

Federico Andrade-Rivas
Pronouns : He/Him/His
PhD Candidate – School of Population and Public Health
University of British Columbia, BC
Mobile phone (+1) 778 8981539
andrade@student.ubc.ca

CURRENT POSITIONS

School of Population and Public Health University of British Columbia PhD Candidate Advisor: Dr. Jerry Spiegel Commitee: Dr. Sarah Henderson, Dr. Lael Parrott, Dr. Matilda van den Bosch	2016 - Present
Universidad El Bosque Environmental Health Institute Assistant Professor	2021 – Present

EDUCATION

University of British Columbia Population and Public Health PhD Focus: Environmental Health and Global Health Vancouver, Canada	Expected 2023
University of Cape Town Master of Public Health Honours degree, dissertation with distinction Cape Town, South Africa	2011-2012
Universidad de los Andes BS in Environmental Engineer Bogotá, Colombia	2002-2009
Universidad de los Andes, BA in Anthropology Bogotá, Colombia	2002-2009

PROFESSIONAL AND ACADEMIC EXPERIENCE

Global Observatory of Polution and Health Schiller Institute for Integrated Science and Society Boston College Planetary Health Visiting Scholar	The Sept. 2021 – February 2022
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- Host Supervisor: Dr. Philip Landrigan

Global Health Research Program
University of British Columbia,
Vancouver, Canada
Research Assistant

October 2016 – March 2020

- RA of the Think, Eat, and Grow Green Globally (TEG3) project funded by the Canadian Institutes of Health Research (CIHR)

Research Vice-Rector
Universidad El Bosque,
Bogotá, Colombia
Researcher - Professor

August 2014 – August 2016

- Research advisor in Public Health and Environmental Engineering
- Researcher at the OSSA (Health, Environment and GIS group), Environment and Health research group, and Human, Work, and Health research group

Exploring the Healthy Cities concept as an strategy to promote health and prevent non-communicable diseases
University of Antioquia–Pan American Health Organization,
Medellín Colombia
Researcher

March 2014- July 2014

- Designing methodology
- Data collection
- Data analysis and report

Access to Health Care services in Medellín:
An assessment and monitoring proposal.
Universidad de Antioquia – City of Medellín,
Medellín, Colombia
Researcher

June 2013 – January 2014

- Designing methodology and research activities
- Qualitative data collection
- Data analysis and report

Herbicide exposure prevention study for Working for Water
Centre for Occupational and Environmental Health Research
School of Public Health and Family Medicine
University of Cape Town,
South Africa

September 2011- July 2013

- Conduct research to understand risk perceptions of herbicides use among Working for Waters workers in the Western Cape
- Conduct research to understand cultural and social factors that might influence workers health-related behaviors.
- Collaborate in the design of a culturally appropriate interventions to reduce workers exposure to herbicides.

Healthy lifestyle behaviors for the prevention of non-communicable diseases in the Global South

INER- ESSM (Research Unit for Exercise Science and Sports Medicine) – African Centre for Cities

January 2012 – June 2013

Universidad de Antioquia – University of Cape Town

Researcher

- Designing methodology and research activities
- Collaborating on writing reports and projects for founders and participating institutions

INAP

June 2010 - February 2011

National Project for Adaptation to Climate Change

Conservation International - National Health Institute

Research Design and Implementation

- Characterize the Malaria surveillance system in a Colombian indigenous community with high risk of contagion
- Developing and conducting participatory educational programs to strengthen the National Malaria surveillance System.

AWARDS, FELLOWSHIPS, AND GRANTS

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- 2022 Stanford University. Ethics, Society, and Technology Seed Hub (US\$10,000). “Biocultural values for sustainable tourism in Colombia: Engaging, Assessing, and Planning”. Stanford University 2022. Co-PIs: **Federico Andrade-Rivas**, Armando Davila Arenas, Katherine Hernandez, Gretchen C Daily, Lisa Mandle, Rodolfo Dirzo, Tad Fukami, Natalia Ocampo-Peñuela Alejandra Echeverri
 - 2022 UCLA- Pritzker fellowship (US\$7,000). “No music without trees or birds: A spatial analysis of cultural reliance and relationships to endemic flora and fauna species in Colombia”. Co-PIs: **Federico Andrade-Rivas**, Armando Davila Arenas, Katherine Hernandez, Gretchen C Daily, Lisa Mandle, Rodolfo Dirzo, Tad Fukami, Natalia Ocampo-Peñuela Alejandra Echeverri
 - 2022-2024 Stanford University - London School of Hygiene and Tropical Medicine. Human and Planetary Health Postdoctoral Scholar, (USD \$160,000) (*Declined*)
 - 2021 -2022 University of British Columbia - Friedman Award for Scholar in Health (USD \$20,000)
 - 2021 University of British Columbia - President's Academic Excellence Initiative PhD Award (USD \$1,000)
 - 2019-2020 School of Population and Public Health, University of British Columbia. Professor Anne Crichton Prize (Best Thesis Proposal) (USD \$1,000)
 - 2018 – 2021 Canadian Institutes of Health Research- CIHR. Vanier Scholar (USD \$120,000)
 - 2017 The Lancet - The Rockefeller Foundation. Travel Grant Planetary Health Alliance
 - 2016 University of British Columbia - Graduate Global Leadership Fellowship (USD \$40,000)
 - 2016 Green College's R. Howard Webster Foundation Fellowship (USD \$2,000)
 - 2016 Colciencias, International PhD Scholarship (USD \$100,000)
 - 2015 and 2016 Universidad El Bosque - Excellence Publication Award (USD \$1,000)
 - 2015 Universidad El Bosque - Convocatoria Interna, Research Grant (USD \$10,000)

- 2013 University of Cape Town. Degree Dissertation with distinction, Master in Public Health
- 2012 University of Cape Town - JW Jagger Centenary Gift Scholarship
- 2011 Colfuturo Colombia Scholarship Master Degree (USD \$35,000)
- 2010 Colombian delegate for the NMC Italy (Young International Meeting of social entrepreneurs)
- 2008 Eighth place nationally in the Environmental Engineer ECAES (National State Exam of Higher Education Quality)
- 2007 Ashoka - Inter-American Development Bank - MTV Television. Changemaker
- 2006 Procter & Gamble. Prestige Scholarship - Puerta a la Excelencia (USD \$3,000)

PUBLICATIONS

*Peer-reviewed journals (in English and Spanish**)*

- Feged-Rivadeneira A , **Andrade-Rivas F**, González-Casabianca F, Escobedo F. Scaling patterns of human diseases and population size in Colombia, Glob Environ Chang. 2022 Jul; 75:102546
- **Cabezas, L, Sanabria-Marin R, **Andrade-Rivas, F**, Darghan A, Olano VA. Relationship between environmental variables and the spatial distribution of the Aedes aegypti mosquito in rural Colombia, Rev. Salud Bosque. 2022 May;12(1):1-18
- **Andrade-Rivas F**, Afshari R, Yassi A, Mardani A, Taft S, Guttmann M, Rao AS, Thomas S, Takaro T, Spiegel JM. Industrialization and Food safety for the Tsleil-Waututh Nation: An Analysis of Chemical Levels in Shellfish in Burrard Inlet, Environ Res. 2022 Apr; 206: 112575
- **Andrade-Rivas F**, Afshari R, Yassi A (In press), Toxic Exposures among Indigenous peoples in Canada: Challenges and a needed Approach, Asia Pac. J. Med. Toxicol. 2022
- ****Andrade-Rivas F**, Giraldo C, Yepes A, Estrategia de Entornos de Trabajo Saludables en el Sector Informal: perspectiva de los actores, Rev Col Enf, 2021; 20(1):e028
- Rossa-Roccor V, Acheson ES, **Andrade-Rivas F**, Coombe M, Ogura S, Super L, et al. Scoping Review and Bibliometric Analysis of the Term “Planetary Health” in the Peer-Reviewed Literature. Front Public Health. 2020;8.
- Thurston AM, **Andrade-Rivas F**, Spiegel JM. Results Communication in Breast Milk Biomonitoring Studies. Health Hum Rights. 2019 Jun;21(1):63–79.
- **Vásquez-González JC, **Andrade-Rivas F**. Construcción experta del espacio vivido en Medellín. Caso Parques del Río. Bitácora Urbano Territ. 2019 Dec;29(3):109–16.
- **Andrade-Rivas F**, Romero M. Misinformation About HIV and Negative Attitudes Toward Homosexuality and Same-Sex Couples’ Rights: The Case of Colombia. Int J Public Opin Res. 2016 May 4;edw011.
- **Andrade-Rivas F**, Rother H-A. Chemical exposure reduction: Factors impacting on South African herbicide sprayers’ personal protective equipment compliance and high risk work practices. Environ Res. 2015 Oct;142:34–45.
- **Restrepo-Zea JH, Silva-Maya C, **Andrade-Rivas F**, VH-Dover R. Acceso a servicios de salud: análisis de barreras y estrategias en el caso de Medellín, Colombia. Gerenc Políticas Salud. 2014 Dec 19;13(27):242–65.

Manuscripts in Progress (available upon request)

- **Andrade-Rivas F**, Paul N, Spiegel J, Henderson S, Parrott L, Delgado-Ron A, Echeverri A, van den Bosch M. (In revision in *GeoHealth*) Mapping potential population-level pesticide exposures in Ecuador using a modular and scalable geospatial strategy
- Feged-Rivadeneira A, González-Casabianca F, Parra-Salazar A, Salcedo-Ortiz J, **Andrade-Rivas F**, Cárdenas P, Morales A, Damelines-Pareja J, Rios-Oliveros D, Salazar C, Usma S, Muñoz M, Patiño L, Ballesteros N, Ramírez J, Ángel A, Rodríguez T, Cascante Vega J, Galindo-Silva H, Majerowicz S, Corredor V. (In revision in *Nature Communications*). Using Big Data and Network Theory to Inform Decision-making on COVID-19 in Bogotá
- Delgado-Ron A, **Andrade-Rivas F**. (In revision in *Maternal and Child Health Journal*). Unwanted or mistimed pregnancy and developmental issues in Ecuadorian children aged 3 to 5: a doubly robust estimate using data from the National Health and Nutrition Survey 2018
- **Andrade-Rivas F**, Delgado-Ron A, Spiegel, J, Henderson, S. (In prep) Spatial distribution of perinatal outcomes in Ecuador and their association with pesticide application rates: A mixed approach combining Bayesian modeling and data-driven cluster detection
- **Andrade-Rivas F**. Karim, Ehsan. (In prep) Household air pollution from cooking fuel and neonatal death: a multi-year cross sectional study in Colombia, 2005-2015
- **Andrade Rivas F**, Kassem, H, Cassidy-Matthews, C, Parrott L, Spiegel J. (In Prep). Globalizing planetary health approaches: insights from local contamination studies in collaboration with traditional and Indigenous Populations

*Conference papers and posters (in English and Spanish**)*

- **Andrade-Rivas F**, Afshari R, Yassi A, Mardani A, Taft S, Guttmann M, Rao AS, Thomas S, Takaro T, Spiegel JM. “Approaches to advancing healthy and sustainable food systems: Lessons from the Tsleil-Waututh Nation’s struggle to establish sovereign management of resources”. 8th Biennial EcoHealth Conference, University of Kwazulu-Natal, Durban (South Africa), 2022
- **Andrade-Rivas F**, Paul N, Spiegel J, Henderson S, Parrott L, Delgado-Ron A, Echeverri A, van den Bosch M. “Mapping potential population-level pesticide exposures using a modular and scalable geospatial strategy”. Planetary Health Alliance Meeting, Harvard University, Boston (USA), 2022
- **Andrade-Rivas F. (Guest speaker - Panelist)** “Hacia una mirada “glocal” de la salud planetaria y la contaminación de los sistemas alimentarios” Simposio Salud Ambiental - XII Congreso Nacional de Toxicología, Universidad de Guanajuato, Guanajuato (Mexico), 2022
- **Andrade-Rivas F. (Guest speaker)** “Apropiación social de la investigación científica y artística: Hacia la transformación de las condiciones de vida y la construcción colectiva del conocimiento”. XXVII Congreso Institucional de Investigaciones Universidad El Bosque, Bogota (Colombia), 2021
- Delgado-Ron A, **Andrade-Rivas F**. “The effect of unintended pregnancies on the early child development of Ecuadorian children”. Tri-Cluster Research Day: The Future of Health, University of British Columbia, Vancouver (Canada), 2021
- ****Andrade-Rivas F. (Guest speaker – Panelist)** “Equidad y justicia social: la imperativa moral de la salud planetaria”, Primer Congreso Latinoamericano de Salud Planetaria, Universidad de Costa Rica – Planetary Health Alliance – Lancet Countdown, San Jose (Costa Rica), 2021
- Rossa-Roccor V, Acheson E, **Andrade-Rivas F**, Coombe M, Ogura S, Super L, et al. “Mission accomplished? A scoping review and bibliometric analysis of the term “planetary health” in the peer-reviewed literature”. Planetary Health Alliance Meeting, Stanford, Stanford (USA), 2019. Selected for proceedings publication: Lancet Planet Health. 2019 Sep 1;3:S17.

- **Andrade-Rivas, F.** “Bananas, roses, shellfish, and crabs: chemical pollution and planetary health in traditional and indigenous communities across the globe”. Cascadia Annual Symposium on Environmental, Occupational, and Public Health, Blaine, Washington (USA), 2019
- **Andrade-Rivas, F.** “Communicating results in environmental contamination studies: Considering challenges and approaches for ethical global health research.”, 7th Biennial EcoHealth Conference, Cali (Colombia), 2018
- Thurston, A, **Andrade-Rivas, F**, Spiegel, J. “A scoping review of community engagement in environmental contamination studies: Considering challenges and approaches for ethical global health research” Ethical Challenges and Issues in Global Health Research, Montreal (Canada), 2016
- Rother, HA **Andrade-Rivas, F**, and DeSouza, M. “When Standard Occupational Exposure Assessments Are Unsuitable – Exposure Observations with South African Herbicide Sprayers”. Occupational and Environmental Medicine 71, no. Suppl 1 (June 1, 2014): A116–A116. doi:10.1136/oemed-2014-102362.366.
- ****Restrepo-Zea JH, Silva-Maya C, Andrade-Rivas F, VH-Dover R.** Acceso a los servicios de salud en la ciudad de Medellín: Caracterización y propuesta para el monitoreo y la vigilancia” (Access to Health care: assessment and monitoring proposal), Conference, VI Congreso Iberoamericano de Investigación Cualitativa en Salud, Medellín, 2014
- ****Silva-Maya C, Andrade-Rivas F, Restrepo-Zea JH, VH-Dover R** “La cartografía social en la caracterización del acceso a los servicios de salud en la ciudad de Medellín” (Social cartography applied to Health care Access issues in Medellín, Colombia), Conference, VI Congreso Iberoamericano de Investigación Cualitativa en Salud, Medellín, 2014
- ****Andrade-Rivas, F** “Influencia de la percepción del riesgo y el contexto social en el uso de Equipo de Protección: El caso de aplicadores de herbicidas en Sudáfrica”, Conference, VI Congreso Iberoamericano de Investigación Cualitativa en Salud, Medellín, 2014
- ****Andrade-Rivas, F** “El acceso a los servicios de salud en Medellín ¿es posible un goce efectivo y ejercicio ciudadano del derecho a la salud?”, Seminario Configuraciones Ciudadanas en contextos de transición y globalización, Universidad de Antioquia, Medellín, 2014

Other publications

- ****“Acceso a los servicios de salud en la ciudad de Medellín: caracterización y propuesta para el monitoreo y la vigilancia”** GES (Grupo Economía de la Salud) e INER (Instituto de Estudios regionales) de la Universidad de Antioquia. Publicación de la Secretaría de Salud de Medellín y en proceso de publicación en revista indexada (2014)
- ****“Respuesta al incremento de la exposición de vectores de enfermedades tropicales (malaria y dengue) inducidos por el cambio climático. Componente Social”** Instituto Nacional de Salud – Conservación Internacional, 2010
- Master of Public Health dissertation: “Influence of risk perceptions and social context on Working for Water herbicide sprayers Personal Protective Equipment (PPE) compliance in the Western Cape of South Africa”, University of Cape Town, 2013
- ****Environmental Engineering dissertation.** “Degradación de la cuenca del río Magdalena: una mirada desde algunos indicadores sociales y los servicios ambientales asociados al agua”, Universidad de los Andes, 2008

AD-HOC REVIEWS FOR JOURNALS AND CONFERENCES

Environmental Research (n=1), Global Health Promotion (n=1), Renewal Agriculture and Food Systems (n=1), International Journal of Health Policy and Management (n=1), Revista Gerencia y Políticas de Salud (n=1), Revista Hacia la Promoción de la Salud (n=1), Revista Ingenieria UniValle (n=1), Revista Nacional de Enfermeria (n=1), UBC and BC Children's Hospital Global Health Conference 2021, Congreso Universidad El Bosque 2021, Universidad El Bosque Master defence external examiner (n =2), UBC Graduate Student Symposium 2017

SOCIETY AND COLLECTIVES MEMBERSHIPS

Planetary Health Alliance Emergent Scholar, UBC Planetary Health Club (co-founder), Planetary Health Alliance Regional Hubs - Latin America, Mesa Técnica Ciudadana y Académica por la Calidad del Aire, Canadian Coalition for Global Health Research, British Columbia Coalition Institute

TEACHNG, ACADEMIC SEMINARS, AND GUEST LECTURER

Faculty of Nursing

Universidad El Bosque,
Bogotá, Colombia
Lecturer

August 2015 – present

- Mixed Methods in Public Health Research, Graduate Online Course, Master of Community Mental Health and Master of Reproductive and Sexual Health

School of Population and Public Health

University of British Columbia,
Vancouver, Canada
Guest Lecturer

2018 – present

- Overview of Global Health (Graduate)
Course Professor: Gina Ogilvie
- Social Determinants of Health (Graduate)
Course Professor: Anne Gadermann
- Topics in Environmental Health (Undergraduate)
Course Professor: Kate Weinberger
- Topics in Environmental Health (Graduate)
Course Professor: Anders Erickson

Biology Department

Boston College,
Chesnut Hill, Massachusetts
Seminar Series

November 2021

- Talk: “Planetary Health Across Scales: From local collaborations to global pollution issues”

Natural Capital Project

September 2021

Woods Institute for the Environment and Department of Biology
Stanford University,
Stanford, California
Natural Capital Webinar Series

- Talk: “Planetary Health Across Scales: From local collaborations to global pollution issues”

Global Observatory of Pollution and Health

February 2021

Boston College,
Boston, Massachusetts
Guest Lecturer

- Children’s Health and the Environment
Course Professors: Phillip Landrigan and Britt Pados

Department of Indigenous Studies

October 2020

University of Winnipeg,
Winnipeg, Canada
Guest Lecturer

- Course: Ethnoecology Research

School of Population and Public HealthSeptember 2018 –
December 2019

University of British Columbia
Vancouver, Canada
Teaching Assistant

- Topics in Environmental Health (Undergraduate)
Course Professor: Matilda van den Bosch
Role: designing and facilitating weekly workshops
- Topics in Environmental Health (Graduate)
Course Professor: Anders Erickson
- Global Health and Human Security
Course Professor: Jerry Spiegel

Faculty of Engineering

October 2014

Universidad de los Andes
Bogotá, Colombia
Guest Lecturer

- Introduction to Environmental Engineering

Faculty of Social Sciences

2005 – 2008

Universidad de los Andes
Bogotá, Colombia
Teaching Assistant

- Introduction to Anthropology
- History, Technology and Society

STUDENT MENTORING

*Master thesis advisor (in English and Spanish**)*

- **Jenny Melisa Amaya Silva, Lilibeth Suarez, Master of Community Mental Health
Thesis: Trayectorias de vida asociadas al consumo de sustancias psicoactivas en jóvenes con historia de habitabilidad de calle egresados de procesos de formación en instituciones distritales en Bogotá
- **Julio Eduardo Mazorco Salas, Master of Community Mental Health
Thesis: Representaciones sociales de salud mental en los miembros de una universidad
- **Juan Camilo Vásquez, Master of Sociospatial Studies at Universidad de Antioquia, Colombia
Thesis: Diseño del Espacio y el Espacio de Representación: Concepción Experta en el proyecto Parques del Río Medellín

Master thesis examiner

- **Fiorella Robayo Ospina, Master of Community Mental Health
Thesis: Transformaciones de las identidades masculinas en hombres diagnosticados con lesión medular traumática vinculados al conflicto armado de Colombia: una exploración a través de sus historias de vida

Graduate Diploma advisor

- **María Mónica Molano, Graduate Degree in Occupational Health
Research Project: Percepción Acerca de la Seguridad y Salud en el Contexto del Trabajo Informal en un Grupo de Mujeres Trabajadores de la Localidad de Tunjuelito
- **Diana Velásquez, Graduate Degree in Occupational Health
Research Project: Situación actual de la Salud Ocupacional en Colombia: Una mirada histórica

Graduate Mentorship Program, School of Population and Public Health

- Nasim Niknejad, PhD student

Undergraduate students- supervised a directed readings course or their undergraduate projects:

- David Choung (Boston College Biology, 2021)
- Alyssa Thurston (UBC Biology 2019)

LEADERSHIP AND SERVICES

Mesa Técnica Ciudadana y Académica por la calidad del Aire (MeCAB)

Bogotá, Colombia

Researcher -Volunteer

2019 - present

- Participatory space where we work together with activists, community members, policy makers and scholars to improve Bogotá's air quality

La Comarca, Civil Society Natural Reserve
Choachí, Colombia
Co-director

2016 - present

- Mission: Restore local ecosystems, particularly two river sources
- Collaborated to develop a network of private natural reserves
- Sharing knowledge with rural communities to improve human well being and the quality of the local ecosystems

Graduate Student Ambassador
University of British Columbia
Volunteer

2019

- Guided prospective and newly admitted graduate students and advised them in their selection and transition to graduate school

La Ciudad Verde (The Green City)
Bogotá, Colombia
Researcher -Volunteer

April 2013 - 2019

- Working together with activists, community members and academics to design interventions to improve the sustainability and health of our cities

Tierra Nativa and Guarino
Asociación Santa Cruz
Project Director
Volunteer

2002 - 2010

- Director of “Guarino”, an outdoor educational project for low-income youths of Bogotá.
- Co-director of “Tierra Nativa”, an expedition program which aims to reach the most remote populations with aid, educational workshops, and social work
- Consolidated Guarino Project in the international sphere, through distinctions such as “Change Maker” (Ashoka, IDB youth) and NMC (World Youth Meeting)
- Participated in 12 summer camps for low-income youths (Directed 6)

ADDITIONAL INFORMATION

- Computing Skills: R, QGIS, Google Earth Engine, SAS, Nvivo, ArcGIS, ENVI