JAMES P. BERNOT
https://jimmybernot.com
NSF Postdoctoral Research Fellow
Smithsonian National Museum of Natural History
Department of Invertebrate Zoology
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EDUCATION

2015-2020	**PhD Genomics and Bioinformatics** George Washington University Advisor: Dr. Keith Crandall Dissertation: Parasitic Copepod Evolution
2012–2015	**MS Ecology and Evolutionary Biology** University of Connecticut Advisor: Dr. Janine Caira Thesis: Taxonomy, Systematics, and Host Associations of Cestodes of Triakid Sharks
2008–2012	**BS Biology** University of Connecticut *summa cum laude* Advisor: Dr. Janine Caira

PROFESSIONAL APPOINTMENTS

2021–2024	**National Science Foundation Postdoctoral Research Fellow** Smithsonian National Museum of Natural History (primary institution) Senckenberg German Center for Marine Biodiversity Research Natural History Museum, London
2015–2020	**Research Fellow** Smithsonian National Museum of Natural History
2015–2020	**Research Assistant** George Washington University Supervisors: Dr. Keith Crandall and Dr. Hiroki Morizono
2017–2020	**Teaching Assistant** George Washington University. Parasitology
2012–2015	**Teaching Assistant** University of Connecticut. Animal Parasitology, Evolutionary Biology, General Ecology, Principles of Biology II

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	https://www.researchgate.net/profile/James_Bernot
Semantics Scholar	https://www.semanticscholar.org/author/James-P.-Bernot/47366584
Publons	https://publons.com/author/1181520/james-p-bernot#profile

PUBLICATIONS

* *denotes undergraduate/graduate student mentee*

(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**, Karpinksi 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. 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. 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. 10.1645/14-571.1

GRANTS *(totaling $298,800)*

2021 NSF Postdoc Research Fellowship (PRFB) supplemental 1-year COVID extension

2020 NSF Postdoc Research Fellowship (PRFB), Biological Collections. https://www.nsf.gov/awardsearch/showAward?AWD_ID=2010898

2020 Smithsonian NMNH Peter Buck Postdoctoral Fellowship (2-year fellowship declined for 3-year NSF PRFB).

2020 Cosmos Scholar. Cosmos Club Foundation. "Towards a phylogenomic framework for copepod diversity and evolution."
2017 Edward and Phyllis Reed Fellowship for Copepod Research (Smithsonian NMNH).
2017 George Washington University Knowledge in Action Career Internship Fund to spend a semester working with Geoff Boxshall at the London Natural History Museum.
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.
2011 Paul L. Drotch Award in Biology, University of Connecticut.

AWARDS AND HONORS

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. 13th 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.

MUSEUM AND COLLECTIONS EXPERIENCE

- Specimen identification, new species descriptions, redescriptions, evaluation of types, and deposition of type specimens. Deposited holotypes/neotypes of 8 species at the following museums (NMNH, NHMUK, Queensland Museum, South African Museum Cape Town, Museum national d'histoire naturelle). Deposited hologenophore and paragenophore in NMNH of first gooseneck barnacle genome (*Pollicipes pollicipes*).
- Museum Appointments: NMNH Research Fellow (2015+); NMNH Creative Council for Communications (2022); visiting predoc NHMUK (2015, 2017)
- Scientific visitor at: NHM Denmark, NHM Geneva, NHMUK, CEFAS UK, STRI
- Collections management: organization of collection cabinets, inventory of collections jars/containers, evaluation of ethanol evaporation rate in spirit collection in Caira lab valve collection (UConn)

Collection digitization and taxonomic databasing

2017-present Taxonomic editor in World Registry of Marine Species (WoRMS) for Copepoda
WoRMS Top-Ten Species committee (2019, 2020, 2021)
WoRMS Image Group (2020)
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. December 19, 2019.

"Introduction to Natural History Collections" 1 credit graduate seminar at UConn Biodiversity Research Collections. Invertebrate, insect, and vertebrate specimen preservation, mounting/pining, and collections management. Spring 2015.

"The International Code of Zoological Nomenclature" 1 credit graduate seminar at UConn. Spring 2013.

INVITED PRESENTATIONS

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" National Museum of Natural History All-Science meeting. Virtual. September 8, 2021.

2021 Bernot, J. P. "Parasitology methods looking forward: genomics, phylogenomics, Iso-Seq, single-cell RNA-Seq, and spacial 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 National Museum of Natural History 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. February 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. 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.

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

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. June 14, 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. October 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.

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.

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.

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.

MENTORSHIP

2021+ Niklas Dreyer. PhD student at Academia Sinica (Taiwan) studying facetotecan diversity and thecostracan genomics. Mentoring on bioinformatics and genomics. Grant review for Peter Buck Postdoc Fellowship. Coauthor on Bernot et al. (2022).

2021+ Felix J Berrios. Undergraduate at Universidad de Puerto Rico Humacao. Reviewed grants for: Doris Dukes Conservation Scholars Fellowship (awarded); Ecological Society of America SEEDS Fellowship (award declined); Louis Stokes Alliance for Minority Participation PR-LSAMP (awarded); NSF REU: Ecological and Evolutionary Response to Rapid Environment Change; Dartmouth Ecology, Evolution, Environment and Society Scholars Program.

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 publication 10, coauthor on presentation.

2018-19 Graduate student mentor in Columbian College of Arts and Sciences international graduate student buddy program. George Washington University.

2017-18 Chaimae Samtal. George Washington University. Visiting Fulbright PhD student with Dr. Keith Crandall. Research project: Prostate cancer genetics in Moroccan men.

TEACHING EXPERIENCE

Instructor on record:

2015 Spring	Current Topics in Ecology and Evolution	University of Connecticut

Teaching assistant:

2016–2020 Fall	Parasitology (laboratory)	George Washington University
2014–2015 Spring	Evolutionary Biology	University of Connecticut
2014 Fall	Animal Parasitology (laboratory)	University of Connecticut
2013 Fall	General Ecology (laboratory)*	University of Connecticut
2013 Spring	Principles of Biology II (laboratory)	University of Connecticut
2012 Fall	Principles of Biology II (laboratory)	University of Connecticut

Duties for all courses included lab prep, teaching, writing exams, grading.
**Designed new laboratory exercises*

Other courses taught:

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

2017–2020 Bimonthly informatics tools training courses . George Washington University REDCap and ResearchMatch

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

Teaching pedagogy training

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 other courses

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 "Parasitic crustacean diversity and evolution" in Parasitology. George Washington University, Washington, DC.

2019 "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 life-cycle 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.

SCIENCE ENGAGEMENT AND OUTREACH

2020+ Co-manages the World Association of Copepodologists Official Twitter account @copepodology.
2020+ Skype A Scientist. 12 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 2020, 3x 2021, 3x 2022)
12th graders at 5th 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)
2022 Cowrote WoRMS article "Ten remarkable new marine species from 2021" for Taxonomists Appreciation Day to draw public attention and press coverage to taxonomic research. March 19, 2022. https://lifewatch.be/en/ten-remarkable-new-marine-species-2021
2022 Smithsonian NMNH White House Office of Science and Technology Policy Staff & Family volunteer. Ocean Hall expert to talk with OSTP staff about NMNH research. Feb. 28, 2022.
2021 Interview for National Geographic article "Parasites may gross us out but they hold ecosystems together". October 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 alien worlds. Aug. 27, 2021.
2021 Panel member "Going to Graduate School" NMNH Natural History Research Experiences intern course (NSF REU). July 30, 2021.
2021 Interview 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 Interview for Sharkpedia podcast "Shark Parasites with Dr. Jimmy Bernot" July 5, 2021.
2021 Interview for PlanetB612 microscopy podcast "Parasites with Jimmy Bernot" June 22, 2021
2021 Panel member "Career Conversations" NMNH Education and Outreach Volunteer Experience. June 21, 2021.
2021 Interview 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 Cowrote WoRMS article "Ten remarkable new marine species from 2020" for Taxonomists Appreciation Day to draw public attention and press coverage to taxonomic research. March 19, 2021. https://lifewatch.be/en/ten-remarkable-new-marine-species-2020
2021 Filmed WoRMS Top 10 Marine Species of 2020 Video. https://youtu.be/mwFdbec5k8s
2021 Skype A Scientist LIVE event. Virtual live Q&A and introduction to marine plankton and parasites with >200 attendees. March 10, 2021. Video recording posted to Youtube: https://youtu.be/6-57CouBfMk

2021 Interview 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 adaptions 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 Interview on LGBTQ+ STEMCast, a podcast featuring LGBTQ+ scientists. January 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 Interview 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. George Washington University. Washington, DC. April 19, 2016.

2015 Interview 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 MacroscopicSolutions to design an exhibit on tapeworms in the Connecticut State Natural History Museum.

2014 Consulted with Gene Helfman and George Burgess on 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 3rd and 4th grade students. Franklin Elementary School Franklin, CT.

2011 Consulted with Janine Caira and Kirsten Jensen in designing a children's book on tapeworms, Meet the Suckers as part of NSF PBI No. 0818823. University of Connecticut.

PROFESSIONAL SERVICE

Appointments:

2015-present Research Associate. Smithsonian National Museum of Natural History
Department of Invertebrate Zoology

2017-present Taxonomic editor World Registry of Marine Species (WoRMS) for Copepoda
WoRMS Top-Ten Species Committee (2019, 2020)
WoRMS Image Group (2020)

2021-present Senate, Smithsonian National Museum of Natural History

2017-2020 REDCap system administrator and trainer. 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 Member of graduate student symposium committee. University of Connecticut

Membership and service in professional societies:

2011-present American Society of Parasitologists
Nomination and Tellers Committee (elected position, 2021)
Education Committee (appointed to 3-year term, 2021–2024)
Local Organizing Committee, Baltimore Meeting (appointed, 2026 meeting)
Committee on diversity, equity, and inclusion (appointed, 2019)
Awards Committee (appointed, 2018, 2019)
Resolutions Committee (appointed, 2018, 2019)

2016-present Helminthological Society of Washington
Executive Committee (appointed, 2022–2024)
Founding Committee for Underrepresented Minorities Research Awards (2021–2022+)
Diversity, Inclusion, and Discrimination Policies Committee (2021)

2017-present The World Association of Copepodologists
Social Media Coordinator (2020+) Twitter: @copepodology
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:

2021+	Member: Smithsonian Pride Alliance
2021	Panel member: "Career Conversations" with Smithsonian NMNH summer interns. June 21, 2021
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)
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
2012-2015	Graduate Student Association. University of Connecticut. -Master of ceremonies: Graduate Student Symposium -Designed Ecology & Evolutionary Biology departmental logo -Designed T-shirt and managed sales to raise funds for GSA

Reviewed 20 articles for 16 journals:

Acta Parasitologica (2020), African Journal of Marine Science (2015, 2021), Communications Biology (2022), Comparative Parasitology (2017), Journal of Crustacean Biology (2022), Journal of Natural History (2020), Marine Biology (2021), Molecular Biology and Evolution (2019), Molecular Phylogenetics and Evolution (2018, 2019), Neotropical Biodiversity (2016), Parasite (2019), Parasitology Research (2018, 2019), PeerJ (2016, 2017), Scientific Reports (2017), The Biological Bulletin (2019), Wellcome Open Research (2021)

FIELD WORK EXPERIENCE

Collections made with local collaborators, permits and ethical use of animal regulations followed, holotypes deposited in country of origin.

Oct. 2018	Panama: 10-day survey of parasitic copepods of reefs in Coiba National Park with Smithsonian Tropical Research Institute. Collaborator: Matthieu Leray (STRI)
Aug. 2018	New York: 2-week survey of freshwater planktonic and parasitic copepods. SUNY Oneonta Biological Field Station. Collaborator: Florian Reyda (SUNY Oneonta)
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. Collaborator: Tom Cribb (University of Queensland)
May 2014	Survey of shark tapeworms of Long Island Sound, CT, USA. Collaborators: Janine Caira (UConn) and Long Island Sound Trawl Survey
Aug. 2013	United Kingdom: 10-day collection of tapeworms of sharks and rays off the coast of Lowestoft, England. Collaborator: Jim Ellis (CEFAS)
Jan. 2013	Chile: 3-week collection of tapeworms of sharks and rays off of central Chilean coastline. Collaborator: Francisco Concha (Universidad de Valparaiso)
May 2012	Peru: SUNY Oneonta Tropical Field Biology Course in Manu National Park. Invertebrate diversity bio-blitz and leaf cutter ant field experiments.

ADVANCED TRAINING AND WORKSHOPS

2016	Workshop 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 3rd 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.

PROGRAMMING LANGUAGES

Python, R, Bash

PROFESSIONAL CONTACTS

Dr. Anna Phillips
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