

JAMES P. BERNOT
<https://BernotLab.org>
Assistant Professor
Department of Ecology & Evolutionary Biology
University of Connecticut
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PROFESSIONAL APPOINTMENTS

2024–present	Assistant Professor Department of Ecology & Evolutionary Biology University of Connecticut, Storrs
2015–present	Research Fellow Smithsonian National Museum of Natural History
2021–2024	National Science Foundation Postdoctoral Research Fellow Smithsonian National Museum of Natural History Advisor: Anna Phillips
2022–2023	Visiting Postdoctoral Fellow (13 months) Natural History Museum, London Advisor: Geoff Boxshall
2022–2023	Visiting Postdoctoral Fellow (8 months) Senckenberg German Center for Marine Biodiversity Research Advisor: Pedro Martínez Arbizu
2015–2020	Research Assistant George Washington University. Clinical & Translational Science Institute. Informatics support and training.

EDUCATION

2015–2020	PhD Genomics and Bioinformatics George Washington University Dissertation: Parasitic Copepod Evolution Advisor: Keith Crandall
2012–2015	MS Ecology & Evolutionary Biology University of Connecticut Thesis: Taxonomy, Systematics, and Host Associations of Cestodes of Triakid Sharks Advisor: Janine Caira
2008–2012	BS Biology University of Connecticut <i>summa cum laude</i> Thesis: On the Cestode Genus <i>Calliobothrium</i> and Their Triakid Shark Hosts Advisor: Janine Caira

ACCESS TO RESEARCH DATA

ORCID ID	http://orcid.org/0000-0002-1769-8631
Google Scholar	https://scholar.google.com/citations?user=9sa6KNwAAAAJ&hl=en
Web of Science	https://www.webofscience.com/wos/author/record/395421
Research Gate	https://www.researchgate.net/profile/James_Bernot

PUBLICATIONS

* denotes undergraduate/graduate student mentees

(21) **Bernot JP**, Khodami S, Boyen J, De Troch M, Boxshall GA, Martínez Arbizu P. (2025). Copepod phylogenomics supports Canuellonida as a valid order separate from Harpacticoida. *Molecular Phylogenetics and Evolution*. <https://doi.org/10.1016/j.ympev.2025.108311>

- (20) Boxshall GA, Nagasawa K, **Bernot JP**. (in press). The male of *Dinemoleus indeprensus* Cressey & Boyle, 1978 with a brief overview of sexual dimorphism in the family Pandaridae (Copepoda: Siphonostomatoida). *Plankton & Benthos Research: Proceedings of the 15th International Conference on Copepoda*. 15 pgs + 4 figs.
- (19) **Bernot JP**, Boxshall GA, Kahara CT, Martínez Arbizu P. (2025). An updated key to the genera of Caligidae (Copepoda: Siphonostomatoida). *Journal of Parasitology*. <https://doi.org/10.1645/24-97>
- (18) **Bernot JP**, Boxshall GA, Goetz FE, Phillips AJ. (2024). MicroCT illuminates the unique morphology of Shiinoidae (Copepoda: Cyclopoida), an unusual group of fish parasites. *PeerJ* 12:e16966 <https://doi.org/10.7717/peerj.16966>
- (17) Ismail N, Nishida Y, Ohtsuka S, Boxshall G, **Bernot JP**. (2024). First record of *Caligus dussumieri* Rangnekar, 1957 (Copepoda, Siphonostomatoida, Caligidae) from Malaysia, with notes on caligids found from Malaysia and on host-specificity of caligids on lutjanid fishes. *Biodiversity Data Journal*. 12: e116598. <https://doi.org/10.3897/BDJ.12.e116598>
- (16) Boxshall GA, **Bernot JP**. (2023). Resolving taxonomic and nomenclatural problems in the genus *Caligus* O.F. Müller, 1785 (Copepoda: Caligidae). *Zootaxa*. <https://doi.org/10.11646/ZOOTAXA.5360.4.5>
- (15) **Bernot JP**, Owen CL, Wolfe JM, Meland K, Olesen J, Crandall KA. (2023). Major revisions in pancrustacean phylogeny and evidence of sensitivity to taxon sampling. *Molecular Biology and Evolution*. <https://doi.org/10.1093/molbev/msad175>
- (14) Hawdon JM, **Bernot JP**. (2022). Teaching Parasitology Lab Remotely using Live Streaming. *The American Biology Teacher*. <https://doi.org/10.1525/abt.2022.84.5.312>
- (13) **Bernot JP**, Avdeyev P, Zamyatin A, Alexeev N, Dreyer N*, Pérez-Losada M, Crandall KA. (2022). Chromosome-level genome assembly, annotation, and phylogenomics of the gooseneck barnacle *Pollicipes pollicipes*. *GigaScience*. <https://doi.org/10.1093/gigascience/giac021>
- (12) **Bernot JP**, Boxshall GA, Crandall KA. (2021). A synthesis tree of the Copepoda: integrating phylogenetic and taxonomic data reveals multiple origins of parasitism. *PeerJ*. <https://doi.org/10.7717/peerj.12034>
- (11) Haskins IN, Wang B-D., **Bernot JP**, Cauley EC*, Horvath A, Marks JH, Lee NH, Agarwal S. (2021). Genomics of Black American Colon Cancer Disparities: An RNA-Seq Study from an Academic, Tertiary Referral Center. *Surgery*. <https://doi.org/10.1016/j.surg.2021.03.031>
- (10) **Bernot JP**, Rudy G*, Erickson PT, Ratnappan R, Haile M, Rosa BA, Mitreva M, O'Halloran DM, Hawdon JM. (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*. <https://doi.org/10.1016/j.ijpara.2020.05.003>
- (9) Boxshall GA, **Bernot JP**, Barton DP, Diggles BK, Yong RQ-Y., Atkinson-Coyle T, Hutson KS. (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>
- (8) Maynard T, Horvath A, **Bernot JP**, Karpinski B, Tavares ALP, Zeng ASQ, Spurr L, Olender J, Moody SA, Fraser CM, LaMantia AS, 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*. <https://doi.org/10.1093/hmg/ddaa024>
- (7) Fujiogi M, Camargo Jr CA, **Bernot JP**, Freishtat RJ, 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>

- (6) **Bernot JP**, Caira JN. (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>
- (5) **Bernot JP**, Boxshall GA. (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>
- (4) Hughes LC, Somoza GM, Nguyen BM, **Bernot JP**, González-Castro M, Díaz de Astarloa JM, 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>
- (3) **Bernot JP**, Boxshall GA. (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. <https://doi.org/10.1007/s11230-016-9692-2>
- (2) **Bernot JP**, Caira JN, Pickering M. (2016). Diversity, phylogenetic relationships, and host associations of *Calliobothrium* and *Symcallio* (Cestoda: “Tetraphyllidea”) parasitizing triakid sharks. *Invertebrate Systematics*, 30: 616–634. <https://doi.org/10.1071/IS15040>
- (1) **Bernot JP**, Caira JN, 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. <https://doi.org/10.1645/14-571.1>

GRANTS (totaling \$298,800)

2021	NSF Postdoc Research Fellowship (PRFB) supplemental 1-year COVID extension (\$69,000, 1 year)
2020	NSF Postdoc Research Fellowship (PRFB), Biological Collections. (\$207,000, 3 years) https://www.nsf.gov/awardsearch/showAward?AWD_ID=2010898
2020	Smithsonian NMNH Peter Buck Postdoctoral Fellowship (\$130,000, 2 years, declined for 3 year NSF PRFB).
2020	Cosmos Scholar. Cosmos Club Foundation. “Towards a phylogenomic framework for copepod diversity and evolution.” (\$3,315)
2017	Edward and Phyllis Reed Fellowship for Copepod Research (Smithsonian NMNH). (\$8,500)
2017	George Washington University Knowledge in Action Career Internship Fund to spend a semester working at the London Natural History Museum with Geoff Boxshall. (\$3,000)
2016	Society for Systematic Biology Mini Advancing Research in Taxonomy and Systematics Grant. (\$1,000)
2016	American Museum of Natural History Lerner-Gray Grant for Marine Research. (\$2,000)
2011	Paul L. Drotch Award in undergraduate Biology, University of Connecticut. (\$5,000)

AWARDS AND HONORS

2023	Ashton Cuckler New Investigator Award. American Society of Parasitologists. Kansas City, MO.
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. 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	Outstanding student presentation award. 13 th International Conference on Copepoda. Cabrillo Marine Aquarium LA, USA.
2017	Student Travel Award. The American Society of Parasitologists Annual Meeting. San Antonio, TX.
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.

MENTORSHIP

- 2021-present Felix Javier Berrios Ortega. PhD student. Previously mentored as undergraduate at Universidad de Puerto Rico Humacao. Mentoring and proposal review for: NSFGRFP (awarded), Doris Dukes Conservation Scholars Fellowship (awarded); Ecological Society of America SEEDS Fellowship (award declined); Louis Stokes Alliance for Minority Participation PR-LSAMP (awarded); and three others.
- 2024-present Netanya Williams. Masters student. Teaching Assistant for Invertebrate Zoology (EEB 4275) Fall 2024.
- 2024 Mark Stukel. External Dissertation Examiner. "Phylogenomics and Evolution of Cicadidae: Insights from New Zealand and Across the Globe."
- 2021-2023 Niklas Dreyer. First as PhD student at Academia Sinica (Taiwan) studying facetotecta diversity, later as postdoc at Harvard working on invertebrate phylogenomics. Mentoring on bioinformatics and genomics. Proposal review for two postdoc fellowships. Coauthors on Bernot et al. (2022) and Dreyer et al. (*in review*).
- 2019 Gabriella Ruby. George Washington University. Undergraduate student and Masters student in lab of John Hawdon. Project: Differential GPCR expression across life stages of the hookworm *Ancylostoma ceylanicum*. Coauthor on Bernot et al. (2020). Currently Bioinformatics Project Manager at QIAGEN.
- 2018-19 Graduate student mentor in Columbian College of Arts and Sciences international graduate student buddy program. George Washington University.
- 2017-18 Chaimae Samtal. Visiting Fulbright PhD student at George Washington University from Sidi Mohamed Ben Abdellah University. Research project: Prostate cancer genetics in Moroccan men. Mentoring in genomics and computational biology.
- 2016-17 Edmund Cauley. Masters student at George Washington University. Mentoring in bioinformatics and genomics. Coauthor on Haskins et al. (2021).

Mentoring and Career Progression

- 2024 CIMER Mentoring Training. 8 hours of mentoring training through UConn Graduate School.
- 2024 Panel Member for "Expand Your Career Options: Postdoc Pathways". UConn Center for Career Development. March 21.
- 2022 Panel Member for "Career Conversations". Institute for Biomedical Sciences, GWU. Dec. 2.
- 2021 Panel member "Going to Graduate School" NMNH Natural History Research Experiences intern course (NSF REU). July 30.
- 2021 Panel member: "Career Conversations". Smithsonian NMNH Summer Internship Program. June 21
- 2018 Panel member for undergraduate Q&A on graduate school. GWU Nov. 18.

INVITED PRESENTATIONS

- 2025 Bernot, J. P. "Extreme life-style modifications in parasitic copepods and barnacles: insights from advanced imaging and phylogenomics" UConn Avery Point, Marine Sciences Departmental Seminar Series. April 4, 2025.
- 2024 Bernot, J. P. "Copepod phylogenomics with a target-enrichment probe set for 100's of genes across all copepods" 15th International Conference on Copepoda, Hiroshima, Japan. June 3, 2024.
- 2023 Bernot, J. P. "Parasitic Copepod Evolution & Pancrustacean Phylogeny" University of Maryland Behavior, Ecology, Evolution, and Systematics Seminar Series. College Park, MA. Dec. 4, 2023.

- 2023 Bernot, J. P. “Parasitic Copepod Evolution & Crustacean-omics” UConn EEB Departmental Seminar Series. Feb. 20, 2023.
- 2022 Bernot, J. P. “Insights into the phylogeny and development of barnacles from the first stalked barnacle genome (*Pollicipes pollicipes*)” Smithsonian NMNH Invertebrate Zoology Departmental Seminar. Sept. 27, 2022.
- 2022 Bernot, J. P. “Parasitic Copepod Evolution” Senckenberg am Meer Research Colloquium. June 15, 2022.
- 2022 Bernot, J. P. “The Evolution of Parasitism in Copepods” Leibnitz Institute for the Analysis of Biodiversity Change Colloquium. Hamburg, Germany. March 28, 2022.
- 2022 Bernot, J. P. “The genome of the gooseneck barnacle (*Pollicipes pollicipes*) provides insights into the evolution and development of barnacles” Dovetail Genomics Genomes of Animals and Plants Conference (GAP 2022). Virtual. Feb. 16, 2022.
Talk available at: <https://vimeo.com/680523159>
- 2021 Bernot, J. P. “Parasite Evolution” Smithsonian NMNH All-Science meeting. Virtual. Sept. 8, 2021.
- 2021 Bernot, J. P. “Parasitology methods looking forward: genomics, phylogenomics, Iso-Seq, single-cell RNA-Seq, and spatial transcriptomics” American Society of Parasitologists Student Symposium. Virtual. July 27, 2021.
- 2021 Bernot, J. P. “Science Careers and Science Engagement” Rutgers Wildlife Society Student Chapter. Virtual. April 16, 2021
- 2021 Bernot, J. P. “New phylogenomic analyses of the Pancrustacea using tree-based orthology inference” Smithsonian NMNH PhyloPizza Seminar series. Virtual. March 23, 2021
- 2021 Bernot, J. P., Rudy, G. and Hawdon, J. M. “Towards the identification of host receptors in hookworm” California Academy of Sciences Genomics Social Hour. Virtual. Feb. 17, 2021.
[Talk available on YouTube.](#)
- 2020 Bernot, J. P. “Copepod taxonomy and phylogeny and a new crustacean phylogenomic analysis” Smithsonian Environmental Research Center. Edgewater, MD, USA. Jan. 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. Sept. 6, 2019.
- 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 28, 2019.
- 2017 Bernot, J. P., Crandall, K. C., and Boxshall, G. A. “Towards a Synthetic Tree of the Copepoda” 13th International Conference on Copepoda. LA, USA. July 21, 2017.

CONFERENCE AND SEMINAR PRESENTATIONS

- 2023 Bernot JP and Boxshall GA. “Taxonomy, systematics, and new keys for *Caligus* (Copepoda: Caligidae) illuminated by confocal laser scanning microscopy”. American Society of Parasitologists. Kansas City, MO. July 16, 2023.
- 2022 Bernot, J. P. “Multiple Evolutions of Parasitism in Copepods”. 15th International Congress on Parasitology. Copenhagen, DK. Aug 24, 2022.
- 2022 Bernot, J. P. “The evolution of parasitism in copepods: phylogeny, diversity, and morphology”. 5th International Conference on Invertebrate Morphology. Vienna, Austria. Aug 10, 2022.
- 2022 Bernot, J. P. “Towards an AHE probe set for copepod phylogenomics”. International Conference on Copepoda virtual meeting. July 30, 2022.
- 2021 Bernot, J. P. and Boxshall, G. A. “How many origins of parasitism in copepods? A new count with a review of the evidence from phylogenetics, morphology, and natural history” American Society of Parasitologists virtual meeting. July 26, 2021.
- 2020 Bernot, J. P., Owen, C. L., Olesen, J., and 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” Smithsonian NMNH Invertebrate Zoology Departmental Seminar. 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. Curaçao. Oct 2018.
- 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.
- 2018 Bernot, J. P., Boxshall, G. A., and Crandall, K. C. "Copepod phylogeny and systematics: the current state and future directions" 9th 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" Smithsonian NMNH Invertebrate Zoology Departmental Seminar. Aug. 2017.
- 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.
- 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.
- 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.
- 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.
- 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.
- 2013 Bernot, J. P. and Caira, J. N. "Site Specificity of Tapeworms of the Genus 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.
- 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.
- 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*" 7th International Workshop on Cestode Systematics. University of Kansas. Lawrence, KS. July 2011.
- 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.

TEACHING EXPERIENCE

Instructor of record:

2024 Fall	Invertebrate Zoology	University of Connecticut
2015 Spring	Current Topics in Ecology and Evolution	University of Connecticut

Other courses taught:

2023	Invited instructor for two-week NSF-funded Meiofauna Diversity Workshop at the University of Alabama Dauphin Island Research Lab.	
2022	Designed and taught a seven-day practical introduction to computational biology focused on transcriptomic analysis in an HPC environment. https://bitbucket.org/JBernot/senck_bioinformatics_workshop/src/master/	
2017–2020	Designed and led bimonthly clinical research informatics training courses for REDCap (Research Electronic Data Capture) and ResearchMatch tools. George Washington University.	
2020	Designed self-paced online REDCap training with automated registration, tutorial videos , and online quiz for CTSI-CN: a partnership with Children’s National Hospital and George Washington University.	
Feb. 2014	Dental Admissions Test Prep Course. University of Connecticut Designed curriculum and led intensive 7-hour review sessions of Biological Science material on the Dental Admissions Test for undergraduates.	
March 2013	Dental Admissions Test Prep Course. University of Connecticut	

Lectures in other courses

2025	“Evolution of parasitic copepods and barnacles” in Marine Invertebrate Diversity and Evolution, Arizona State University.	
2023	“Parasitic copepod evolution and crustacean-omics” in Invertebrate Zoology (graduate-level), Moscow State University.	
2020	“My experience with parasites: a clinical trial for a hookworm vaccine” in Problematic Progress in Parasitology, Creighton University School of Medicine.	
2020	“Crustacean diversity and current topics in crustacean research” in Animal Diversity, Meredith College, NC.	
2019	“Biology and art in the description of species” in Biology and Art, James Madison University.	
2015	“Genetic conflict and levels of selection” in Evolutionary Biology, University of Connecticut.	
2014	“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.	

Teaching pedagogy training

Fall 2024	UConn Center for Excellence in Teaching and Learning voluntary consultation (3 sessions)	
Fall 2024	UConn EEB voluntary Peer Evaluation of Teaching	
Fall 2019	UNIV 0250 Graduate Teaching Assistantship Program (1 credit). George Washington University	
Fall 2013	EDCI 5830 Fundamentals of Teaching and Learning (3 credits). UConn.	
Spring 2013	EEB 5830 Teaching Methods (1 credit). UConn.	

MUSEUM AND COLLECTIONS EXPERIENCE

- Specimen identification, new species descriptions, redescrptions, evaluation of types, and deposition of type specimens. Deposited holotypes/neotypes of 8 species at the following museums (NMNH, NHM London, Queensland Museum, South African Museum Cape Town, Museum National d'Histoire Naturelle).
- Museum Appointments: NMNH Research Fellow (2015+); NMNH Creative Council for Communications (2022); visiting postdoc NHM London (2022–2023); visiting predoc NHM London (2015, 2017)
- Scientific visitor at: NHM Denmark, NHM Geneva, CEFAS UK, STRI, Senckenberg, NHM Hamburg
- Collections management: organization and inventory of specimens (NMNH and UConn)

Collection digitization and taxonomic databasing

- 2022-present World Registry of Marine Species (WoRMS) Steering Committee (elected, 2022–2025)
- 2017-present Taxonomic editor in WoRMS for Copepoda
- 2015 Prepared specimens and worked with [MacroscopicSolutions](#) to design an exhibit on tapeworms in the Connecticut State Natural History Museum.
- 2012-16 Contributed to the population of the Global Cestode Database as part of NSF PBI Nos. 0818696 and 0818823. Taxonomic authority on *Symcallio* and *Calliobothrium*.
<http://tapewormdb.uconn.edu>

Advanced training in museum collections

- “Beyond Specimens” American Institute of Biological Sciences Meeting. Washington, DC. Dec. 19, 2019.
- “Introduction to Natural History Collections” 1 credit graduate seminar at UConn
Biodiversity Research Collections. Invertebrate, and vertebrate specimen preservation, mounting/pining insects, and collections management. Spring 2015.

SCIENCE ENGAGEMENT AND OUTREACH

- 2020-present Social Media Coordinator for [World Association of Copepodologists](#). Manages Society Twitter account [@copepodology](#) and Facebook <https://www.facebook.com/Worldcopepodologists/>
- 2020-present Skype A Scientist. 16 virtual meetings with K-12 students at a variety of schools for marine biology lessons and Q&A:
4th graders at Hampstead Hill Academy, Baltimore, MD (3x/year 2020–2022)
12th graders at Staples High School, Westport, CT (2022)
K-12 at City of Sundown Public Library, Sundown, TX (2022)
5th graders at The Leffell School, White Plains, NY (2020)
Skype A Scientist LIVE Q&A on Marine Biology with >200 attendees on [Youtube](#) (2021)
- 2021-present Chaired Top 10 New Marine Species Committee 2022–2023. Cowrote WoRMS articles for “Ten remarkable new marine species from [2020, 2021, 2022, 2023]” for Taxonomists Appreciation Day to draw public attention and press coverage to taxonomic research.
<https://lifewatch.be/en/worms-top10-2023>
<https://lifewatch.be/en/worms-top10-2022>
<https://lifewatch.be/en/worms-top10-2021>
<https://lifewatch.be/en/worms-top10-2020>
- 2025 Interviewed in LiveScience article on deep sea parasites spotted in ROV footage:
<https://www.livescience.com/animals/fish/scientists-capture-footage-of-bizarre-deep-sea-creature-with-parasite-pig-tails>
- 2025 Research featured in Smithsonian Magazine article:
<https://www.smithsonianmag.com/science-nature/you-might-think-of-shrimp-as-bugs-of-the-sea-but-a-remarkable-discovery-shows-the-opposite-bugs-are-actually-shrimp-of-the-land-180986303/>

- 2025 Invertebrate display for UConn EEB and Connecticut State Museum of Natural History “Biodiversity Bonanza: Celebrating Natural History Collections at UConn” event. Met with >50 visitors to discuss reef building marine animals.
- 2024 Interviewed in LiveScience article on Gulper Eel parasites in ROV footage: <https://www.livescience.com/animals/watch-bright-red-blood-sucking-parasite-feast-on-gulper-eel-in-rare-deep-sea-footage>
- 2022 Science ambassador for Smithsonian NMNH White House Office of Science and Technology Policy Staff. Ocean Hall expert to talk with OSTP staff about NMNH research. Feb. 28, 2022.
- 2021 Interviewed for National Geographic article “Parasites may gross us out but they hold ecosystems together”. Oct 7, 2021. <https://www.nationalgeographic.com/animals/article/parasites-are-diverse-heres-why-they-matter>
- 2021 Panel discussion on [Exolore Podcast](#) season 2 [episode 9](#), a podcast featuring scientists discussing biology on extraterrestrial worlds. Aug. 27, 2021.
- 2021 Interviewed for The Atlantic article “The Mystery at the Base of One of Biology’s Strangest Relationships” July 14, 2021. <https://www.theatlantic.com/science/archive/2021/07/tongue-biting-isopod/619430/>
- 2021 Interviewed for Sharkpedia podcast “[Shark Parasites with Dr. Jimmy Bernot](#)” July 5, 2021.
- 2021 Interviewed for PlanetB612 microscopy podcast “[Parasites with Jimmy Bernot](#)” June 22, 2021.
- 2021 Interviewed on Biocord Network on LGBTQ PRIDE in STEM. June 21, 2021.
Interview available on youtube: https://www.youtube.com/watch?app=desktop&v=6yho_X3WXQY
- 2021 Interviewed for Undark/Slate article “In ‘Challenge Trials’ Participants Put Their Bodies on the Line”. April 9, 2021. <https://slate.com/technology/2021/04/covid-19-challenge-trials-malaria-hookworms.html>
- 2021 Interviewed and supplied photographs for Snopes article on cymothoid isopods and fish tongue replacement. March 5, 2021. <https://www.snopes.com/fact-check/parasite-fish-tongue-mouth/>
- 2021 Cowrote article “7 Ocean Parasites Worth Celebrating on World Parasite Day” on Smithsonian Ocean Portal website. March 2, 2021. <https://ocean.si.edu/ocean-life/7-ocean-parasites-worth-celebrating-world-parasite-day>
- 2021 Smithsonian NMNH social media takeover for World Parasite Day. Wrote posts for Smithsonian NMNH Twitter, Instagram, and Facebook. <https://twitter.com/NMNH/status/1366410398178578437?s=20>
- 2021 Zoom virtual meeting with 5th grade class for World Parasite Day. Mableton Elementary School, Mableton, GA. March 4, 2021.
- 2021 Podcast on copepod diversity with [Just the Zoo of Us](#) episode 86 – an animal diversity podcast. Feb. 24, 2021.
- 2021 Panel discussion on hermaphroditic life on [Exolore Podcast](#) season 1 [episode 23](#), a podcast featuring scientists, historians, psychologists that discuss biological and sociological implications of sci-fi worlds. Feb. 11, 2021.
- 2021 Interviewed on [LGBTQ+ STEMCast](#), a podcast featuring LGBTQ+ scientists. Jan 4, 2021.
- 2020 Authored blog post for [WeRepSTEM](#), a diversity in STEM blog. <https://werepstem.com/2020/07/03/profile-james-jimmy-bernot-ph-d-candidate-in-genomics-bioinformatics-nsf-postdoc-research-fellow-in-biological-collections/>
- 2020 Presented on parasite biology to an auditorium of >70 8th graders for “World Parasite Day”. Imagine Foundations at Morningside Public Charter School. Prince George’s County, MD. March 6, 2020.
- 2020 Interviewed for [PhDetails](#) blog on graduate student life. <http://phdetails.blogspot.com/2020/01/83-jimmy-bernot.html>

- 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 and staff at a special event for science engagement with Congress. July 17, 2019. <https://twitter.com/JimmyBernot/status/1151639577746169856>
- 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 12th grade science classes x2. 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 NMNH. April 5, 2018.
- 2017 Contributed a figure to Science Magazine article *Biologists propose to sequence the DNA of all life on Earth*. <https://doi.org/10.1126/science.aal0824>
- 2016 Meet-a-scientist “Ocean Expert” for World Ocean Day at Smithsonian NMNH. “Copepods: what reefs eat, and what is eating them.” Topic included: food webs, invertebrate diversity, specimen display, Q&A. Smithsonian NMNH. June 8, 2016.
- 2016 Served as expert for live Q&A on parasites in Smithsonian “ScienceHow?” Webcast. Broadcast designed to meet middle school science curriculum. Online attendance >2,000 students. Smithsonian NMNH. May 19, 2016.
- 2016 On-camera interview for BBC documentary on CRISPR-CAS9 and research ethics. Washington University. Washington, DC. April 19, 2016.
- 2015 Interviewed for UConn Today article “Of Scholar and Tapeworms”. April 23, 2015. <https://today.uconn.edu/2015/04/of-scholars-and-tapeworms>
- 2015 Prepared specimens and worked with [Macroscopic Solutions](#) to design an exhibit on tapeworms in the Connecticut State Natural History Museum.
- 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 3rd and 4th grade students. Franklin Elementary School Franklin, CT.

PROFESSIONAL SERVICE

Appointments:

- 2023-present Associate Editor, Journal of Parasitology
- 2017-present World Registry of Marine Species (WoRMS)
Steering Committee (elected, 2023–2026)
Taxonomic Editor for Copepoda (2017–present)
Chair: WoRMS Top-10 New Marine Species Committee (2023, 2024)
WoRMS Top-Ten New Marine Species Committee (2019–2022)
WoRMS Image Working Group (2020)
- 2025-present Editor: World Association of Copepodologists PeerJ Hub.
- 2024-2025 Associate Editor: Plankton and Benthos Research (special issue): Proceedings of the Fifteenth International Conference on Copepoda
- 2021-2024 Senate, Smithsonian National Museum of Natural History
- 2017-2020 REDCap system administrator and instructor. CTSI-CN: A Partnership between Children’s National Medical Center and GWU
- 2014-2015 Graduate student representative to Ecology & Evolutionary Biology faculty. University of Connecticut
- 2015 Graduate Student Symposium Committee. University of Connecticut

Departmental Service at UConn

2025 EEB Student Research Award Committee

Membership and service in professional societies:

2011-present American Society of Parasitologists
 Council Member-at-Large (elected, 2025–2029)
 Nomination and Tellers Committee (elected, 2021, 2022, 2023, 2024, 2025)
 Education Committee (appointed to 3-year term, 2021–2024)
 Student Awards Committee (appointed to 2-year term, 2023–2024)
 Local Organizing Committee, Baltimore Meeting (appointed, 2026 meeting)
 Committee on Diversity, Equity, and Inclusion (appointed, 2019)
 Awards Committee (appointed, 2018, 2019, 2023)
 Resolutions Committee (appointed, 2018, 2019, 2023)

2017-present The World Association of Copepodologists
 Executive Committee (elected to 2-year term, 2022–2024, 2024–2026)
 Founding Chair, Student Program Committee (2024-present)
 Founding Chair, Student Research Grant Committee (2023–present)
 Social Media Coordinator (2020–present) Twitter: [@copepodology](#) and [Facebook](#)
 World Association of Copepodologists PeerJ Hub Editor (2025-present)
 Chair, Student Presentation Awards Committee (2024)

2024-present Society of Systematic Biologists
 DEI Committee (2024–2027)

2016-2024 Helminthological Society of Washington
 Executive Committee (appointed to 2-year term, 2022–2024)
 Student Research Grant Committee (2023)
 Committee for Underrepresented Minorities Research Awards (2021–2022)
 Diversity, Inclusion, and Discrimination Policies Committee (2021)

2022 International Conference on Copepoda (e-ICOC) Steering Committee

2016-present AAAS

2016-present Society of Systematic Biologists

2018-present The Crustacean Society

2018-present Global Invertebrate Genomics Alliance (GIGA)

Other professional service:

2022-present Smithsonian NMNH Creative Council (Public Affairs, Communications, and
 science advisory team for digital and social media and television)

2021-present Member: Smithsonian Pride Alliance

2019 Organized Ensembl Workshop “Browsing Genes and Genomes” at GWU.

2018 Contributed photos to Operating a Successful Cryopreservation Facility. James Bennet. 2018.
 Planer plc (Publisher)

2016 Institute for Biomedical Sciences Curriculum Committee. GWU June 2016

2012-2015 Graduate Student Association. University of Connecticut.

Reviewed 33 articles for 19 journals:

Acta Parasitologica, African Journal of Marine Science (x2), Communications Biology, Comparative Parasitology, Journal of Crustacean Biology (x2), Journal of Natural History, Marine Biology, Molecular Biology and Evolution (x2), MDPI Diversity, Molecular Phylogenetics and Evolution (x4), Neotropical Biodiversity, Parasite, Parasitology Research (x2), PeerJ (x2), Plankton and Benthos Research (x2), PLOS ONE (x2), Scientific Reports, Systematic Parasitology (x4), The Biological Bulletin, Wellcome Open Research

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