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Research fields

Tropical fish ecology and conservation, mangrove ecology and conservation, invasion ecology, small-scale fisheries management, sustainability of tropical marine social-ecological systems

Education

- 2010-2013 **Doctor rerum naturalium** (Dr. rer. nat.) [*Summa Cum Laude*]. Bremen University and Leibniz Centre for Tropical Marine Research (ZMT), Germany. Thesis: *The temporal and spatial variability of nursery habitats for fishes in macrotidal mangrove systems of Colombia and Brazil*
- 2006-2008 **M.Sc. Tropical Marine Ecology**. Bremen University and Centre for Tropical Marine Research (ZMT), Germany. Thesis: *Tides and seascape configuration: determinants of reef fish intertidal migration in the tropical eastern Pacific (Colombia)*
- 1997-2004 **B.Sc.** Biology (Marine Biology major). Universidad del Valle, Cali, Colombia. Thesis: *Spatial and trophic organization of a tidepool fish assemblage, Malaga Bay, tropical eastern Pacific (Colombia)*

Professional experience

- 2019- **Postdoctoral Fellow**, Smithsonian Tropical Research Institute (STRI), Panama
- 2019- **Guest Scientist**, Leibniz Centre for Tropical Marine Research (ZMT), Bremen, Germany
- 2016-2019 **Postdoctoral Fellow**, Leibniz Centre for Tropical Marine Research (ZMT), Bremen, Germany
- since 2009 **Consultant**, WWF, Marine Program, Cali, Colombia
- 2005-2006 **Junior Research Fellow**, Coral Reef Research Group, Universidad del Valle, Cali, Colombia

International research stays

India – in 2018; *Ecuador* – in 2017; *Panama* – since 2016; *Costa Rica* – in 2015 and 2017; *Peru* – in 2014 and 2018; *Scotland* – in 2013; *Brazil* – in 2011-2012 and 2018; *Colombia* – since 2002

Grants and Scholarships (since 2010)

- 2019 **CEMarin** – [US\$ 3,500] “Shallow-water habitat mapping in remote tropical coasts: evaluating the usefulness of lightweight unmanned aerial vehicles for conservation and monitoring” with Jaime Cantera (UniValle) and Andres Osorio (UniNacional)
- 2018 **Conservation Leadership Programme** (CLP) [€ 1,629] – “Using traditional ecological knowledge and ecosystem-based models to conserve aquatic ecosystems in India” – binational cooperation (exchange) with Paromita Ray (Wildlife Institute of India)
- since 2018 **Federal Ministry of Education and Research** (BMBF) [US\$ 59,690] – “Nahrungsnetze in den Mangroven der Kolumbianischen Pazifikküste und ihre Rolle bei der Erklärung von Fischereiproduktivität und Ressourcennutzung (MAKOPA)” – binational cooperation with Matthias Wolff (ZMT) and Jaime Cantera (Uni del Valle)
- 2018-2019 **BMBF** [US\$ 79,011] – “Schutz mariner Biodiversität und ökosystemarer Dienstleistungen in Lateinamerika unter Bedingungen des globalen Klimawandels (SELAMABIO)” – cooperation with Matthias Wolff and Valeria Bers (ZMT)
- since 2017 **Smithsonian short-term fellowship** [US\$ 2,600] – “The Tarpon *Megalops atlanticus* (Valenciennes 1847) in the Tropical Eastern Pacific: an exotic species that passed the Panama Canal from the Western Atlantic”
- 2016-2018 **Smithsonian Latin American Senior Scholar Award** [US\$ 15,000] – “Mangrove fish communities of Panamanian Eastern and Caribbean coasts: understanding the effect of historical and contemporary events on community structure and function”

- 2015-2018 **Alexander von Humboldt Foundation Georg-Forster Research Fellowship** [US\$ 85,000] – “Understanding and valuing mangrove ecosystem function and services in the Panama Bight eco-region” – Post Doc project
- 2015-2018 **Colombian Science Agency (COLCIENCIAS)** [US\$ 80,000] – “Food web dynamics in mangrove areas of the Colombian Pacific coast: combining isotopic tools and mass balance ecosystem models” with Prof. Jaime Cantera and Prof. Enrique Peña (Uni del Valle)
- 2014 **CLP** [US\$ 1,250] – Travel grant to attend the second international mangrove as fish habitat symposium in Mazatlán, Mexico
- 2014-2015 **Rufford Small Grant Foundation** (Booster grant) [US\$ 19,640] – “Mangroves as providers of ecosystem services in the Tropical Eastern Tropical region under the influence of climate variability”
- 2011 **CLP** [US\$ 1,250] – Travel grant to attend student conference on conservation science; Cambridge, United Kingdom
- 2010-2013 **Centre of Excellence in Marine Sciences (CEMarin) /DAAD** scholarship [€ 36,000] – PhD studies
- 2010-2011 **CLP** [US\$ 12,500] – “Conservation status of the Pacific Goliath Grouper in Colombia”
- 2009-2010 **Rufford Small Grant Foundation** (Second grant) [US\$ 8,800] – “Fish tidal migrations in mangroves of the tropical eastern pacific (Colombia) – potential nursery areas for fishing resources”

Awards

- 2019 Smithsonian Postdoctoral Fellow
- 2016 Alexander von Humboldt Fellow
- 2016 Smithsonian Senior Latin American Fellow
- 2014 Selection of 8 best PhD dissertations from the Leibniz Society in 2013

Ad Hoc Reviewer

Acta Ichthyologica et Piscatoria, Endangered Species Research, Environmental Biology of Fishes, Estuaries and Coasts, Estuarine Coastal and Shelf Science, Environmental Conservation, Fisheries Science, Fish and Fisheries, Hydrobiologia, Journal of Experimental Marine Biology and Ecology, Journal of Fish Biology, Journal of the Marine Biological Association of the United Kingdom, Marine and Coastal Fisheries, Marine Biology, Marine Biology Research, Marine Ecology Progress Series, Marine Environmental Research, Neotropical Ichthyology, Ocean & Coastal Management, PLOS ONE, Revista de Biología Tropical, Wetlands Ecology and Management

Memberships

IUCN SSC Grouper, Wrasse Specialist Group; Society for Conservation Biology

Languages

Spanish – Mother tongue; *English* – Full Professional Proficiency; *German* – Minimum Professional Proficiency (Goethe-Zertifikat B2); *Portuguese* – Minimum Professional Proficiency

Peer-reviewed publications (<https://scholar.google.de/citations?user=CF8bQg8AAAAJ&hl=en&oi=ao>)

- [36] Herrón P, Kluger LC, **Castellanos-Galindo GA**, Wolff M, Glaser M (*in press*) Understanding gear choices and identifying leverage points for sustainable tropical small-scale marine fisheries. *Ocean & Coastal Management* <https://doi.org/10.1016/j.ocecoaman.2019.105074>
- [35] Mejia-Renteria JC, **Castellanos-Galindo GA**, Osorio-Cano JD, Casella E (2020) Subaerial exposure of coral reefs during spring low tides in the Eastern Pacific. *Bulletin of Marine Science* 96:219-220 <https://doi.org/10.5343/bms.2019.0085>
- [34] **Castellanos-Galindo GA**, Casella E, Mejia-Renteria JC, Rovere A (2019) Habitat mapping of remote coasts: evaluating the usefulness of lightweight unmanned aerial vehicles for conservation and monitoring. *Biological Conservation* 239:108282
- [33] Stuthmann LE, **Castellanos-Galindo GA** (2019) Trophic position and isotopic niche of mangrove fish assemblages at both sides of the Isthmus of Panama. *Bulletin of Marine Science* <https://doi.org/10.5343/bms.2019.0025>
- [32] **Castellanos-Galindo GA**, Robertson DR, Pacheco-Chaves B, Angulo A, Chong-Montenegro C (2019) Atlantic Tarpon in the Tropical Eastern Pacific 80 years after it first crossed the Panama Canal. *Reviews in Fish Biology and Fisheries* 29:401-416

- [31] Herrón P, **Castellanos-Galindo GA**, Stäbler M, Díaz JM, Wolff M (2019) Towards Ecosystem-Based Assessment and Management of Small-Scale and Multi-Gear Fisheries: Insights From the Tropical Eastern Pacific. *Frontiers in Marine Science* 6:127. doi: 10.3389/fmars.2019.00127
- [30] **Castellanos-Galindo GA**, Zapata LA (2019) Chapter 20: Small-Scale Fisheries on the Pacific Coast of Colombia: Historical Context, Current Situation, and Future Challenges In: Jentoft S, Franz N, Barragan Paladines MJ, Chuenpagdee R (Eds) Viability and Sustainability of Small-Scale Fisheries in Latin America and the Caribbean. Springer
- [29] **Castellanos-Galindo GA**, Moreno X, Robertson DR (2018) Risks to eastern Pacific marine ecosystems from sea-cage mariculture of alien Cobia. *Management of Biological Invasions* 9:323-327
- [28] Pülmanns N, **Castellanos-Galindo GA**, Krumme U (2018) Tidal-diel patterns in feeding and abundance of armed snook *Centropomus armatus* from macrotidal mangrove creeks of the tropical Eastern Pacific. *Journal of Fish Biology* 93:850-859
- [27] Mejía-Rentería JC, **Castellanos-Galindo GA**, Cantera-Kintz JR, Hamilton SE (2018) A comparison of Colombian Pacific mangrove extent estimations: implications for the conservation of a unique Neotropical tidal forest. *Estuarine, Coastal and Shelf Science* 212:233-240
- [26] Hamilton SE, **Castellanos-Galindo GA**, Millones M, Chen M (2018) Remote Sensing of Mangrove Forests: Current Techniques and Existing Databases. In: Makowski C, Finkl CW (Eds) Threats to Mangrove Forests: Hazard, Vulnerability and Management. Springer International Publishing, Cham Switzerland
- [25] **Castellanos-Galindo GA**, Chong C, Baos R, Zapata LA, Tompkins P, Graham R, Craig M (2018) Using landing statistics and fisher's traditional ecological knowledge to assess Pacific goliath grouper conservation threats in Colombia. *Aquatic Conservation: Marine and Freshwater Ecosystems* 28:305-314
- [24] **Castellanos-Galindo GA**, Cantera J, Valencia N, Giraldo S, Peña E, Kluger LC, Wolff M (2017) Modeling trophic flows in the wettest mangroves of the world: the case of Bahía Málaga in the Colombian Pacific coast. *Hydrobiologia* 803:13-27
- [23] Lee SY, Jones EBG, Diele K, **Castellanos-Galindo GA**, Nordhaus I (2017) Chapter 3: Biodiversity. In: Rivera-Monroy V, Lee SY, Kristensen E, Twilley RR (Eds) Mangrove Ecosystems: A Global Biogeographic Perspective. Structure, Function and Services. Springer
- [22] **Castellanos-Galindo GA**, Kluger LC, Tompkins P (2017) Panama's impotent mangrove laws. *Science* 355(6328):918-919
- [21] Ramírez-Martínez GA, **Castellanos-Galindo GA**, Krumme U (2016) Tidal and diel patterns in abundance and feeding of a marine-estuarine-dependent fish from macrotidal mangrove creeks in the Tropical Eastern Pacific (Colombia). *Estuaries and Coasts* 39:1249-1261
- [20] **Castellanos-Galindo GA**, Baos R, Zapata LA (2016) Mariculture-induced introduction of cobia *Rachycentron canadum* (Linnaeus, 1766), a large predatory fish, in the Tropical Eastern Pacific. *BiolInvasions Records* 5:55-58
- [19] Baos R, **Castellanos-Galindo GA**, Chong C, Tompkins P, Zapata LA (2016) Length-weight relationship of the Pacific goliath grouper, *Epinephelus quinquefasciatus* (Bocourt, 1868). *Journal of Applied Ichthyology* 32:727-728
- [18] **Castellanos-Galindo GA**, Krumme U (2015) Tides, salinity and biogeography affect fish assemblage structure and function in macrotidal mangroves of the Neotropics. *Ecosystems* 18: 1165-1178
- [17] Hutchison J, et al. (incl. **Castellanos-Galindo GA**) (2015) Building an Expert-Judgment-Based Model of Mangrove Fisheries. *American Fisheries Society Symposium* 83:17-42
- [16] **Castellanos-Galindo GA**, Cantera J, Saint-Paul U, Ferrol-Schulte D (2015) Threats to mangrove social-ecological systems in the most luxuriant coastal forests of the Neotropics. *Biodiversity and Conservation* 24:701-704
- [15] **Castellanos-Galindo GA**, Krumme U (2014) Long-term stability of tidal-related patterns in mangrove creek fish assemblages in North Brazil. *Estuarine and Coastal Shelf Science* 149:264-272
- [14] **Castellanos-Galindo GA**, Giraldo A, Zapata LA (2014) Tidepool fish assemblages of Gorgona Island, Colombian Pacific coast: a local and regional comparison. *Revista de Biología Tropical* 62:373-390
- [13] **Castellanos-Galindo GA**, Krumme U (2013) Tidal, diel and seasonal effects on intertidal mangrove fish in a megahumid area of the Tropical Eastern Pacific. *Marine Ecology Progress Series* 494:249-265
- [12] **Castellanos-Galindo GA**, Krumme U (2013) Mangrove fish assemblages from data-sparse regions and the measurement of ecological equivalence. *Marine Ecology Progress Series* 474:299-302
- [11] **Castellanos-Galindo GA**, Krumme U, Rubio EA, Saint-Paul U (2013) Spatial variability of mangrove fish assemblage composition in the tropical eastern Pacific Ocean. *Reviews in Fish Biology and Fisheries* 23:69-86

- [10] **Castellanos-Galindo GA**, Sanchez GC, Beltrán-León BS, Zapata LA (2011) A goby-fry fishery in the northern Colombian Pacific Ocean. *Cybium* 35(4):391-395
- [9] **Castellanos-Galindo GA**, Cantera JR, Espinosa S, Mejía-Ladino LM (2011) Use of local ecological knowledge, scientist's observations and grey literature to assess marine species at risk in a tropical eastern Pacific estuary. *Aquatic Conservation: Marine and Freshwater Ecosystems* 21:37-48
- [8] **Castellanos-Galindo GA**, Krumme U, Willis TJ (2010) Tidal influences on fish distributions on tropical eastern Pacific rocky shores (Colombia). *Marine Ecology Progress Series* 416:241-254
- [7] **Castellanos-Galindo GA**, Giraldo A (2008) Food resource use in a tropical tidepool fish assemblage, Colombia. *Marine Biology* 153(6):1023-1035
- [6] **Castellanos-Galindo GA**, Rodríguez-Moreno M, Escarria E (2007) Spatial distribution of damselfishes (Pomacentridae) in a coral reef of the Colombian Caribbean. *Cespedesia* 29 (84-85):65-76 [In Spanish]
- [5] **Castellanos-Galindo GA**, Rubio EA, Beltrán-León B, Zapata LA, Baldwin C (2006) Check-List of gadiform, ophiidiform and lophiiform fishes from Colombian waters of the Tropical eastern Pacific. *Biota colombiana* 7(2):191-209
- [4] **Castellanos-Galindo GA**, Rubio EA, Beltran-Leon B, Baldwin C (2006) Check-List of stomiiform, aulopiform and myctophiform fishes from Colombian waters of the Tropical eastern Pacific. *Biota colombiana* 7(2):245-262
- [3] **Castellanos-Galindo GA**, Caicedo-Pantoja JA, Mejía-Ladino LM, Rubio EA (2006) Marine and estuarine fishes of Malaga Bay, Valle del Cauca, Colombian Pacific Ocean [In English and Spanish]. *Biota colombiana* 7(2):263-282
- [2] Rodriguez J, Ospina R, Berrio M, Cepeda B, **Castellanos G**, Valencia M (2006) Daily periodicity of macro-invertebrate drift and organic matter in a Tropical mountain Stream, Nariño, Colombia [In Spanish]. *Acta Biológica colombiana* 11S:47-53
- [1] **Castellanos-Galindo GA**, Giraldo A, Rubio EA (2005) Community structure of an assemblage of tidepool fishes in a Tropical eastern Pacific rocky shore, Colombia. *Journal of Fish Biology* 67:392-408