## **JAMES P. BERNOT**

https://jimmybernot.com George Washington University Institute for Biomedical Sciences jbernot@gwu.edu

**Education:** 

2015-present PhD

George Washington University Institute for Biomedical Sciences

Primary advisor: Dr. Keith Crandall

Research interests: Parasite evolution, host-parasite associations, phylogenetics, molecular systematics, comparative transcriptomics.

morphological evolution

Advanced to candidacy February 20, 2018

2012–2015 **MS** 

University of Connecticut, Ecology and Evolutionary Biology Department

Primary advisor: Dr. Janine Caira

Research projects: Taxonomy, systematics, phylogenetics, and

evolutionary ecology of tapeworms of triakid sharks

2008–2012 **BS** Summa Cum Laude

University of Connecticut

Major: Biological Sciences, Minor: Ecology and Evolutionary Biology

Honors thesis advisor: Dr. Janine Caira

Honors thesis: Cestode morphology as predicted by elasmobranch

relationships

Access to research data:

ORCID ID http://orcid.org/0000-0002-1769-8631

Google Scholar https://scholar.google.com/citations?user=9sa6KNwAAAAJ&hl=en

Research Gate <a href="https://www.researchgate.net/profile/James Bernot">https://www.researchgate.net/profile/James Bernot</a>

Publons https://publons.com/author/1181520/james-p-bernot#profile

#### **Publications:**

Haskins, I. N., Wang, B.-D., **Bernot, J. P.**, Horvath, A., Marks, J. H., Lee, N. H., Agarwal, S. (**submitted**). Genomics of Black American Colon Cancer Disparities: An RNA-Seq Study from an Academic, Tertiary Referral Center. 15 pages + 2 figures.

2020 Bernot, J. P., Rudy, G., Erickson, P. T., Ratnappan, R., Haile, M., Rosa, B. A., Mitreva, M., O'Halloran, D. M., Hawdon, J. M. (2020). Transcriptomic analysis of hookworm *Ancylostoma ceylanicum* life cycle stages reveals changes in GPCR diversity associated with the onset of parasitism. *International Journal for Parasitology*. <a href="https://doi.org/10.1016/j.iippara.2020.05.003">https://doi.org/10.1016/j.iippara.2020.05.003</a>

Boxshall, G. A., **Bernot, J. P.**, Barton, D. P., Diggles, B. K., Yong, R. Q.-Y., Atkinson-Coyle, T., Hutson, K. S. (2020). Parasitic copepods of the family Lernanthropidae Kabata, 1979 (Copepoda: Siphonostomatoida) from Australian fishes, with descriptions of seven new species. *Zootaxa*. https://doi.org/10.11646/zootaxa.4736.1.1

Maynard, T., Horvath, A., **Bernot, J. P.**, Karpinksi, B., Tavares, A. L. P., Zeng, A. S. Q., Spurr, L., Olender, J., Moody, S. A., Fraser, C. M., LaMantia, A. S., Lee, N. H. (2020). Transcriptional dysregulation in developing trigeminal sensory neurons in the LgDel mouse model of DiGeorge 22q11.2 Deletion Syndrome. *Human Molecular Genetics*. <a href="https://doi.org/10.1093/hmg/ddaa024">https://doi.org/10.1093/hmg/ddaa024</a>

- Fujiogi, M., Camargo Jr., C. A., Bernot, J. P., Freishtat, R. J., Harmom, B., Mansbach, J. Castro-Nallar, E., Perez-Losada, M., Hasegawa, K. (2020). In infants with severe bronchiolitis: dual-transcriptomic profiling of nasopharyngeal microbiome and host response. *Pediatric Research*. https://doi.org/10.1038/s41390-019-0742-8
- 2019 **Bernot, J.P.** and Caira, J. N. (2019). Site specificity and attachment mode of *Symcallio* and *Calliobothrium* species (Cestoda: "Tetraphyllidea") in smoothhound sharks of the genus *Mustelus* (Carcharhiniformes: Triakidae). *PeerJ.* http://doi.org/10.7717/peerj.7264
  - **Bernot, J.P.** and Boxshall, G. A. (2019). Two new species of parasitic copepods from the genera *Nothobomolochus* and *Unicolax* (Cyclopoida: Bomolochidae) from Australian waters. *PeerJ.* http://doi.org/10.7717/peerj.6858
- 2017 Hughes, L.C., Somoza, G.M., Nguyen, B.M., Bernot, J.P., González-Castro, M., Díaz de Astarloa, J.M., and Ortí, G. (2017). Transcriptomic differentiation underlying marine-to-freshwater transitions in the South American silversides Odontesthes argentinensis and O. bonariensis (Atheriniformes). Ecology and Evolution. http://dx.doi.org/10.1002/ece3.3133
  - **Bernot, J.P.** and Boxshall, G.A. (2017). A new species of *Pseudopandarus* Kirtisinghe, 1950 (Copepoda: Siphonostomatoida: Pandaridae) from sharks of the genus *Squalus* L. in New Caledonian waters. *Systematic Parasitology*, 94: 275–291. 10.1007/s11230-016-9692-2
- 2016 **Bernot, J.P.**, Caira, J.N. and Pickering, M. (2016). Diversity, phylogenetic relationships, and host associations of *Calliobothrium* and *Symcallio* (Cestoda: "Tetraphyllidea") parasitizing triakid sharks. *Invertebrate Systematics*, 30: 616–634. 10.1071/IS15040
- 2015 Bernot, J.P., Caira, J.N. and Pickering, M. (2015). The dismantling of *Calliobothrium* (Cestoda: Tetraphyllidea) with erection of *Symcallio* n. gen. and description of two new species. *The Journal of Parasitology*, 101: 167–181. 10.1645/14-571.1

## **Grants, awards, and honors**

- 2020 NSF Postdoc Research Fellowship (PRFB), Biological Collections. https://www.nsf.gov/awardsearch/showAward?AWD\_ID=2010898
- 2020 Cosmos Scholar. Cosmos Club Foundation. "Towards a phylogenomic framework for copepod diversity and evolution."
- 2019 Student Travel Award. 14th International Conference on Copepoda. Kruger National Park, South Africa.
- 2019 Student Travel Award. The American Society of Parasitologists Annual Meeting. Rochester, MN.
- 2019 Doctoral student travel award to present at The American Society of Parasitologists Annual Meeting. The Institute for Biomedical Sciences at George Washington University.
- 2019 Student Travel Award. The Crustacean Society mid-year meeting, Hong Kong.
- 2018 American Genetics Association travel grant to attend Invertebrate Genomics Alliance Conference and Workshop (GIGA III). Curacao.
- 2017 Student presentation award. 13<sup>th</sup> International Conference on Copepoda. Cabrillo Marine Aquarium LA, USA.
- 2017 Student Travel Award. The American Society of Parasitologists Annual Meeting. San Antonio, TX.
- 2017 Edward and Phyllis Reed Fellowship for Copepod Research (Smithsonian NMNH).
- 2017 George Washington University Knowledge in Action Career Internship Fund.
- 2016 Society for Systematic Biology Mini-ARTS Grant (Advancing Research in Taxonomy and Systematics).
- 2016 American Museum of Natural History Lerner-Gray Grant for Marine Research.

- 2016 Honorable Mention, Best Student Presentation Helminthological Society of Washington.
- 2014 Student Travel Award. The American Society of Parasitologists Annual Meeting. New Orleans, LA.
- 2013 Best Student Presentation. New England Association of Parasitologists.
- 2012 Best Student Presentation. Helminthological Society of Washington.
- 2011 Drotch Scholarship, University of Connecticut.

## **Invited presentations:**

- 2020 **Bernot, J. P.** "Copepod taxonomy and phylogeny and a new crustacean phylogenomic analysis." Smithsonian Environmental Research Center. Edgewater, MA, USA. January 16, 2020.
- 2019 **Bernot, J. P.** "Phylogenomics and genome size evolution: exploring the evolution of parasitism in copepods." James Madison University Department of Biology Seminar Series. Harrisonburg, VA, USA. September 6, 2019.
  - **Bernot, J. P.**, Wyngaard, G. A., Boxshall, G. A., and Crandall, K. C. "Parasitic copepods: diversity, phylogeny, and genome size evolution" The Crustacean Society. Evolution and Ecology of Parasitic and Symbiotic Crustaceans Symposium. Hong Kong. May, 2019.
- 2017 **Bernot, J. P.**, Crandall, K. C., and Boxshall, G. A. "Towards a Synthetic Tree of the Copepoda" 13<sup>th</sup> International Conference on Copepoda. LA, USA. July 2017.

## **Conference and seminar presentations:**

- 2020 Bernot, J. P., Owen, C. L., Olesen, J., Crandall, K. A. "A new phylogeny of the Pancrustacea" American Society of Parasitologists "Parasite Hour" Virtual Conference. June, 25 2020.
- 2020 **Bernot, J. P.** "Surprising incongruity in crustacean phylogenomic analyses" No Bones Invertebrate Zoology Seminar. Smithsonian NMNH. April 2020.
- 2019 **Bernot, J. P.**, Wyngaard, G. A., Boxshall, G. A., and Crandall, K. C. "Copepod phylogenomics reveals surprising relationships in the broader Crustacea: insights, intrigue, and patterns of genome size evolution" American Society of Parasitologists. Rochester, MN. June 2019.
- 2018 Bernot, J. P. and Crandall, K. C. "Copepod phylogenomics: orthology inference for target-capture marker development" Third Global Invertebrate Genomics Alliance Research Conference. Curação. October 2018.
  - **Bernot, J. P.** and Crandall, K. C. "Get more from publicly available data: ortholog development for target-capture phylogenomics in copepods" American Society of Parasitologists. Cancun, Méx. June 2018.
  - **Bernot, J. P.**, Boxshall, G. A., and Crandall, K. C. "Copepod phylogeny and systematics: the current state and future directions" 9<sup>th</sup> International Crustacean Congress. Washington, DC, USA. May 2018.
- 2017 **Bernot, J. P.**, Crandall, K. C., and Boxshall, G. A. "Copepod phylogeny in the Open Tree of Life: estimating the number of transitions to parasitism" No Bones Invertebrate Zoology Seminar. Smithsonian NMNH. Aug. 2017.
  - **Bernot, J. P.**, Crandall, K. C., and Boxshall, G. A. "Evolution of parasitism in copepods: a phylogenetic approach using the Open Tree of Life" American Society of Parasitologists. San Antonio, TX. July 2017.
  - **Bernot, J. P.** and Crandall, K. C. "The Open Tree of Life: integrations with WoRMS" WoRMS Host-Parasite Databasing Workshop. Flanders Marine Institute, Oostende, Belgium. April 2017.

- 2016 **Bernot, J. P.** and Boxshall, G. A. "A new species of *Pseudopandarus* (Copepoda: Siphonostomatoida; Pandaridae) from sharks of the genus *Squalus* in New Caledonian waters" International Workshop on Symbiotic Copepoda. James Cook University, Australia. July 2016.
  - **Bernot, J. P.**, Rosa, B. A., Mitreva, M., and Hawdon, J. M. "Utility of genomic and RNA-Seq data sets to identify putative host recognition receptors in hookworms" Helminthological Society of Washington. George Washington University, Washington, DC. April 2016.
- 2015 **Bernot, J. P.** and Caira J. N. "Tapeworms in *Mustelus* spp. in the Atlantic: from 1819–2015" UConn Graduate Student Symposium. University of Connecticut. Storrs, CT. March 2015.
- 2014 Bernot, J. P., Caira, J. N., and Pickering-Villa, M. "Calliobothrium (Cestoda: Tetraphyllidea) in Mustelus (Carcharhiniformes: Triakidae) of the Atlantic Ocean" American Society of Parasitologists. New Orleans, LA. July 2014.
  - **Bernot, J. P.**, Caira, J. N., and Pickering-Villa, M. "Shark Tapeworms: why do they live where they live? UConn Graduate Student Symposium" University of Connecticut. Storrs, CT. March 2014.
- 2013 **Bernot, J. P.** and Caira, J. N. "Site Specificity of Tapeworms of the Genus *Calliobothrium* in the Spiral Intestine of Smoothhound Sharks (Carcharhiniformes: Triakidae)" American Society of Parasitologists. Quebec City, Canada. June 2013.
  - **Bernot**, J. P. and Caira, J. N. "Site Specificity of Tapeworms of the Genus *Calliobothrium* in the Spiral Intestine of Smoothhound Sharks (Carcharhiniformes: Triakidae). New England Association of Parasitologists" Yale University. New Haven, CT. April 2013.
- 2012 **Bernot, J. P.**, Caira, J. N., and Pickering, M. "David and Goliath: examination of additional complexity in the genus *Calliobothrium* (Cestoda: Tetraphyllidea) in smoothhound sharks of the genus *Mustelus* (Carcharhiniformes: Triakidae)" American Society of Parasitologists. Richmond, VA. July 2012.
  - **Bernot, J. P.**, Caira, J. N., and Pickering, M. "Cestode morphology as predicted by elasmobranch relationships: *Calliobothrium* in smooth hound sharks of the genus *Mustelus*" Helminthological Society of Washington. Quinnipiac University. Hamden, CT. April 2012.
- 2011 **Bernot, J. P.**, Caira, J. N., and Pickering, M. "Cestode morphology as predicted by elasmobranch relationships: *Calliobothrium* in smooth hound sharks of the genus *Mustelus*" New England Association of Parasitologists. Salve Regina University. Newport, RI. Nov. 2011.
  - **Bernot, J. P.**, Caira, J. N., and Pickering, M. "Cestode morphology as predicted by elasmobranch relationships: *Calliobothrium* in smooth hound sharks of the genus *Mustelus*" 7<sup>th</sup> International Workshop on Cestode Systematics. University of Kansas. Lawrence, KS. July 2011.
  - **Bernot, J. P.**, Caira, J. N., and Pickering, M. "Cestode morphology as predicted by elasmobranch relationships: *Calliobothrium* in smooth hound sharks of the genus *Mustelus*" American Society of Parasitologists. Anchorage, AK. June 2011.

#### **Outreach and Public Engagement:**

- 2020 Skype a Scientist. Met with 5th grade class for marine biology lesson and Q&A. The Leffell School, White Plains, NY. June 16, 2020.
- 2020 Skype a Scientist. Met with 4th grade class for marine biology lesson and Q&A. Hampstead Hill Academy, Baltimore, MD. Jun 5, 2020.

- 2020 Authored blog post for <u>Werepstem</u>, a diversity in STEM blog. <a href="https://werepstem.com/2020/07/03/profile-james-jimmy-bernot-ph-d-candidate-in-genomics-bioinformatics-nsf-postdoc-research-fellow-in-biological-collections/">https://werepstem.com/2020/07/03/profile-james-jimmy-bernot-ph-d-candidate-in-genomics-bioinformatics-nsf-postdoc-research-fellow-in-biological-collections/</a>
- 2020 Presented on parasite biology to an auditorium of >70 8<sup>th</sup> graders for "World Parasite Day". March 6, 2020. Imagine Foundations at Morningside Public Charter School. Prince George's County, MD.
- 2020 Interviewed for <a href="PhDetails">PhDetails</a> blog on graduate student life.
  <a href="http://phdetails.blogspot.com/2020/01/83-jimmy-bernot.html">http://phdetails.blogspot.com/2020/01/83-jimmy-bernot.html</a>
- 2019 Scientist representative for Smithsonian Natural History Museum "Congressional Science Night". Invited by Smithsonian Department of Invertebrate Zoology to discuss science, research, and collections with members of Congress, their families, and their professional staff at an special for science engagement with Congress. July 17, 2019. <a href="https://twitter.com/JP Bernot/status/1151639577746169856">https://twitter.com/JP Bernot/status/1151639577746169856</a>
- 2019 Guest speaker on parasite biology, research, and career options at Temple High School in Arizona on Parasite Day. Video call, presentation, and Q&A for 2 12<sup>th</sup> grade science classes. March 4, 2019.
- 2018 "Computational Biology" Discussed research in the Computational Biology Institute in Introduction to Medicine, a college-level course for high school students. George Washington University. July 3, 2018.
- 2018 Crustacean scientist, ocean hall Invertebrate Zoology Department public outreach.
  Crustacean specimen displays and Q&A. Smithsonian National Museum of
  Natural History. April 5, 2018.
- 2016 Meet-a-scientist "ocean expert" for World Ocean Day at Smithsonian National Museum of Natural History. "Copepods: what reefs eat, and what iseating them." Topic included: food webs, invertebrate diversity, specimen display, Q&A. Smithsonian Museum of Natural History. June 8, 2016.
- 2016 Served as expert for live Q&A on parasites in Smithsonian "ScienceHow?" Webcast. Broadcast designed to meet middle school sciencecurriculum. Online attendance >2,000 students. Smithsonian Museum of Natural History. May 19, 2016.
- 2016 Interviewed for BBC documentary on CRISPR-CAS9 and research ethics. George Washington University. Washington, DC. 19 April, 2016.
- 2016 Photographer for Smithsonian Insider article: <u>In face of mass extinctions</u>
  Smithsonian's Global Genome Initiative quietly saves world's DNA. 5 April, 2016.
- 2015 Prepared specimens and worked with a photographer to design an exhibit on tapeworms in the Connecticut State Natural History Museum
- 2014 Consulted with Gene Helfman and George Burgess for the publication of the book Sharks: The Animal Answer Guide.
- 2014 Designed and presented a curriculum on parasites for 1st and 4th grade students. Franklin Elementary School Franklin, CT.
- 2013 Designed and presented a curriculum on parasites for 3<sup>rd</sup> and 4<sup>th</sup> grade students. Franklin Elementary School Franklin, CT.

#### Teaching experience:

#### Instructor on record:

2015 Spring Current Topics in Ecology and Evolution University of Connecticut

## Teaching assistant:

2020 Fall	Parasitology (laboratory)	George Washington University
2019 Fall	Parasitology (laboratory)	George Washington University
2018 Fall	Parasitology (laboratory)	George Washington University
2017 Fall	Parasitology (laboratory)	George Washington University
2016 Fall	Parasitology (laboratory)	George Washington University

2015 Spring	Evolutionary Biology	University of Connecticut
2014 Fall	Animal Parasitology (laboratory)	University of Connecticut
2014 Spring	Evolutionary Biology	University of Connecticut
2013 Fall	General Ecology (discussion)	University of Connecticut
2013 Spring	Principles of Biology II (laboratory)	University of Connecticut
2012 Fall	Principles of Biology II (laboratory)	University of Connecticut

#### Other courses taught:

2017-present	Bimonthly informatics tools training courses	George Washington University
Feb. 2014	Dental Admissions Test Prep Course	University of Connecticut
	Designed curriculum and led intensive 7-l	nour review sessions of
	Biological Science material on the Dental	Admissions Test for
	undergraduates.	
March 2013	Dental Admissions Test Prep Course	University of Connecticut

## Teaching training

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Fall 2019	UNIV 0250 Graduate Assistant Certification Course (1 credit).
	George Washington University
Fall 2013	EDCI 5830 Fundamentals of Teaching and Learning (3 credits).
	University of Connecticut.
Spring 2013	EEB 5830 Teaching Methods (1 credit). University of Connecticut.

## Lectures in undergraduate courses

- 2020 "Crustacean diversity and current topics in crustacean research" in Animal Diversity. Meredith College, NC.
- 2019 "Parasitic crustacean diversity and evolution" in Parasitology. George Washington University, Washington, DC.
  - "Biology and art in the description of species" in Biology and Art. James Madison University, VA.
- 2018 "The parasitic Crustacea" in Parasitology. George Washington University
- 2017 "Parasitic copepods" in Parasitology. George Washington University.
- 2015 "Genetic conflict and levels of selection" in Evolutionary Biology. University of Connecticut.
- 2014 "Parasitic copepods: economically important species, evolutionary trends, and lifecycle modifications" in Introduction to Animal Parasitology. University of Connecticut.
- 2014 "Levels of selection (multilevel selection theory)" in Evolutionary Biology. University of Connecticut.
- 2013 "Opening a can of worms: tapeworms of elasmobranchs" in Topics in Modern Biology. University of Connecticut.
- 2012 "Opening a can of worms: my experience with parasites" in Topics in Modern Biology. University of Connecticut.

#### Mentorship

- Gabriella Ruby. George Washington University. Undergraduate student and Masters student in lab of Dr. John Hawdon. Project: Differential GPCR expression across life stages of the hookworm *Ancylostoma ceylanicum*.
- 2017-18 Chaimae Samtal. George Washington University. Visiting Fullbright PhD student with Dr. Keith Crandall. Research project: Prostate cancer genetics in Moroccan men.

## **Professional service:**

An	od	int	me	nts:
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2015-present Research fellow. Smithsonian National Museum of Natural History

Department of Invertebrate Zoology

2017-present REDCap system administrator and trainer. CTSI-CN: A Partnership

between Children's National Medical Center and GWU

2017-present Taxonomic editor World Registry of Marine Species (WoRMS)

Copepoda and Parasite Portal.

WoRMS Top-Ten Species 2019 committee Participant: WoRMS Image Group (2020+)

2019 WoRMS Top 10 Species of 2019 Committee.

2019 American Society of Parasitologists. Ad hoc committee on diversity, equity

and inclusion.

2018-2019 American Society of Parasitologists. Awards Committee
 2018-2019 American Society of Parasitologists. Resolutions Committee
 2015 Member of graduate student symposium committee. University of

Connecticut

2015 Graduate student representative to Ecology & Evolutionary Biology faculty.

University of Connecticut

2014 Graduate Student Representative to Ecology & Evolutionary Biology faculty.

University of Connecticut

## Other professional service:

2019	Organized Ensembl Workshop "Browsing Genes and Genomes" at GWU.
2018	Panel member for GWU undergraduate Q&A on graduate

school and research experience. GWU November 27, 2018.

2016 Institute for Biomedical Sciences Curriculum Committee. GWU June 2016.

2015 Master of ceremonies: Graduate Student Symposium. University of

Connecticut

2014 Designed Ecology & Evolutionary Biology departmental logo.

University of Connecticut.

2014 Designed Ecology & Evolutionary Biology departmental Tshirt and banner.

Managed Tshirt sales to raise funds for the Ecology & Evolutionary Biology Graduate Student Association. University of Connecticut

#### Reviewer for scientific journals:

2020	Journal of Natural History
2020	Journal of Natural History

2019 Molecular Biology and Evolution

Parasitology Research

**Parasite** 

The Biological Bulletin (x2) Journal of Applied Ichthyology

2018 Parasitology Research

Molecular Phylogenetics and Evolution

2017 Scientific Reports

Molecular Phylogenetics and Evolution (x2)

Comparative Parasitology

PeerJ

2016 PeerJ

**Neotropical Biodiversity** 

2015 African Journal of Marine Science

# Membership in professional societies:

2011-present American Association of Parasitologists

Appointed to:

Awards Committee (2018-2019) Resolutions Committee (2018-2019)

Committee on diversity, equity, and inclusion (2019)

Local Organizing Committee (2021 meeting)

2016-present AAAS

2016-present Society of Systematic Biologists

2017-present The World Association of Copepodologists

Appointed to:

Manage society's Twitter account (@copepodology)

2018-present The Crustacean Society

2018-present Global Invertebrate Genomics Alliance (GIGA)

# Advanced Training and Workshops: 2016 Workshop on Molecular Evolution, University of Chicago Marine

2016	vvorkshop on Molecular Evolution. University of Chicago Marine
	Biological Laboratory. Woods Hole, MA.
2016	Smithsonian Target Enrichment/Bait Capture Workshop. Smithsonian
	Museum of Natural History. Washington, DC.
2016	3 <sup>rd</sup> International Workshop on symbiotic Copepoda. Heron Island, Australia.
2016	OVPR Grant Writing Workshop: Keys to Successful Grant Writing. George
	Washington University. Washington, DC.
2015	Practical Computing for Biologists. University of Washington. Friday Harbor
	Labs. Friday Harbor, WA.
2014	International Workshop on Cestode Systematics and Phylogeny.
	Universidade de São Paulo. Sao Sebastiao, Brazil.
2011	International Workshop on Cestode Systematics. University of Kansas.
	Lawrence, KS.

# Field work experience:

Oct. 2018	Panama: 10-day survey of parasitic copepods of reefs in Coiba National
4 0040	Park with Smithsonian Tropical Research Institute.
Aug. 2018	New York: 2-week survey of freshwater planktonic and parasitic copepods.
	SUNY Oneonta Biological Field Station.
June 2016	Australia: 2-week survey of commercial fish parasites as part of ABRS
	grant (PI Tom Cribb, University of Queensland). Fish collection (spear
	fishing and line and reel), fish dissection, parasite identification.
May 2014	Connecticut: survey of shark tapeworms of Long Island Sound, CT, USA.
Aug. 2013	United Kingdom: 10-day collection of tapeworms of sharks and rays off the coast of Lowestoft, England.
Jan. 2013	Chile: 3-week collection of tapeworms of sharks and rays off of central
	Chilean coastline. Field sites included: Huinay Field Station, Puerto
	Montt, and Valdivia.
May 2012	Peru: Tropical Field Biology Course by SUNY Oneonta in Manu National
,	Park. Invertebrate diversity bio-blitz and leaf cutter ant field experiments.

## Other Contributions:

2018	Contributed photos to Operating a Successful Cryopreservation Facility.
	James Bennet. 2018. Planer plc (Publisher).
2018, 2019	Graduate student mentor in Columbian College of Arts and Sciences
	international graduate student buddy program. George Washington
	University.

Contributed a figure to Science Magazine article Biologists propose to sequence the DNA of all life on Earth.
 <a href="https://doi.org/10.1126/science.aal0824">https://doi.org/10.1126/science.aal0824</a>
 Contributed to the population of the Global Cestode Database as part of NSF PBI Nos. 0818696 and 0818823. Serve as a taxonomic authority on Symcallio and Calliobothrium. <a href="http://tapewormdb.uconn.edu">http://tapewormdb.uconn.edu</a>
 Consulted with Janine Caira and Kirsten Jensen in designing a children's book on tapeworms, <a href="Meet the Suckers">Meet the Suckers</a> as part of NSF PBI No. 0818823. University of Connecticut.