Melissa Chapman

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EDUCATION

University of California- Berkeley **Berkeley, CA**
PhD Student: Dept. of Environmental Science, Policy, and Management *Aug 2018-present*
Advisors: Dr. Carl Boettiger and Dr. Justin Brashares

Yale University **New Haven, CT**
Bachelor of Science: Dept. of Ecology and Evolutionary Biology & Dept of African Studies *Sept 2010-May 2014*
Advisor: Dr. Sunil Parikh

RESEARCH EXPERIENCE

Helmholtz Centre for Environmental Research (UFZ) *May 2019 - Aug 2019*
Visiting Scientist
- Three month position with the POLISES (Policy Instruments and Social-Ecological Systems) research group
- Used agent based modeling and learning algorithms to investigate the impact of risk management policy on livestock and crop smallholder decision making in dryland systems

Woods Hole Research Center *Sept 2015 - Apr 2018*
Research Assistant II
- Worked with global remote sensing data, assisted in design of social surveys, utilized spatial optimization techniques for conservation prioritization
- Collaborated with NGOs and government agencies on interdisciplinary and applied research in the Democratic Republic of Congo, Costa Rica, Papua New Guinea, and Brazil

REDD+ Projet Équateur *Jan 2016 - Sept 2016*
Measurement, Reporting and Verification (MRV) Analyst
- Developed a spatially explicit model of deforestation utilizing biophysical, socioeconomic, and political data in the Equateur province of the Democratic Republic of Congo

PEER-REVIEWED PUBLICATIONS

6. **Chapman, M.**, Cook-Patton S., Griscom B., Farina M., Baccini A., and Walker W. A 30-m Global Analysis of Carbon Storage and Climate Mitigation Potential in Production Landscapes. (*In review at Global Change Biology*). Analysis available at github.com/milliechapman/treesincroplands
5. Oestreich, W., **Chapman, M.**, and Crowder, L. A comparative analysis of dynamic management in marine and terrestrial systems. (*In review at Frontiers in Ecology and Evolution*)
4. Griscom, B., et al [including **Chapman, M**]. National potential for natural climate solutions in the tropics. Philosophical Transactions of the Royal Society B: Biological Sciences (*In press*) DOI: 10.1098/rstb.2019.0126
3. Samndong, R. A., Bush, G., Vatn, A., **Chapman, M.** (2018). Institutional analysis of causes of deforestation in REDD+ pilot sites in the Equateur province: Implication for REDD+ in the Democratic Republic of Congo. *Land use policy*, 76, 664-674.
2. Galvin, B. D., Li, Z., Villemaine, E., Poole, C. B., **Chapman, M. S.**, Pollastri, M. P., ... & Carlow, C. K. (2014). A Target Repurposing Approach Identifies N-myristoyltransferase as a New Candidate Drug Target in Filarial Nematodes. *PLoS neglected tropical diseases*, 8(9), e3145.
1. Cunningham, Courtney, et al. [including **Chapman, M**] (2014). Impaired consciousness in partial seizures is bimodally distributed. Neurology, 82(19), 1736-1744. *Neurology* 82.19 (2014): 1736-1744.

TECHNICAL REPORTS, POLICY BRIEFS, AND THESES

5. Galbiati, L.A., and Botero, M., et al [including **Chapman, M.**]. (2017) "Prioritizing Areas for Reforestation of Private Lands in the Brazilian Amazon". Policy Brief. available at: http://ipam.org.br/wp-content/uploads/2017/08/Prioritizing-Areas-for-Reforestation-of-Private-Lands- eng-web.pdf
4. Cuthbert, R.J., Bush, G., **Chapman, M.**, Ken, B., G, Neale, E. and Whitmore, N. (2016) Analysis of National Circumstances in the Context of REDD+ and Identification of REDD+ Abatement Levers on Papua New Guinea. Wildlife Conservation Society, Goroka, Papua New Guinea. ISBN: 978-0-9943203-3-9
3. Bush, G., Nassikas, Z., and **Chapman, M.** (2017). Forest Landscape Restoration in Costa Rica: A spatially explicit multi-criteria tool for policy management prioritization and cost-benefit analysis. Presented to Costa Rica Forest Financing Ministry. Available upon request.
2. **Chapman, M.** Myhre, L. (2014) "A Geographic Correlation of Spina Bifida and Malaria in Kenya". Yale Department of African Studies Senior Thesis. Advisor: Sunil Parikh
1. **Chapman, M.** (2014) "Assessing patterns of malaria risk: Environmental determinants of differential malaria susceptibility between Mossi and Fulani people in Burkina Faso". Yale Department of Ecology and Evolutionary Biology Senior Thesis. Advisor: Sunil Parikh

FELLOWSHIPS AND GRANTS

- NEON Science Summit Travel Grant ($900) 2019
- Safari Club Wildlife Ecology Field Grant ($2200) 2019
- NSF National Research Trainee ($32,000) 2018-2020
- POLISES 3-month Visiting Scientist Travel and Research Funding ($6,000) 2019
- Foreign Language Area Studies (FLAS) Fellowship: Kiswahili ($35,000) 2012- 2014
- Kingsley Trust Association Senior Fellowship ($5,000) 2014
- Yale Collaborative Action Project Grant ($5,000) 2013-2014

WORKSHOPS AND WORKING GROUPS

- People, Land, Ecosystems: Leveraging NEON for Socio-Environmental Synthesis *Feb 2020*
- National Ecological Observation Network (NEON) Science Summit 2019
- Advancing Integrated Process-Based Modeling of Socio-Environmental Systems (SESYNC) 2019-2020
- Graduate Student Workshop on Socio-Environmental Synthesis (SESYNC) 2019
- Ecological Forecasting Initiative Student Working Group 2019-Present
- Mathematical Ecology Working Group: Woods Hole, MA 2017-2018

TEACHING EXPERIENCE

- Software Carpentry: *Instructor (in training)* 2019-present
- Amazon Environmental Research Institute: *Technical Mentor for Public Policy Course* 2017
- Lahey Health Systems: *eLearning Developer* 2015
- Yale University: *Course Based Peer Tutor in Organic Chemistry II and Physics I* 2012-2014

SKILLS

- **Computer/Coding:** R, git, python, NetLogo, Google Earth Engine, QGIS, ArcGIS, LaTeX
- **Mathematics/Statistics:** population modeling, spatial statistics, Bayesian statistics, agent based modeling
- **Languages:** English (native), Spanish (Intermediate), Kiswahili (Intermediate), Portuguese (Beginner)

OUTREACH AND LEADERSHIP

- Ecological Forecasting Initiative *Student Working Group Co-chair* 2019-2020
- UC Berkeley Graduate Student Association (GSA): 2018-Present
  (*2018-2019*) *Political Liaison*, (*2019-2020*) *Graduate Student Union Representative*
- Bay Area Scientists in Schools (BASIS): *Instructor* 2018-Present
- Society for Conservation Biology, Berkeley Chapter: *Planning Committee Officer* 2018-present
- 500 Women Scientists - Woods Hole Chapter: *Media Outreach* 2017-2018
- Yale Public Health Coalition: *President* (*2012-2013*), *Secretary* (*2011*) 2011-2013
- Yale Varsity Cross Country and Track and Field: *Captain* (*2014*) 2010-2014