

Maria del Pilar Cornejo-Rodriguez

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Guayaquil, Ecuador

### **Personal Information**

birthday: April 23, 1961  
Nationality: Ecuadorian  
Languages: Spanish (native), English (fluent in reading, writing, spoken), Portuguese (reading), French (reading).  
Orcid Number: [0000-0003-4198-2904](https://orcid.org/0000-0003-4198-2904)  
Scopus number: 57189254420  
Google Scholar: <https://scholar.google.com/citations?user=ZZSN8HoAAAAJ&hl=es>  
Researchgate: <https://www.researchgate.net/profile/Mp-Cornejo-Rodriguez>  
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### **Degrees**

December 2003 Ph.D. Meteorology and Physical Oceanography. Rosenstiel School of Marine and Atmospheric Sciences, University of Miami- USA  
June 1987 M.Sc. en Physical Oceanography, Oregon State University, Corvallis, Oregon, USA.  
August 1984 B.Sc. in Oceanography, Escuela Superior Politécnica del Litoral (ESPOL), Guayaquil, Ecuador.

### **Professional experience**

2017- present Director of the Pacific International Center for Disaster Risk Reduction, at ESPOL-Ecuador  
2017-2021 Dean of the Faculty of Maritime Engineering and Marine Sciences at ESPOL  
2009-2015 Secretary of Risk Management of the Republic of Ecuador, cabinet member, under the President of Ecuador (ministerial level, over 500 employees in the country)  
2008-2009 Director of the Water and Sustainable Development Center at ESPOL  
1990-2009 Consultant at several coastal studies for Gas Exploitation and port development  
1993-1997 Research Assistant, AOML/NOAA. Miami-USA.  
1987-present Full-time professor at Faculty of Maritime Engineering and Marine Sciences, ESPOL, Guayaquil, Ecuador. (Undergraduate and graduate courses, research).  
1985-1987 Research Assistant, College of Oceanography, Oregon State, Corvallis, Oregon, EUA (September 85-March 87).  
1984 Oceanographer 1. Ecuadorian Navy Oceanographic Institute (March- June).

### **Recent Training**

2023	Corporative Speaker Training, 12 hours
2022	E-learning Certificate, 75-hours CISE-ESPOL
2018	Higher Education Management practices, 96-hours at ESPAE-ESPOL

Over 50 workshops attended on teaching skills and on specific topics related to Climate, Human Dimensions of Global Change and Disaster Risk Reduction between 1981 and 2018

### **Teaching experience**

1987-present Undergraduate courses in Oceanography and Aquaculture B.Sc.

Physical Oceanography	Fisheries Oceanography
Oceanographic Information Analysis	Hydrology
Estuarine Process Studies	Research Methodology
Climate and Meteorology	Aquatic Ecology
Descriptive Oceanography	Equatorial Oceanography
Marine Resource Management	Limnology
Applied Mechanics	Advanced Mechanical Physics
Sustainability Sciences	

2000-2020 Courses taught at the graduate level:

Aquatic Ecology	Vulnerability and Risk Management
Data Analysis	Natural Resources Management
Climate and Society	

1989-2012 Advisor of over 7 undergraduate B.Sc. Thesis

2002-2019 M.Sc. and Ph.D. Committee Member (over 6, at the national and international level)

### **Other Activities in Ecuador**

- Member of ESPOL research committee (1991-1993, 2003-2005)
- Research Coordinator (1991-1993) at the National Marine and Aquaculture Center - CENAIM
- Member of the National Meteorological and Hydrological Service Directory, representing all Ecuadorian Universities (2016-2017)
- Member of the Charles Darwin Foundation Scientific Advisory Committee (2017-current)

### **Research Projects**

PERIOD	TITLE/POSITION/FUNDING AGENCY	BUDGET (US\$)
1989-1999	Seasonal and interannual variability of the coastal zone climatology in Ecuador, CONUEP, Ecuador, P.I.1	\$10,000.00
1996	"Tropical Convergence Climate Complex TC3", National Science Foundation-USA/Interamerican Institute for Climate Change (IAI). Co-PI	\$127,700.00
1998-2000	Variations In Spatial And Temporal Precipitation Patterns In The Trade Convergence Region Interamerican Institute (IAI) Through USA National Science Foundation with Colombia, Costa Rica, Cuba, Ecuador, Mexico, Panama, USA. Co-PI	\$103,000.00
1999-2003	Multi-Objective Study Of Climate Variability For Impact Mitigation In The Trade Convergence Climate Complex. Interamerican Institute (IAI) Through USA National Science Foundation (NSF) with Canada, Chile, Colombia, Costa Rica, Ecuador, Mexico, Panama, Venezuela, USA. Co-PI	\$804,600.00

<sup>1</sup> PI= Principal Investigator, CO-PI= Co-Principal Investigator or responsible for country chapter

1999-2009	Environmental Sustainability, A Vllir-Espol Project Component 4: Environmental Management Systems In Agriculture And Aquaculture Belgium Consortium Of Universities Vllir. PI	\$2,344,238.00
1999-2000	Reducing the Impact Of Environmental Emergencies Through Early Warning And Preparedness - The Case Of El Niño-Southern Oscillation, with China, Costa Rica, Cuba, Ecuador, Ethiopia, Fiji, Indonesia, Kenya, Mozambique, Panama, Papua New Guinea, Philippines, Paraguay, Peru, and Vietnam. Co-PI	\$650,000.00
2000-20001	"Proyecto Andino de Competitividad: The cost of d Business", funded by Corporacion Andina de Fomento Harvard University. Team Member	
2000-2001	When oceans conspire: Examining the effect of concurrent SST Anomalies in the Tropical Atlantic and Pacific on Caribbean Rainfall". NATIONAL SCIENCE FOUNDATION-USA. / IAI PESCA PROGRAM. Co-PI	\$25,000.00
2008-2011	"Enhancing the role of wetlands in integrated water resources management for twinned river basins in EU, Africa and South-America", EUROPEAN UNION – FP7. Co-PI	\$2,921,962.20
2009-2011	Development of integrated projects and internships as cornerstones in curriculum development aiming at Joint MSc degrees. FUNDED BY VLIR-BELGIUM. with ESPOL, U. de Cuenca, U. Gent, U. Lobaina y U. Cantho. Co-PI	\$69,000.00
2016-2017	El Niño Ready Nations and Disaster Risk Reduction, lead investigator for the case study about Ecuador, under Michael Glantz-PI (Consortium for Capacity Building/INSTAAR-University of Colorado), Co-PI	
2018-2019	Climate Resilience (RESCLIMA) for Duran Municipality in Ecuador, Co-PI	\$80,000.00
2020-2022	Estudio del sistema de alerta temprana para inundaciones y Plan de Acción post COVID-19 y prevención de invierno 2021 en el Cantón Durán (SATI-COVID DURAN), Co-PI	\$50,000.00
2019-2021	Sistema de Alerta Temprana SAT SALIMA	\$35,000.00
2020-2022	"Conceptualización, diseño e implementación de un sistema de alerta temprana contra inundaciones para la Isla Luis Vargas Torres de la ciudad de Esmeraldas"	\$109,866.50
2020-2023	Diseño del Sistema de Alerta Temprana para la Gestión de Riesgos de Portoviejo enfocado en la amenaza de inundación en la cuenca del río Portoviejo y la cuenca del río Chico en el Cantón Portoviejo	\$40,065.70
2020-2022	"Insumos para la Implementación de un Sistema de Alerta Temprana ante Pandemias: caso piloto COVID 19 (SARS- CoV 2) en la ciudad de Duran"	\$15,000.00
2021-2023	Evolución de los eventos El Niño/Oscilación Sur	\$40,000.00
2022-2025	Strengthening the Climate change, ecosystems and livelihood nexus in coastal zones of Ecuador through transdisciplinary research and innovative teaching (CELICE)	\$130,544.78
2023-2026	Desarrollo Climático Resiliente: Estrategias Innovadoras en Sistemas Socio-Ecológicos Priorizados en las Islas Galápagos.	\$80,000.00
2023-2026	Plataforma para modelar el impacto de eventos adversos en las vías de evacuación y acceso del cantón Durán utilizando datos de movilidad histórica	\$92,170.40
2023-2025	Estudio de evaluación del nexo entre migración, medio ambiente y cambio climático en zonas costeras del Ecuador	\$40,000.00
	<b>TOTAL</b>	<b>\$7,768,147.58</b>

**Investment Projects within the Ecuadorian Risk Management Secretary (2009-2015)**

INVESTMENT PROGRAM NAME	2009	2010	2011	2012	2013	2014	2015	subtotal
FORTALECIMIENTO PARA LA PREPARACION Y/O DESASTRES	\$256,180.63							\$256,180.63
RIESGOS NATURALES DE ALERTA TEMPRANA	\$170,637.47							\$170,637.47
SISTEMA DE ALERTA TEMPRANA Y GESTION DEL RIESGO NATURAL (BID 1707/OC-EC)	\$757,932.54	\$1,570,305.19		\$44,324.68				\$2,372,562.41
SISTEMA NACIONAL DESCENTRALIZADO DE LA GESTION DEL RIESGO Y EMERGENCIAS	\$22,386,099.68	\$72,324,898.77	\$16,119,178.07	\$3,917,149.16	\$4,457,010.54	\$3,635,592.59	\$2,651,396.93	\$125,491,325.74
INDEMNIZACION DE LOS SERVIDORES DE LA EX-DIRECCION NACIONAL DE DEFENSA CIVIL	\$437,962.00		\$1,371,274.54					\$1,809,236.54
MODERNIZACION DE LOS CUERPOS DE BOMBEROS	\$293,150.73							\$293,150.73
RACIONALIZACION DE RECURSOS HUMANOS		\$265,600.00						\$265,600.00
PLAN EMERGENTE PARA CONTRRRESTAR EL EFECTO DEL FENOMENO DEL NIÑO		\$25,000.00						\$25,000.00
RECUPERACION DE LA INFRAESTRUCTURA AFECTADA POR LAS INUNDACIONES 2002		\$7,411,138.78						\$7,411,138.78
EMERGENCIA 2009		\$78,153.80						\$78,153.80

PROGRAMA DE PREVENCIÓN Y MITIGACIÓN PARA DISMINUIR EL RIESGO POR DIFERENTES AMENAZAS <sup>2</sup>			\$37,919,311.97	\$18,985,595.46	\$3,796,697.26	\$2,096,951.78	\$162,673.62	\$62,961,230.09
PROGRAMA DE LIQUIDACIÓN Y EJECUCIÓN DE OBRAS POR CONCLUIR (FASE I) DE LA DIRECCIÓN DE SERVICIOS DE INFRAESTRUCTURA Y DESARROLLO GUAYAS EX- CORPECUADOR			\$20,687,480.24	\$3,025,230.03	\$2,011,821.49	\$2,272,140.74	\$84,548.55	\$28,081,221.05
DIFUSIÓN E IMPLEMENTACIÓN DEL PLAN NACIONAL DE PREVENCIÓN DE RIESGOS Y EMERGENCIAS (COORDINACIÓN, TALLERES, DIFUSIÓN)			\$43,000.00					\$43,000.00
PROGRAMA DE REFORMA INSTITUCIONAL DE LA GESTIÓN PÚBLICA				\$994,219.51				\$994,219.51
PROYECTO DE LEY DE GESTIÓN DE RIESGOS Y SU REGLAMENTO				\$8,000.00				\$8,000.00
ENCAUZAMIENTO Y PROTECCIÓN DE LA QUEBRADA LAS TOTORAS				\$485,054.63	\$1,615,609.17	\$1,097,898.80	\$1,303,257.38	\$4,501,819.98
PROYECTO DE EQUIPAMIENTO DE LAS NUEVAS INSTALACIONES DE LA SNGR PLANTA CENTRAL					\$3,045,472.27			\$3,045,472.27

<sup>2</sup> It includes studies and construction of coastal protection along the Ecuadorian seaside

EN EL EDIFICIO INTEGRADO DE SEGURIDAD								
PROGRAMA DE INFRAESTRUCTURA Y EQUIPAMIENTO DE LOS CUERPOS DE BOMBEROS						\$58,272.52		\$58,272.52
SUBTOTAL	\$24,301,963.05	\$81,675,096.54	\$76,140,244.82	\$27,459,573.47	\$14,984,883.25	\$9,102,583.91	\$4,201,876.48	

TOTAL \$237,866,221.52

### **Professional Projects and Programs**

**Name of Activity:** preparation of a GUIDE to be applied in EMERGENCY situations that provides guidance on the process of adaptation of public health programs and actions in territories and populations in vulnerable situations.

Aimed at the technical teams and decision makers of the countries.

**Description:** Director

**Beneficiary Entity:** Panamerican Health Organization

**Address:**

**Execution Time:** From October 21 through December 20, 2022

**Name of Supervisor or Manager:** Leonardo Estrada

**Name of Activity:** Preparation of a financing proposal so that the actors of the decentralized national risk management system can have the necessary resources to execute the disaster risk management processes established in the organic management law project of disaster risk.

**Description:** Director

**Beneficiary Entity:** Nacional Service for Emergencies and Risk Management

**Address:** Edificio Centro Integrado de Seguridad, Km 0.5 vía Puntilla-Samborondón, Samborondón 09230

**Execution Time:** From November 16 through December 16, 2022

**Name of Supervisor or Manager:** Leonardo Estrada

**Name of Activity:** Strengthening of activities and formation of volunteers in matters of risk management and early warning systems (EWS) in the municipalities of Quito, Rumiñahui, Manta, Portoviejo, Guayaquil, Samborondón and Durán, in the provinces of Pichincha, Guayas and Manabí (7 GAD in 3 provinces)

**Description:** Director

**Beneficiary Entity:** World Food Program

**Address:** Avenida Mariana de Jesús Oe7-02 y Nuño de Valderrama, Quito

**Execution Time:** From 4/ 07/2022 / To 4/ 09/2022

**Name of Supervisor or Manager:** Carlos Ivan Rivera/Leonardo Estrada

**Name of Activity:** Strengthening the capacities of community brigades through the creation of preparedness protocols for response and disaster drills in the municipalities of Quito, Rumiñahui, Manta, Portoviejo, Guayaquil, Samborondón and Durán

**Description:** Director

**Beneficiary Entity:** World Food Program

**Address:** Avenida Mariana de Jesús Oe7-02 y Nuño de Valderrama, Quito

**Execution Time:** From 18/ 01/2021 / To 20/ 12/2021

**Name of Activity:** Adaptation of the guide for the application of health measures non-pharmacological public treatment for vulnerable groups in the context of COVID-19: Case of application to the Municipality of Durán.

**Description:** responsible for working on actors' mapping and synoptic matrix analysis.

**Beneficiary Entity:** Panamerican Health Organization

**Address:**

**Execution Time:** From 10/ 1/2021 / To 12/20/2021

**Name of Supervisor or Manager:** Mercy Borbor-Cordova

**Name of Activity:** Design and Implementation of a Community Alert System for floods in the Luis Vargas Torres Island-Esmeraldas, Ecuador

**Description:** advisor on disaster risk reduction, interagency protocol development, public policy implications, mapping stakeholders

**Beneficiary entity:** UNDP

**Address:** Centro Corporativo EKOPARK. Torre 4, piso 3, vía antigua a Nayón

**Execution Time:** 11 months (August 2020- July 2021)

**Name of Supervisor or Manager:** Luis Altamirano

**Name of Activity:** Design and Implementation of a Community Alert System for floods in Salima-Esmeraldas, Ecuador

**Description:** advisor on disaster risk reduction, interagency protocol development, public policy implications, mapping stakeholders

**Beneficiary entity:** GIZ, German Technical Cooperation

**Address:** Whymper N28-39 y Francisco de Orellana, Quito

**Execution Time:** 75 días, 2019-2020

**Name of Supervisor or Manager:** Luis Altamirano

**Name of Activity:** Consulting Technical support to establish a knowledge co- production process to consolidate the Capacity Building Strategy (HCD), promote the link between the academy and public-private entities, and organized civil society, for the implementation of the Urban National Agenda.

**Description:** document analysis, workshop preparation and analysis of results, product development with consulting team, final report preparation with the team members

**Beneficiary entity:** GFCA Consulting

**Address:** Quito, Ecuador

**Execution Time:** November 2019-February 2020 (120 days)

**Name of Supervisor or Manager:** Mercy Borbor

**Name of Activity:** Consulting "Technical support for the preparation of the position of the academy on the Urban National Agenda and formation of the Academic Advisory Council

**Description:** document analysis, workshop preparation and analysis of results, product development with consulting team, final report preparation with the team members.

**Beneficiary entity:** GFCA Consulting

**Address:** Quito, Ecuador

**Execution Time:** 70 DIAS, 2019

**Name of Supervisor or Manager:** Mercy Borbor

**Name of Activity:** Consultant for Developing a Private Sector Network for disaster risk reduction

**Description:** analysis and processing of information from survey to identify the willingness of the private sector to develop such a network

**Beneficiary entity:** AFINES, Asesoría en Finanzas y Eficiencia S.A.

**Address:** Chimborazo 418 e/ Aguirre y Clemente Ballen; Piso # 2, Oficina 203.

**Execution Time:** June-October 2018

**Name of Supervisor or Manager:** Roberto Palacios

**Name of Activity:** Director of the Consultancy to develop a portfolio of 18 projects for Reducing Risk and Vulnerability in the Guayas River basin through the protection of the sub-basin of the Daule-Peripa dam

**Beneficiary entity:** Ministerio del Litoral

**Address:** Guayaquil, Ecuador

**Execution Time:** 2008, 3 months.

**Name of Supervisor or Manager:** Carolina Portaluppi, Ministry

**Name of Activity:** Consultant Impact of Climate Change on Fisheries Ecuador

**Description:** analysis and processing of all information relating to the impact of climate change on fisheries Ecuador.

**Beneficiary entity:** UNOPS

**Address:** New York, USA



**Execution Time:** December 2006-May 2007

**Name of Supervisor or Manager:** Liliana Carvajal

**Name of Activity:** Chief of Research Coordination Division at the National Center for Aquaculture and Marine Research (CENAIM) -ESPOL

**Description:** coordination and supervision of all research programs at the center

**Address:** San Pedro/Sta. Elena, Ecuador

**Execution Time:** From 05/1991 Up / 7/1993

**Name of Supervisor or Manager:** Jorge Calderon

**Name of Activity:** Physical Oceanography Studies for environmental impact analysis of the expansion of the seaport of Esmeraldas.

**Description:** statistical and oceanographic analysis of all historical and registered during the project.

**Funding Recipient:** Efficácitas

**Address:** EDIFICO NOBIS, MEZANINE, Guayaquil-Ecuador

**Execution Time:** 2000

**Name of Supervisor or Manager:** Juan Carlos Blum

**Name of Activity:** Satellite Image Processing for developing fishing charts.

**Description:** analysis of sea surface temperature in the North and South Atlantic and the Indian Ocean for fishing charts.

**Funding Recipient:** Roffer'S

**Address:** MIAMI / USA

**Execution Time:** From 09/1993 To / 12/1993

**Name of Supervisor or Manager:** Mitch Roffer

**Name of Activity:** Physical Oceanography Studies for the recovery of the beach of San Lorenzo - Salinas

**Description:** generation, processing and analysis of all physical oceanography and meteorological data

**Funding Recipient:** ESPOL

**Address:** VIA KM 30.5 PERIMETRAL, Guayaquil-Ecuador

**Execution Time:** 2002

**Name of Supervisor or Manager:** Joseph Chang

**Name of Activity:** oceanographic and meteorological climate studies for the Barbasquillo-Manta area, an expansion project of submarine fuel pipeline.

**Description:** generation, processing and analysis of all physical oceanography and coastal processes data

**Funding Recipient:** ESPOL

**Address:** VIA KM 30.5 PERIMETRAL, Guayaquil-Ecuador

**Execution Time:** 2002

**Name of Supervisor or Manager:** Jose Chang

**Name of Activity:** Monitoring physical and meteorological oceanographic conditions in the area of gas exploration in Block 3, Gulf of Guayaquil

**Description:** analysis of all information recorded during the project.

**Funding Recipient:** Efficácitas

**Address:** EDIFICO NOBIS, MEZANINE, Guayaquil-Ecuador

**Execution Time:** 2000-2007

**Name of Supervisor or Manager:** Juan Carlos Blum

**Name of Activity:** Physical Oceanography and Coastal Processes Studies for the restoration of the seaside at Libertad (ESPOL-Libertad Municipality)

**Description:** generation, processing and analysis of all physical oceanography and coastal processes data

**Funding Recipient:** ESPOL-Libertad Municipality

**Address:** VIA KM 30.5 PERIMETRAL, Guayaquil-Ecuador **Execution Time:** 2000

**Name of Supervisor or Manager:** Joseph Chang

**Name of Activity:** Physical Oceanography. Addendum, Environmental Impact Study for Drilling Exploratory and Advanced; Development and Production; Industrialization and Transportation of Natural Gas in Block 3, Gulf of Guayaquil. Analysis alternative route (Machala) subsea pipeline and land

**Description:** statistical and oceanographic analysis of all historical and registered data during the project

**Funding Recipient:** Efficácitas in partnership with KOMEX International Ltd., for EDC Ecuador Ltd.

**Address:** EDIFICO NOBIS, MEZANINE, Guayaquil-Ecuador

**Execution Time:** From / 12/1998 / Up / 4/1999

**Name of Supervisor or Manager:** Juan Carlos Blum

**Name of Activity:** Physical Oceanography. Environmental Impact Study for Drilling Exploratory and Advanced; Development and Production; Industrialization and Transportation of Natural Gas in Block 3, Gulf of Guayaquil

**Description:** statistical and oceanographic analysis of all historical and registered data during the project

**Funding Recipient:** Efficácitas in partnership with KOMEX International Ltd., for EDC Ecuador Ltd.

**Address:** EDIFICO NOBIS, MEZANINE, Guayaquil-Ecuador

**Execution Time:** From / 3/1998 / Up / 8/1998

**Name of Supervisor or Manager:** Juan Carlos Blum

**Name of Activity:** Director of Wave Measurement Section during ESPOL- Japan International Cooperation Agency (JICA) project,

**Description:** responsible for calibration, programming and placement of wave gauge, analysis of historical information and wave gauge one.

**Funding Recipient:** ESPOL

**Address:** VIA KM 30.5 PERIMETRAL, Guayaquil-Ecuador

**Execution Time:** From / 12/1990 / Up / 1/1991

**Name of Supervisor or Manager:** Eduardo Cervantes

**Name of Activity:** Director of Wave Measurement Section during ESPOL- Manta Port Authority project (July-November 1989).

**Description:** responsible for calibration, programming and placement of wave gauge, analysis of historical information and wave gauge one.

**Funding Recipient:** ESPOL

**Address:** VIA KM 30.5 PERIMETRAL, Guayaquil-Ecuador

**Execution Time:** From / 7/1989 / To / 11/1989

**Name of Supervisor or Manager:** Eduardo Cervantes

**Countries visited on Business travels (32)**

Argentina	Dominican Republic	Jamaica	South Africa
Belgium	England-UK	Japan	Spain
Brazil	France	Mexico	Switzerland
Chile	Germany	Panama	Tanzania
China	Guatemala	Paraguay	The Netherlands
Colombia	Haiti	Peru	United States of America
Costa Rica	Hungary	Russia	Uruguay
Cuba	Italy	Scotland-UK	Venezuela

### **Participation in major international intergovernmental events and conferences**

- International Human Dimension Program Workshop for developing countries, Bonn, Germany 1998
- Co-President of the Mixed Commission IOC/UNESCO-WMO-Permanent Commission of the South Pacific (CPPS: COLOMBIA, ECUADOR, PERU and Chile), 1999
- Socioeconomic Impacts of ENSO in Colombia, Ecuador, Peru and Chile. International Space University, Design Project II, Summer Session Program, Valparaiso Chile 2000
- Participant in the annual meetings of the ERFEN (El Niño Regional Studies) of the Permanente Commission of the South Pacific (CPPS: COLOMBIA, ECUADOR, PERU and Chile), 1988- 2002
- CLIVAR, and VAMOS Panel meetings (panels of the World Climate Research Program), 2001-2003
- World Climate Research Program, Annual Joint Steering Committee (2001-2008)
- International Hydrology Program Organizational Workshops, worldwide (2002- 2009)
- Member of Ecocostas Foundation for Integrated Marine Management Programs.
- Participation in Several Water Colloquium and Water Dialogue organizing committees in the Americas (1999-2004) and World Water Forum (2006)
- Participation on Integrated Assessment of Water Resources and Global Change: A North-South Analysis. 2005
- World Ministerial Conference on Disaster Reduction in Tohoku- Japan, 2011
- Participation on several Regional and Global Platform for Disaster Risk Reduction, International Mechanism for Humanitarian Aid, High Level conference of National Authorities related to Risk Management in UNASUR, Andean Community and Organization of American States (2009-2015).
- Organization of the IV Regional Platform for Disaster Risk Reduction in Ecuador, 2014 (800 participants)
- Over 6 meetings of the Bureau of the Preparatory Committee for the Third World Conference on Disaster Risk Reduction, leader of more than 10 workshops, ministerial conferences, Dialogues related to the conference.
- Participation in over 10 bilateral presidential cabinets between Ecuador and Colombia, Ecuador and Peru, Ecuador and Chile,
- Coordination of Ecuadorian Humanitarian Team, with international programs such as UNDP, International Plan, UNICEF, OCHA, USAID-OFDA and others
- Coordination with UNDP for developing Disaster Risk Reduction tools and projects for local governments.
- Negotiations with Japan for supporting local governments in prevention for tsunami events as well as with the Ecuadorian Oceanographic, Geophysical and Meteorological Institutes.

### **Publications**

- 2023 International Science Council. 2023. Report for the Mid-Term Review of the Sendai Framework for Disaster Risk Reduction. Paris, France. International Science Council. DOI: 10.24948/2023.01.  
<https://council.science/publications/mtr-sendai-framework-disaster-risk-reduction/>. CO-AUTHORS: Roger Pulwarty (Co-chair), Rathana Peou Norbert-Munns (Cochair), Kristiann Allen, Angela Bednarek, Charlotte Benson, Alonso Brenes, Maria del Pilar Cornejo-Rodriguez, Oliver Costello, Susan Cutter, Bapon Fakhruddin, Victor Galaz, Franziska Gaupp, Satoru Nishikawa, Aromar Revi, Albert Salamanca, Pauline Scheelbeek, Renato Solidum
- 2022 Rincon, G., Morantes, G., Roa-López, H., **Cornejo-Rodriguez, M. P.**, Jones, B., & Cremades, L. V. (2022). Spatio-temporal statistical analysis of PM1 and PM2.5 concentrations and their key influencing factors at guayaquil city, ecuador. Stochastic Environmental Research and Risk Assessment, doi:10.1007/s00477-022-02310-2
- 2022 **Cornejo-Rodriguez, M.d.P.** Ecuador and the 2015–16 El Niño. In: Glantz, M.H. (eds) El Niño Ready Nations and Disaster Risk Reduction. Disaster Studies and Management. Springer, Cham.  
[https://doi.org/10.1007/978-3-030-86503-0\\_18](https://doi.org/10.1007/978-3-030-86503-0_18)
- 2021 Litardo, J., Palme, M., Borbor-Cordova, M., Caiza, R., Hidalgo-Leon, R., **del Pilar Cornejo-Rodriguez, M.**, & Soriano, G. (2021). Urban heat island simulation and monitoring in the hot and humid climate cities of Guayaquil and Durán, Ecuador doi:10.1007/978-981-33-4050-3\_7

- 2021 Borbor-Cordova M, M.P. Cornejo-Rodriguez, G. Andrade, E. Ochoa. Gobiernos autónomos descentralizados y la academia: buenas prácticas de colaboración para la resiliencia climática y la COVID-19. Capitulo en Cambio climático, desarrollo territorial y gobiernos locales: lecciones de la crisis sanitaria / editado por Andrea Carrión. Quito: CONGOPE: Ediciones Abya Yala: Incidencia Pública Ecuador. 2021. ISBN: 9789942097514.
- 2021 Cornejo-Rodriguez M. et al. Enhancing Self-determined/Socio-Ecological Resilience to Flooding in marginalised communities of Ecuador and Peru. In: Leal Filho W., Luetz J., Ayal D. (eds) Handbook of Climate Change Management. Springer, Cham. [https://doi.org/10.1007/978-3-030-22759-3\\_249-1](https://doi.org/10.1007/978-3-030-22759-3_249-1)
- 2021 Borbor-Cordova M. & María del Pilar Cornejo-Rodriguez, Colaboración de academia con un gobierno local: Construyendo ciudades climáticamente resilientes. Lecciones del caso de Durán, en Ciudades y territorios sostenibles. Aportes desde la academia. FLACSO Ecuador, Departamento de Asuntos Públicos Alianza para el Desarrollo Urbano Sostenible (ADUS). ISBN: 978-9978-67-557-1
- 2020 Matamoros, D., Arias-Hidalgo, M., **del Pilar Cornejo-Rodriguez, M.**, & Borbor-Cordova, M. J. (2020). Hydrodynamic analysis of a stormwater system, under data scarcity, for decision-making process: The Duran case study (Ecuador). Sustainability (Switzerland), 12(24), 1-16. doi:10.3390/su122410541
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- 2000 Gestión Integrada de los Recursos Hídricos en las Américas. Enfoque Multidisciplinario y recomendaciones derivadas del tercer Diálogo Interamericano sobre Administración de Agua. Editado por M. Donosoy **M.P. Cornejo de Grunauer**. BID-CATHALAC.
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- 1998 Las dimensiones humanas del cambio climático: el complejo climático de convergencia tropical (C3T) *Propuestas*, N°2. ESPOL
- 1998 **Cornejo R. de Grunauer M.P.**, An Impact Assessment of the 1997-98 Enso Event on the Ecuadorian Economy, *Proceedings of the IAI Science Forum (NSF-IAI)*, Washington D.C.
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- 1990 **Cornejo-Rodríguez M.P.**, "Aspectos Oceanográficos y Meteorológicos del Fenómeno de El Niño 1986-1987", Acta Oceanográfica, INOCAR, Vol. 6 N 1, Guayaquil, Ecuador.
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- 1990 Cardin V. y **M.P. Cornejo-Rodríguez** , "Análisis Espectral de la Interacción Vientos-Ondas en la Provincia de Manabí", Acta Oceanográfica del Pacífico, INOCAR, Vol. 6 N 1
- 1990 **Cornejo M. Pilar** and Fernando Arcos. "Some physical and biological characteristics of water column at Chile Bay (Discovery Bay) – Greenwich Island". Acta Antártica Ecuatoriana, 2(1).
- 1988 **Cornejo-Rodríguez M.P.**, "Cálculo de los parámetros de las olas aplicando el análisis espectral de series de tiempo", Proceedings of the First National Symposium on Mathematics, ESPOL, Guayaquil, Ecuador, TECNOLOGICA, Vol. 8, No. 1
- 1987 Cornejo-Rodríguez M.P., "Ondas Ecuatoriales Atrapadas: Ondas Mezcladas de Rossby-Gravedad", Acta Oceanográfica, INOCAR, Vol.4 ,No. 1.
- 1987 Enfield D.B., **M.P. Cornejo-Rodríguez**, R.L. Smith and P.A. Newberger, "The equatorial source of propagating variability along the Peru Coast during the 1982-83 El Niño", J. Geophys. Res., Vol. 92, C13, 14334- 14346.
- 1987 **Cornejo-Rodríguez M.P.** y D.B. Enfield, "Propagation and Forcing of High Frequency Sea Level Variability along the West Coast of South America", J. Geophys. Res., Vol. 92, C13, 14323-14334.

#### **International Networks, Committees and Working Groups**

- 2001-2008 Member of Joint Scientific Committee del World Climate Research Program -World Meteorological Organization
- 2005 -2008 Member of the Executive Committee and Research Committee of the Global Environmental Change and Food Systems.
- 2002- 2009 Coordinator for Latin America and the Caribbean of the UNESCO-HELP Program: Hydrology for Environment Life and Policy.
- 2009-2013 Member of the executive committee of UNESCO, IHE- Delft.
- 2012-2013 Pro-tempore President of the Andean Community for Disaster Risk Reduction
- 2014-2015 Co-Vice-Chair of the ten-member Bureau of the Preparatory Committee for the Third UN World Conference on DRR, representing Latin America and the Caribbean (two vice-chairs per region; CELAC region).
- 2015 Co-Vice-Chair of the ten-member bureau of the Third UN World Conference on DRR, representing Latin America and the Caribbean (two vice-chairs per region; CELAC region), at SENDAI.
- 2016-present AmeriGEOSS Regional Coordination Working GROUP
- 2018 Member of REMCI Ecuadorian Network of Woman in Science
- 2018 -present Member of the Scientific committee of the Charles Darwin Foundation - Galapagos
- 2020- present GEO Capacity Building Working group.
- 2021 – 2022 Member of GEO Programme Board

#### **STAKE-HOLDER ENGAGEMENT**

- 1995-1998 Local communities in Panama, about climate variability impacts 2005-2006 Coastal local communities in Santa Elena-Ecuador about El Niño related impacts
- 1999-2009 Local farmers in the Guayas River basin about water management and environmental pressure
- 2008-2009 Local farmers in the Abras de Mantequilla, Ramsar wetland-Ecuador, about integrated water management and impacts
- 2009-2015 Municipal Authorities for development of subsidies for disaster risk reduction (DRR) programs.
- 2017-current Municipal authorities for implementing DRR policies.

## **AWARDS**

- 2007 Recipient of the 2007 Rachel Carson Award Lecture, by the American Geophysical Union.
- 2005 ESPOL 's Research Award
- 1998 Certificate and Medal as one of the best 10 graduates during ESPOL First forty years at the Faculty of Maritime Engineering and Marine Science
- 1993-97 NOAA/AOML/PHOD-CIMAS scholarship for Ph.D. studies
- 1990 Junior Chamber 10 Outstanding Young People, Environment Chapter
- 1989 AGU award to Latin American young geophysicist to visit USA and attend one of the AGU Meetings
- 1986 Rotary Club of Corvallis Journal Award Recipient
- 1984-85 OAS scholarship for pursuing Master of Science Program at Oregon State University-US
- 1984 OAS scholarship for the post-graduate course on Management and Planning of the Economic and Exclusive Coastal Zone
- 1983 Silver Medal and Honors as ESPOL best graduate at the Faculty of Marine Science and Marine Engineering
- 1983 Award of the Benemérita Sociedad Filantrópica del Guayas to the best student at any University Department/Faculty in Guayaquil (out of 4 Universities) during 1982-83.
- 1982 Award of the Benemérita Sociedad Filantrópica del Guayas to the best student at any University Department/Faculty in Guayaquil (out of 4 Universities) during 1981-82