

# Elisabeth A. Holland, Ph.D.

Director and Professor

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[Elisabeth Ann Holland](#) | [LinkedIn](#) • Suva, Fiji

Accomplished scientist and educator with 15+ years of experience in the field of Climate Change, Oceanography, Sustainable Development and Environmental Science. Proven ability in developing scientific institutes and programs, successfully building and maintaining relationships with relevant national and international stakeholders to further the organization's goals. Expert in Climate Change, the Ocean-Climate Nexus, possessing knowledge of both national and international developments at the science policy interface. Demonstrated success serving as a motivational, innovative, and receptive leader who encourages collaboration with team development.

## Education

### Post-doctoral Fellow in the Department of Biological Sciences

Stanford University, Stanford, CA

### Ph. D. in Ecology and Environmental Sciences

Colorado State University, Fort Collins, CO

Thesis: Plant Carbon Allocation and Nitrogen Cycling in a Perennial Grassland: The Role of Herbivory

### Master of Science in Soil Science

Colorado State University, Fort Collins, CO

Thesis: Crop Residue Placement Impacts on Soil Processes

### Bachelor of Science in Zoology with a Minor in Spanish

Colorado State University, Fort Collins, CO

## Selected Achievements

- 2007 Nobel Peace Prize Co-Recipient with Al Gore and the rest of the Intergovernmental Panel on Climate Change.
- Team Established Locally Managed Climate Change and Adaptation network of more than 120 communities in 16 Pacific Islands countries including the Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, Niue, Palau, Papua New Guinea, Republic of the Marshall Islands, Samoa, Solomon Islands, Timor L'este, Tonga, Tuvalu, and Vanuatu.
- Advanced the forecasting and research capacity of Pacific Meteorological Services by getting approval of the World Meteorological Organization to set up a Pacific Islands Regional Training Center for delivery of Weather, Water, Climate & Ocean Services.
- Quantified the atmospheric Nitrogen deposition budgets of the U.S. and Western Europe using measurements and models, including establishment of public access data base widely used by chemical transport modeling community and terrestrial biogeochemical models.
- Founding member of the Max Planck Institute of Biogeochemistry, Jena Germany, one of 18 institutes established in former East Germany following German reunification.
- Quantified the impact of coupling of the global nitrogen and carbon cycles in a pioneering series of papers, as well as the importance of many aspects of heterotrophic respiration in the carbon budgets, including 2 papers in Nature.
- Spearheaded the first focus on the global nitrogen cycle for Chapter 8, Coupled Biogeochemical Cycles, in the IPCC Fourth Assessment Report, The Physical Science Basis.
- Aided in the successful negotiation of the Paris Agreement by utilizing scientific research and data to persuade the nations present at the UNFCCC to undertake ambitious efforts to combat Climate Change and adapt to its effects.

## Professional Experience

### • Director of the Pacific Center for the Environment and Sustainable Development (PaCE-SD) & 2021 – present Professor of Ocean and Climate Change University of the South Pacific (USP)

Reinvigorated PaCE-SD academic portfolio with the establishment of the post-graduate Program in Islands and Ocean Stewardship and the establishment of a new joint Master's in Sustainability with the University of New Caledonia, appointed to the USP Senate and elected to the USP governing Council.

- Secured 5.5 million NZD in funding from the NZ Ministry of Foreign Affairs and Trade for Pacific Ocean and Climate Crisis project jointly led with Professor Steven Ratuva, Director of the MacMillan Brown Center for Pacific Studies at the University of Canterbury, New Zealand
- Convened virtual Deep Ocean Stewardship Initiative mini course on [Deep Ocean, Humans and Management](#) spanning science and policy including fishing, deep-seabed mining, and conservation practice
- Appointed to the World Meteorological Organisation Activity on Safe Landing Climates Lighthouse Activity of the World Climate Research Program (WCRP) & UN GESAMP, Joint Group of Experts on the Scientific Aspects of Marine Environmental Pollutions

• **Norway-Pacific Chair the Ocean and Climate, USP, and University of Bergen, Norway** **2019 – 2020**

As the Norway-Pacific chair developed research and science diplomacy at the Ocean-Climate Nexus. Established a strong foundation for Pacific research capacity, furthering research opportunities for scientists and research organizations. Authored multiple peer reviewed publications, dealing with Climate Change and Oceanography. Participated in and Chaired numerous UNFCCC negotiations.

- Secured 24 Norway Pacific Ocean and Climate PhD scholarships for students, advancing not only their education but their careers as scientists and researchers, 3.5 million Euro project.
- Wrote and published 17 peer reviewed papers, including *The use of Copernicus Marine Service products to describe the State of the Pacific Ocean around the Islands: A case study* and *Seagrasses and seagrass habitats in Pacific small island developing states: Potential loss of benefits via human disturbance and climate change*.
- Established a strong Pacific focused research and science basis for the Sustainable Development Goals, specifically SDG 13 on Climate Change and SDG 14 on the Ocean.

**Director PaCE-SD, University of the South Pacific, Suva, Fiji** **2013 – 2019**

Oversaw all aspects of strategic planning, fund raising, grant writing, Human Resources and financial management, project development and implementation, across the University and regional coordination, ensuring each part of the Center ran smoothly and efficiently. Promoted education and communication on Climate Change and Climate Science through internal and external outreach and communication. Participating in UNFCCC negotiations on Climate Change.

- Implemented more than 25M USD\$ of projects focused on climate adaptation, capacity building, applied research and community development at Pacific Centre for Environment and Sustainable Development at the University of the South Pacific, furthering student's understanding of Climate Change and Climate Science.
- Spearheaded a Pacific Islands team to create a world class Climate Change program for post-graduate studies and research at the University of the South Pacific. Since this program began, six Ph.D.'s, 35+ Master of Science degrees, and 250+ post-graduate diplomas in climate change have been awarded to Pacific Island students.

• **Professor of Climate Change,** **2012 – 2019**

Established a Pacific research program in Climate Change educating University students in all facets of Climate Change., Maintained high-quality and consistency of instruction in post graduate courses in Climate Change and Tropical Meteorology serving as a Course Coordinator. Developed climate change course curricula, preparing course material for students, grading student work, and advising students on their education and career path. Supervised multiple research students, mentoring them and educating them in the field. Wrote and published multiple peer reviewed papers.

- Taught a Massively Open On-Line Course on Climate Change in the Pacific Islands to 1600 students in 51 countries.
- Selected to be the Delegate representing Fiji and Solomon Islands governments for United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (COP18-25).

• **Fellow Bjerknes Centre for Climate Research, University of Bergen, Norway** **2011 and 2018**

Conducted Climate Change research focused on land and ocean biogeochemistry, as well as addressing the role of the Ocean in supporting the SDGs. Collaborated with multiple nations to address common Climate Change and marine science problems, fostering constructive international partnerships. Authored numerous peer reviewed publications pertaining to Climate Change research.

- Built and cultivated strong ties between the University of the South Pacific and the University of Bergen at the Ocean - Climate Change Nexus resulting in Student Exchanges, a Norway-Pacific Chair in Ocean and Climate, and the Norway-Pacific Scholarship Program. This partnership was recognized as a successful voluntary commitment towards SDG 14 under the United Nations Ocean Conference.

• **National Center for Atmospheric Research (NCAR), Boulder, CO** **2006 – 2012**  
**Director of the Biogeosciences Program and the Integrated Studies Program,** **2008 – 2010**

Directed internal and external research coordination, overseeing multiple research projects and scientists. Managed all strategic planning and fund raising for the NCAR, ensuring projects were completed on time and had the necessary funding. Served as a Grant Manager for the NCAR, distributing grants to worthy candidates.

- Provided innovative leadership and scientific vision for the NCAR Biogeosciences Program, managing the Total program budget annual budget of approximately \$2.7M. The Program involved 5 divisions and was a cornerstone in the establishment of TIIMES and Integrated Science Programs at NCAR.

• **Senior Scientist,** **2006 – 2012**

Conducted internationally recognized research on utilizing both models and observations to understand the global nitrogen cycle and interactions with the carbon cycle, atmospheric chemistry and climate change and securing research funding, peer reviewed publication. Became a leader in the Global Nitrogen Cycle and Coupled Biogeochemical Cycles.

- Lead Author of the IPCC Fourth Assessment Report, as a member of the IPCC team that won the 2007 Nobel Peace Prize. Received the prize for efforts to expand and distribute greater knowledge about man-made climate change and its work in laying the foundations for the measures that are needed to counteract Climate Change.
- Coupled carbon and nitrogen cycles focusing on Bio

## *Additional Career Experience*

**Director of Biogeosciences Program**, The Institute for Integrative and Multidisciplinary Earth Studies (TIIMES), National Center for Atmospheric Research (NCAR), Boulder, CO, 2005 – 2008

**Management Committee**, The Institute for Integrative and Multidisciplinary Earth Studies (TIIMES), National Center for Atmospheric Research (NCAR), Boulder, CO, 2004 – 2008

**Leader of the NCAR's Biocomplexity Program**, National Center for Atmospheric Research (NCAR), Boulder, CO, 2004 – 2005

**Leader of the Biogeosciences Initiative**, National Center for Atmospheric Research (NCAR), Boulder, CO, 2002 – 2005

**Scientist III of the Atmospheric Chemistry Division**, National Center for Atmospheric Research (NCAR), Boulder, CO

**Scientist II of the Atmospheric Chemistry Division**, National Center for Atmospheric Research (NCAR), Boulder, CO

**Fellow of the Institute of Arctic and Alpine Research**, University of Colorado, Boulder, CO

**Scientist I of the Atmospheric Chemistry Division**, National Center for Atmospheric Research (NCAR), Boulder, CO

**Post-Doctoral Fellow of the Department of Biological Sciences**, Stanford University, Stanford, CA

**Graduate Research Assistant**, NREL, Colorado State University, Fort Collins, CO

**Undergraduate Research Assistant**, NREL, Colorado State University, Fort Collins, CO

**Naturalist**, Todd Sanctuary, Audubon Society of Western Pennsylvania

## Languages

**English**, Native Speaker

**Spanish**, Fluent

**French**, Fluency level: functional

**German**, Fluency level: functional

**Italian**, Novice

**Portuguese**, Fluency level: functional

**Fijian**, Fluency Level 1

## Awards

**Fellow**, American Association for the Advancement of Sciences, 2019

**Fellow Bjerknes Centre for Climate Research, University of Bergen 2011,& 2013**

**Best Paper Award 2017**: International Journal of Climate Change: Impacts and Responses

**Woman of Achievement**, Zonta Foothills Club of Boulder County, 2007-2008

**Nobel Peace Prize**, Awarded to the Intergovernmental Panel on Climate Change and Al Gore, 2007

**Aldo Leopold/Earth Leadership Fellow**, 2005

## Affiliations

- American Geophysical Union
- American Meteorological Society
- Association for the Advancement of Science
- Leopold/Earth Leadership Network
- National Center for Atmospheric Research (NCAR) Leadership Academy, 2003
- Gamma Sigma Delta, Honor Society of Agriculture, Member
- Ecological Society of America former member of adhoc committee on Women and Minorities
- Adventurers and Scientists for Conservation, <http://www.adventureandscience.org/>, Governing Board and Science Advisory Board Member, 2011 – 2014
- World Meteorological Organization Regional Training Center Pacific Islands
- Max Planck Institute of Biogeochemistry
- The Institute for Integrative and Multidisciplinary Earth Studies (TIIMES)
- Institute for Arctic and Alpine Research, University of Colorado
- Stanford University
- Natural Resource Ecology Laboratory, Colorado State University
- Audubon Society of Western Pennsylvania

## Community Activities and Volunteer Work

- **Participant**, Roundtable on Climate Change on Native Lands: Opportunities for NCAR and Tribal Colleges to Work Together, NCAR, Boulder, CO, 09/26/2011

- **Participant**, Roundtable on Roundtable on Private, Public, and Tribal Collaboration on Workforce and Supply Chain Opportunities in Energy organized by International Indigenous Institute for Resource Management, Consolidated Tribes of the Umatilla Reservation, Wildhorse Casino, Pendleton, OR, 09/7/2011–09/8/2011
- **Organizer**, Navajo training workshop on Climate Change, Air Pollution, and Renewable Energy, for 13 students from Dine College, held at NCAR, University of Colorado, and National Renewable Energy Laboratory, Boulder, CO, 07/18/2011–07/22/2011
- **Co-organizer**, Navajo training workshop for 18 students from Dine College, Shiprock, NM held at NCAR, Boulder, CO, 07/5/2010–07/8/2010
- **Participant and Climate Change Speaker**, Community Meeting, Hardrock Senior Center, Navajo Reservation, Hardrock, AZ, 03/13/2010
- **Participant and Climate Change Speaker**, Earth Day Celebration, Pinon Elementary School, Navajo Reservation Pinon, AZ, 04/23/2010–04/24/2010
- **Speaker and Participant**, Environmental Education Forum, Navajo Reservation, St. Michaels, AZ, 04/19/2010
- **Speaker and Participant**, Making Connections: An Autumn Ecoforum, organized by Cornell American Indian Program and Cornell Indigenous Graduate Students Association, Cornell University, Ithaca, NY, 10/23/2009–10/25/2009
- **Climate Change Resource Expert**, National Congress of American Indians, 2008-Present
- **Co-organizer and Keynote speaker**, Planning for Seven Generations: Indigenous & Scientific Approaches to Climate Changes, Boulder, CO, March 19-21, 2008
- **Co-Organizer**, American Physical Society Study on the Status of Women Scientists at NCAR 1998-1999
- **Organizer**, sub-committee of Boulder's Women in Atmospheric Science (WIAS) to address, amend and implement changes to NCAR's maternity and family leave policies 1990-1992

## Honors, Leadership and Diplomacy

**Advisory Board Priestley International Centre for Climate**, University Leeds, UK, 2018-Present

**USP Governing Council Professorial Representative** with Ministers of Education and Finance, 12 member countries

**Pacific Representative**, Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection and Co Chair of Working Group 45 on Greenhouse Gas Impacts on Contaminants in the Ocean. 2021-present

**Board Member**, Sustainable Sea Transport Initiative, 2020-present

**Co-Founder and Chairwoman of the Board** Pacific Ecosystem & Climate Exchange 2014-present

**Technical Advisory Group**, Pacific Climate Change, Mobility and Human Security Project, Office of the High Commissioner on Human Rights, Pacific Regional Office, 20019-present

**Stakeholder Representative** EU Horizon 2020 Comfort Project led by Professor Christophe Heinze the Bjerknes Center for Climate Science

**External Advisor**, RERIPA EU ACP Research and Innovation Project, 2018-present

**USP Representative**, Pacific Islands Aviation Weather Panel, Climate Services Panel, and Education, Training and Research Panel of the Pacific Meteorological Council, 2015-Present

**USP Representative**, International Universities Climate Alliance, and the Association of Commonwealth Universities Climate Resilience Network 2017-present, International Association of Universities SDG13 Task Force led by University of the West Indies and SDG14 Task Force led by University of Bergen 2016-present.

**USP Representative** Council of Regional Organisations of the Pacific COP 19-26 team and Marine Sector Working Group

**Chair of the Board**, Pacific Environment and Climate Exchange, Suva Fiji, 2014-Present

**Delegate Representing Fiji, Solomon Islands and Nauru Governments**, United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (COP18-26), 2012–Present

**USP Representative & Chair** Sustainable Development Working Group of the Pacific Island Forum, 2012–2016, Chair 2014-2015

**Friends of the Chair Committee & Senior Officials Committee** Pacific Islands Development Forum, 2013-2019

**Occasional Advisor**, USP Executive for Council of Regional Organizations Executives Meeting, 2014-2016

**Member**, Steering Committee of the Pacific Islands Roundtable Forum on Climate Change, 2013-2016

**Pacific Negotiator**, Joint Policy Positions for EU and Africa, Caribbean, and Pacific for UNFCCC COP20-COP24 and Sustainable Development Committee of ACP, 2014-2018

**2014 Core Team tasked with development of Green Growth Framework, Fiji Government**

**Delegate**, IPCC representing Federated States of Micronesia, Fiji, Solomon Islands, and Tuvalu to the Intergovernmental Panel on Climate Change (IPCC), 2013-2016

**Technical Working Group for Fiji Climate Change Policy Implementation and Advisor**, the National Climate Change Summits for Fiji, 2012–2015

**Member**, USP Senate & University Research Committee, 2013-present

**Chair**, USP Cluster & Strategic Research Theme on Climate Change, Environment and Sustainable Development, 2012-2015

**USP Representative**, PIFS Task Force on Sustainable Development, 2015-2017

**IPCC Lead Author, Contributing Author and/or Reviewer**, the 2nd, 3rd, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> IPCC Assessment Reports as US, German, Fiji and Solomon Islands Representative

## Selected Publications (out of >130, h index 53)

1. Seabrook, S.A., **E.A. Holland**, L. A. Levin, N D. Gallo, , 2021. "[The ocean is our greatest climate regulator. It must be a stronger part of climate policy and action](#)". The Conversation.
2. Dobush, B.J., N D. Gallo, M. Guerra, B. Guilloux, **E.A. Holland**, S. Seabrook & L. A. Levin (2021): A new way forward for ocean-climate policy as reflected in the UNFCCC Ocean and Climate Change Dialogue submissions, Climate Policy, DOI: 10.1080/14693062.2021.1990004
3. Metherall\*, N. **E.A. Holland**, S. Beavis, A.M. Dralolo Vinaka. 2021. Characterisation of pH variations along the Ba River in Fiji utilising the GEF R2R framework during the 2019 sugarcane season Environmental Monitoring Assessment <https://doi.org/10.1007/s10661-021-09423-1>
4. Heinz, C, Thorsten B, H. Martins, D. Rusiecka, R. Döscher, M. Gehlen, N. Gruber, **E.A. Holland**, Ø. Hov, F. Joos, R. Matthews, R. Rødvenj & S. Wilson. 2021 The quiet crossing of ocean tipping points . Proceedings of the National Academy of Sciences March 2, 2021 118 (9) e2008478118; <https://doi.org/10.1073/pnas.2008478118>
5. von Schuckmann, K, **E. Holland**, P. Haugen, P. Thomson. 2020. Ocean science, data, and services for the UN 2030 Sustainable Development Goals. *Marine Policy* 121 (2020) 104154
6. Brodie, G., **Holland, E.**, N'Yeurt, A.D.R., Soapi, K., Hills, J. 2020. Seagrasses and seagrass habitats in Pacific small island developing states: Potential loss of benefits via human disturbance and climate change. *Marine Pollution Bulletin*, Volume 160, November 2020.
7. Mendler de Suarez, J., A. Laing, Te. Stephenson, and **E.A. Holland**. 2020. Climate Impact on the Small Island Developing States. International Federation of the Red Cross World Disaster 2020 Report.
8. Schimel, A & **E.A. Holland**. 2020 Tonga, Pacific Disaster Prevention Review. Australia Strategic Policy Institute
9. \*Anderson, G, **E.A.Holland**, & C. Rico. 2019. Meta-analysis of factors influencing population differentiation in yellowfin tuna (*Thunnus albacares*). *Reviews in Fisheries Science & Aquaculture* Manuscript ID: 1633270 (BRFS-2019-0018.R1).
10. **Holland, E.A.** 2020. When Tropical Cyclone Harold meets the Novel Corona Virus. Pacific Journalism Review. <https://asiapacificreport.nz/2020/04/22/when-tropical-cyclone-harold-meets-the-novel-coronavirus/>
11. **Holland, E.A.** 2020. Reconciling Moana, Vanua, Science and the Blue Economy. DAWN INFORMS, Blue Economy edition. Development Alternatives with Women for a New Era, ISSN 2413-1512
12. **Holland, E.A.** , G. Brodie, P. Chand, M. Wairiu and I. Korovulavula. 2020. Sustainability in Conservation, Biodiversity, and Protected Areas Management: Challenges and Opportunities for Accredited Tertiary Qualifications. In *Oceania State of the Protected and other Conserved Areas Report* L. Scherl editor.
13. **Holland, E.A.** K. von Schuckmann, M. Monier, J.F. Legeais, S. Prado, S. Sathyendranath, C. Dupouy. 2019. Chapter 3. The use of Copernicus Marine Service products to describe the State of the Pacific Ocean around the Islands: A case study. The Copernicus Marine Environment Monitoring Service Ocean State Report #3. J. of Operational Oceanography. Vol. 12.
14. Iese, V., Halavatau, S., N'Yeurt, A. D. R., Wairiu, M., **Holland, E.**, Dean, A., Veisa, F., Patolo, S., Havea, R., Bosenaqali, S., Navunicagi, O. 2019. Agriculture Under a Changing Climate. In L. Kumar (ed.), *Climate Change and Impacts in the Pacific*, Springer Climate. Springer Nature Switzerland. [https://doi.org/10.1007/978-3-030-32878-8\\_9](https://doi.org/10.1007/978-3-030-32878-8_9)
15. Abram, N. J.P. Gattuso, A. Prakash, L.Cenge, M. P. Chidichimo, S. Crate, H. Enomoto, M. Garschagen S. Harper, **E.A. Holland**, R. M. Kudela, A. Pandey, J. Rice, K. Steffen, and K. von Schuckmann. 2019. Chapter 1: Framing and Context of the Report. In Intergovernmental Panel on Climate Change [Special Report on Oceans and Cryosphere in a Changing Climate](#). To be published Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
16. Garschagen, M, C. Adler, S. Crate, H. Jacot Des Combes, B. Glavovic, S. Harper, **E.A. Holland**, G. Kofinas, S. O'Donoghue, B. Orlove, Z. Sebesvari, M. Sommerkorn. 2019. Key concepts of risk, adaptation, resilience and transformation. Intergovernmental Panel on Climate Change [Special Report on Oceans and Cryosphere in a Changing Climate](#). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
17. Magnan, A. M. Garschagen, J.P Gattuso, J. E. Hay, N. Hilmi, **E.A. Holland**, F. Isla, G. Kofinas, J. Petzold, B. Ratter, T. Schuur, T. Tabe, R. van de Wal. 2019. Cross-Chapter Box 5: Low-lying Islands and Coasts. Intergovernmental Panel on Climate Change [Special Report on Oceans and Cryosphere in a Changing Climate](#). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
18. Prakash, A, S. Cassotta, B. Glavovic, J. Hinkel, **E.A. Holland**, Md Saiful Karim, B Orlove, B. Ratter, J. Rice, E. Rivera-Arriaga, C. Sutherland. 2019. Cross-Chapter Box 3: Governance of the Ocean, Coasts and the Cryosphere under Climate Change. Intergovernmental Panel on Climate Change [Special Report on Oceans and Cryosphere in a Changing Climate](#). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
19. Prakash, A, **E.A. Holland**, N. Abrams, J. Rice. 2019. Frequently Asked Question 1.2: How will changes in the ocean and cryosphere affect meeting the Sustainable Development Goals? Intergovernmental Panel on Climate Change [Special Report on Oceans and Cryosphere in a Changing Climate](#). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
20. \*Keremama, M., **E.A.Holland**, MGM Khan, D. Hiriasia, L.Tahni, Air temperature trends, variability, and extremes across the Solomon Islands: 1951-2011. 2019. *Pacific Dynamics, Journal of Interdisciplinary Research* 3:15-32.
21. \*Ha'apio, M.O., Morrison, K., Gonzalez, R., Wairiu, M. & **Holland, E.** (2018). Study of April Ridge relocation initiative East of Honiara, Solomon Islands. *Climate Change Management*. Springer International Publishing.
22. \*Iese, V. and **Holland, E. A.**, Wairiu, M and Havea, R. S. (2018) Facing food security risks: The rise and rise of the sweet potato in the Pacific Islands. *Global Food Security*, 18. pp. 48-56. ISSN 2211-9124
23. Burnside-Lawry , Judy, R. Franquet, M. Wairiu, **E. A. Holland**, and S. Chand(2017) Communication, Collaboration, and Advocacy: A Study of Participatory Action Research to Address Climate Change in the Pacific. *The International Journal of Climate Change: Impacts and Responses*, 9 (4). pp. 11-33. ISSN 1835-7156.
24. **Holland, E. A.** (2017) [Embracing Hope- and a Carbon Tax](#). Biographic, published by the California Academy of Sciences.

25. **Holland, E. A.** (2016) [Shocking: The World's Largest Association of Earth Scientists Is Funded by Climate-Denying Exxon—The American Geophysical Union should be standing up for climate science and scientific integrity—not Exxon.](#) AlterNet.
26. \*Riddick, S.N. D. S. Ward, P. Hess, N. Mahowald, R. S. Massad, and **E. A. Holland.** 2015. Estimate of changes in agricultural terrestrial nitrogen pathways and ammonia emissions from 1850 to present in the Community Earth System Model Biogeosciences Discuss., 12, 15947-16018, doi:10.5194/bgd-12-15947-2015.
27. \*Ha'apio, M., W.L. Filho, R. Gonzalez, **Holland, E.A.,** & Wairiu, M. (2014). Mapping the economic costs and benefits of Coral Triangle Initiative (CTI) and Mangrove Rehabilitation Projects (MRP) in Solomon Islands: a study of two MPAs and one MRP. *International Journal of Sustainable Development & World Ecology*, 21(5), 414-421.
28. **Holland, E.A,** Nuttall, P., Newell, A., Prasad, B., Veitayaki, J., Bola, A. and\* Kaitu'u, J. (2014) Connecting the Dots: Policy Connections between Pacific Island Shipping and Global Carbon Dioxide and Pollutant Emission Reduction. *Carbon Management* 5(1) 99-105.
29. Nuttall, P., Newell, A., Prasad, B., Veitayaki, J. and **Holland, EA.** (2014) A review of sustainable sea-transport for Oceania: Providing context for renewable energy shipping for the Pacific. *Marine Policy* Vol. 43 (Jan 2014), 283-287 Prasad, B., Veitayaki, J., Holland, E., Nuttall, P., Newell, A., Bola, A. and Kaitu'u, J. (2013) Sustainable Sea Transport Research Programme: Toward a Research-based Programme of Investigation for Oceania. *Journal of Pacific Studies* (33), 78-95.
30. Ciais, P., C. Sabine, G. Bala, L. Bopp, V. Brovkin, J. Canadell, A. Chhabra, R. DeFries, J. Galloway, M. Heimann, C. Jones, C. Le Quéré, R.B. Myneni, S. Piao and P. Thornton, with **E.A. Holland** and others 2013: Carbon and Other Biogeochemical Cycles. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
31. Halvorsen, A. and **E. A. Holland.** 2012. *Climate Change: Scientific Basis and Statues of the Negotiations of the Treaties.* *International and Comparative Corporate Law Journal* (No. 2/2012 as part of the Sustainable Companies Project, University of Oslo Norway, Faculty of Law Legal Studies Research Paper Series, <http://www.jus.uio.no/ifp/english/research/projects/sustainable-companies/>, Cambridge Press.
32. Lamarque, J.-F., L. Emmons, P.G. Hess, D. Kinnison, S. Tilmes, F.M. Vitt, C.L. Heald, **E.A. Holland,** P.H. Lauritzen, J. Neu, J.J. Orlando, P.J. Rasch, and G.S. Tyndall, 2012: CAM-chem: Description and evaluation of interactive atmospheric chemistry in the Community Earth System Model. *Geoscientific Model Development*, 5, 369-411, DOI: 10.5194/gmd-5-369-2012.
33. Finzi, A.C., J. Cole, S. C. Doney, **E. A. Holland,** and R. B. Jackson. 2011. Research Frontiers in the Analysis of Coupled Biogeochemical Cycles. *Frontiers in Ecology and the Environment*, 2011; 9(1): 74–80, doi:10.1890/100137
34. Schlesinger, W.H. J. Cole, A.C. Finzi and **E.A. Holland.** 2010. Coupled Biogeochemical Cycles. *Frontiers in Ecology and the Environment*, 2011; 9(1): 5–8, doi:10.1890/090235
35. Vitousek, P.M.m, R. L. Naylor, T. Crews, M. B. David, L. E. Drinkwater, **E.A. Holland,** P. J. Johnes, J. Katzenberger, L. A. Martinelli, P. A. Matson, G. Nziguheba, D. Ojima, C. A. Palm, G. P. Robertson, P. A. Sanchez, A. R. Townsend, F. S. Zhang. 2009. Nutrient Imbalances Along Trajectories of Agricultural Development. *Science Policy Form. Science* 324: 1519-1520
36. Denman, K, G. Brasseur, A. Chidthaisong, P. Ciais, P. Cox, R.E. Dickinson, D. Hauglustaine, C. Heinze, **E.A. Holland,** D. Jacob, U. Lohmann, S. Ramachandran, P. Leite da Silva Dias, S. C. Wofsy, X. Zhang, et al., 2007. *Couplings Between Changes in the Climate System and Biogeochemistry, Chapter 7.* In, *Climate Change 2007, The Physical Science Basis, contribution of Working Group 1 to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.* Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor and H.L. Miller, Z. Chen (eds.). Cambridge University Press, New York.
37. House, J., V. Brovkin, R. Betts, B. Constanza, M. Assuncao Silva Dias, **E.A. Holland,** C. LeQuere´, N. K. Phat, U. Riebesell, M. Scholes; A. Arneth, D. Barratt, K. Cassman, T. Christensen, S. Cornell, J. Foley, L. Ganzeveld, T. Hickler, S. Houweling, M. Scholze, F. Joos, K. Kohfeld, M. Manizza, D. Ojima, I. Colin Prentice, C. Schaaf, B. Smith, I. Tegen, K. Thonicke, N. Warwick 2005: *Air Quality and Climate, Millennium Ecosystem Assessment, Volume 1, Current States and Trends,* R. Hassan, B. Scholes, N. Ash (eds), Island Press, Washington D.C..
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## Selected Talks and Seminars (>300)

1. Pacific Perspectives, Science |Policy & Ocean @Climate, Invited Lecture, Bjerknæs Centre at the University of Bergen, Bergen, Norway, December, 2019,
2. Opportunities and challenges in implementing integrated and innovative ocean science to support Pacific Small Islands Developing states to take action, panel hosted by the Pacific Community Centre for Ocean Science, Moana Blue Pacific Pavilion, COP25, Madrid Spain, December 2019
3. Inspiring Courage to Act and Adapt in a Climate Emergency, panel, side event, COP25, Madrid Spain, December 2019.
4. Keynote, The IPCC Special Report on the Ocean and Cryosphere in a Changing Climate, Joint Side-event by the African, Caribbean and Pacific (ACP) Group of States and the Pacific Community (SPC), Moana Blue Pacific Pavilion, Sea Level rised side event Cryosphere Pavilion, and IPCC side event, World Meteorological Organisation WMO Pavilion COP25, Madrid Spain, December 2019.
5. Climate Change and the Deep Sea, panel, Moana Blue Pacific Pavilion, COP25, Madrid Spain, December 2019.
6. Keynote presentation, One Canoe, One Ocean, One Planet, at Moana: The Water of Life, Navigating Climate Change for a Healthy Planet, University of Lincoln, Anglican Diocese of Lincoln, August 2019.
7. Keynote presentation Exploring Opportunities for Resilience of Big Ocean States (BOSS), OCEANS Vision 2019, held at Georgia Institute of Technology, Atlanta, Georgia.
8. Climate Change and Health, Fiji Ministry of Health and KOICA, Tanoa Hotel, August 2018.

9. Invited Keynote lecture VOICES of the PACIFIC: Stories of Climate Change, Leadership and Interconnectedness ,PACIFIC OCEANS | PACIFIC CLIMATE. Keeling Lecture, Birch Aquarium, Scripps Institute of Oceanography, May 2018
10. PACIFIC OCEANS| PACIFIC CLIMATE, Anglican Fono in the Pacific, hosting Archbishop of Canterbury, Archbishop Justin Welby March, 2018.
11. Keynote, Connecting the Dots, Oceans, Climate and Policy for Big Ocean StateS (BOSS), PACIFIC OCEANS: PACIFIC CLIMATE, Pacific Climate Change Conference, University of Victoria & SPREP\_23 February 2018
12. Climate Change, Adaptation and Progress, GCCA Intra-ACP Project March 2017.
13. Climate Change and the Paris Agreement: Pacific Journeys, United Society of Partners in the Gospel of the Anglican Communion, Anglican Primates, Pearl Resort, July 2016
14. USP EUGCCA Progress to date, 5<sup>th</sup> Programme Steering Committee, Indian Ocean Commission, Mauritius, April 2016
15. Paris Agreement and the Pacific, Pacific Islands Development Forum Blue Green Economy Summit, 2016
16. Collaborating to Empower for Climate Action, PaCE-SD Seminar Series, March 2016
17. Climate Change in the Pacific Islands: Working together towards solutions, TOPEX (Top Executives) Annual Meeting, Shangri-La, Resort, July 2015.
18. Climate Change, Leadership and Solutions in the Pacific Islands, EU ACP Parliamentary meeting, Suva, Fiji, June 2015
19. Pacific Leadership in Climate Change, En route to Paris and Beyond, International Red Cross and Symposium Organized by French Embassy, Suva, Fiji, August 2015.
20. Climate Change, Leadership and Solutions in the Pacific Islands. Climate Change Summit. University of Bergen, May 2015.
21. Climate Change Adaption and Resilience Strategies in the Pacific, Fiji Community Development Project, March 2105.
22. PaCE-SD Overview and Climate Change Program to the Fiji Meteorological Services, February 2015
23. Invited talks : Climate Change, Leadership, Adaptation, and Innovation in the Pacific Islands, presented at Fiji Green Growth Meeting, National Tehcnical University Singapore, IUCN, USP School of Governance, Development and International Affairs and Timor Leste Climate Action Summit, 2014
24. 14 Lecture Tour : Climate Change, Leadership, Adaptation, and innovation in the Pacific Islands, La Fête de La Science, New Calédonie, Octobre, 2014
25. Climate Change, Sustainable Sea Transport, and Blue Economy Panels, all given at the UN Small Island Developing States Conference in Apia Samoa, 2013.
26. Climate Change Science & Policy, Where to from Here? 2013. Labor and Migration meeting hosted by the Pacific Islands Forum, Nadi, Fiji.
27. Climate Change: A Pacific Islands Perspective, Keynote talk for the Pacific Islands Intercongress, Suva, Fiji, July, 2013.
28. Integrating climate change adaptation and disaster risk reduction at local level: How to combine modern science and local knowledge to reduce communities' vulnerability. Holland, Elisabeth A. Helene Jacot des Combes, Sarah L Hemstock, and Viliamu Iese, Ecological Society of America, Portland Oregon, 2012
29. Understanding Climate Change, Fiji National Climate Policy Implementation Workshop, Holiday Inn, Suva, 06/28/2012 – 06/29/2012.
30. The Fourth Assessment Report (AR4) Climate Change Working Group 1:The Physical Science Basis The IPCC Process, and Key Findings, Sea Series Lecture, Fiji Times Building, Suva Fiji, 05/16/2012
31. Future Projections of Greenhouse Gas Emission and its impact on Climate Change, Fiji National Air Pollution Control Strategy, Southern Cross Hotel, Suva, Fiji, 05/24/2012
32. Climate Change and its Implications for Pacific Island Countries, In-Country Coordinator Training, Southern Cross Hotel, Suva, Fiji, 04/22/2012
33. Our Changing Climate, EV414 Workshop, University of the South Pacific, Suva, Fiji, 04/2012.
34. Global Modeling of Nitrogen and Carbon, IPCC meeting on the Global Nitrogen Cycle, Amsterdam, The Netherlands, 11/ 2011
35. The Global Nitrogen Cycle: Where Climate, Air Pollution and Food Intersect, The Bjerknes Centre for Climate Research, University of Norway, Bergen Norway, 11/ 2011
36. The Global Nitrogen Cycle: Where Climate, Air Pollution and Food Intersect, Royal Netherlands Meteorological Institute, KNMI, Utrecht, 11/ 2011
37. Climate System Impacts of the Changing Nitrogen Cycle. Special session on Nitrogen and Climate. AGU, San Francisco, CA, 12/2010
38. The Global Carbon and Nitrogen Cycles in the Climate System: Models and Observations, ASP Colloquium on Asia in the 21st Century, 08/2010
39. Scientific and Personal Life and Times, Atmospheric Science Collaboration and Enriching NeTworks (ASCENT) workshop, Steamboat Springs, CO, 07/2010
40. Panelist, Environmental Protection Agency meeting on Nitrogen and Climate, Washington D.C., 10/2010
41. The Role of the Nitrogen Cycle in the Earth System, Atmospheric Sciences Department, Colorado State University, Fort Collins, CO, 09/2010
42. Our Changing Climate, Pinon School Earth Day Celebrations, Pinon, Navajo Nation, AZ, 04/2010
43. Our Changing Climate, Educational Forum, St. Michaels, Navajo Nation, AZ, 04/2010
44. Our Changing Climate, Community Meeting, Hardrock Senior Center Hardrock, Navajo Nation, AZ, 03/2010
45. Invited speaker The Role of the Nitrogen Cycle in the Earth System, Mary Firestone Lab Group, Inez Fung Lab Group, Department of Environmental Science Policy and Management University of California Berkeley, Berkeley, CA, 03/2010
46. Our Changing Climate and the Underlying Role of Biogeochemistry, invited classroom lecture, University of Denver Law School, Denver, CO, 01/ 2010
47. The Global N Cycle in the Climate System: Models and Observations Aguron Institute Nitrogen meeting, Phoenix, AZ, 10/2009

48. Our Changing Climate, Building Bridges to Native American Communities. For workshop on Making Connections: Understanding Our Relations, an eco-forum sponsored by the American Indian Program at Cornell University, Ithaca, NY, 10/2009
49. The Role of Soils and Biogeochemistry in the Climate and Earth System, presented at meeting on Sustaining Soil Productivity in Response to Global Climate Change: Science, Policy and Ethics, sponsored by the Organisation for Economic Cooperation and Development (OECD) meeting, Madison, WI, 07/2009
50. The Fourth Assessment Report (AR4) Climate Change Working Group 1: The Physical Science Basis, The IPCC Process and Key Findings IPCC, to International Nitrogen Initiative to the International Nitrogen Initiative Paris, France, 04/ 2009
51. Our Changing Climate and the Underlying Role of Biogeochemistry, invited lectures, University of Denver Law School, University of Wyoming, University of Colorado, Colorado College, Annual meeting of the National Atmospheric Deposition Program, QUEST Open Science Meeting, Oxford, UK, Association of Women Geoscientists, Laramide Section NCAR Advanced Study Program, & Environmental Protection Agency, Region 8 Headquarters, 2007-2009
52. Reader and Panelist, The 8th Annual Juniper Literary Festival, The World and the World, University of Massachusetts, Amherst, MA, 04/2008
53. Our Changing Climate and the Underlying Role of Biogeochemistry, Keynote address, Planning for Seven Generations, Indigenous & Scientific Approaches to Climate Changes, Boulder, CO, 03/22/2008
54. Interacting Element Cycles: Examining the Bio-Atmospheric Carbon and Nitrogen Cycles, invited lecture Purdue University, Lafayette, IN, April, 20017
55. The Global Nitrogen Cycle. Advanced Study Program Colloquium on Regional Biogeochemistry, Boulder, CO, 06/2007
56. Linking Water and Biogeochemical Cycles, special session on Hydrology, American Meteorological Society, Austin, TX, 01/2007
57. Trends in Nitrogen and Sulfur Wet Deposition for the US and Western Europe: Success and Failure of Clean Air Regulations. N Cycling Session, AGU San Francisco, CA, 12/2006.
58. Biogeosciences Program Overview and Opportunities, Earth Observing Laboratory Community Meeting, Boulder, CO, 11/2006.
59. Building on the Dickinson Legacy, including Nitrogen in Earth System Models, for 40 Years of Climate Research, A Celebration of Bob Dickinson's Career, Georgia Institute of Technology, Atlanta, GA, 10/2005
60. Using Observations and Models to Understand Biosphere Atmosphere Nitrogen and Sulfur Cycling, Atmospheric Science Department, Colorado State University, Fort Collins, CO, 10/2005
61. Using Observations and Models to Understand Biosphere Atmosphere Nitrogen and its Role in the Earth System, Gordon Conference on Atmospheric Chemistry, Big Sky, MT, 09/2005
62. An Overview of the Biogeosciences Program, National Center for Atmospheric Research, TIIMES External Advisory Committee, 08/2005
63. Global and Regional Nitrogen Cycles, National Center for Atmospheric Research, Advanced Study Program, Boulder, CO, 06/2005
64. The Bio-Atmospheric Nitrogen Cycle, National Center for Atmospheric Research, Climate and Global Dynamics Division, Boulder, CO, 04/2005
65. An Overview of the Biogeosciences Program, National Center for Atmospheric Research, External Advisory Committee, 04/2005
66. An NCAR Perspective on the Bio-Atmospheric Nitrogen Cycle, National Science Foundation, Washington, D.C., 02/2005
67. Integrating Biogeochemistry and Atmospheric Chemistry into Earth System Models: Where are the Non-Linearities?, AGU, Special Session on Mathematics in Geophysics, San Francisco, CA, 12/2004
68. Progress on Dry Deposition Modeling, National Center for Atmospheric Research Community Climate System Modeling meeting, Santa Fe, NM, 07/2004
69. Making the Case for an Institute for Multi-Disciplinary Earth Studies, National Center for Atmospheric Research Reorganization Committee, 06/2004
70. The Global Nitrogen Cycle in the Climate System: A Story of Multiple Element Interactions, Scripps Institute on the Environment, Boulder, CO, 05/2004
71. Understanding the Global Nitrogen Cycle, the Upper Midwest Aerospace Consortium, Grand Forks, ND, 03/2004
72. From the Inside Looking Out: A Perspective on Being One of a Few Women in Science and Mathematics, the Theater Department, University of North Dakota, Fargo, ND, 03/2004
73. The NCAR Biogeosciences Initiative, Transferring Knowledge from Local to Global Scales through Integrated Observation and Modeling of Physical and Biological Processes (E. A. Holland, G. Bonan, A. Guenther, N. Mahowald, D. Schimel, B. Stephens, J. Sun, P. Thornton), National Science Foundation Workshop, American Geophysical Union Fall Meeting, San Francisco, CA, 12/2003
74. Interacting Biogeochemical Cycles: Human Perturbation of the Global N Cycle (classroom lecture) Department of Atmospheric Sciences, University of Colorado, 11/2003
75. Human Perturbation of the Global N Cycle, Natural Resource Ecology Laboratory, 30th Reunion, Colorado State University, Fort Collins, CO, 10/2003.
76. Biogeosciences Initiative, lecture to Allen Cutler, Professional Staff, Senate Appropriations Committee National Center for Atmospheric Research, Boulder, CO, 08/2003
77. Atmospheric Chemistry Feedbacks on the Carbon Cycle, IPCC Working Group 1, Meeting on Current Scientific Understanding of the Processes Affecting Terrestrial Carbon Stocks and Human Influence Upon Them, World Meteorological Organization, Geneva, Switzerland, 07/2003
78. Global Biogeochemical Cycles, Teacher Training Workshop, NCAR & Undergraduate Leadership Workshop, University of Colorado, Boulder, CO, 07/2003

79. Interactions between Biogeochemistry, Climate and Biogeochemistry, Joint NASA/USDA Meeting on Future Interagency Plans and Possibilities, Denver, CO, 03/2003
80. Making the Case for Coupled Modeling of Chemistry, Climate and Biogeochemistry, Chemistry-Climate Workshop, Santa Fe, NM, 02/2003
81. Building the Case for Coupled Biogeochemical Cycles and their Influence on Climate and Atmospheric Composition (invited panelist), Chapter 3, Atmospheric Composition, United States Climate Change Science Plan, Washington, D. C., 12/2002
82. Biogeosciences Initiative, Frank Cushing, House Appropriations Committee, National Center for Atmospheric Research, Boulder, CO, 11/2002, Opportunities for Cooperation, Charles G. Groat, Director, U.S. Geological Survey, National Center for Atmospheric Research & Rachel Craig, Program Director, Carbon Cycle Biogeosciences Program Officer, National Science Foundation, National Center for Atmospheric Research, Boulder, CO, 10/2002
83. The Global Nitrogen Cycle, IGBP Land Working Group, Bilthoven, The Netherlands & IGBP Land Atmosphere Working Group, Paris, France, 10/2002
84. Bio-Atmospheric Cycling of Reactive C and N: Linking Models and Measurements, Telluride Workshop on Atmospheric Chemistry, Telluride, CO, 08/2002
85. Development of a Fully Coupled Reactive Bio-atmospheric C and N Cycle, Including Tropospheric Chemistry and Biogeochemistry, Biogeochemistry Working Group, Community Climate System Model Annual Meeting, Breckenridge, CO, 06/2002
86. The Terrestrial Nitrogen Cycle, Max-Planck Institut fuer Biogeochemie, Jena, Germany, 05/22/2001 and 02/25/2020
87. Ecological Contributions to Global Change Research in the 1990s, Sustainable Biosphere Initiative Symposium, Ecological Society of America, Snowbird, UT, 08/2000
88. An Overview of Bio-Atmospheric Coupling of the Nitrogen Cycle and its Links to the Carbon Cycle, University of California at Berkeley, Berkeley, CA, 02/2000
89. The Global Nitrogen Cycle, Institute for the Chemistry and Dynamics of the Geosphere, Forschungszentrum Juelich GmbH, Juelich, Germany, 10/2000
90. A Microbial Perspective on the Global Nitrogen Cycle, Max-Planck Institut fuer Terrestrial Microbiology, Marburg, Germany, 09/2000

## Selected Grants (2012-2021 >29 million USD)

- Grant Agreement to Support the New Zealand MFAT's award to undertake 'Protecting Our Pacific in a Climate Emergency: A Climate and Ocean Assessment (ACT-0101226)' a partnership between University of Canterbury and University of the South Pacific. 4.6 million NZD 2021-2024.
- Belmont Forum Award, [Pacific Ocean Pathways](#) in Support of Sustainable Development: an Integrated Approach in response to the Pathways 2020 call. PI Alexandre Ganachaud partnered with USP. Duration 2021-2023. Funded by German Research Foundation, Germany, French National Research Agency, France, US National Science Foundation.
- Grant Agreement to Support the European Union's Global Climate Change Alliance Plus-Scaling Up Pacific Adaptation - USP component (ENV/2017/40482) in partnership with the Secretariat for the Pacific Community (SPC) and the Secretariat of the Regional Environmental Program (SPREP): 2.1 million EUR to USP, 2019-2024.
- Grant Agreement to Support the European Union's Intra-ACP Global Climate Change Alliance Plus- Pacific Adaptation - Pacific Adaptation Climate Change and Resilience USP component (FED/2018/404-364) in partnership with SPREP, SPC and the Pacific Islands Forum Secretariat (PIFS): 2.6 million EUR to USP, 2019-2024.
- TOPFORSK grant, Mare Nullius to University of Bergen in partnership with University of the South Pacific: 2.6 million EUR, 2019-2024.
- Partnership with the Secretariat of the Pacific Community (SPC), and Secretariat of the Regional Environment Programme (SPREP) to support New Zealand Aid (NZ AID) funded capacity building project Pacific Islands Partnerships on Ocean Acidification. Total Award 1.8million NZD 2015. 260,000 allocated to USP. 2015 - 2019.
- Implemented Contribution Agreement between EU and USP to Support the *European Union's Global Climate Change Alliance) through Capacity Building, Community Engagement and Applied research (EU-GCCA (CRIS: 258-661): 8 million EUR, 2010-2016 and 1.9 million EUR, 2015-2016* costed extension.
- Implemented *Pacific Technical Vocational Education and Training Project (PacTVET) on Sustainable Energy and Climate Change Adaptation (FED/2014/347-438)* in partnership with the Secretariat for the Pacific Community, 6.1 million EUR 2014-2021, 3.1 EU allocation to USP.
- Implemented subcontract of USAID's *Coastal Community Adaptation Project (C-CAP): total award 24 million USD to Development Alternatives International (DAI). 3.4 million USD subcontract to USP, 2012-2016.*
- Implemented AusAID funded Enhancing Climate Adpatation in Rural Communities of Fiji: 391K AUD, 2010-2013 and AusAID Future Climate Leader's Program: 2.9 million AUD; 2009-214.
- Partnered with University of Bergen, Norway, & European Universities to implement the European Consortium for Pacific Studies (ECOPAS), Coordination and Support Action project funded by the European Union under the 7th Framework Programme theme SSH.2012.2.2-4 Climate Change Uncertainties: Policymaking for the Pacific Socio-economic sciences and Humanities. Grant agreement no: 320298: 1.499,997 EUR total 220,420 EUR allocated to USP, 2012-2016
- Partnered with the Government of France, Ministry of Foreign Affairs (Permanent Office of the Pacific), Culture Education and Science Division to launch the *Climate Change Adaptation in the Pacific Science Experiences and Perspectives and Culture Week* for the build up to the 30th Nov - 10th December 2015, 21st Conference of the Parties to United Nations Framework Convention on Climate Change (UNFCCC) (COP21). 9,000 FJD Allocated to USP, August 2015.

- Partnership with the International Union for the Conservation of Nature (IUCN) International Social Science Council funded Transformations to Sustainability Programme Project: Catalysing the transition to low carbon sea transport futures for Oceania Grant No. T22\_PP\_255 30,000 EUR allocated to USP, 2014