

Curriculum Vitae

PERSONAL INFORMATION

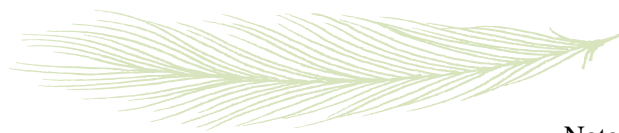
Name: Natalia Juliana Bayona Vásquez
E-mail: njbayon@emory.edu
Birth date: February 25th, 1986
Country: Colombia
Profession: Biologist with a Master's in Sciences and Doctorate in Sciences.
Webpage: <https://bayonalab.wixsite.com/natalia-bayona>
Research Interests: I am interested in molecular ecology, genomics, and evolution of species of relevance in conservation and environmental science. Our research group's questions are about genetic diversity, population structure, gene flow, phylogenetics, and community composition. Furthermore, I am interested in standardizing and implementing genomic protocols in non-model organisms.
Current Position: Assistant Professor of Biology. Division of Natural Science and Mathematics. **Oxford College of Emory University.**

ACADEMIC INFORMATION

Graduate studies: Doctor in Sciences
Posgrado en Ciencias del Mar y Limnología
Universidad Nacional Autónoma de México, Mexico
Entry date: 01-2011
Graduation date: 08-2015

Master's in Sciences
Posgrado en Ciencias del Mar y Limnología
Universidad Nacional Autónoma de México, Mexico
Entry date: 01-2009
Graduation date: 01-2011
Mean grad: 9.78/10

Undergraduate studies: Biologist
Universidad Nacional de Colombia, Colombia
Entry date: 02-2003
Graduation date: 07-2007
Mean grad: 4.0/5

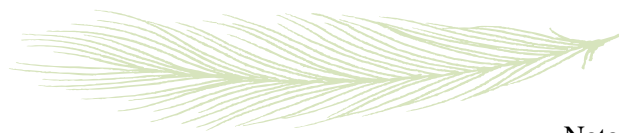


WORK EXPERIENCE

- 2021–Present Assistant Professor of Biology. Division of Natural Science and Mathematics. Oxford College. Emory University. Oxford GA, USA.
- 2020–2021 Visiting Assistant Professor of Biology. Division of Natural Science and Mathematics. Oxford College. Emory University. Oxford GA, USA.
- 2020–2021 Postdoctoral Research & Teaching Associate. Department of Environmental Health Science. Eugene P. Odum School of Ecology. University of Georgia, Athens GA, USA.
- 2016–2020 Postdoctoral Research Associate. Travis Glenn Lab. Department of Environmental Health Sciences and Institute of Bioinformatics. University of Georgia, Athens GA, USA.
- 2016 Visiting Postdoctoral Researcher. Alejandro Zaldivar-Riverón Lab. Entomology Collection. Instituto de Biología. Universidad Nacional Autónoma de México. Mexico.
- 2015–2016 Postdoctoral Researcher. Píndaro Díaz-Jaimes Lab. Laboratory of Genetics of Aquatic Organisms. Instituto de Ciencias del Mar y Limnología. Universidad Nacional Autónoma de México. Mexico.
- 2015 Fellow. Pelágios Kakunjá A.C. for the project funded by Carlos Slim Foundation & World Wildlife Fund.
- 2008 Professional Services. Project ‘Genetic variability of *Gmelina arborea*’. Pizano S.A., Forest Genetic Resources Cooperative from the State University of North Carolina –CAMCORE-, Temasek Life Sciences Laboratory of Singapore University and Conservation Genetics Laboratory of the Universidad Nacional de Colombia. Colombia.
- 2006–2008 Research Assistant. Project ‘Genetic characterization of six freshwater fish species from the San Jorge River Basin’. Conservation Genetics Laboratory. Universidad Nacional de Colombia. Colombia.

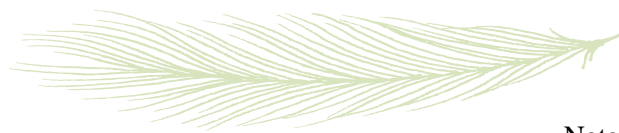
TEACHING EXPERIENCE

- 2021-FALL Instructor. Two sections. Cellular and Molecular Biology & Genetics with Lab—BIOL_OX-141Q. Division of Natural Science and Mathematics. Oxford College. Emory University. Oxford GA, USA.



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- 2021-SPRING Instructor. One section. Concepts in Biology with Lab—BIOL_OX-120. Division of Natural Science and Mathematics. Oxford College. Emory University. Oxford GA, USA
- 2021-SPRING Instructor. One section. Cellular and Molecular Biology & Genetics with Lab—BIOL_OX-141Q. Division of Natural Science and Mathematics. Oxford College. Emory University. Oxford GA, USA
- 2020-FALL Instructor. Two sections. Cellular and Molecular Biology & Genetics with Lab—BIOL_OX-141Q. Division of Natural Science and Mathematics. Oxford College. Emory University. Oxford GA, USA.
- 2020-SUMMER Instructor. Ecology—ECOL3500. Eugene P. Odum School of Ecology. University of Georgia.
- 2020-SPRING Co-Instructor. Molecular Ecology—GENE4530/ECOL6530. University of Georgia. USA.
- 2019-FALL Co-Instructor. Environmental Genomics—EHSC 8460. University of Georgia. USA.
- 2019-FALL Guest Lecturer. Departmental Seminar —EHSC 8030. Environmental Health Science, University of Georgia, USA. “Genomics in Environmental Sciences”.
- 2019-SPRING Co-Instructor. Special Problems: Genomic Analyses —EHSC 8800. University of Georgia, USA.
- 2019-SPRING Guest Lecturer. Genetic Applications in Environmental Health Sciences —EHSC 4700. University of Georgia, USA. “Conservation and Environmental Genomics: Study cases and methods in a new era”.
- 2018-FALL Teaching Assistant. Environmental Genomics—EHSC 8460. University of Georgia. USA.
- 2018-FALL Guest Lecturer. First Year Odyssey Seminar —FYOS 1001. University of Georgia, USA. “My experience as an international researcher using DNA”.
- 2011–2014,
2016-SPRING Co-Instructor. Molecular Ecology and Conservation Genetics. Posgrado en Ciencias del Mar y Limnología. Universidad Nacional Autónoma de México. Mexico.



PUBLICATIONS

Numbered chronologically in each category.

348 citations, *h-index* = 8 at Google Scholar, as of 09/23/2021.

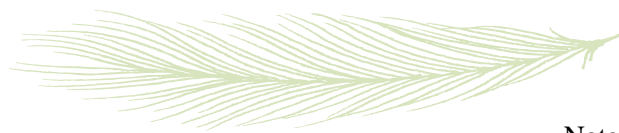
Asterisk (*) indicate equal contributions.

PUBLICATIONS IN PRESS IN PEER-REVIEWED JOURNALS

No publications In-Press.

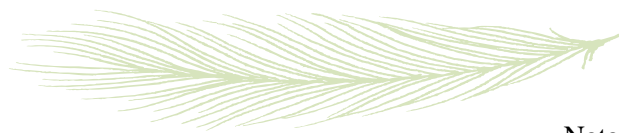
PUBLICATIONS IN PEER-REVIEWED JOURNALS

24. 2021 BEAUDRY MS, THOMAS JC, BAPTISTA RP, SULLIVAN AH, NORFOLK W, DEVAULT A, ENK J, KIERAN TJ, RHODES OE, PERRY-DOW A, ROSE LJ, **BAYONA-VÁSQUEZ NJ**, OLADEINDE A, LIPP EK, SANCHEZ S & GLENN TC. Escaping the fate of Sisyphus: assessing resistome hybridization baits for antimicrobial resistance gene capture. *Environmental Microbiology*. <http://doi.org/10.1111/1462-2920.15767>.
23. 2021 THOMAS IV JC, KIERAN TJ, FINGER JW, **BAYONA-VÁSQUEZ NJ**, OLADEINDE A, BEASLEY J, SEAMAN JC, MCARTHUR JV, RHODES Jr OE & GLENN TC. Unveiling the gut microbiota and resistome of wild cotton-mice, *Peromyscus gossypinus*, from heavy metal and radionuclide-contaminated sites in the Southeastern US. *Microbiology Spectrum*. Vol. (1), e00097-21. <https://doi.org/10.1128/Spectrum.00097-21>.
22. 2021 BEAUDRY MS, WANG J, KIERAN TJ, THOMAS J, **BAYONA-VÁSQUEZ NJ**, GAO B, DEVAULT A, BRUNELLE B, LU K, WANG JS, RHODES OE & GLENN TC. Improved microbial community characterization of 16S rRNA via metagenome capture enrichment. *Frontiers in Microbiology*. Vol. 12, pp 833. <https://doi.org/10.3389/fmicb.2021.644662>.
21. 2020 DÍAZ-JAIMES P, **BAYONA-VÁSQUEZ NJ**, ESCATEL-LUNA E, URIBE-ALCOCER M, PECORARO C, ADAMS DH, FRAZIER BS, GLENN TC & BABUCCI M. Limited dispersal promotes genetic divergence of Bonnethead *Sphyrna tiburo* in the Western North Atlantic. *Aquatic Conservation, Marine and Freshwater Ecosystems*. Vol 31, pp 83-98. <https://doi.org/10.1002/aqc.3434>.
20. 2020 KIERAN T, **BAYONA-VÁSQUEZ NJ**, VARIAN CP, SALDAÑA A SAMUDIO F, CALZADA JE, GOTTDENKER NL, & GLENN TC. Population genetics of two chromatic morphs of the Chagas disease vector



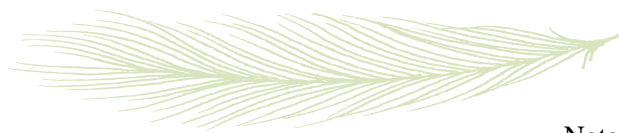
Rhodnius pallescens Barber, 1932 in Panamá. *Infection, Genetics and Evolution*. Vol 84. <https://doi.org/10.1016/j.meegid.2020.104369>.

19. 2020 THOMAS IV JC, OLADEINDE A, KIERAN TJ, FINGER JW, **BAYONA-VÁSQUEZ NJ**, CARTEE JC, BEASLEY J, SEAMAN JC, MCARTHUR JV, RHODES Jr OE & GLENN TC. Co-occurrence of antibiotic, biocide, and heavy metal resistance genes in bacteria from metal and radionuclide contaminated soils at the Savannah River Site. *Microbial Biotechnology*. Vol 13(4), pp 1179-1200. <https://doi.org/10.1111/1751-7915.13578>.
18. 2020 HERNÁNDEZ-ÁLVAREZ C*, **BAYONA-VÁSQUEZ NJ***, DOMÍNGUEZ-DOMÍNGUEZ O, URIBE-ALCOCER M & DÍAZ-JAIMES P. Phylogeography of the Pacific Red Snapper (*Lutjanus peru*) and the Spotted Rose Snapper (*Lutjanus guttatus*) in the inshore Tropical Eastern Pacific. *Copeia*. Vol 108(1), pp 61-71. <https://doi.org/10.1643/CG-18-157>.
17. 2020 DELGADO-MACHUCA N, MEZA-LÁZARO RN, ROMERO-NAPOLES J, SARMIENTO-MONROY CE, AMARILLO A, **BAYONA-VÁSQUEZ NJ** & ZALDÍVAR-RIVERÓN A. Genetic structure, species limits and evolution of the parasitoid wasp genus *Stenocorse* (Braconidae:Doryctinae) based on nuclear 3RAD and mitochondrial data. *Systematic Entomology*. Vol 45(1), pp 33-47. <https://doi.org/10.1111/syen.12373>.
16. 2019 GHOSH A, JOHNSON MG, OSMANSKI AB, GLENN TC, LOUHA S, **BAYONA-VÁSQUEZ NJ**, GONGORA J, GREEN RE, ISBERG S, STEVENS RD & RAY DA. A high-quality reference genome assembly of the saltwater crocodile, *Crocodylus porosus*, reveals patterns of selection in Crocodylidae. *Genome Biology and Evolution* evz269. <https://doi.org/10.1093/gbe/evz269>.
15. 2019 **BAYONA-VÁSQUEZ NJ***, GLENN TC*, KIERAN TJ, PIERSON TW, HOFFBERG SL, SCOTT PA, BENTLEY KE, FINGER JR. JW, LOUHA S, TROENDLE N, DÍAZ-JAIMES P, MAURICIO R & FAIRCLOTH BC. Adapterama III: Quadruple-indexed, double/triple-enzyme RADseq libraries (2RAD/3RAD). *PeerJ* 7:e7724. <http://doi.org/10.7717/peerj.7724>.
14. 2019 GLENN TC, PIERSON TW, **BAYONA-VÁSQUEZ NJ**, KIERAN TJ, HOFFBERG SL, THOMAS IV JC, LEFEVER DE, FINGER JR. JW, GAO B, BIAN X, LOUHA S, KOLLI RT, BENTLEY K, RUSHMORE J, WONG K, SHAW TI, ROTHROCK JR. MJ, MCKEE AM, GUO TL, MAURICIO R, MOLINA M, CUMMINGS BS, LASH LH, LU K, GILBERT GS, HUBBELL SP & FAIRCLOTH BC. Adapterama II: Universal amplicon sequencing on Illumina platforms (TaggiMatrix). *PeerJ* 7:e7786. <http://doi.org/10.7717/peerj.7786>.
13. 2019 GLENN TC, NILSEN RA, KIERAN TJ, SANDERS JG, **BAYONA-VÁSQUEZ NJ**, FINGER JR. JW, PIERSON TW, BENTLEY



KE, HOFFBERG SL, LOUHA S, GARCÍA-DE LEÓN FJ, DEL RÍO-PORTILLA MA, REED KD, ANDERSON JL, MEECE JK, AGGREY SE, REKAYA R, ALABADY M, BÉLANGER M, WINKER K & FAIRCLOTH BC. Adapterama I: Universal stubs and primers for 384 unique dual-indexed or 147,456 combinatorially-indexed Illumina libraries. *PeerJ* 7:e7755. <http://doi.org/10.7717/peerj.7755>.

12. 2018 MEZA-LÁZARO RN, POTEAUX C, **BAYONA-VÁSQUEZ NJ**, BRANSTETTER MG & ZALDIVAR-RIVERÓN A. Extensive mitochondrial heteroplasmy in the neotropical ants of the *Ectatomma ruidum* complex (Formicidae: Ectatomminae). *Mitochondrial DNA Part A*. Vol 29(8), pp 1203-1214. <https://doi.org/10.1080/24701394.2018.1431228>.
11. 2018 DÍAZ-JAIMES P, BONFIL R, PALACIOS-BARRETO P, BOLAÑO-MARTÍNEZ N & **BAYONA-VÁSQUEZ NJ**. Mitochondrial genome of the critically endangered smalltooth sawfish *Pristis pectinata* from Veracruz, Mexico. *Conservation Genetics Resources*. Vol 10(4), pp 663-666. <https://doi.org/10.1007/s12686-017-0896-9>.
10. 2018 **BAYONA-VÁSQUEZ NJ**, GLENN TC, URIBE-ALCOCER M, PECORARO C & DÍAZ-JAIMES P. Complete mitochondrial genome of the yellowfin tuna (*Thunnus albacares*) and the blackfin tuna (*Thunnus atlanticus*): notes on mtDNA introgression and paraphyly on tunas. *Conservation Genetics Resources*. Vol 10(4), pp 697-699. <https://doi.org/10.1007/s12686-017-0904-0>.
09. 2018 **BAYONA-VÁSQUEZ NJ**, GLENN TC, DOMÍNGUEZ-DOMÍNGUEZ O, URIBE-ALCOCER M & DÍAZ-JAIMES P. Mitochondrial genomes of the Pacific sierra mackerel *Scomberomorus sierra* and the Monterey Spanish mackerel *Scomberomorus concolor* (Perciformes, Scombridae). *Conservation Genetics Resources*. Vol 10(3), pp 471-474. <https://doi.org/10.1007/s12686-017-0851-9>.
08. 2017 **BAYONA-VÁSQUEZ NJ**, HERNÁNDEZ-ÁLVAREZ CA, GLENN T, DOMÍNGUEZ-DOMÍNGUEZ O, URIBE-ALCOCER M & DÍAZ-JAIMES P. Complete mitogenome sequences of the pacific red snapper (*Lutjanus peru*) and the spotted rose snapper (*Lutjanus guttatus*). *Mitochondrial DNA Part A*. Vol 28(2), pp 223-224. <https://doi.org/10.3109/19401736.2015.1115851>.
07. 2016 DÍAZ-JAIMES P, URIBE-ALCOCER M, ADAMS DH, RANGEL-MORALES JM & **BAYONA-VÁSQUEZ NJ**. Complete mitochondrial genome of the porbeagle shark, *Lamna nasus* (Chondrichthyes, Lamnidae). *Mitochondrial DNA Part B*. Vol 1(1), pp 730-731. <http://dx.doi.org/10.1080/23802359.2016.1233465>.
06. 2016 DÍAZ-JAIMES P, **BAYONA-VÁSQUEZ NJ**, ADAMS DH & URIBE-ALCOCER M. Complete mitochondrial DNA genome of bonnethead shark,



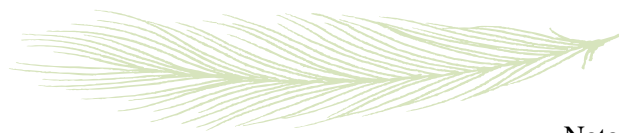
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Sphyrna tiburo, and phylogenetic relationships among main superorders of modern elasmobranchs. *Meta Gene*. Vol 7, pp 48-55. <https://doi.org/10.1016/j.mgene.2015.11.005>.

05. 2016 BOLAÑO-MARTÍNEZ N, **BAYONA-VÁSQUEZ N**, URIBE-ALCOCER M & DÍAZ-JAIMES P. The mitochondrial genome of the hammerhead *Sphyrna zygaena*. *Mitochondrial DNA Part A*. Vol 27(3), pp 2098-2099. <https://doi.org/10.3109/19401736.2014.982574>.
04. 2015 DÍAZ-JAIMES P, **BAYONA-VÁSQUEZ NJ**, HINOJOSA S & URIBE-ALCOCER M. The complete mitogenome of the common dolphinfish (*Coryphaena hippurus*). *Mitochondrial DNA*. Vol 26(6), pp 959-960. <https://doi.org/10.3109/19401736.2013.865175>.
03. 2015 **BAYONA-VÁSQUEZ NJ**, DÍAZ-JAIMES P & URIBE-ALCOCER M. Isolation and characterization of microsatellite loci in the common dolphinfish *Coryphaena hippurus* (Perciformes: Coryphaenidae) from next generation sequencing and cross amplification in pompano dolphinfish *Coryphaena equiselis*. *Conservation Genetics Resources*. Vol 7(2), pp 373-375. <https://doi.org/10.1007/s12686-014-0372-8>.
02. 2007 **BAYONA-VÁSQUEZ, NJ** & BURBANO MC. New primers for microsatellite loci in *Plagioscion magdalenae* (Pisces: Sciaenidae). *Acta Biológica Colombiana*. 12S:123.
01. 2007 RODRIGUEZ-P E, **BAYONA-V N** & JIMENEZ-A O. Relationship between the shift on tide levels over the abundance on planktonic bioluminescent organisms. *Actualidades Biológicas*. 2007:124.

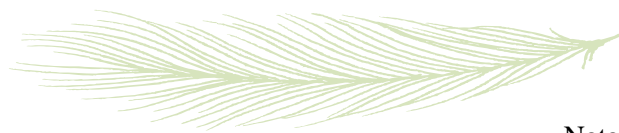
PUBLICATIONS OF NATURAL HISTORY AND GEOGRAPHIC DISTRIBUTION

- N03. 2019 PIERSON TW & **BAYON-VÁSQUEZ NJ**. *Eurycea cirrigera* (Southern Two-lined Salamander) communal nesting. *Herpetological Review* 50(3): 544.
- N02. 2017 PIERSON TW & **BAYONA-VÁSQUEZ NJ**. *Eurycea aquatica* (Brown-backed salamander) and *Eurycea cirrigera* (Southern Two-lined salamander). Hatching. *Herpetological Review* 48(3): 598.
- N01. 2014 DURSO AM, CARTER CM, PIERSON TW & **BAYONA N**. *Plethodon chattahoochee* (Chattahoochee Slimy Salamander) Habitat. *Herpetological Review* 45(4): 676-677.



PUBLICATIONS IN CONFERENCE PROCEEDINGS

- C15.** 2019 **BAYONA-VÁSQUEZ NJ, GLENN TC, URIBE-ALCOCER M, ORTEGA-GARCÍA S & DÍAZ-JAIMES P.** New genomic resources and population genetics of the cosmopolitan marine pelagic fish, dolphinfish (*Coryphaena hippurus*). 70th Tuna Conference Proceedings. Pg. 17.
- C14.** 2015 **DÍAZ-JAIMES P, BAYONA-VÁSQUEZ N & URIBE-ALCOCER M.** Population genomics of large pelagic fishes, including tunas and sharks. 66th Tuna Conference Proceedings. Pg. 24.
- C13.** 2015 **BAYONA-VÁSQUEZ N, DÍAZ-JAIMES P & URIBE-ALCOCER M.** Global population genetics of dolphinfish (*Coryphaena hippurus*). 66th Tuna Conference Proceedings. Pg. 21.
- C12.** 2014 **BAYONA-VÁSQUEZ N, DÍAZ-JAIMES P & URIBE-ALCOCER M.** Population genomics on pelagic fish, protocols and applications. Memories Book. IV Congreso Colombiano de Zoología. I Symposium on Migratory Species.
- C11.** 2014 **BAYONA-VÁSQUEZ N, DÍAZ-JAIMES P & URIBE-ALCOCER M.** Golden legend: Population genetics of dolphinfish *Coryphaena hippurus*. Memories Book. IV Colombian Congress on Zoology. I Symposium on Migratory Species.
- C10.** 2012 **BAYONA-VÁSQUEZ NJ.** Conservation studies: From genetics to genomics, implications in marine organisms. Memories Book. Second Postgraduate Students Congress. ISBN 978-607-02-3355-5. Pg. 530.
- C09.** 2011 **BAYONA-VÁSQUEZ NJ & DIAZ-JAIMES P.** Genetic characterization of dolphinfish *Coryphaena hippurus* from the Pacific Ocean, using microsatellite markers. Memories Book. First Postgraduate Students Congress. First edition. ISBN 978-607-02-2569-7. Pg. 149.
- C08.** 2010 **BAYONA-VÁSQUEZ N, DÍAZ-JAIMES P & URIBE-ALCOCER M.** Genetic characterization of dolphinfish *Coryphaena hippurus* in populations from the Pacific Ocean, using microsatellite data. Abstracts Book. III Colombian Congress of Zoology, Genetic Perspectives Applied in Biodiversity Conservation Symposium. Pg. 20.
- C07.** 2010 **BAYONA-VÁSQUEZ N, DÍAZ-JAIMES P & URIBE-ALCOCER M.** Conservation genetics in marine pelagic species. Abstracts Book. III Colombian Congress of Zoology, Genetic Perspectives Applied in Biodiversity Conservation Symposium. Pg. 22.



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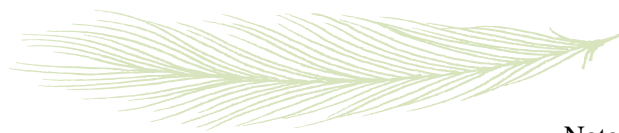
- C06.** 2010 **BAYONA VASQUEZ NJ, DÍAZ JAIMES P & URIBE ALCO CER M.** Genetic characterization of dolphinfish *Coryphaena hippurus* in populations from the Pacific Ocean, using microsatellite data. Abstracts Book. XII National Ichthyologic Congress, by the Mexican Ichthyology Society SIMAC. Pg. 44.
- C05.** 2008 **BAYONA N & RODRÍGUEZ E.** Marine Regional Ecology of the Cartagena Bay, Cholon Bay, Ciénaga de la Virgen, Ciénaga Grande de Santa Marta. Abstracts Book. SENALMAR. Pg. 317.
- C04.** 2008 **BAYONA-VÁSQUEZ N & GALEANO-GALEANO E.** Marine Regional Ecology of Cartagena Bay. Abstracts Book. SENALMAR. Pg. 345.
- C03.** 2006 RODRIGUEZ-P E, **BAYONA-V N** & JIMENEZ-A O. First report of bioluminescent dinoflagellates from the Colombia Caribbean. Abstracts Book. First Congress and Fifth Scientific Meeting of Biology Students.
- C02.** 2007 RODRIGUEZ-P E, **BAYONA-V N** & JIMENEZ-A O. Relation between the shift on tide levels over the abundance on planktonic bioluminescent organisms. Colacmar Vol 2. Abstract number 10833. Pg. 284.
- C01.** 2006 GALLO C & **BAYONA N.** Pollination interactions among hummingbirds and *Bombus rubicundus* on *Tibouchina grossa*. Abstracts Book. II Colombian Congress of Zoology. Pg. 457.

PUBLICATIONS SUBMITTED, IN PEER-REVIEW, AND AVAILABLE AS PREPRINT

- P01.** 2021 HALSEY MK, STUHLER JD, **BAYONA-VÁSQUEZ NJ**, PLATT II RN, GOETZE JR, MARTIN RE, MATOCHA KG, BRADLEY RD, STEVENS RD, & RAY DA. Comparison of genetic variation between rare and common congeners of *Dipodomys* with estimates of contemporary and historical effective population size. *bioRxiv*, doi: <https://doi.org/10.1101/2021.08.04.455110>.

MEDIA RESOURCES

- 2017 Multiple resources and tools for our Adapterama series are available at baddna.uga.edu.
- 2012 **BAYONA-VÁSQUEZ NJ.** Essay about: “How Next Generation Sequencing Technologies has revolutionized my research program”.



Natalia J. Bayona-Vásquez, Ph.D.

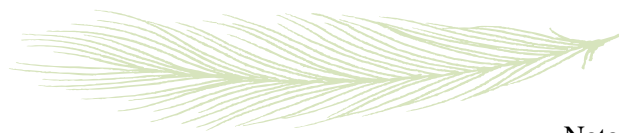
[http://evomics.org/registration-form/scholarships/winning-essays/#Natalia Bayona](http://evomics.org/registration-form/scholarships/winning-essays/#NataliaBayona)

CONTRIBUTIONS IN BOOKS

- 2013 Contribution. GUÍA DE LAS ESPECIES MIGRATORIAS DE LA BIODIVERSIDAD EN COLOMBIA. PECES. VOL 2. *Coryphaena hippurus* Sheet. Pg. 157. ©Ministerio de Medio Ambiente y Desarrollo Sostenible y ©WWF-Colombia. Editores: Luis Alonso Zapata Padilla & José Saulo Usma Oviedo.

RESEARCH GRANTS, PROJECTS AND CONTRACTS

- 2020–2024 NIH—1R01AI148667 - 01A1, USA. “Capturing the genomic variation present in *Cryptosporidium* and cryptosporidiosis”. KISSINGER, J. US\$2,221,688. Role: co-investigator.
- 2016–2020 CONACYT 253381, Mexico. Coastal use as nursery areas of bull shark (*Carcharhinus leucas*) and bonnethead shark (*Sphyrna tiburo*), in the Gulf of Mexico and Caribbean. A molecular perspective. DÍAZ-JAIMES, P. ~US\$59,000. Role: co-investigator.
- 2018–2020 CDC—75D30118C02889, USA. New approaches to improve the efficiency, sensitivity, specificity and standardization of sampling, DNA isolation, shotgun library preparation, and microbiome DNA enrichment and analysis in healthcare settings. GLENN TC. US\$509,880. Role: co-investigator.
- 2016–2018 UNAM Project PAPIIT IN212816, Mexico. Population genomics of the Eastern Pacific mackerels (*Scomberomorus sierra* and *Scomberomorus concolor*). URIBE-ALCOCER, M. ~US\$26,000. Role: co-investigator.
- 2014–2018 CONACYT 221702, Mexico. Population genomics and demography of dolphinfish (*Coryphaena hippurus*) and yellowfin tuna (*Thunnus albacares*). URIBE-ALCOCER, M. ~US\$80,000. Role: co-investigator.
- 2015–2017 Carlos Slim Foundation & World Wildlife Fund (WWF). Nursery and aggregation areas of sharks in the eastern Pacific: hammerhead, white and Mako sharks. AMEZCUA F & DÍAZ-JAIMES P. ~US\$750,000. Role: Postdoctoral researcher.
- 2015–2017 UNAM Project PAPIIT IG201215, Mexico. Definition of nursery areas in the hammerhead shark *Sphyrna lewini* through the use of genomic methods, trace



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elements and age structure analyses. DÍAZ-JAIMES, P. ~US\$75,000. Role: key personnel.

2013–2015 UNAM Project PAPIIT IN207413, Mexico. Population divergence and historic demography of two red snapper species (*Lutjanus peru* y *L. guttatus*) from the Mexican Pacific Coast. URIBE-ALCOCER, M. ~US\$36,000. Role: key personnel.

2012–2014 UNAM Project PAPIIT IN208112, Mexico. Phylopatry in the bull shark (*Carcharhinus leucas*) and bonnethead shark (*Sphyrna tiburo*). DÍAZ-JAIMES, P. ~US\$30,000. Role: key personnel.

2010–2011 UNAM Project PAPIIT IN221910, México. Global population structure and phylogeography of dolphinfish *Coryphaena hippurus* using nuclear and mitochondrial markers. DÍAZ-JAIMES, P. ~US\$20,000. Role: key personnel.

PARTICIPATION IN OTHER RESEARCH PROJECTS

2012–2018 National Science Foundation. Dimensions: Testing the potential of pathogenic fungi to control the diversity, distribution, and abundance of tree species in a neotropical forest community. HUBBELL S, FAIRCLOTH B, GILBERT G, SAUNDERS M, & GLENN TC. Role: Postdoctoral Researcher.

2008 UNAM Project PAPIIT IN208408, Mexico. Comparative Phylogeography of dolphinfish (*Coryphaena hippurus*) and yellowfin tuna (*Thunnus albacares*) from the Pacific Ocean. DÍAZ-JAIMES, P. Role: Student.

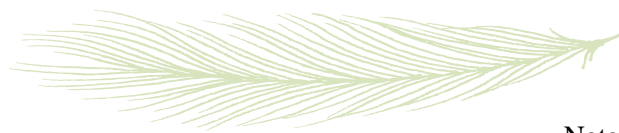
2006–2008 FONADE-Corporación Regional para los ríos Sinú y San Jorge (CVS), Universidad Nacional de Colombia, Colombia. Genetic characterization of six fish species—*Pseudoplatystoma fasciatum*, *Prochilodus magdalenae*, *Sorubim cuspicaudus*, *Plagioscion magdalenae*, *Hoplias malabaricus* and *Ageneiosus caucanus*— from the San Jorge River basin. BURBANO-MONTENEGRO, MC. Role: Student.

RESEARCH ASSOCIATED WITH GRADUATE STUDIES

2011–2015 Doctorate Thesis, Mexico. Global genetic population structure of dolphinfish (*Coryphaena hippurus*).

2009–2011 Master's Thesis, Mexico. Genetic characterization of dolphinfish *Coryphaena hippurus* in the Pacific Ocean using microsatellite markers.

WORKSHOPS AND TRAININGS

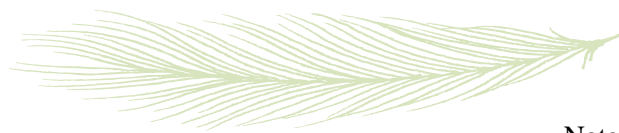


Natalia J. Bayona-Vásquez, Ph.D.

- 2021 Co-Instructor. Alaska INBRE Bioinformatics Training Workshop. University of Alaska (Online Workshop)
- 2019 Co-Organizer and Co-Instructor. RADcamp 2019— The New York City Edition Workshop. Columbia University (New York, NY, USA)
- 2019 Co-Instructor. Alaska INBRE Bioinformatics Training Workshop. University of Alaska (Fairbanks, AK, USA)
- 2017 Instructor. Training Sessions on RADSeq Bioinformatic Analyses and Population Genetics. University of Georgia (Athens, GA, USA)
- 2017 Instructor. Training Sessions on RADSeq and RADcap Bioinformatic Analyses and Population Genetics. (Aiken, SC, USA)
- 2014 Organizer and Co-Instructor. Workshop on Last Advances in New Generation Sequencing Techniques. Posgrado de Ciencias del Mar y Limnología (Mexico City, Mexico)
- 2012 Co-Instructor. Fragment Analysis Course. Instituto de Biología. Universidad Nacional Autónoma de México (Mexico City, Mexico)

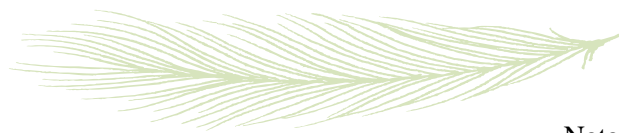
PARTICIPATION IN SCIENTIFIC EVENTS

- 2021 Attending. Evolution 2021. Society for the Study of Evolution, American Society of Naturalists and Society of Systematic Biologists (Virtual Event)
- 2021 Attending. 71st Tuna Conference. Inter-American Tropical Tuna Commission, Southwest Fisheries Science Center, NOAA/NMFS (Virtual Event)
- 2021 Attending. Biology of Genomes Virtual Meeting. Cold Spring Harbor Laboratory (Virtual Event)
- 2021 Attending. Southern Division American Fisheries Society—Virginia Chapter (Virtual Meeting)
- 2020 Speaker. Meet the marine fish you eat: the science on your plate. Turtle Pond Talks from the Friends of the Georgia Museum of Natural History (Athens, GA, USA)
- 2020 Seminar Speaker. A genomic perspective on biodiversity: from individuals to communities. Utah Valley University (Orem, UT, USA)



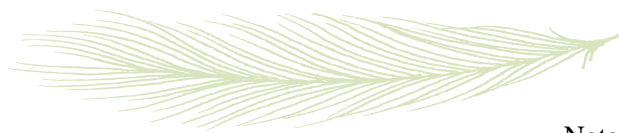
Natalia J. Bayona-Vásquez, Ph.D.

- 2020 Seminar Speaker. Molecular ecology of marine organisms: genomic approaches for measuring diversity and population boundaries. Western Washington University (Bellingham, WA, USA)
- 2020 Speaker. Global population genomics of the Yellowtail kingfish, *Seriola lalandi*. 3rd *Seriola* Workshop – National Oceanic and Atmospheric Administration (San Diego, CA, USA)
- 2019 Speaker. The molecular ecologist's guide to RADSeq: a case-study on a cosmopolitan fish. Southeastern Population Ecology and Evolutionary Genetics Conference – SEPEEG (Clemson, SC, USA)
- 2019 Speaker. New genomic resources and population genetics of the cosmopolitan marine pelagic fish, dolphinfish (*Coryphaena hippurus*). 70th Tuna Conference (Lake Arrowhead, CA, USA)
- 2018 Speaker. Population genomics and phylogeography of the cosmopolitan marine pelagic fish, mahi-mahi (*Coryphaena hippurus*). Joint Meeting of Ichthyologists and Herpetologists – JMIH (Rochester, NY, USA)
- 2018 Attending. Biology of Genomes. Cold Spring Harbor Laboratory (Long Island, NY, USA)
- 2017 Visiting Scientist. Gregory Gilbert Lab. Greenhouse and molecular practices for the assessment of pathogenic fungi in forest trees. Smithsonian Tropical Research Institute (Gamboa, Panama)
- 2017 Invited Speaker. Departmental Seminar. From populations to communities: case studies and methods in the genomics era. University of South Carolina Aiken (Aiken, SC, USA)
- 2017 Seminar Speaker. Genomics in the study of marine populations and species. Enthusiast of Diversity, Genetics and Evolution— EDGE. University of Georgia (Athens, GA, USA)
- 2017 Visiting Scientist. Brant Faircloth Lab. Molecular practices for the assessment of pathogenic fungi in forest trees. Louisiana University (Baton Rouge, LA, USA)
- 2016 Speaker. How to process 1500 RADseq samples in a week for \$6/sample. Evolution 2016. Society for the Study of Evolution, American Society of Naturalists and Society of Systematic Biologists (Austin, TX, USA)
- 2016 Visiting Researcher. Dr. Travis Glenn Lab. Environmental Health Sciences. Training in reduced representation libraries and genomic data analysis. Georgia University (Athens, GA, USA)



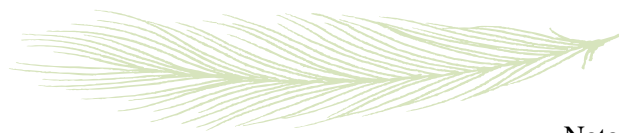
Natalia J. Bayona-Vásquez, Ph.D.

- 2016 Invited Speaker. Departmental Seminar. Genomic applications for the study of biodiversity. Instituto de Ciencias del Mar y Limnología (Mexico City, Mexico)
- 2015 Speaker. Population genomics of large pelagic fishes, including tunas and sharks. 66th Annual Tuna Conference (Lake Arrowhead, CA, USA)
- 2015 Speaker. Global population genetics of dolphinfish (*Coryphaena hippurus*). 66th Annual Tuna Conference (Lake Arrowhead, CA, USA)
- 2014 Visiting Researcher. Dr. Travis Glenn Lab. Environmental Health Sciences Building. Implementation and developing of genomic libraries. Georgia University (Athens, GA, USA)
- 2014 Speaker. Population genomics on pelagic fish, protocols and applications. IV Colombian Congress of Zoology, Migratory Species Symposium. Asociación Colombiana de Zoología ACZ (Cartagena, Colombia)
- 2014 Speaker. The Golden Legend: Population genetics of dolphinfish *Coryphaena hippurus*. IV Colombian Congress of Zoology, Migratory Species Symposium. Asociación Colombiana de Zoología ACZ (Cartagena, Colombia)
- 2014 Attending. Joint Meeting of Ichthyologists and Herpetologists. American Society Ichthyologists and Herpetologists-Kansas University (Chattanooga, TN, USA)
- 2014 Attending. Workshop on Techniques and Application in Elasmobranch Population Genetics: A workshop to further the field. Save Our Seas – American Elasmobranch Society. Universidad de Tennessee (Chattanooga, TN, USA)
- 2014 Visiting Scholar. Dr. Travis Glenn Lab. Environmental Health Sciences. Genomic libraries preparation for Hi-throughput platform sequences and data analyses. Georgia University (Athens, GA, USA)
- 2012 Attending. RADSeq methodologies for ecological and evolutionary genetic studies. GENECO, Lund University (Lund, Sweden)
- 2012 Attending. Workshop on Genomics and Advance Topic Session on Biopython (Český Krumlov, Czech Republic)
- 2012 Speaker. Conservation studies: From genetics to genomics, implications in marine organisms. 2nd Postgraduate Student Congress. Universidad Nacional Autónoma de México (Mexico City, Mexico)



Natalia J. Bayona-Vásquez, Ph.D.

- 2011 Attending. 2011 Annual Symposium by the American Genetic Association-AGA (Guanajuato, Mexico)
- 2011 Attending. NSF-funded Workshop on Next Generation Sequencing. American Genetic Association- AGA (Irapuato, Mexico)
- 2011 Speaker. Genetic characterization of dolphinfish *Coryphaena hippurus* from the Pacific Ocean, using microsatellite markers. 1st Postgraduate Students Congress. Universidad Nacional Autónoma de México (Mexico City, Mexico)
- 2010 Attending. VII Latin-American Workshop on Conservation Genetics: ‘Genetics and Biodiversity Conservation’. REGENEC (Petropolis, Brazil)
- 2010 Speaker. Genetic characterization of dolphinfish *Coryphaena hippurus* in populations from the Pacific Ocean, using microsatellite data. III Colombian Congress of Zoology, Genetic Perspectives Applied in Biodiversity Conservation Symposium (Medellín, Colombia)
- 2010 Speaker. Conservation genetics in marine pelagic species. III Colombian Congress of Zoology, Genetic Perspectives Applied in Biodiversity Conservation Symposium (Medellín, Colombia)
- 2010 Speaker. Genetic characterization of dolphinfish *Coryphaena hippurus* in populations from the Pacific Ocean, using microsatellite data. XII National Ichthyologic Congress, by the Mexican Ichthyology Society SIMAC (Nuevo Vallarta, Mexico)
- 2010 Research Internship. Conservation Genetics Laboratory directed by Dr. Francisco García de León. Developing clonal libraries for the discovery and design of microsatellite markers in *C. hippurus*. Centro de Investigaciones Biológicas del Noroeste- CIBNOR (La Paz, Mexico)
- 2009 Attending. Theory-practical Course of Microsatellites by Applied Biosystems México and the Instituto de Biología from Universidad Nacional Autónoma de México (Mexico City, Mexico)
- 2008 Attending. Bioinformatics Course. Bioinformatics Center of the Biotechnology Institute from Universidad Nacional de Colombia (Bogotá, Colombia)
- 2008 Speaker. Marine Regional Ecology of the Cartagena Bay, Cholon Bay, Ciénaga de la Virgen, and Ciénaga Grande de Santa Marta. XIII National Seminar on Marine Science and Technology SENALMAR (San Andrés Islas, Colombia)



Natalia J. Bayona-Vásquez, Ph.D.

- 2008 Speaker. Marine Regional Ecology of Cartagena Bay. XIII National Seminar on Marine Science and Technology SENALMAR (San Andrés Islas, Colombia)
- 2007 Poster. 4th Botany Colombian Congress. Colombian Botany Association ACB (Medellín, Colombia)
- 2006 Attending. Second International Seminar on Genomics, Proteomics, Bioinformatics and Systems Biology from la Universidad del Cauca (Popayan, Colombia)
- 2006 Poster. II Colombian Congress of Zoology. Universidad Nacional de Colombia (Santa Marta, Colombia)

PARTICIPATION IN SCIENTIFIC OUTREACH EVENTS

- 2015 Talk for Kids. Science Museum UNAM—UNIVERSUM. “Family ties in marine fish”. (Mexico City, Mexico)

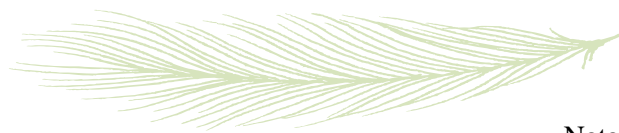
PARTICIPATION & CONTRIBUTIONS IN DIVERSITY/EQUALITY/INCUSION EVENTS

- 2021 Mentor. Virtual Evolution Meeting. Bilingual Mentoring Program.
- 2020 Panelist. Online event: Latinas Energizing Science. Broad Institute, Shades@Broad LatinX, Women@Broad.

REPRESENTATIVE PRESENTATIONS & POSTERS AT MEETINGS

Presenter in *italics*. Asterisk indicates award winning presentation.

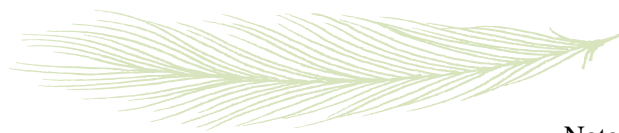
- 2021 Talk. **BAYONA-VASQUEZ NJ** & *FREEMAN B.* Exploratory species delimitations among cryptic black basses. Southern Division American Fisheries Society Virtual Meeting.
- 2020 Talk. *RAMSTAD KM*, **BAYONA-VASQUEZ NJ**, *DEL LAMA S*, *LANCE S*, *BRYAN A.* Genomic population structure of American wood storks - how many populations are there? North American Ornithological Conference (Virtual Conference).
- 2019 Poster. *THOMPSON AT*, *FREDERICK JC*, **BAYONA-VÁSQUEZ NJ**, *GLENN TC*, *YABSLEY MJ.* Population genomics of the invasive



Natalia J. Bayona-Vásquez, Ph.D.

tick, *Haemaphysalis longicornis*. Wildlife Disease Association (WDA) 2019 (Lake Tahoe, CA, USA)

- 2019 Poster. *THOMPSON AT*, FREDERICK JC, **BAYONA-VÁSQUEZ NJ**, GLENN TC, YABSLEY MJ. Population genomics of the invasive tick, *Haemaphysalis longicornis*. Center for Tropical and Emerging Global Diseases 29th Annual Molecular Parasitology and Vector Biology Symposium (Athens, GA, USA)
- 2019 Talk. *SAXON R*, RAMSTAD KM, **BAYONA-VÁSQUEZ NJ** & BRYAN A. Genetic analysis of nest parasitism in American wood storks. Scholar Showcase Research Symposium. University of South Carolina (Aiken, SC, USA)
- 2019 Talk. *HERBERT A*, RAMSTAD KM, **BAYONA-VÁSQUEZ NJ**, NASSIF DEL LAMA S & BRYAN A. Genomic population structure of American wood storks. Scholar Showcase Research Symposium. University of South Carolina (Aiken, SC, USA)
- 2019 Poster. *SAXON R*, RAMSTAD KM, **BAYONA-VÁSQUEZ NJ** & BRYAN A. Genetic analysis of nest parasitism in American wood storks. Discover USC Research Symposium. University of South Carolina (Aiken, SC, USA)
- 2019 Poster*. *HERBERT A*, RAMSTAD KM, **BAYONA-VÁSQUEZ NJ**, NASSIF DEL LAMA S & BRYAN A. Genomic population structure of American wood storks. Discover USC Research Symposium. University of South Carolina (Aiken, SC, USA)
- 2018 Poster*. *HERBERT A*, **BAYONA-VÁSQUEZ NJ**, NASSIF DEL LAMA S, LANCE SL, BRYAN A & RAMSTAD KM. Assessing genetic population structure of American wood storks. USC End of Year Student Research Meeting. University of South Carolina (Aiken, SC, USA)
- 2018 Talk. *MEZA-LÁZARO RN*, CHANTAL P, **BAYONA-VÁSQUEZ NJ**, BRANSTETTER MG, ZALDIVAR-RIVERÓN A. Two mitochondrial genomes coexisting in individuals of the complex *Ectatomma ruidum* (Formicidae:Ectatomminae). 1st Mexican Society of Systematics on Arthropods (AMXSA A.C.) Congress (Mexico City, Mexico)
- 2018 Talk. *MACHUCA-DELGADO N*, ZALDIVAR-RIVERÓN A, **BAYONA-VÁSQUEZ N**. Phylogeography of *Stenocorse bruchivora* (Hymenoptera: Braconidae: Doryctinae) using phylogenomic tools. 1st Mexican Society of Systematics on Arthropods (AMXSA A.C.) Congress (Mexico City, Mexico)
- 2007 Poster*. *RODRIGUEZ-P EDITH*, **BAYONA-V NATALIA** & JIMENEZ-A OSCAR. First report of bioluminescent dinoflagellates for the Colombian



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Caribbean. First Congress and Fifth Scientific Meeting of Biology Students (Bogotá, Colombia).

- 2007 Poster. RODRIGUEZ-P EDITH, **BAYONA-V NATALIA** & JIMENEZ-A OSCAR. Relation between the shift on tide levels over the abundance on planktonic bioluminescent organisms. XII Congresso Latino-Americano de Ciências do Mar COLACMAR por Associação Latino-americana de Pesquisadores em Ciências do Mar – ALICMAR e a Associação Brasileira de Oceanografia – AOCEANO (Florianópolis, Brazil).

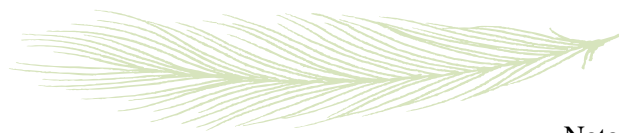
COMMITTEE MEMBER

- 2016–Present Fernando Mar. Doctorate in Science student. Posgrado en Ciencias del Mar y Limnología. Universidad Nacional Autónoma de México (UNAM).
- 2016–2019 Carolina Serrano. Master’s in Science student. Posgrado en Ciencias del Mar y Limnología. Universidad Nacional Autónoma de México (UNAM).
- 2016–2019 Arturo Morales. Master’s in Science student. Posgrado en Ciencias del Mar y Limnología. Universidad Nacional Autónoma de México (UNAM).

STUDENT MENTORING

Thirteen undergrads and 23 graduate students at both master’s and doctorate level.

- S36.** 2021-Present OCEU. Jessica Yoon. Freshman.
- S35.** 2021-Present OCEU. Sahithi Gangaram. Freshman.
- S34.** 2021 OCEU. Alex Kershaw. Sophomore.
- S33.** 2021 OCEU. Grace Engel. Sophomore.
- S32.** 2021 OCEU. Joyce Liu. Sophomore.
- S31.** 2020-2021 UGA. Kelly Petersen. PhD student.
- S30.** 2020-2021 UGA. Amanda Howard. Master’s student.
- S27.** 2018-2021 UGA. Megan Sara Beaudry. PhD student.
- S26.** 2018-2021 UGA. Julia Frederick. PhD student.
- S29.** 2019-2020 UGA. Karen Bobier. PhD student.
- S28.** 2018-2019 UGA. Alec Thompson. PhD student.
- S25.** 2018 USC. Rachel Saxon. Undergraduate student.
- S24.** 2018 USC. Austin Herbert. Undergraduate student.
- S23.** 2017 UGA. Lily Wang. Undergraduate student.
- S22.** 2017 IVIC. Ariel Espinosa Blanco. PhD student.
- S21.** 2017 SREL. Cara Love. PhD student.
- S20.** 2017 SREL. Joshua Zajdel. Master’s student.
- S19.** 2016-2017 UGA. Jesse C. Thomas. PhD student.
- S18.** 2016-2019 UGA. Troy Kieran. PhD student.
- S17.** 2016-2018 UGA. Maddy Ryan Watson. Master’s student.



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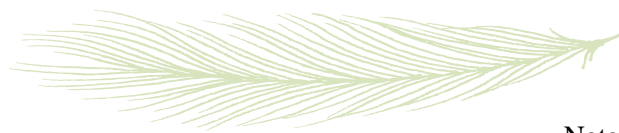
S16. 2016-2018	UNAM. Natalia Delgado Machuca. Master's student.
S15. 2016-Present	UNAM. Fernando Mar. PhD student.
S14. 2016-Present	UNAM. Arturo Morales. Master's student.
S13. 2016	UNAM. Pedro Castro. Undergraduate student.
S12. 2015-Present	UNAM. Carolina Serrano. Master's student.
S11. 2014-2016	UNAM. Jose Miguel Rangel. PhD student.
S10. 2014-2016	UNAM. Andrea Marcela Mar Ramírez. Master's student.
S09. 2014-2016	UNAM. Paola Palacios Barreto. Master's student.
S08. 2014-2015	UNAM. Gabriela Andrade. Undergraduate student.
S07. 2014-2015	UNAM. Cristóbal Hernández-Álvarez. Undergraduate student.
S06. 2013-2016	UNAM. Elena Escatel Luna. PhD student.
S05. 2013-2015	UNAM. Josué Barranco. Undergraduate student.
S04. 2012-2015	UNAM. Erika Magallón Gayón. PhD student.
S03. 2011-2016	UNAM. Nadia Sandoval Laurrabaquio. Master's and PhD student.
S02. 2011-2015	UNAM. Nataly Bolaño-Martinez. PhD student.
S01. 2011-2013	UNAM. Linda Marisol García Areas. Undergraduate student.

JOURNAL REVIEW SERVICES

2019	Reviewer. Aquatic Conservation: Marine and Freshwater Ecosystems.
2019	Reviewer. Freshwater Biology.
2018–2019	Reviewer. Conservation Genetics Resources.
2017–2019	Reviewer. Molecular Ecology Resources.
2016	Reviewer. Fisheries Research.
2015	Reviewer. Briefings in Functional Genomics.
2013	Reviewer. Boletín de Investigaciones Marinas y Costeras.

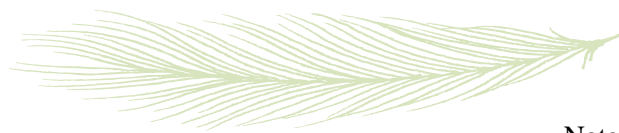
SOCIETY, ASSOCIATIONS AND ACADEMIC MEMBERSHIPS

2019–Present	Friends of the Georgia Museum of Natural History.
2018–Present	Member. American Society of Ichthyologists & Herpetologists.
2015–Present	Postdoctoral Member. Society for the Study of Evolution SSE.
2006–Present	Founder Member. Asociación Colombiana de Zoología. ACZ
2019–2020	Women In Science Mentor Program at UGA.
2018–2019	President of the Postdoctoral Association of the University of Georgia.
2016–2020	Member. Postdoctoral Association University of Georgia.
2011–2012	Student Member. American Genetic Association AGA.



PROFESSIONAL AWARDS, STIPENDS AND RECOGNITIONS

- 2021 Funding from Faculty Development Committee (FDC) at Oxford College of Emory University to purchase lab equipment (US\$1,762.27)
- 2020 Funding from the American Genetic Association to co-organize and co-instruct the workshop RADCamp NYC 2020—Postponed due to COVID—. New York, New York, USA (US\$12,000)
- 2019 Funding from the Society for the Study of Evolution (SSE), Society of Systematic Biologists (SSB), City University of New York (CUNY), and Columbia University to co-organize and co-instruct the workshop RADCamp NYC 2019
- 2019 Travel and registration stipend from the 2019 Tuna Conference Dolphinfinh Symposium Review Committee to attend the 70th Tuna Conference in Lake Arrowhead, California, USA (US\$2,000)
- 2018 Travel stipend from the Postdoctoral Association of the University of Georgia to attend to the Joint Meeting of Ichthyologists and Herpetologists in Rochester, New York, USA (US\$700)
- 2016 Travel stipend from the Society for the Study of Evolution to attend the Evolution meeting 2016 in Austin, Texas, USA (US\$1,500)
- 2016 One-year postdoctoral fellowship grant to conduct studies on “Population genomics and demography of dolphinfinh (*Coryphaena hippurus*) and yellowfin tuna (*Thunnus albacares*)” from CONACYT-Mexico
- 2016 Six-months fellowship for research from Pelagios Kankunjá and Carlos Slim Foundation for the project “Definition of nursery areas in the hammerhead shark *Sphyrna lewini*”
- 2015 Honorable mention to Doctorate thesis: “Genetic population structure across its distribution range, *Coryphaena hippurus*”. Posgrado en Ciencias del Mar y Limnología. Universidad Nacional Autónoma de México
- 2015 Four-months fellowship to conduct research in the PAPIIT Project “Definition of nursery areas in the hammerhead shark *Sphyrna lewini* through the use of genomic methods, trace elements and age structure analysis”.
- 2014 Funding from “Programa de Fortalecimiento Académico del Posgrado de Alta Calidad” CONACYT to organize and co-instruct, in collaboration with Dr. Brant Faircloth, the Workshop on Last Advances in New Generation Sequencing Techniques. Posgrado de Ciencias del Mar y Limnología (Mexico City, Mexico) (US\$2,500)



Natalia J. Bayona-Vásquez, Ph.D.

- 2012 Stipend for attending to the Workshop on Genomics in Český Krumlov by the evomics.org group (US\$1,000)
- 2011 Four-year fellowship–salary– to conduct doctorate studies in the Posgrado en Ciencias del Mar y Limnología, UNAM by CONACYT-Mexico
- 2011 Honorable mention to master thesis: “Genetic characterization of the dolphinfish *Coryphaena hippurus* from Pacific Ocean populations using microsatellite markers”. Posgrado en Ciencias del Mar y Limnología. Universidad Nacional Autónoma de México
- 2009 Two-year fellowship–salary– to course Master’s studies in the Posgrado en Ciencias del Mar y Limnología, UNAM by CONACYT
- 2007 Best poster in the Marine Ecology Area: “First report of bioluminescent dinoflagellates for the Caribbean in Colombia”. First Congress and Fifth Scientific Meeting of Biology Students

MOLECULAR AND BIOINFORMATIC SKILLS

Laboratory

DNA sampling and isolation, DNA quantification, purification, PCR, qPCR, Sanger sequencing, polymer gels (acrylamide and agarose), genotyping, cloning, RADSeq libraries, shotgun genomic libraries, 10X genomic libraries. Experience with Next Generation Sequencing Platforms such as: Illumina (MiSeq, NextSeq, HiSeq, NovaSeq) and PacBio (Sequel Prep and Sequel Prep II).

Computational

Linux/OS/Windows

Miscellaneous software: Genemapper®, Geneious®, CLC Workbench®, Genepop, BioEdit, Arlequin, DnaSP, a variety for population genetics tests.

Bioinformatic Skills:

Proficient in R language and statistical packages.

Familiar with Python and BioPython, including Jupyter notebooks.

Use of variety of pipelines for high-throughput data accession, quality filter and analyses (bcl2fastq, BLAST, samtools, bwa, Qiime, Stacks, ipyRAD, SuperNova, etc.), Bayesian analyses, Maximum Likelihood analyses (Mr. Bayes, BEAST, RAxML, Structure, etc.), Jupyter notebooks, etc.