucispinis)." 94<sup>th</sup> Annual Meeting of the American Society of Ichthyologists and Herpetologists, Joint Meeting of Ichthyologists and Herpetologists, Reno, NV
- 2014 **Nosal AP**, Hastings PA. "Shoreward homing in experimentally displaced leopard sharks (*Triakis semifasciata*)." 30<sup>th</sup> Annual Meeting of the American Elasmobranch Society, Joint Meeting of Ichthyologists and Herpetologists, Chattanooga, TN
- 2014 Nosal AP, Hastings PA. "Shoreward homing in experimentally displaced leopard sharks (*Triakis semifasciata*)." 2<sup>nd</sup> Sharks International Conference, Durban, KZN, South Africa
- 2013 **Nosal AP**, Keenan EA, Gneezy A. "Happy and playful sharks? The effect of background music in nature documentaries on viewers' perception of and willingness to protect sharks." 29<sup>th</sup> Annual Meeting of the American Elasmobranch Society, Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM
- 2012 **Nosal AP**, Lewallen EA, Burton RS. "Low incidence of multiple paternity in leopard sharks (*Triakis semifasciata*) sampled from a predominantly female aggregation." 28<sup>th</sup> Annual Meeting of the American Elasmobranch Society, World Congress of Herpetology, Vancouver, BC, Canada
- 2011 Nosal AP, Caillat A, Kisfaludy EK, Royer MA, Wegner NC. "Aggregation behavior of the leopard shark (*Triakis semifasciata*) at the head of La Jolla Submarine Canyon, La Jolla, California, USA." 27<sup>th</sup> Annual Meeting of the American Elasmobranch Society, Joint Meeting of Ichthyologists and Herpetologists, Minneapolis, MN (Award for Best Student Oral Presentation)
- 2011 **Nosal AP**, Caillat A, Kisfaludy EK, Royer MA, Wegner NC. "Aggregation behavior of the leopard shark (*Triakis semifasciata*) at the head of La Jolla Submarine Canyon, La Jolla, California, USA." 1<sup>st</sup> International Conference on Fish Telemetry, Sapporo, Hokkaido, Japan (Award for Best Student Oral Presentation)

#### SCIENCE COMMUNICATION AWARDS

- 2015 **iBiology Young Scientist Seminar (YSS) Competition** Sponsored by the Lasker Foundation and the Alan Alda Center for Communicating Science
- 2011 **Best Student Oral Presentation Award** 29<sup>th</sup> Annual Meeting of the American Elasmobranch Society, Minneapolis, MN, USA
- 2011 **Best Student Oral Presentation Award** 1<sup>st</sup> International Conference on Fish Telemetry, Sapporo, Hokkaido, Japan

#### Curriculum Vitae | 5 of 9 TEACHING, MENTORING, AND SCIENCE COMMUNICATION DEVELOPMENT

- 2021 Pod Participant: Unlearning Racism in Geoscience (URGE), University of San Diego
- 2021 Workshop Participant: "Advising Students of Color", Center for Educational Excellence, University of San Diego, San Diego, USA
- 2018 Workshop Participant: "Engaging Pedagogies: Strategies to Encourage Mastery", Center for Educational Excellence, University of San Diego, San Diego, USA
- 2017 Workshop Chair: "Personal Branding: Defining Your Purpose and Promise, Advancing Your Career", SACNAS National Diversity in STEM Conference, Salt Lake City, UT, USA
- 2016 Workshop <u>Panelist</u>: "Science Communication: Becoming a Public Voice, Advancing Your Career", SACNAS National Diversity in STEM Conference, Long Beach, CA, USA
- 2016 Workshop <u>Coach</u>: "Improvisation for Scientists", University of California San Francisco, San Francisco, CA, USA
- 2015 Workshop Participant: "Inclusive Education Workshop Series: Enhancing the Learning Environment for Students with Learning Disabilities using Universal Design for Learning (UDL)", Center for Inclusion and Diversity, University of San Diego, San Diego, CA USA
- 2015 Workshop Participant: "Improvisation for Scientists", Alan Alda Center for Communicating Science, Stony Brook University, Stony Brook, NY, USA
- 2013 Workshop Participant: 20<sup>th</sup> Institute on Teaching and Mentoring, Compact for Faculty Diversity, Arlington, VA, USA
- 2011 Workshop Participant: 18<sup>th</sup> Institute on Teaching and Mentoring, Compact for Faculty Diversity, Atlanta, GA, USA
- 2009 Workshop Participant: 16<sup>th</sup> Institute on Teaching and Mentoring, Compact for Faculty Diversity, Arlington, VA, USA
- 2008 NSF Communicating Ocean Sciences to Informal Audiences (COSIA) Course Scripps Institution of Oceanography, La Jolla, CA, USA

#### INVITED ACADEMIC SEMINARS AND COURSE GUEST LECTURES

- 2023 **"Improvisation for Scientists and Communicating Science to the Public"** SIO 295: Introduction to Marine Biodiversity, Conservation, Global Change (Graduate Course) Scripps Institution of Oceanography, La Jolla, CA, USA
- 2022 **"Movement Ecology of Sharks off the Coast of Southern California"** Perspectives on Science Speaker Series Point Loma Nazarene University, San Diego, CA, USA
- 2022 **"Improvisation for Scientists and Communicating Science to the Public"** SIO 295: Introduction to Marine Biodiversity, Conservation, Global Change (Graduate Course) Scripps Institution of Oceanography, La Jolla, CA, USA
- 2021 **"Improvisation for Scientists and Communicating Science to the Public"** SIO 295: Introduction to Marine Biodiversity, Conservation, Global Change (Graduate Course) Scripps Institution of Oceanography, La Jolla, CA, USA
- 2019 **"Improvisation for Scientists and Communicating Science to the Public"** SIO 295: Introduction to Marine Biodiversity, Conservation, Global Change (Graduate Course) Scripps Institution of Oceanography, La Jolla, CA, USA

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- 2018 **"Improvisation for Scientists and Communicating Science to the Public"** SIO 295: Introduction to Marine Biodiversity, Conservation, Global Change (Graduate Course) Scripps Institution of Oceanography, La Jolla, CA, USA
- 2017 **"Public Perception, Science Communication, and Shark Conservation"** SIO 295: Introduction to Marine Biodiversity, Conservation, Global Change (Graduate Course) Scripps Institution of Oceanography, La Jolla, CA, USA
- 2016 **"Local Legends: Movement Ecology of Leopard Sharks off La Jolla, California"** Aquarium of the Pacific Guest Speaker Series, Long Beach, CA, USA (http://bit.ly/2nwOVu6)
- 2016 "Movement Ecology of the Leopard Shark off La Jolla, CA" SIO 188: Biology of Fishes (Undergraduate Course) Scripps Institution of Oceanography, La Jolla, CA, USA
- 2015 **"Elasmobranch Coastal Policy and Conservation."** SIO 295: Introduction to Marine Biodiversity and Conservation (Graduate Course) Scripps Institution of Oceanography, La Jolla, CA, USA
- 2015 "Not Just on Vacation: Why Leopard Sharks Hang Out In La Jolla." iBiology Young Scientist Seminar (YSS) Series (https://bit.ly/2JKOKq8)
- 2015 "Behavioral Ecology of the Leopard Shark (*Triakis semifasciata*) in La Jolla, California." Evening Lecture Series, Saint Katherine College, San Marcos, CA, USA
- 2014 **"Protecting Sharks: Documentary Music and Viewers' Perceptions"** Center for Marine Biodiversity and Conservation (CMBC) Brown Bag Lecture Series Scripps Institution of Oceanography, La Jolla, CA, USA
- 2014 "Behavioral Ecology of the Leopard Shark (*Triakis semifasciata*) in La Jolla, California." Ecology Seminar Series, Scripps Institution of Oceanography, La Jolla, CA, USA
- 2014 **"Sharks and Rays: Biodiversity and Conservation."** SIO 295: Introduction to Marine Biodiversity and Conservation (Graduate Course) Scripps Institution of Oceanography, La Jolla, CA, USA
- 2014 **"Behavioral Ecology of the Leopard Shark (Triakis semifasciata) in La Jolla, California."** Coastal and Marine Institute Seminar Series, San Diego State University, San Diego, CA, USA
- 2013 **"Shark Conservation: Safeguarding the Future of Our Oceans."** Jeffrey B. Graham Perspectives on Ocean Sciences Lecture Series, Birch Aquarium at Scripps, La Jolla, CA, USA (http://bit.ly/1DWxdhy)
- 2013 **"Demography, movement patterns, and mating system of leopard sharks (Triakis** semifasciata) aggregating along the open coast of southern California, USA." Biology Department Seminar Series, University of San Diego, San Diego, CA, USA
- 2013 "Shark Conservation: Safeguarding the Future of Our Oceans." San Diego Zoo Institute for Conservation Research Seminar Series, Escondido, CA, USA
- 2012 **"Local Legends: The Leopard Sharks of La Jolla Shores."** Jeffrey B. Graham Perspectives on Ocean Sciences Lecture Series, Birch Aquarium at Scripps, La Jolla, CA, USA (http://bit.ly/1Df1ygt)
- 2012 **"Sharks at the End of the Line."** *Tijuana River National Estuarine Research Reserve Saturday Speaker Series Imperial Beach, CA, USA*

#### **PROFESSIONAL SERVICE**

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#### 2023 – Board of Directors Member

Pres. American Elasmobranch Society

#### 2022 – Grant Committee Member

Pres. American Elasmobranch Society

#### 2021 - Equity and Diversity Committee Member

Pres. American Elasmobranch Society

#### 2012 - Chair of Judging Committee for Gruber Award for Outstanding Student Oral Presentation

Pres. American Elasmobranch Society

#### 2009 - Editorial Peer Reviewing

Pres.Conservation Biology<br/>PLOS ONEBulletin of the Southern California Academy of Sciences<br/>BioMed Central Research NotesAquatic BiologyMarine and Freshwater Research<br/>CopeiaCopeiaMarine Ecology Progress SeriesCalifornia Fish and Game<br/>International Union for the Conservation of Nature (IUCN)<br/>Journal of Experimental Marine Biology and Ecology<br/>Frontiers in Marine Science

#### 2014 - Center for Marine Biodiversity and Conservation (CMBC) Steering Committee Member

2016 Scripps Institution of Oceanography, La Jolla, CA, USA

#### 2010 - Conference and Online Store Manager

2013 American Elasmobranch Society

#### COMMUNITY ENGAGEMENT AND OUTREACH

#### 2017 - Assistant Regional Director, National Ocean Science Bowl (NOSB)

2022 Annual high school competition hosted by the University of San Diego

#### 2013 - Volunteer SCUBA Diver at Birch Aquarium

2021 Live underwater cleaning, feeding, and education performances

#### 2008 - Media Consulting (>150 print and broadcast news interviews):

Pres. Associated Press CNN, FOX, CW, NBC, CBS, ABC, KUSI, CBSN New York Times National Public Radio (NPR) Al Jazeera International Los Angeles Times Washington Post **Discovery News** San Diego Union-Tribune New York One News (NY1) North County Times Central Coast Public Radio (KPBX) Christian Science Monitor The Hill La Jolla Light Women's Health Magazine Newsweek

#### **On-Camera** Contributions:

"Solved: Nature's Greatest Mysteries" Documentary Series – Animal Planet
"When Sharks Attack" Documentary Series – National Geographic
"Shocking Sharks" Documentary – National Geographic
"Lifeguard!" Documentary Series – The Weather Channel
"Sky Sharks" Documentary – National Geographic
"History's Greatest Mysteries" – History Channel
"Sharks Gone Viral" Documentary – National Geographic
"Sharks Unknown" – PBS

#### 2011 – Other Consulting San Diego Lifeguard Services Long Beach Aquarium of the Pacific Pres. **Banning LLP** San Diego County Medical Examiner 2008 – Invited Speaker Pres. Science and Religion Club at Point Loma Nazarene University (2023) Upward Bound at San Diego State University (2023) California Academy of Sciences Breakfast Club Livestream Speaker Series (2021) Bolsa Chica Conservancy ExperTalk Series (2021) Torrey Pines Conservancy (2021) USD Summer Undergraduate Research Experience (SURE) Program (2021) Solana Santa Fe Elementary (2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023) Boy Scout Troop 88, Bridgewater, NJ (2021) InterpreTEEN High School Internship Program, Birch Aquarium (2013, 2014, 2015, 2016, 2017) Mount Miguel High School (2010, 2017) Rancho Santa Fe School (2010, 2011, 2012, 2013, 2016) Sierra Club San Diego (2016) Aldo Leopold Charter School (2009, 2010, 2011, 2012, 2013, 2014, 2015) Exploring Ocean STEM Careers at the Birch Aquarium (2015) Torrey Pines Docent Society (2015, 2022) Cabrillo National Monument (2014) Better Education for Women in Science and Engineering (BE WiSE; 2013) St. Joseph Academy (2013) El Cajon Valley High School (2012) Torrey Pines High School (2010, 2012) Temecula Valley High School (2009) La Jolla Elementary School (2009) San Diego County Libraries (2009) California State Summer School for Mathematics and Science (COSMOS; 2008) Southwest Marine Educators Association (SWMEA; 2008)

- 2008 Tour Guide for Scripps Community Outreach Program for Education (SCOPE)
- 2016 Walking tours of Scripps Institution of Oceanography and snorkeling tours with leopard sharks

# 2008 - Moderator and Science Judge for National Ocean Science Bowl (NOSB)

2012 Annual high school competition hosted by the Birch Aquarium

# **GRADUATE (M.S.) STUDENTS ADVISED**

Year(s)	Name	Institution
2021 – pres.	Okoiya Kelly	University of San Diego, San Diego, CA (Committee Chair)
2022 – pres.	Makenna Chan	University of San Diego, San Diego, CA (Committee Member)
2020 – pres.	Ryan Yont	University of San Diego, San Diego, CA (Committee Member)
2020 - 2022	Annabel Gong	University of San Diego, San Diego, CA (Committee Chair)
2018 - 2022	Jack May III	CSU – Long Beach, Long Beach, CA (Committee Member)
2018 - 2019	Rachel Steinberg	University of San Diego, San Diego, CA (Committee Member)

# UNDERGRADUATE AND HIGH SCHOOL STUDENTS MENTORED AS RESEARCH ASSISTANTS

Year(s)	Name	Institution
	Caroline Saple	Point Loma Nazarene University, San Diego, CA

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2023 – pres.	Kayleigh Bajarin	Point Loma Nazarene University, San Diego, CA
2023 – pres.	Josh Gailey	Point Loma Nazarene University, San Diego, CA
2020 - 2021	Alyssa Veneri	University of San Diego, San Diego, CA
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2020 - 2021	Clara Padinske	University of San Diego, San Diego, CA
2020 - 2022	Savannah Stallings	University of San Diego, San Diego, CA
2020 - 2022	Maya Hodder	University of San Diego, San Diego, CA
2020 - 2022	Siena Merk	University of San Diego, San Diego, CA
2018 - 2019	Annabel Gong	University of San Diego, San Diego, CA
2018 - 2019	Nikola Modric	University of San Diego, San Diego, CA
2017 2017	Anik Ribera	University of Saint Katherine, San Marcos, CA
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2017	Tabitha Hannon	University of Saint Katherine, San Marcos, CA
2016	Chris Papatheofanis	Pitzer College, Clairemont, CA
2016	Dylan Sarish	University of California – San Diego, La Jolla, CA
2016	Ram Iyer	University of California – San Diego, La Jolla, CA
2016	Wenda Ly	University of California – San Diego, La Jolla, CA
2015 - 2016	Lindsay Baerg	Bellarmine Preparatory High School, Tacoma, WA
2015 2010	Mitchell Simpson	University of San Diego, San Diego, CA
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2015	Jennifer Joseph	San Diego State University, San Diego, CA
2014 - 2015	Danielle Lemieux	University of San Diego, San Diego, CA
2014	Jamie Canepa	Pomona College, Pomona, CA
2014	Isaac Davidson	University of San Diego, San Diego, CA
2014	Caitlin McNally	University of San Diego, San Diego, CA
2013 - 2014	Katherine Laybourn	University of San Diego, San Diego, CA
2013	Jesse O'Neil	University of San Diego, San Diego, CA
2013	Sydney Davis	University of San Diego, San Diego, CA
2013	Brittany Nelson	University of San Diego, San Diego, CA
2013	Melis Okter	University of California – San Diego, La Jolla, CA
2013	Ronia Sham	University of California – San Diego, La Jolla, CA
2013	Delanie Medina	California State University – San Marcos, San Marcos, CA
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2012	Allison Randolph	Florida Institute of Technology, Melbourne, FL
2012	Adam Hardy	Swarthmore College, Swarthmore, PA
2012	Megan Ouyang	University of California – San Diego, La Jolla, CA
2011 - 2013	Justin Beckman	University of California – San Diego, La Jolla, CA
2011 - 2012	Taylor Smith	Yorktown High School, Yorktown Heights, NY
2011 - 2012	Amanda Barker	University of California – San Diego, La Jolla, CA
2011	Bryan Frossard	University of California – Berkeley, Berkeley, CA
2011	Jordan Arce	University of California – San Diego, La Jolla, CA
2011	Sara Pennebaker	University of California – San Diego, La Jolla, CA
2010 - 2011	Alex Caillat	
		Cornell University, Ithaca, NY
2010	Amanda Martin	University of California – Los Angeles, Los Angeles, CA
2010	Mary-Cate Bernal	Santa Clara University, Santa Clara, CA
2010	Lillian McCormick	Eckerd College, Saint Petersburg, FL
2010	Lindsay Bonito	University of California – San Diego, La Jolla, CA
2009 - 2010	Mark Royer	University of North Carolina – Wilmington, Wilmington, NC
2009	Marcus Taylor	University of Hawaii – Hilo, Hilo, HI
2008	Martin Lührmann	University of Cologne, Cologne, Germany