

BERNARDO A. BASTIEN-OLVERA

CURRICULUM VITAE

JUNE 2023

Email:
bbastien@ucsd.edu

Scripps Institution of Oceanography
8622 Kennel Way, La Jolla, CA 92037

EDUCATION

- PhD** Geography
University of California Davis. September 2022
Dissertation: “Climate change impacts on natural capital:
consequences for human well-being and macro-economic growth”
Recipient of the Kinsella Memorial Prize
- MSc** Climate Change
University College London. September 2017
- BSc** Earth Science
National Autonomous University of Mexico. June 2015

PROFESSIONAL APPOINTMENTS

- Institutional Postdoctoral Fellow** Present
Scripps Institution of Oceanography
University of California San Diego

PUBLICATIONS

Refereed Journal Articles

- 2023 Bastien-Olvera, B. A., Batker, D., Soares, J., Day, J., Boutwell, L., & Briceno, T. (2023). Wetland Loss in Coastal Louisiana Drives Significant Resident Population Declines. *Sustainability*, 15(11), 8941.
<http://dx.doi.org/10.3390/su15118941>
- 2022 Bastien-Montoya, G.M., Bastien-Olvera, B.A., Pilatowsky-Gruner, R., & Gay García G. (2022). Importancia relativa de los conceptos erróneos sobre el cambio climático. *Enseñanza y Comunicación de las Geociencias*, 1(2).
- 2022 Bastien-Olvera, B. A., & Moore, F. C. (2022). Climate Impacts on Natural Capital: Consequences for the Social Cost of Carbon. *Annual Review of Resource Economics*, 14, 515-532.

- 2022 Bastien-Olvera, B. A., Granella, F. & Moore, F. C. (2022). Persistent effect of temperature on GDP identified from lower frequency temperature variability. *Environmental Research Letters*, 17(8), 084038.
- 2021 Bastien-Olvera, B. A., & Moore, F. C. (2021). Use and non-use value of nature and the social cost of carbon. *Nature Sustainability*, 4(2), 101-108.
- 2019 Bastien-Olvera, B. A. (2019). Business-as-usual redefined: Energy systems under climate-damaged economies warrant review of nationally determined contributions. *Energy*, 170, 862-868.

Book Chapters

- 2019 Bastien-Olvera, B. A., Carreño-Najera H., Estrada-Porrúa, F. (2019). Chapter: “Camino paralelos: división metodológica entre las negociaciones de internacionales de cambio climático y la economía climática” in *¿Aún estamos a tiempo para el 1.5C?*, pp.51-67. Ed. Rueda-Abad JC. UNAM, PINCC, 2019. ISBN: 978-607-30-2099-2
- 2017 Bastien-Olvera, B.A., Gay-García C. (2017). Chapter: “Incertidumbre científica y el avance en los modelos climáticos” in *La Gobernanza Climática en México. Volumen II, Retos y Opciones*, pp.37-53, UNAM, PINCC, 2017. ISBN: 978-607-02-9769.
- 2016 Bastien-Olvera, B.A., Gay-García C., Estrada-Porrúa, F. (2016). Chapter: “¿Es factible el 1.5°C de elevación de la temperatura en los acuerdos de París?” in *21 visiones de la COP 21*, pp.43-56, UNAM, PINCC, 2016. ISBN: 978-607-02-8439-.

Manuscripts in submission

- In Review Bastien-Olvera, B.A., Conte, M.N., Dong, X., Briceno, T., Batker, D., Tavoni, M., Emmerling, J., Granella, F. & Moore, F.C. (In Review) Biome range shifts under climate change: impacts on country-level macro-economic production and ecosystem services.

AWARDS AND HONORS

- 2023 **Kinsella Memorial Prize Award UC Davis**
High quality, original, multidisciplinary Ph.D. dissertation of the year in the College of Agricultural and Environmental Sciences at UC Davis.

- 2023 **Candidato a Investigador Nacional**
Sistema Nacional de Investigadores, Consejo Nacional de Ciencia y Tecnología, Mexico.
- 2022 **National Geographic Explorer**
National Geographic Society
- 2020 **John Muir Institute for the Environment Fellow**
University of California Davis
- 2020 **The Green Fund Initiative Fellow**
University of California Davis
- 2020 **Big Ideas Award**
University of California Berkeley
- 2019 **Blum Institute for Developing Economies**
University of California Berkeley
- 2019 **Centennial Grant Fellowship**
American Geophysical Union
- 2017 **Fulbright-Garcia Robles Fellowship**
Fulbright
- 2016 **Santander's Masters Scholarship**
Santander
- 2015 **Francisco Medina Martinez Award**
Unión Geofísica Mexicana
- 2015 **Mitacs Globalink Award**
Canadian Government

INVITED TALKS

- 2023 “Climate Economics and Communication: Naming and Valuing What Matters”
Lecture Series: Perspectives on Ocean Sciences, Birch Aquarium, Scripps Institution of Oceanography, April 2023.
- 2023 “The economic geography of natural capital in a changing climate”
Co-sponsored by the Economics and Geography Departments, San Diego State University, January 2023.

- 2022 “What do we lose when we lose a biome?”
Earth Science Department, University of Southern California, October 2022.
- 2022 Invited to the “Workshop on New Frontiers on Natural Capital Accounting.”
Cambridge University, UK, September 2022.
- 2022 “Cambio climáticos, ecosistemas y crisis hídricas”
Programa Universitario de Estudios sobre la Ciudad, UNAM, September 2022.
- 2020 “Natural Capital in a Regional Integrated Assessment Model”
Centro Euro-Mediterráneo sui Cambiamenti Climatici, June 2020.
- 2020 “Communicating science to policy makers and the broader public”
Ensenada Center for Scientific Research and Higher Education (CICESE),
February 2020.
- 2019 “Creation of open source integrated assessment models of climate change”
Centro de Ciencias de la Atmósfera, National Autonomous University of
Mexico, March 2019.
- 2019 “Natural Capital and the Social Cost of Carbon”
The Natural Capital Project, Stanford University, November 2019.
- 2017 “Climate change impacts on the energy system”
Instituto de Ciencias Nucleares, National Autonomous University of Mexico,
September 2017.

CONFERENCE ACTIVITY

Organizer

- 2019 Mexican, Latinx and Chicanx Academic Symposium. University of California
Davis, May 11, 2019. Chair.
- 2018 Transdisciplinary collaboration between academia and California-Mexico
relations. Discussion session at the General Mexican Consulate in
Sacramento.
- 2013 IV Congreso Nacional de Estudiantes en Ciencias de la Tierra. Facultad de
Ciencias, Universidad Nacional Autónoma de México, March 20-23, 2013.

Papers presented

- 2023 Bastien-Olvera, B.A., Conte, M., Dong, X., Briceno, T., Batker, D., Emmerling, J., Tavoni, M., Granella, F., Moore, F.C. (2022). Climate-drive ecosystems migration: impacts on country-level ecosystem services and GDP. *Association of Environmental and Resource Economists Summer Conference*. Portland, Maine, May 32nd - June 1st, 2023.
- 2023 Bastien-Olvera, B.A. & Ricke, K. (2023) Blue natural capital in a cost-benefit integrated assessment model of climate change. *5th International Symposium on the Effects of Climate Change on the World's Ocean*, Bergen, Norway, April 17-21, 2023.
- 2022 Bastien-Olvera, B.A., Conte, M., Dong, X., Briceno, T., Batker, D., Moore, F.C. (2022). Biome range shifts under climate change: impacts on country-level macro-economic production and ecosystem services. *American Geophysical Union Fall Meeting*, Chicago, Il, December 12-16, 2022.
- 2022 Bastien-Olvera, B.A., Conte, M., Emmerling, J., Tavoni, M., Dong, X., Briceno, T., Batker, D., Moore, F.C. (2022). Biome range shifts under climate change: impacts on country-level macro-economic production and ecosystem services. *XXIII Annual BIOECON Conference on Biodiversity, Finance and Economy*, Exeter, United Kingdom, September 4-6, 2022.
- 2022 Bastien-Olvera, B. A., Granella, F. & Moore, F. C. (2022). Persistent effect of temperature on GDP identified from lower frequency temperature variability. *The Occasional Workshop*, University of California Santa Barbara, April 30-May 1, 2022.
- 2021 Bastien-Olvera, B. A., Granella, F. & Moore, F. C. (2021). Efecto persistente de la temperatura sobre el PIB identificado a partir de la variabilidad de la temperatura de baja frecuencia. *Reunión Anual de la Unión Geofísica Mexicana*, Online, October 31 – November 5, 2021.
- 2021 Bastien-Olvera, B.A., Moore, F.C. (2021). El Costo Social del Carbono en Relación a los Valores de Uso y No-uso del Capital Natural. *XXIV Congreso Nacional de Geografía*, Online, October 15, 2021.
- 2019 Bastien-Olvera B.A., Pilatowsky-Gruner, R. (2019). Planeteando: Climate change video-blogging. *American Geophysical Union Fall Meeting*, San Francisco, December 9-13, 2019.
- 2015 Bastien-Olvera, B.A., Gay-Garcia, C. (2015). Stabilizing Global Temperature Through a Fuzzy Control on CO2 Emissions. *International Conference on Simulation and Modeling Methodologies, Technologies and Applications*, Colmar, France, July 21-25, 2015.

CAMPUS TALKS

- 2022 “What do we lose when we lose a biome?”
Climate, Atmospheric Sciences, and Physical Oceanography. Scripps
Institution of Oceanography, University of California San Diego.

TEACHING EXPERIENCE

University of California Davis

- 1 quarter Course: Environmental Policy Analysis. Teacher Assistant and Discussion
Leader, PhD and Masters level.
- 4 quarters Course: Methods of Environmental Policy Evaluation. Teacher Assistant and
Discussion Leader. Undergraduate level.

Summer School on Earth Science and Climate Justice Communication

- 3 summers Course: Converting research articles into compelling stories. Instructor on
record. Undergraduate and Graduate level.

Informal Education Group for children

- 2 years Course: Environment, society, and leadership. Instructor on record. Kids 8-12.

National Autonomous University of Mexico

- 1 semester Course: Selected Methods for Atmospheric Sciences. Teacher Assistant,
Undergraduate level.

RESEARCH EXPERIENCE

- 2022 – Research collaborator in the Climate and Environmental Change Integrated
Assessment Model of Mexico City and its Metropolitan area. National
Autonomous University of Mexico.
- 2017 – 2022 Graduate Student Research in Dr. Fran Moore’s research group at the
University of California Davis.
- 2015 – 2016 Red Nacional de Investigación Multidisciplinaria en Cambio Climático,
Programa de Investigación en Cambio Climático, National Autonomous
University of Mexico.

- 2013 – 2016 Fuzzy logics and climate change modeling, Programa de Investigación en Cambio Climático, National Autonomous University of Mexico.
- 2012 – 2013 Paleoclimatology research group, Geology Department, National Autonomous University of Mexico.

SERVICE TO PROFESSION

Editorial Board of the Journal Enseñanza y Comunicación de las Geociencias (Geosciences Teaching and Communication) by the National Autonomous University of Mexico (2021-present).

Member of the American Geophysical Union Global Engagement Committee (2020-present).

Manuscript reviewer for: Nature Climate Change; Nature Sustainability; Scientific Reports; Environment, Development and Sustainability.

ADDITIONAL TRAINING

- 2023 Storyteller collective. (Spring 2023). National Geographic Society.
- 2020 Graduate Leaders in Socio-Environmental Synthesis workshop. (Winter 2020). The National Socio-Environmental Synthesis Center.
- 2019 Summer School in Sustainable Climate Risk Management. (Summer 2019). Penn State University.
- 2018 Summer School in Resource and Environmental Economics. (Summer 2018). European Association of Environmental and Resource Economists.
- 2016 International Summer School. Masters course: A changing Arctic. Social, economic, political and physical dynamics of the Arctic. (Summer 2016). University of Oslo.

CREATIVE PRODUCTIONS AND OUTREACH

- 2023 “TierraFest” Earth Day science, art and film festival (May 2023). General coordinator and activities curator. 1500 attendees and 55 partner organizations. Celebrated in Centro Cultural El Rule, Mexico City. [Link to video](#). [Link to website](#).
- 2023 “Guardianxs del Territorio” Short stop-motion film (2023). Producer and Scriptwriter advisor. A film depicting indigenous communities in Puebla,

- Mexico combatting the water extractive industry. Screened at TierraFilme 2023.
- 2023 “Historias Paralelas” Short documentary film (2023). Producer and scriptwriter advisor. A film about the entangled stories of cultures and birds diversity in Santa Gertudris, Veracruz, Mexico.
- 2023 “Explotar hasta el Oxígeno” Short documentary film (2023). Producer and scriptwriter advisor. A film about the community of Cuajimiloyas, Oaxaca assessing the risks and benefits of protecting their forests within the carbon offsets market. Screened at TierraFilme 2023.
- 2022 “¡Ya cálmate clima!” Climate change stand-up comedy (October 2022). Performer and routine writer. Presented in Puerto Vallarta, Jalisco public plaza.
- 2022 “TierraCamp” Climate justice media production summer camp (August 2022). Coordinator. [Link](#).
- 2022 “Bioguardianes” Documentary TV-series (June 2022). Researcher, scriptwriter and host. A series about climate change risks and conservation efforts related to the biocultural heritage in Mexico. Aired on the Mexican public TV channel *Canal 14*. [Link to series](#).
- 2022 “TierraFest” Earth Day science, art and film festival (May 2022). General coordinator and activities curator. 800 attendees and 60 partner organizations. Celebrated in Centro Cultural El Rule, Centro Cultural de España en México, Antiguo Colegio de San Ildefonso in Mexico City, and University of California Davis, United States.
- 2021 “CliMitología Season 1” Podcast debunking climate change myths (June 2021). Scriptwriter and host. Partnered with the Programa de Investigación en Cambio Climático, Universidad Nacional Autónoma de México. [Spotify Link](#).

MEDIA COVERAGE

Basilio, H. Mexico’s Biggest Earth Science Festival Draws Crowds. Eos, American Geophysical Union (2023). <https://eos.org/articles/mexicos-biggest-earth-science-festival-draws-crowds>

CNN International. Cost of Climate Impacts Severely Underestimated. (2022). <https://twitter.com/holmesCNN/status/1561591963949965312>

Duncombe, J. A New Approach to an Unresolved Mystery in Climate Economics. Eos, American Geophysical Union (2022). <https://eos.org/articles/a-new-approach-to-an-unresolved-mystery-in-climate-economics>

Agarwala, M., Coyle, D. Natural capital in climate models. Nat Sustain 4, 81–82 (2021). <https://doi.org/10.1038/s41893-020-00618-x>

Nuccitelli, D. Study: Accounting for value of nature reinforces Paris climate targets. Yale Climate Connections (2021). <https://yaleclimateconnections.org/2021/01/study-accounting-for-value-of-nature-reinforces-paris-climate-targets>

LANGUAGES

Spanish (native)

English (fluent)

AFFILIATIONS

National Geographic Society

American Geophysical Union

American Association of Environmental and Resource Economists

Unión Geofísica Mexicana

Red de Resistencia Climática