

Camrin D. Braun

MIT-WHOI Joint Program in Oceanography
Massachusetts Institute of Technology
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EDUCATION

- Ph.D.** **Massachusetts Institute of Technology** Cambridge, MA
expected **Woods Hole Oceanographic Institution** Woods Hole, MA
Ph.D. in Biological Oceanography, MIT-WHOI Joint Program in Oceanography May 2018
Thesis title: Oceanographic drivers of large pelagic fish movements in the North Atlantic Ocean
- Massachusetts Institute of Technology** Cambridge, MA
Graduate Certificate in Science, Technology and Policy May 2018
- M.Sc.** **King Abdullah University of Science and Technology** Thuwal, KSA
M.Sc. in Marine Science and Engineering, Red Sea Research Center July 2013
Thesis title: Movement ecology of *Manta alfredi* in the eastern Red Sea
- B.Sc.** **The College of Idaho** Caldwell, ID
B.Sc. in Environmental Studies and Conservation Biology, Summa cum laude May 2011
Honors thesis title: Movements of juvenile whale sharks (*Rhincodon typus*) in the Red Sea

RESEARCH EXPERIENCE

- MIT-WHOI Joint Program in Biological Oceanography** 2013 - present
NASA Graduate Research Fellow, Fish Ecology Lab, Dr. Simon Thorrold
- Developed Bayesian state-space model framework that leverages oceanographic data to improve geolocation of archival-tagged fishes (Braun et al. in press. MEE) and published open-source R package (HMMoce)
 - Constructed habitat models from animal tag and oceanographic data (Braun et al. in prep. CJFAS)
 - Leveraged high-performance computing resources to determine biophysical drivers of animal movements using high-resolution movement and oceanographic data and models
 - Led independent research project including conception, funding acquisition (NASA), data collection, analysis and dissemination (Braun et al. 2018 Ocean Sciences Meeting, Portland)
 - *Collaborators:* Benjamin Galuardi (NOAA/NMFS), Dr. Peter Gaube (APL/UW)
- Woods Hole Oceanographic Institution, Biology Department** 2013 - present
Graduate Research Assistant, Fish Ecology Lab, Dr. Simon Thorrold
- Led field teams for two 45-day expeditions to the remote tropical Pacific
 - Sampled reef sharks, fishes and other foodweb components using various fishing and underwater techniques
 - Conducted various ecogeochemistry lab techniques, including amino acid isolation and mass spectrometry
 - Analyzed and visualized isotope geochemistry data using Bayesian mixing models in R
 - *Collaborators:* Conservation International, New England Aquarium, SEA Education Association
- King Abdullah University of Science and Technology, Red Sea Research Center** 2012 - 2013
Masters Student, Reef Ecology Lab, Dr. Michael Berumen
- Discovered and characterized the population ecology at a novel aggregation site for juvenile whale sharks (Cochran et al. 2016. JFB)
 - Led daily outreach field expeditions to engage the public in our whale shark and manta ray research
 - Analyzed and published satellite tag data (Braun et al. 2014. PLoS One) and quantified error in various modeling techniques (Braun et al. 2015. Mar. Bio.)
 - *Collaborators:* Dr. Gregory Skomal (MA Marine Fisheries), Dr. Simon Thorrold (WHOI)
- Woods Hole Oceanographic Institution, Biology Department** 2011 - 2012
Research Assistant I, Fish Ecology Lab, Dr. Simon Thorrold
- Analyzed a novel animal movement dataset describing extreme diving behavior in Mobulid rays (Thorrold et al. 2014. Nature Comm.)
 - Discovered adaptive role of and evolutionary explanation for morphological specialization in deep-diving fishes
 - *Collaborators:* Dr. Pedro Afonso and Dr. Jorge Fontes (U. of the Azores)

National Science Foundation - Woods Hole Oceanographic Institution Summer 2010
NSF Research Experience for Undergraduates Fellow, Fish Ecology Lab, Dr. Simon Thorrold

- Learned the R programming language and tag data analysis methods and model techniques
- Summarized and analyzed a large movement dataset recorded by archival tags on whale sharks (Berumen et al. 2014. PLoS One)

Idaho Department of Fish and Game, Anadromous Fish Program Summer 2009
Fisheries BioAide and Field Technician

- Communicated with land owners and the public to access and sample water resources on private land
- Cooperated as a member of a field team in harsh conditions during long days in remote, mountain environments
- Sampled and analyzed stream fish community composition and maintained a network of fish weirs and traps to sample anadromous fish populations and meet management objectives

Research Collaborations

Co-PI Movement ecology of white sharks in the North Atlantic Ocean 2012 - present
Collaborators: Dr. Gregory Skomal (MA Marine Fisheries), OCEARCH

Co-PI Functional and genetic diversity of coral reef fishes in the remote tropical Pacific 2012 - present
Collaborators: Dr. Serge Planes (CRIOBE), Dr. Kelton McMahon (URI-GSO), Dr. Simon Thorrold (WHOI)

Co-PI Blood chemistry of grey and blacktip reef sharks in the wild 2012 - present
Collaborators: Dr. Julie Cavin (SC Aquarium), Dr. John Mandelman (New England Aquarium)

Analyst Population and movement ecology of elasmobranchs in the Red Sea 2010 - present
Collaborators: Dr. Michael Berumen (KAUST), Dr. Julia Spaet (Univ. of Cambridge), Dr. Jesse Cochran (KAUST), Dr. Chi Hin Lam (Boston Univ.)

PI Synthesizing biophysical drivers of billfish movements 2014 - 2015
Collaborators: Dr. Maxwell Kaplan (MIT-WHOI), Dr. Joel Llopiz (WHOI), Dr. Andrij Horodysky (Hampton Univ.)

Analyst Fidelity and migration of tiger sharks in the Coral Sea 2012 - 2014
Collaborators: Dr. Eric Clua (French Ministry of Ag and Fisheries), Dr. Serge Planes (CRIOBE), Dr. Jonathan Werry (Griffith Univ.), Dr. Kate Lee (Macquarie Univ.)

PI Characterizing historical and modern ecosystem effects of a riverine invasive 2009 - 2011
Collaborators: Dr. Christoph Walser (The College of Idaho)

TECHNICAL SKILLS AND TRAINING

Programming languages: R (expert), Matlab (intermediate)

Analysis: R (writing libraries, parallel computing, statistics, mapping, graphics), High-performance computing via Amazon Web Services, LaTeX/Markdown, Github, Adobe Creative Suite (Illustrator, Photoshop)

GIS/Remote Sensing: GMT, QGIS, many cartographic utilities implemented in R, ArcGIS

AniMove: Course on Animal Movement and Remote Sensing in Ecology and Conservation, 13-24 April 2015, Smithsonian Conservation Biology Institute, USA.

OS: Mac, Linux/Ubuntu, Windows

Other: AAUS Scientific Diver, PADI Rescue and Advanced Diver, NAUI Drysuit and Nitrox, Part 107 certified commercial drone pilot, Wilderness First Aid

PUBLICATIONS

In Preparation [drafts available upon request]

Braun C. D., P. Gaube, P. Afonso, J. Fontes, G. B. Skomal, S. R. Thorrold. in prep. Oceanographic association, movements and connectivity of swordfish in the North Atlantic. ICES JMS.

Submitted

Gaube P., **C. D. Braun**, A. Della Penna, G. L. Lawson, D. J. McGillicuddy Jr., G. B. Skomal, S. R. Thorrold. in review. Mesoscale eddies influence white shark movements in the open ocean. Scientific Reports.

Cochran J. E. M., **C. D. Braun**, G. B. Skomal, S. R. Thorrold, M. L. Berumen. in review. Acoustic telemetry reveals stark differences in residency behavior and movement ecologies among whale shark (*Rhincodon typus*) aggregations. Marine Biology.

Published

Braun C. D., B. Galuardi, S. R. Thorrold. 2018. HMMoce: An R package for improved geolocation of archival-tagged fishes using a hidden Markov method. Methods in Ecology and Evolution. [link](#)

- Sequeira A. M. M.,....**C. D. Braun**...., M. Thums. 2018. Convergence of marine megafauna movements patterns in coastal and open oceans. *Proceedings of the National Academy of Sciences*.
- Braun C. D.**, G. B. Skomal, S. R. Thorrold. 2018. Integrating archival tag data and a high-resolution oceanographic model to estimate basking shark (*Cetorhinus maximus*) movements in the western Atlantic. *Frontiers in Marine Science*. [link](#)
- Skomal G. B., **C. D. Braun**, J. H. Chisholm, S. R. Thorrold. 2017. Movements of the white shark (*Carcharodon carcharias*) in the North Atlantic Ocean. *Marine Ecology Progress Series* 580: 1-16. [link](#)
- Spaet J. L. Y., C. H. Lam, **C. D. Braun**, M. L. Berumen. 2017. Extensive use of mesopelagic waters by a Scalloped hammerhead shark (*Sphyrna lewini*) in the Red Sea. *Animal Biotelemetry* 5(1). [link](#)
- Cochran J. E. M., R. S. Hardenstine, **C. D. Braun**, G. B. Skomal, S. R. Thorrold, K. Xu, M. G. Genton, M. L. Berumen. 2016. Population structure of a whale shark (*Rhincodon typus*) aggregation in the Red Sea. *Journal of Fish Biology* 89(3): 1570-1582. [link](#)
- Coker D. J., **C. D. Braun**, J. Cavin, S. Payet, M. L. Berumen. 2016. Remote marine protected area reveals unusual social behavior in *Chaetodon trifascialis*. *Marine Biodiversity*: 1-2. [link](#)
- Braun C. D.**, G. B. Skomal, S. R. Thorrold, M. L. Berumen. 2015. Movements of the reef manta ray (*Manta alfredi*) in the Red Sea using satellite and acoustic telemetry. *Marine Biology* 162(12). [link](#)
- Braun C. D.**, M. B. Kaplan, A. Z. Horodysky, J. K. Llopiz. 2015. Satellite telemetry reveals physical processes driving billfish behavior. *Animal Biotelemetry* 3(1). [link](#)
- Priest, M. A., G. R. Almany, **C. D. Braun**, R. J. Hamilton, D. F. Lozano-Cortés, et al. 2014. Isolation and characterization of 29 microsatellite markers for the bumphead parrotfish, *Bolbometopon muricatum*, and cross amplification in 12 related species. *Marine Biodiversity* 45(4): 861-866. [link](#)
- Berumen M. L., **C. D. Braun**, J. E. M. Cochran, G. B. Skomal, S. R. Thorrold. 2014. Movement patterns of juvenile whale sharks tagged at an aggregation site in the Red Sea. *PLoS One* 9. [link](#)
- Thorrold S. R., P. Afonso, J. Fontes, **C. D. Braun**, G. B. Skomal, M. L. Berumen. 2014. Extreme diving behavior in devil rays links surface waters and the deep ocean. *Nature Communications* 5. [link](#)
- Braun C. D.**, G. B. Skomal, S. R. Thorrold, M. L. Berumen. 2014. Diving Behavior of the Reef Manta Ray Links Coral Reefs with Adjacent Deep Pelagic Habitats. *PLoS One* 9. [link](#)
- Werry J. M., S. Planes, M. L. Berumen, K. A. Lee, **C. D. Braun**, E. Clua. 2014. Reef fidelity and migration of tiger sharks, *Galeocerdo cuvier*, across the Coral Sea. *PLoS One* 9. [link](#)
- Walter R. T.,....**C. D. Braun**,....N. E. Hussey. 2013. First record of living *Manta alfredi* x *Manta birostris* hybrid. *Marine Biodiversity* 44: 1-2. [link](#)
- Braun, C. D.** and C. A. Walser. 2011. The diet and distribution of largemouth bass (*Micropterus salmoides*) in the lower Boise River, Idaho. *Western North American Naturalist* 71(3): 316-326. [link](#)

GRANTS AND FUNDING: Total to Date \$379,661

Research Grants: \$74,862

2017	The Explorers Club Rolex Exploration Grant: The Secret Life of the World's Largest Fish	
	PI: Braun	\$10,000
2015	Sigma Xi, Grants-in-Aid of Research: Human influence on pristine coral reefs and management implications	
	PI: Braun	\$500
2015	MIT Center for International Studies, Summer Study Grant: High seas pupping necessitates multinational cooperation over the world's largest fish. PI: Braun	\$3,150
2014	WHOI Access to the Sea Grant: The RAFOS Ocean Acoustic Monitoring (ROAM) tag: A new tool for tracking marine megafauna. PIs: Braun and Thorrold	\$54,712
2014	National Geographic Young Explorer Grant: Pelagic pupping, reproduction in the world's largest fish	
	PI: Braun	\$5,000
2013	WHOI Coastal Ocean Institute Grant: Pelagic pupping, reproduction in the world's largest fish	
	PIs: Braun and Thorrold	\$1,500

Fellowships: \$295,104

2016	NASA Earth and Space Science Fellowship	\$74,670
2016	NOAA Fisheries/Seagrant Fellowship in Population Dynamics (declined)	\$78,434
2016	American Fisheries Society Steven Berkeley Marine Conservation Fellowship (runner-up)	\$1,000
2016	WHOI Ocean Venture Fellowship	\$5,000
2015	WHOI Grassle Fellowship	\$10,000
2015	MIT Martin Family Society of Fellows for Sustainability Fellowship	\$60,000
2015	MIT John S. Hennessy Fellowship	\$60,000

2012	King Abdullah University of Science and Technology Provost Award	\$6,000
2010	National Science Foundation Research Experience for Undergraduates Fellowship, WHOI	

Other Financial Awards: \$9,695

2017	MIT Graduate Student Council Travel Grant \$860, MIT Student Assistance Fund \$1,000, WHOI Travel Grant \$760, WHOI Biology Department \$525	\$3,145
2016	MIT Student Assistance Fund \$400, WHOI Travel Grant \$750, WHOI Biology Department \$500	\$1,650
2016	MIT Student Assistance Fund \$600, WHOI Biology Department \$300	\$900
2014	MIT Student Assistance Fund \$1,000, WHOI Biology Department \$500	\$1,500
2011	The College of Idaho Student Research Grant	\$500
2011	The College of Idaho Nel Tobias Award	\$1,000
2010	The College of Idaho Student Research Grant	\$1,000

HONORS AND AWARDS

2016	Outdoor 30 Under 30 Fellow	
2015	MIT Martin Family Society of Fellows for Sustainability Fellowship	
2015	MIT John S. Hennessy Fellowship	
2011	Graduated <i>Summa Cum Laude</i> at The College of Idaho	
2011	The College of Idaho Scarab Award in recognition of academic excellence	
2010	Abbott Award at The College of Idaho: "For scholarship, character, and effective participation in the life and work of the College."	
2010	Outstanding Environmental Studies Student Award at The College of Idaho	
2010	Best Poster in Ecology, Idaho Academy of Sciences Meeting	
2007	Heritage Scholarship (4 years full tuition) at The College of Idaho	
2007	Dean's Honors List at The College of Idaho, 11 of 12 semesters	

RESEARCH EXPEDITIONS

Expedition or Team Leader

2017	MV Machaca, Cape Cod, MA: Biophysical interactions on the high seas using sharks as model predators, 3 day trips. Collaborators: APL-UW, MA Marine Fisheries	
2017	MV Endurance, Cape Cod, MA: The Secret Life of the World's Largest Fish, 16 day trips	
2016	MV Machaca, Cape Cod, MA: Biophysical interactions on the high seas using sharks as model predators, 6 day trips. Collaborators: APL-UW, MA Marine Fisheries	
2015	MV Hanse Explorer, Phoenix Islands Marine Protected Area, Pacific: Tracing carbon flow through coral reef food webs using a compound-specific stable isotope approach, 45 days. Collaborators: New England Aquarium, UC-Santa Cruz, Scripps Institution of Oceanography	
2015	MV Machaca, Cape Cod, MA: Biophysical interactions on the high seas using sharks as model predators, 8 day trips. Collaborators: APL-UW, MA Marine Fisheries	
2014	SV Robert Seamans, Phoenix Islands Marine Protected Area, Pacific: Tracing carbon flow through coral reef food webs using a compound-specific stable isotope approach. Explorer's Club flagged expedition, 30 days. Collaborators: New England Aquarium, Sea Education Association, UC-Santa Cruz, Scripps	
2012	MV Dream Master, Al Lith, Saudi Arabia: Movement ecology and seasonality of whale sharks and manta rays in the Red Sea, 25 day trips. Collaborators: WHOI, MA Marine Fisheries	

Expedition Participant

2017	SV C'est Si Bon, Baja Mexico: Salinity Variability at (Sub)mesoscale Fronts, 14 days. Collaborators: UW-APL	
2016	MV OCEARCH, Nantucket, MA: Ecology of adult white sharks in the Atlantic Ocean, 14 days	
2016	MV OCEARCH, Jacksonville, FL: Ecology, physiology, and behavior of white sharks in the Atlantic Ocean. Explorer's Club flagged expedition, 14 days.	
2015	MV Arabella, Montauk, NY: Movements and ecology of highly migratory sharks of the Atlantic, 3 days.	
2013	MSV Elegante, Sudanese Red Sea: Movement ecology and foodweb dynamics in a UNESCO World Heritage area. Explorer's Club flagged expedition, 12 days. Collaborators: Cousteau Society, Univ. of Windsor	
2012	MSV Nai'a, Phoenix Islands Marine Protected Area, Pacific: Tracing carbon flow through coral reef food webs using a compound-specific stable isotope approach, 40 days. Explorer's Club flagged expedition.	
2012	MSV Elegante, Sudanese Red Sea: Movement ecology and foodweb dynamics in a UNESCO World Heritage area. Explorer's Club flagged expedition, 10 days. Collaborators: WHOI	

2010 Heron Island Research Station, Great Barrier Reef, Australia: Distribution of butterflyfish on Heron Reef, 10 days.

INVITED TALKS AND SEMINARS

- Braun CD***. 2017. Dynamic ocean management: A fish perspective. Invited oral presentation at NASA-World Resources Institute workshop on ocean health and fisheries, Washington, DC.
- Braun CD***, Thorrold SR. 2017. The secret lives of sharks. Invited oral presentation at The Birches School, Lincoln, MA.
- Braun CD***. 2017. Letters from a sinking ship. Invited oral presentation at National Geographic Nights, Washington, DC.
- Braun CD***, Thorrold SR. 2017. The secret lives of sharks. Invited oral presentation at National Geographic Family Day, Washington, DC.
- Braun CD***, Thorrold SR*. 2017. The science of JAWS. Invited oral presentation at Boston Symphony Orchestra, Lenox, MA.
- Braun CD***, Thorrold SR. 2017. The secret lives of sharks. Invited oral presentation at Mullen Hall Elementary School, Falmouth, MA.
- Braun CD***, Thorrold SR. 2016. The secret lives of sharks. Invited oral presentation at Science Made Public, Woods Hole, MA.
- Braun CD***, Galuardi B, Thorrold SR. 2016. Improved marine animal geolocation using hidden Markov models. Invited oral presentation at WHOI Biology Department Seminar Series, Woods Hole, MA.
- Braun CD***, Thorrold SR. 2015. Tracking sharks in a dynamic ocean. Invited poster presentation at MIT Museum's Nautical Nights, Cambridge, MA.
- Braun CD***. Lost at sea: studying fish movements without gills of our own. 2015. Invited oral presentation at KAUST Winter Enrichment Program, Thuwal, KSA.
- Braun CD***, Thorrold SR. 2014. Population and migratory connectivity in ocean ecosystems. Invited oral presentation at Yale School of Forestry and Environmental Studies, Woods Hole, MA.
- Braun CD***, Thorrold SR. 2014. Population and migratory connectivity in ocean ecosystems. Invited oral presentation at Sea Education Association, Woods Hole, MA.
- Braun CD***, Skomal GB, Thorrold SR, Berumen ML. 2013. Movement ecology of *Manta alfredii* in the eastern Red Sea. Invited oral presentation at WHOI Biology Department Seminar Series, Woods Hole, MA.
- Braun CD***, Skomal GB, Berumen ML, Thorrold SR. 2011. Movements of juvenile whale sharks (*Rhincodon typus*) in the Red Sea. Invited oral presentation at The College of Idaho Environmental Studies Seminar Series, Caldwell, ID.

CONFERENCE PRESENTATIONS

- Braun CD***, Gaube P, Skomal GB, Thorrold SR. 2018. Mesoscale oceanography influences highly migratory shark movements. Ocean Sciences Meeting, Portland, OR (Domestic, Oral).
- Thorrold SR*, McMahon K, **Braun CD**, Houghton LA, Berumen ML, Planes S. Reconciling functional and genetic diversity in fish communities on coral reefs in the central tropical Pacific by combining compound specific stable isotope analysis, population genetics and acoustic telemetry. 2018. Ocean Sciences Meeting, Portland, OR (Domestic, Oral).
- Gaube P*, Thorrold SR, **Braun CD**, McGillicuddy Jr D, Lawson G. 2017. Mesoscale eddies influence white shark movements in the open ocean. ASLO Ocean Sciences, Honolulu, HI (International, Oral).
- Braun CD***, Galuardi B, Thorrold SR. 2017. An improved hidden Markov method for geolocating archival-tagged fishes. Bio-Logging Symposium, Konstanz, Germany (International, Oral).
- Gaube P*, Thorrold SR, **Braun CD**, McGillicuddy Jr DK, Lawson G, Skomal GB. 2016. The Use of Mesoscale Eddies and Gulf Stream Meanders by White Sharks *Carcharodon carcharias*. Ocean Sciences Meeting, New Orleans, LA (International, Oral).
- Thorrold SR*, McMahon K, **Braun CD**, Berumen ML, Houghton LA. 2016. Tracing Carbon Flow Through Food Webs on Isolated Coral Reefs in the Central Pacific Ocean Using a Compound-Specific Stable Isotope Approach. Ocean Sciences Meeting, New Orleans, LA (International, Oral).
- Braun CD***. 2016. Creeping climate constraint: A case study of the North Atlantic's pelagic predators. Graduate Climate Conference, Seattle, WA (National, Poster).
- Braun CD***, Skomal GB, Thorrold SR, Berumen ML. 2016. Movements of the reef manta ray (*Manta alfredi*) in the Red Sea. International Coral Reef Symposium, Honolulu, HI (International, Poster).
- Braun CD***, Skomal GB, Thorrold SR. 2014. Fidelity and migration of basking sharks in the Atlantic. Ocean

Sciences Meeting, Honolulu, HI (International, Poster).

Afonso P*, **Braun CD**, Vandeperre F, Fontes J, Skomal GB, Thorrold SR. 2014. Deep diving in large pelagic fishes. 65th Tuna Conference, UCLA (International, Oral).

Braun CD*, Skomal GB, Thorrold SR, Berumen ML. 2013. Movement ecology of *Manta alfredii* in the eastern Red Sea. Indo-Pacific Fish Conference, Okinawa, Japan (International, Oral).

Berumen ML, **Braun CD***, Cochran JE, Skomal GB, Thorrold SR. 2013. Seascape-scale movements of whale sharks in the Saudi Arabian Red Sea. 3rd International Whale Shark Conference, Atlanta, GA (Int., Oral).

Braun CD*, Berumen ML, Skomal GB, Thorrold SR. 2011. Movements of juvenile whale sharks (*Rhincodon typus*) in the Red Sea. American Elasmobranch Society and Joint Meeting of Ichthyologists and Herpetologists, Minneapolis, MN (National, Oral).

Braun CD*, Finch SL*. 2011. Butterflyfish (*Chaetodontidae*) distribution on the Heron Reef, Great Barrier Reef, Australia. International Marine Conservation Congress, Victoria, BC (International, Poster).

Braun CD*, Walser CA. 2011. The diet and distribution of largemouth bass (*Micropterus salmoides*) in the lower Boise River, Idaho. The College of Idaho Student Research Conference, Caldwell, ID (Institutional, Poster).

Braun CD*, Berumen ML, Skomal GB, Thorrold SR. 2011. Movements of juvenile whale sharks (*Rhincodon typus*) in the Red Sea. The College of Idaho Student Research Conference, Caldwell, ID (Institutional, Oral).

Braun CD*, Walser CA. 2011. The diet and distribution of largemouth bass (*Micropterus salmoides*) in the lower Boise River, Idaho. Idaho Chapter of American Fisheries Society, Boise, ID (State, Poster).

Braun CD*, Walser CA. 2011. The diet and distribution of largemouth bass (*Micropterus salmoides*) in the lower Boise River, Idaho. Idaho Statehouse, Boise, ID (State, Poster).

Braun CD*, Finch SL. 2010. Butterflyfish (*Chaetodontidae*) distribution on the Heron Reef, Great Barrier Reef, Australia. The College of Idaho Student Research Conference, Caldwell, ID (Institutional, Poster).

Braun CD*, Finch SL, Yensen E. 2010. Determining Southern Idaho Ground Squirrel (*Spermophilus brunneus endemicus*) Soil Preferences Using GIS Analysis. The College of Idaho Student Research Conference, Caldwell, ID (Institutional, Poster).

Braun CD*, Finch SL. 2010. Butterflyfish (*Chaetodontidae*) distribution on the Heron Reef, Great Barrier Reef, Australia. Idaho Academy of Sciences, Twin Falls, ID (State, Poster). **Best Poster in Ecology**

Braun CD*. 2009. Using GIS to model populations of redband trout, *Oncorhynchus mykiss gairdneri*, in the headwaters of the Owyhee River drainage. The College of Idaho Student Research Conference, Caldwell, ID (Institutional, Poster).

RELEVANT COURSEWORK

Observational Physical Oceanography · Marine Chemistry · Biophysical Interactions in Marine Systems · Structure and Function of Marine Ecosystems · Quantitative Fisheries Oceanography · Applied Statistics · Biological Oceanography · Coral Reef Ecology · Adv Topics in Pelagic Ecology · Marine Life · Oceanography · Genomics · Ecology and Systematics of Marine Fishes · Science, Technology, and Public Policy · Ocean Instrumentation · Modeling the Biology and Physics of the Ocean · Advanced Geographic Information Systems

PEER REVIEW

Reviewer for Animal Biotelemetry, Deep Sea Research Part II, Ecological Modelling, Journal of Fish Biology, Marine and Freshwater Research, Marine Ecology Progress Series, Methods in Ecology and Evolution, PeerJ, PLoS One, Science Advances

PROFESSIONAL ORGANIZATIONS

American Elasmobranch Society, International Bio-logging Society, , International Society for Reef Studies, The Oceanography Society, Society for Conservation Biology

TEACHING AND MENTORSHIP

Nov 2017	Invited lecturer. Birches School, Lenox, MA.
May 2017	Invited lecturer. Mullen Hall Elementary School, Falmouth, MA.
Spring 2016	Teaching Assistant , Biological Oceanography Instructors: L. Mullineaux, A. Tarrant; MIT-WHOI Joint Program in Oceanography
Feb 2015	Invited lecturer. Stonehill College, Easton, MA.
Oct 2014	Invited lecturer. Yale field course, Woods Hole, MA.
Summer 2012	Co-advisor for summer volunteer at WHOI.
Fall 2010	Teaching Assistant. Stream Ecology (lecture and lab)

Instructor: C. Walser; The College of Idaho
 Spring 2010 **Course Development.** Designed and tested Advanced Geographic Information Systems syllabus.
 Instructor: C. Walser; The College of Idaho
 2009 - 2011 **Student Mentor.** Heritage Scholar Program, The College of Idaho.

SELECTED MEDIA OUTREACH

- Cape Cod Chronicle: What do white sharks do in the middle of the atlantic?, October 2017. [link](#)
- National Geographic Facebook Live: Live at National Geographic Museum's SHARKS exhibit, July 2017.
- National Geographic Family Day: The secret lives of sharks, July 2017.
- Falmouth Enterprise: Falmouth shark expert gives talk at Boston Pops 'JAWS', June 2017. [link](#)
- Jacksonville Daily News: Great white shark tag recovered at Cape Lookout, April 2017. [link](#)
- Inside the Adventure podcast: Episode 20 - Camrin Braun, Oceanographer, October 2016. [link](#)
- Capecod.com: WHOI Teams up With Local Fishermen to Track Blue, Mako Sharks, August 2016. [link](#)
- Oceanus magazine: Shark Tales - Satellite tags reveal hidden world of ocean's largest fish, June 2016. [link](#)
- Cape Cod Times: Woods Hole researchers interested in shark of a different color, June 2016. [link](#)
- GearJunkie: 30 Young Adventure Leaders You Need to Know, May 2016. [link](#)
- Science Daily: Newly discovered juvenile whale shark aggregation in Red Sea, August 2014. [link](#)
- Phys.org: Tags reveal Chilean devil rays are among ocean's deepest divers, July 2014. [link](#)
- National Geographic News: What Ate a 9-Foot Great White Shark? Another Great White?, June 2014. [link](#)
- Outreach video: The secret lives of sharks, 2014. [link](#)

SYNERGISTIC AND SERVICE ACTIVITIES

2015 - present	Explorer's Club Term Member
2013 - 2014	Elected Representative, MIT-WHOI Joint Program Student Group
2010 - 2011	Hall Director, Residence Life, The College of Idaho
2009 - 2011	Director, Outdoor Education Program, The College of Idaho
2009 - 2010	Resident Assistant, Residence Life, The College of Idaho
2008 - 2010	Lead Student Ambassador, Admissions, The College of Idaho
2007 - 2010	Member, Varsity Ski and Snowboard Team, The College of Idaho
2008 - 2009	Student Mentor, Residence Life, The College of Idaho

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