

Linda Valeri
Date of Preparation: April 12, 2023
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Place of Birth: Treviglio (BG), Italy

Citizenship: American, Italian

Academic Appointments / Work Experience

08/2018-Present	Assistant Professor of Biostatistics Department of Biostatistics, Mailman School of Public Health (MSPH), Columbia University, New York, NY
08/2018-Present	Adjunct Assistant Professor of Epidemiology Department of Epidemiology, Harvard T. H. Chan School of Public Health, Boston, MA
02/22	Visiting Assistant Professor Dipartimento di Scienze Cliniche e Comunita', University of Milan, Milan, Italy
07/19 - 20 - 21 - 22	Visiting Assistant Professor Department of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, MI
03/2018-07/2018	Assistant Professor in Psychiatry (Biostatistics) Harvard Medical School, Boston, MA
07/2015-03/2018	Instructor in Psychiatry (Biostatistics) Harvard Medical School, Boston, MA
07/2009-12/2012	Research Assistant Harvard T.H. Chan School of Public Health, Boston, MA

Hospital Appointments

04/2018-07/2018	Associate Biostatistician Laboratory for Psychiatric Biostatistics McLean Hospital, Belmont, MA
07/2015-04/2018	Assistant Biostatistician Laboratory for Psychiatric Biostatistics McLean Hospital, Belmont, MA

Education

08/2008-03/2013	Harvard University, Graduate School of Arts and Sciences, Cambridge, MA Ph.D in Biostatistics , May 2013 Thesis: Statistical Methods for Causal Mediation
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Analysis Dissertation Defended: December 10, 2012
Advisor: Professor Tyler J. VanderWeele
Committee: Professor Xihong Lin, Professor Judith Lok
08/2008-09/2010 **Harvard University, Graduate School of Arts and Sciences, Cambridge, MA**
M.A. in Biostatistics
09/2006-07/2008 **Bocconi University, Milan, Italy**
M.Sc. (cum laude) in Economics and Social Sciences
09/2003-08/2006 **Bocconi University, Milan, Italy**
B.A. (cum laude) in Economics and Social Sciences

Training

02/2013-06/2015 **Postdoctoral Research Fellow**
Department of Biostatistics
(Mentors: Brent Coull and Xihong Lin)
Harvard T.H. Chan School of Public Health, Boston, MA

Honors & Awards

07/2022 Sanford Bolton Award, MSPH
01/2020 Columbia Innovation Award, MSPH (2 awards, one as sole PI and the other as co-PI)
01/2019 Calderone Young Investigator Award, MSPH
02/2018 Rappaport Investigator Award, McLean Hospital (Declined to move to Columbia University)
12/2016 Sarles Young Investigator Award, McLean Hospital
12/2015 Corneel Young Investigator Award, McLean Hospital
02/2013 Travel Award Women in Statistics
10/2013 Italian Scientists and Scholar North America Foundation Award (selected among the top Italian scientists below the age of 40 in North America and invited to present at the Italian Embassy in Washington D.C.)
URL: <https://www.issnaf.org/celebrate>

Academic Service

Columbia University MSPH

01/2023- Member, Doctoral Dissertation Committee
(Irene Morata, Department of Environmental Health Sciences Columbia University MSPH)
09/2022- Member, Doctoral Dissertation Committee
(Soohyun Kim, Department of Biostatistics Columbia University MSPH)
09/2022- Member, Doctoral Dissertation Committee
(Sumera Aziz, Department of Sociomedical Sciences Columbia University MSPH)

05/2021-05/2022	Organizer of Biostatistics weekly colloquium seminar of the Biostatistics Department.
09/2020-	Chair (co-Chair since 2022) of Communication Committee– Duties include planning and executing the transition to a digital Department newsletter.
09/2019-	Member, Department of Biostatistics Qualifying Examination Committee – Duties include preparing and grading the qualifying exam.
09/2019-	Member, Master Students Admission Committee
09/2019-	Member, Research Advisory Committee
09/2018-09/2020	Vice-Chair Communication Committee
09/2018-09/2019	Member, Awards Committee
09/2018-09/2019	Member, Recruitment Committee
09/2018-09/2019	Member, Doctoral Students Admission Committee
09/2019-10/2020	Member, Doctoral Dissertation Committee (Ayana Sanders, Department of Sociomedical Sciences Columbia University MSPH)
09/2019-08/2021	Member, Doctoral Dissertation Committee (Jiaqing Zhang, Department of Human Development, Columbia Teachers' College)
09/2018-05/2021	Member, Doctoral Dissertation Committee (Nicole Comfort Department of Environmental Health Sciences Columbia University MSPH)
09/2018-05/2019	Member, Doctoral Dissertation Committee (Eleanor Hayes-Larson Department of Epidemiology Columbia University MSPH)
09/2018-	Co-founder and co-organizer of Causal Inference Learning Group

Harvard University T.H. Chan School of Public Health

09/2017-09/2018	Chair of the Harvard Award for Psychiatric Epidemiology and Biostatistics Committee – The Committee selects each year an outstanding biostatistician or epidemiologist who made significant contributions in the field of Psychiatry
09/2017-09/2018	Member, Department of Biostatistics Qualifying Examination Committee – Duties include preparing and grading the qualifying exam
07/2015-07/2018	Member, Department of Biostatistics Doctoral Dissertation Committee (Students: Leah Comment)
07/2015-07/2018	Member, Department of Environmental Health Doctoral Dissertation Committee (Students: Kelsey Gleason, Vy Nguyen)
07/2015-07/2018	Member, Department of Epidemiology Doctoral Dissertation Committee (Students: Hari Iyer)

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- 07/2015-07/2018 Co-Chair, Department of Biostatistics Doctoral Dissertation Committee (Students: Katrina Devick)
07/2015-05/2017 Chair, Department of Biostatistics Master of Science Dissertation Committee (Students: Yiwen Zhu)
07/2015-05/2017 Member, Department of Biostatistics Master of Science Dissertation Committee (Students: Isabelle Mieling)

Professional Organizations and Societies

Society Membership

- 2021- Society for Causal Inference, Member
2020- Society of Biological Psychiatry, Member
2017- Eastern North American Region of the Biometric Society (ENAR), Member
2017- International Biometric Society (IBS), Member
2016- International Society of Environmental Epidemiology (ISEE), Member
2010- American Statistical Association (ASA), Member

Member of Conference Organizing Committee

- 2022 - ENAR Regional Advisory Board (RAB)
2020 - 2021 Scientific Committee - International Society of Clinical Biostatistics (ISCB).

International Grant Review Activities:

- 2019 Health Sciences section
Medical Research Council UK
2016-2019 Statistics section
Cancer Research UK
2014 Health Sciences section
Research Foundation – Flanders (FWO)
2014 Methodology, Measurement, and Statistics section
National Science Foundation

Data Safety and Monitoring Board Activities:

- 2021 - Parenting Skills Training in Affect and Interpersonal Regulation (P-STAIR), to reduce child maltreatment recidivism
PI: Michael Lindsey
2020 - Mechanisms and Predictors of Change in App-Based Mindfulness Training for Adolescents
PI: Christian Webb
2018 - Effect of Mindfulness on Opioid Use and Anxiety During Primary Care Buprenorphine Treatment.
PI: Zev Schuman-Olivier

Participation on National research institutes, NIH and NSF Advisory Panels

2023	Standing Member of the NIH (Analytics and Statistics for Population Research Panel A), Center for Scientific Review
2021	Health Effects Institute ad hoc reviewer
2021	NSF Statistics Panel C P211248 reviewer
2021	Early Career Reviewer – NIMH FOA for the term 2021 1) RFA MH20-226 - Enhancing Suicide Prevention in Emergency Care via Telehealth (R01 Clinical Trial Optional) 2) RFA MH20-510 - Laboratories to Optimize Digital Health (R01 Clinical Trial Required)
2020	Early Career Reviewer - Member of the NIH Biostatistical Methods and Research Design Study Section (BMRD), Center for Scientific Review for the term 2020-2021

Editorial Board:

Associate Editor

International Journal of Biostatistics

Guest Associate Editor

Biometrical Journal (2021-2022)

Statistical Editor

JAMA Psychiatry

JAMA Network Open

Journal Reviewer:

Statistics Journals

Annals of Applied Statistics, Biometrical Journal, Biometrics, Biometrika, Biostatistics, BMC Medical Research Methodology, BMC Research Notes, Computational Statistics & Data Analysis, International Journal of Biostatistics, Journal of Causal Inference, Multivariate Behavioral Research, Royal Statistical Society Series C (Applied statistics), Royal Statistical Society Series B (Theory and Methods), Statistics and Probability Letters, Statistics in Medicine, Statistical Methods and Applications, Statistical Methods in Medical Research, Statistica Sinica, Statistical Science, Psychological Methods, Psychometrika.

Environmental Health Sciences Journals

Environmental Health, Environmental Health Perspectives, Environment International, Environmental Research, International Journal of Environmental Research and Public Health, Journal of Occupational Medicine.

Epidemiology Journals

American Journal of Epidemiology, Epidemiologic Methods, Epigenomics, European Journal of Epidemiology, Genetic Epidemiology, Global Epidemiology, International Journal of Epidemiology, Observational Studies.

Psychiatry Journals

Addictive Behaviors, BJPsych, Journal of Clinical Psychiatry, Psychiatric Services, Schizophrenia Bulletin, Social Psychiatry and Psychiatric Epidemiology.

Health Disparities Journals

Journal of Health Disparities Research and Practice.

Medical Journals

Cancer, Circulation, Journal of Clinical Oncology, Plos One, Scientific Reports, Social Science and Medicine, SSM Population Health, Sleep medicine.

Fellowship and Grant Support

Grants under review

2023-2025	Resubmission <i>Machine Learning remedies for unmeasured confounding biases in environmental mixture studies</i> NIEHS R21 PI: Valeri
2023-2028	New submission <i>The role of microbiome in explaining air pollution effects on child development in the Ghana Randomized Air Pollution and Health Study</i> NIEHS R01 PI: Alison Lee
2023-2028	New submission <i>Imaging and blood biomarkers as mediators of adverse pregnancy outcomes on cognitive decline in the nuMoM2b-HHS study</i> NIA R01 PI: Eliza Miller

Active Research Funding

2023-2028	<i>Bayesian Statistical Learning for Robust and Generalizable Causal Inferences in Alzheimer's Disease and Related Disorders Research</i> PI: Valeri, effort 35% years 1-5 Total Award Amount (including Indirect Costs): \$2,733,960
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NIH/ National Institute of Aging (NIA) 1 R01 AG077518-01A1
This project responds to the research need of more diverse cohorts, more participants, more variables, and more occasions of measurement to advance progress in the epidemiology of cognitive resilience and decline. We will develop advanced models for causal mediation analysis based on Bayesian machine learning approaches along with computationally efficient and user-friendly R packages to integrate rich longitudinal data on exposures and health markers and account for biases inherent in observational data from life-course studies. The proposed approaches will enable causal inference on joint exposure effects and time-to-event and longitudinal mediators to inform policy for environmental exposures and cardiovascular health in mid and late life to prevent Alzheimer's Disease and Related Disorders in diverse populations.

2022-2023 *Sanford Bolton Faculty Scholar Award*
PI: Valeri, effort 20%

2022-2027 *Columbia University Superfund Research Program (SRP)*
NIH/National Institute of environmental Health (NIEHS) P01
Co-I at 7.5% (PI: Ana Navas-Acien)
The mission of the Columbia University Superfund Research Program is to help reduce As exposure in the US and globally using interdisciplinary science and innovative forms of remediation. The societal relevance of the research questions, the engagement of study communities, the strong institutional support, and our team's demonstrated motivation to work together will contribute to the ongoing and future success of the Columbia SRP.

2022 - 2027 *The role of neighborhood greenspace in reducing hypertensive disorders of pregnancy, chronic hypertension, and racial disparities in maternal morbidity*
NHLBI R01
Co-I at 15% (PI: Heather Burris and Gina South)
The overall goal of this study is to determine the impact of greening interventions and green space on racial disparities in pregnancy outcomes.

2021 - 2026 *Vascular Contributions to Cognitive Impairment after Adverse Pregnancy Outcomes: the nuMoM2b-Heart Health Study*
R01
Co-I at 10% (PI: Eliza Miller)

The overall goal of this ancillary study is to determine the impact of Adverse pregnancy outcomes (APOs) on long term maternal vascular contributions to cognitive impairment and dementia (VCID), by performing neurocognitive assessments and brain imaging on a large, diverse, well-phenotyped prospective cohort of US women followed since early in their first pregnancies 10-15 years ago.

- 2021 - 2026 *Advancing Public Health Research in Eastern Africa through Data Science Training (APHREA-DST)*
Co-I at 5% (PI: Kiros Berhane)
NIH U2R: "Capacity Building in Public Health Data science across Eastern Africa"
Currently I am involved mentoring two APHREA scholars.
- 2020 - 2025 *Arsenic related changes in Epitranscriptomics and Type 2 Diabetes Mellitus*
NIEHS R01
Co-I at 5% (PI: Ana-Navas Acien)
The aim of the proposed research is to contribute to the understanding of the role of epitranscriptomics changes in explaining the effects of arsenic on Type 2 diabetes among the Native American population in the Strong Heart Study.
- 2020-2025 *Cardiovascular Health After Placental Abrupton (CHAP)*
NIH R01
Co-I at 15% (PI: Cande Ananth)
The aim of the proposed research is to examine the associations between placental abrupton and risks of cardiovascular and cerebrovascular mortality and morbidity later in life.
- 2020-2025 *Metal Exposure and Subclinical Lung Disease in Adult E-cigarette Users*
NIEHS R01
Co-I at 5% (PI: Elizabeth Olsen)
- 2018 – 2023 *Statistical Methods for the assessment of social engagement in psychosis using digital technologies*
NIH/National Institute of Mental Health (NIMH)
K01MH118477
PI - \$ 507,846
The aim of the proposed research is to provide an innovative framework to develop powerful and computationally efficient statistical methods to integrate active (e.g. survey) and passive

(e.g. GPS, text and call log) data streams from mobile sensors for the discovery of behavioral targets of chronic psychosis.

2018 – 2023

Prospective study of vitamin D and MS risk in African Americans
NIH/NIMH R01

Co-I (PI: Alberto Ascherio)

The aim of the proposed research is to investigate the effects of longitudinal exposure to vitamin D on Multiple Sclerosis risk among African Americans and to assess gene-environment interactions.

Past Support

2020-2022

The Role of Hypothalamic Pituitary- Adrenal Axis Dysregulation in Preterm Birth

NIH R21

Co-I at 10% (PI: Bizu Gelaye)

The aim of the proposed research is to contribute to the understanding of the mechanism by which chronic dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis affects the risk of preterm birth (PTB) among trauma-exposed pregnant women.

2019 – 2021

New York Causality Network, Mailman School of Public Health – Innovation Fund

Co-Principal Investigator: \$10,000

The aim of the proposed application is to promote via the organization of meetings and workshops a New York network of causality researchers with Columbia leadership.

2019 – 2021

Ethics and Feasibility of a Mobile Application for the Assessment of Social Functioning in Schizophrenia, Mailman School of Public Health – Innovation Fund

PI: \$10,000

The aim of the proposed application is to evaluate the feasibility of introducing mobile application to monitor social engagement in schizophrenia in a sample of low income and minority schizophrenia patients.

2019 – 2021

Intervening to Promote Healthy Weight from Gestation to Age 2, Particularly Among Disproportionately Burdened Populations
Robert Wood Johnson Foundation – Healthy Eating Research – Small Grants

Co-I (PI: Jennifer Woo-Baidal)

The aim of the proposed research is to examine the effect of a mobile technology-based intervention on beverage attitudes,

purchasing, and consumption among low-income Hispanic families.

- 2019 – 2021 *The Association Between Neurology Clinic Appointment Adherence and Health Care Utilization and Costs; The Potential of Telehealth*
New York Presbyterian - Small Grants
Co-I (PI: Sarah Tom)
The aim of the proposed research is to examine the role of integrating outpatient tele neurology visits within the Ambulatory Care Network (ACN) Neurology Clinic on access to care, healthcare utilization and costs, patient well-being and satisfaction and racial/ethnic disparities in these outcomes.
- 2018-2021 *Augmenting hospitalization for severe mental ill patients by targeting interpretation bias*
NIH/NIMH R34
Co-I (PI: Courtney Beard)
The proposed research will evaluate the feasibility and acceptability of augmenting cognitive-behavioral training-based partial hospital care and bridging the high risk period following discharge using a smart-phone delivered intervention targeting interpretation bias.
- 2018 – 2019 *Causal-BKMR a machine learning approach to inform policy on environmental mixtures*
Calderone Award (\$20,000)
The aim of the proposed research is to develop causal propensity score methods and causal mediation methods for multiple co-exposures to inform policy on environmental mixtures (i.e. set of multiple exposures to metals, pollutants, and social stressors) and to develop power calculation tools for the design of studies of environmental mixtures.
- 2017 – 2019 *Brain neurochemical profile during substance use*
NIH/NIMH R21
Co-I (PI Chun Zuo)
The aim of this project is to use FMRI techniques to evaluate brain neurochemical profiles during substance use to discover novel targets of treatment.
- 2017 – 2019 *Characterization of variability in motivation and reward in psychosis*
NIH/NIMH R21
Co-I (PI: Eve Lewandowski)
The aim of this project is to characterize the positive valence

system (PVS) in a sample of individuals affected by psychosis in order to determine whether there are separable components to the PVS in psychotic psychopathology.

2018 – 2019

A latent variable approach for causal mediation analysis to study treatment mechanism of action in psychiatry
Rappaport Mental Health Research Award (DECLINED)
PI (\$35,000)

The aim of this project is to develop and apply latent variable approaches for interaction and mediation analysis in the context of multiple and complex psychiatric primary and secondary outcomes.

2017 – 2018

Moderators of efficacy and mechanisms of action in psychosocial therapy for substance use disorders
Sarles Young Investigator Award
PI (\$25,000)

The aim of this project is to develop and apply interaction and mediation analysis approaches to group therapy data in order to investigate moderators of group therapy efficacy and mechanisms of action through affiliation.

2016 – 2017

Social dynamics of group therapy for substance use disorder
Adam Corneel Young Investigator Award
PI (\$20,000)

The goal of this project is to investigate the role of enhanced affiliation in explaining superiority of single gender therapy groups relative to mixed gender therapies.

2016 – 2018

Biostatistics consulting for Harvard Medical School affiliated researchers
Harvard PI (\$24,000) Catalyst

The aim of this project is to provide a consulting service on the design and statistical analysis of controlled and observational studies for Harvard Medical School affiliated researchers.

2016 – 2018

Cumulative effects of prenatal stress and chemical exposures on child development
NIH/National Institute of Environmental Health
Environmental Influences on Child Health Outcomes Pediatric Cohorts (UG3/UH3)
Co-I (PI: Susan Schantz)

The aim of this project is to investigate the effects of exposure to toxic environmental mixtures (i.e. combination of environmental toxicants) on child development.

- 2016 – 2017 *Diagnostics for informative censoring in efficacy and effectiveness trials of schizophrenia therapy*
Harvard Catalyst OPTICS Pilot Grant
Co-I (PI: Karenstan Koenen)
The aim of this project is to develop software tools to diagnose selection bias due to drop out and confounding in clinical trials for schizophrenia.
- 2016 – 2017 *Explaining comparative efficacy of antipsychotic medications for treatment of schizophrenia in short-term RCT and comparative effectiveness trials: A causal mediation approach*
Harvard Catalyst OPTICS Pilot Grant
PI (\$44,200)
The aim of this project is to develop and apply causal mediation analysis approaches to understand the interplay of symptoms and adverse events to improve treatment strategies in schizophrenia.
- 2014 *The joint effect of metal mixtures exposure on child neurodevelopment in rural Bangladesh*
Rose Traveling Fellowship for Chronic disease Epidemiology
PI (\$5,000)
The aim of this project is to conduct field research in Bangladesh to investigate the joint effect of arsenic, lead, and manganese (i.e. a metal mixture) on child neurodevelopment accounting for socio-economic and nutritional conditions.

Pending Funding

- 2023-2028 *Optimizing and Personalizing Interventions For Schizophrenia Across the Lifespan (OPAL) – Methods Core*
Co-I at 10% years 1-2 and 5% years 3-5 (PI: Stroup)
NIH/ National Institute of Mental Health (NIMH)
2P50MH115843-05A1
This study will increase our understanding of dementia in schizophrenia by addressing pressing questions regarding risk factors, especially modifiable risk factors, and providing an urgently needed evaluation of the effects of alternative antipsychotic medications on the course of patients with schizophrenia and dementia. The project will also yield a clinical toolkit to aid in the evaluation and management of cognition health in this vulnerable population. The Methods core is designed to support OPAL's research projects to optimize the effectiveness of treatments and services in real-

world clinical settings and examine implementation issues critical for enhancing readiness for broad deployment.

2024-2028 *Mobile Health-aided Measurement-based Care for Schizophrenia*
Co-I at 5% years 3-5 (PI: Stroup)
NIH/ National Institute of Mental Health (NIMH)
2P50MH115843-05A1
This project will use mHealth technology innovatively to deliver timely and accurate measurement-based care to prescribers, to promote collaborative decisions, and to improve clinical outcomes in FEP patients.

Not funded

2022-2024 New Submission, scored, preparing for resubmission March 2023
Machine Learning remedies for unmeasured confounding biases in environmental mixture studies
NIEHS R21
PI: Valeri

2022-2024 New Submission, not scored, preparing for new submission October 2023 as R34
Machine learning approaches for personalized causal inference and missing data in smartphone-based studies of mental illness
NIMH R21
PI: Valeri

2022-2023 New Submission
Machine learning approaches for personalized causal inference and missing data in smartphone-based studies of mental illness
DASHI program at Columbia Data Science
PI: Valeri

2022-2027 Resubmission
Exposure to Metal-Mixtures and Coronary Heart Disease across Diverse Populations
NIEHS R01
Co-I at 10% (PI: Yu Chen)

2021- 2026 Resubmission
Neurological Outcomes in Children After Placental Abruptio (NEOCAP)
NIH R01
Co-I at 15% (PI: Cande Ananth)

The aim of the proposed research is to investigate the risks and mechanisms explaining neurological complications in children, including CP, epilepsy, ID, ASD, ADHD, schizophrenia, and bipolar disorder in relation to placental abruption.

- 2021 - 2022 *Causal Inference and Fusion in the Health Sciences*
Columbia RISE program
PI (co-PI: Elias Bareinboim)
The proposal will fund a postdoctoral fellow in Data Science working jointly with Dr. Valeri and Dr. Bareinboim.
- 02/2020 *D-CHIRP: Center for Data Processing, Analysis, and Coordination of Research on Clinical High Risk for Psychosis*
Research Foundation for Mental Hygiene, Inc
Co-I at 5% (PI: Daniel Javitt)
- 2018 (Scored: 45) *Design and causal inference methods to inform policy on environmental mixtures*
NIH/National Institute of environmental Health (NIEHS) R01
PI – Direct cost requested - \$1,496,775
The aim of the proposed research is to develop causal propensity score methods and causal mediation methods for multiple co-exposures to inform policy on environmental mixtures (i.e. set of multiple exposures to metals, pollutants, and social stressors) and to develop power calculation tools for the design of studies of environmental mixtures

Educational Contributions

Teaching activities at Columbia University MSPH (Local)

- Summer 2021 Environmental Justice Boot camp
Guest Speaker and Lecturer
SHARP Workshop, Department of Environmental Health Sciences (2 days, 60 students approximately)
- Fall 2019 - Statistical Methods for Causal Inference (P8122)
Designer of the Course and Primary Instructor
PhD candidates and Master's students in Biostatistics and Epidemiology, Columbia University Mailman School of Public Health (68 hours in class teaching, 40-50 students)
- Summer 2019 - Introduction to Causal Mediation Analysis
Organizer and Co-Instructor
SHARP Workshop, Department of Environmental Health Sciences (2.5 days, 20-50 students)

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Spring 2019	Guest Lecture on Introduction to Causal Mediation Analysis Department of Environmental Health Sciences (2.5 hours, 20 students approximately)
Fall 2019	Introduction to Causal Inference Primary Instructor MPH and medical students, Columbia University Irving Institute for Clinical and Translational Research (CTSA) (2.5 hours, 20 students approximately)
Fall 2018	Introduction to Causal Mediation Analysis Primary Instructor MPH and medical students, Columbia University Irving Institute for Clinical and Translational Research (2.5 hours, 20 students approximately)

Teaching activities at Harvard University (Regional)

Winter 2019 -	Harvard Catalyst Winter Session course in Causal Mediation Analysis Harvard T.H. Chan School of Public Health, Department of Epidemiology (5 days, 3h lectures each day, 20 students) Received a teaching citation for outstanding evaluations.
Summer 2020	Summer Course in Causal Mediation Analysis (CANCELED DUE TO COVID-19) Harvard T.H. Chan School of Public Health, Department of Epidemiology (5 days, 3h lectures each day, TBS students)
Spring 2018	Guest Lecture on Challenges in the Application of Mediation Analyses in Perinatal Epidemiology Harvard T.H. Chan School of Public Health, Department of Epidemiology (2.5 hours, 20 students approximately)
Spring 2018	Harvard Catalyst Short course in Causal Mediation Analysis Harvard T.H. Chan School of Public Health, Department of Epidemiology (8 hours, 150 students approximately)
Fall 2017	Mediation Analysis – Theory and Methods for Causal Inference Department of Intensive Care, Beth Israel Deaconess, Harvard Medical School (2.5 hours in class teaching, 20 students approximately)
Fall 2017	Methods I PhD candidates and Master's students in Biostatistics Harvard T.H. Chan School of Public Health Instructor (68 hours in class teaching, 40 students approximately)
Spring 2016 - 2018	Methods for Mediation and Interaction PhD candidates and Master's students in Biostatistics and Epidemiology Harvard T.H. Chan School of Public Health Instructor (32 hours in class teaching, 40 students approximately)

Spring 2016 - 2018	Ethical Considerations in Design and Analysis Responsible Conduct of Research Series McLean Hospital, Harvard Medical School (2.5 hours in class teaching, 15 students approximately)
Spring 2016 - 2017	Guest Lecture on Challenges in the Application of Mediation Analyses in Perinatal Epidemiology Harvard T.H. Chan School of Public Health, Department of Epidemiology (2.5 hours, 20 students approximately)
Spring 2014	Guest Lecture on Introduction to Causal Mediation Analysis Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, (2.5 hours, 20 students approximately)
Fall 2012	Regression and Analysis of Variance in Experimental Research Master's students in Biostatistics, Epidemiology, Health Policy, Harvard T.H. Chan School of Public Health Teaching Assistant (32 hours, 50 students approximately)
Spring 2012	Methods for Mediation and Interaction PhD candidates and Master's students in Biostatistics and Epidemiology, Harvard T.H. Chan School of Public Health Teaching Assistant (Head TA; 16 hours, 30 students approximately)
Fall 2010 - 2011	Rates and Proportions Master's students in Biostatistics, Epidemiology, Health Policy Harvard T.H. Chan School of Public Health Teaching Assistant (Head TA; 32 hours, 50 students approximately)
Fall 2009	Advanced Epidemiological Methods PhD candidates and Master's students in Biostatistics and Epidemiology Harvard T.H. Chan School of Public Health Teaching Assistant (32 hours, 40 students approximately)

National Teaching Activities

Spring 2023	Causal Mediation Analysis in STATA (2h) Stata symposium
Spring 2023	Causal Mediation Analysis with failure time data sponsored by the Lifetime Data Science Section, American Statistical Association,
Summer 2019 -	Causal Mediation Analysis Summer Session in Epidemiology, University of Michigan, Ann Arbor (5 days, 30-50 students)
Spring 2020	Introduction to Causal Mediation Analysis Primary Instructor Duke University, Department of Biostatistics (2.5 hours, 20 students approximately)

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Spring 2020	Introduction to Causal Mediation Analysis Primary Instructor Yale VA Medical Center, Biostatistics Unit (5 hours, 20 students approximately)
Fall 2019	Introduction to Causal Mediation Analysis Primary Instructor New York University, Department of Biostatistics (2.5 hours, 20 students approximately)
Summer 2014	Mediation Analysis – Theory and Methods for Causal Inference American College of Rheumatology Annual Meeting, San Diego (CA) (2.5 hours, 50 students approximately)

International Teaching Activities

Winter 2024	Introduction to causal mediation analysis, University of Milan (4 days, students TBD)
Spring 2023	Spring School in Causality, Sorbonned University (3 days, 50 students)
Winter 2022	Introduction to causal inference, University of Milan (4 days, 20 students)
Summer 2016 -	Causal Mediation Analysis Erasmus Summer Program, Rotterdam, Netherlands (5 days, 30-50 students)
Summer 2021	Causal Mediation Analysis with the <i>CMAverse</i> R package. Invited short course, International Society of Clinical Biostatistics, Lyon, France (1 day, 30 students approximately)
Summer 2021	Causal Mediation Analysis Invited short course, University of Cape Coast, Ghana (1 day, 20 students approximately)
Fall 2021 -	Introduction to causal inference Invited short course, University of Bordeaux, France (1 day, 30 students approximately)
Fall 2019	Introduction to Causal Inference Bordeaux University Digital School of Public Health, Bordeaux, France (2.5 days, 30 students approximately)
Summer 2018	Introduction to Causal Mediation Analysis Summer School of Epidemiology and Biostatistics, Bordeaux University, France (2.5 days, 30 students approximately)
Summer 2017	Methods for causal mediation analysis (One week 4-hour sessions per day course for PhD, Master, and MPH students) BiostatEpi Summer Program, Treviso, Italy.
Spring 2016	Introduction to causal mediation analysis (One day course for PhD candidates and Master's students in Biostatistics and Epidemiology). Department of Epidemiology, Karolinska Institutet, Stockholm, Sweden.

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Fall 2016 An introduction to causal mediation analysis: Theory and methods
Department of Education, Pontificia Universidad Católica de Chile, Santiago, Chile. (2.5 hours, 20 students approximately)

Advising and Mentorship:

Activities at Columbia University: Master Students Advising

2023 – Ziqing Wang
Master Student, class of 2024.
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Project TBD

2022 – Zachary Katz
Master Student, class of 2023.
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Zak's project concerns the evaluation of Bayesian Kernel Machine regression in comparison to other popular machine learning approaches in the presence of complex confounding structure.

2021 – Junzhe Shao
Master Student, class of 2023.
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Junzhe is conducting two independent research projects. The first project concerns the development of an R package for multiple imputation for non-stationary multivariate time series (SSMimpute) of mHealth studies. The second project concerns the development of a generalized synthetic control method for time series analysis using state space models. Junzhe has presented the second project at the Princeton Synthetic Control Workshop, the American causal inference conference and the manuscript has been accepted at NeurIPS. He will join Berkely Biostat doctoral program.

2021 - 2022 Hanyu Lu
Master Student, class of 2022
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Hanyu's practicum concerns the application of approaches for multivariate longitudinal mediators and their application in a pragmatic trial for schizophrenia treatment.

2020 – 2021 Weijia Xiong
Master Student, class of 2021.
Mentor: Dr. Linda Valeri Columbia University Mailman School

	<p>of Public Health, Department of Biostatistics Weijia's independent research project concerns the conduct of simulation studies to evaluate the predictive performance of hidden Markov models in the presence of missing data. We co-author one manuscript in preparation. Weijia continues her graduate studies at Hong Kong University.</p>
2020 – 2021	<p>Mengyu Zhang Master Student, class of 2021. Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics Mengyu's practicum concerns the conceptualization of causal contrasts of interest in N-of-1 time series data. Mengyu continues her graduate studies at UThealth University.</p>
2020 – 2021	<p>Xinru Wang Master Student, class of 2021. Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics Xinru's independent research project concerns the conduct of simulation studies to compare the predictive ability of recurrent neural networks for online prediction in time series data in the presence of missing data. Xinru continues her graduate studies at Singapore University. We co-author one manuscript in preparation.</p>
2020 – 2021	<p>Jiafei Li Master Student, class of 2021. Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics Jiafei's practicum concerns the conduct of simulation studies to compare the predictive ability of recurrent neural networks for online prediction in time series data in the presence of missing data. Jiafei has accepted a position as data analyst in the Biostatistics Department.</p>
2020 – 2021	<p>Shen Shui Master Student, class of 2021. Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics Cathy Shen's practicum concerns the evaluation of matching approaches for estimating average period treatment effects in non-stationary time series.</p>
2020 – 2021	<p>Jingyu Fu Master Student, class of 2021. Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics Jingyu's project concerns the investigation of the causal effect of reopening of businesses on COVID-19 new cases and mortality.</p>

Linda Valeri

- 2019 - 2020 Xinyao Wu
Master Student, class of 2020
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Xinyao's practicum concerns the conduct of simulation studies to evaluate the performance of generalized propensity score approaches when the causal inference assumption of overlap is violated.
- 2019 - 2020 Baoyi Shi
Master Student, class of 2020
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Baoyi's independent research project concerns the development of the R package *CMAverse* that includes a suite of functions for reproducible conduct of mediation analyses. We co-author one article in *Epidemiology*. Baoyi continues her graduate studies at Columbia University. Baoyi has presented her work at ENAR 2021.
- 2019 - 2020 Zixu Wang
Master Student, class of 2020.
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Zixu's project concerns the development of visualization tools of mobile data streams for research and clinical use in psychiatry. Zixu has accepted a position as senior data analyst at Dana Farber Cancer Institute. Zixu has presented the work at the Society for Biological Psychiatry annual conference. We co-author one manuscript in preparation.
- 2018 - 2019 Siyuan Ding
Master Student, class of 2019
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Siyuan's practicum concerned the analysis of multivariate longitudinal latent variable data and its application in a pragmatic trial for schizophrenia treatment.
- 2018 - 2019 Chuhan Zhou
Master Student, class of 2019.
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Chuhan's practicum concerned mediation analysis with survival outcome and mediator with application in health disparities research.

Activities at Columbia University: Data Analyst Advising

- 2019 - 2021 Aijin Wang (50% support)
Aijin's is working on two projects. The first concerns the development of the R package *BKMR-cma* that includes a suite of functions for the conduct of mediation analyses with multiple exposures. The second project regards the analysis of mobile communication and investigating its role in predicting relapse in schizophrenia. Aijin has presented her work at the Society of Environmental Epidemiology Conference and at the Society of Biological Psychiatry Conference in 2020-2021. We co-author two manuscripts in preparation.
- 2019 - 2020 Weijia Fan (30% support)
Weijia's project concerns the development of simulation studies to compare statistical and causal inference approaches for mediation analysis in the presence of semi-competing risks. We co-author one manuscript under revision.

Activities at Columbia University: Doctoral Student Advising

- 2019 - 2020 Serena Zhan
Research Assistant
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Serena's project concerned the development of visualization tools to identify violations of the positivity assumptions for causal inference in environmental mixture studies. Serena accepted a position as Senior Data Analyst at a Biostatistics Unit at Mount Sinai Hospital.

Activities at Columbia University: Doctoral Candidate Advising

- 2020 - Charlotte Fowler
Doctoral Student, class of 2024.
Dissertation advisor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Charlotte's dissertation concerns the development of statistical methods for causal inference and missing data in digital Psychiatry. Charly presented her first dissertation paper at JSM 2022 and will present her work at ENAR 2023, and Atlantic causal inference conference 2023.
- 2019 - Zilan Chai
Doctoral Student, class of 2023.
Dissertation advisor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Zilan's dissertation concerns the development of machine

learning and causal inference approaches to investigate the health effects of environmental mixtures in a life course perspective. Zilan presented her first dissertation paper at JSM 2022.

2018 - Melanie Mayer
Doctoral Student, class of 2024.
Dissertation advisor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Melanie's dissertation concerns the evaluation of the external validity of epidemiological investigations on environmental mixtures and on the evaluation of current available machine learning approaches for the analysis of the effects of environmental mixtures on failure time outcomes. Melanie has presented this work at the 2021 International Society for Environmental Epidemiology Conference at JSM 2022. Melanie is the recipient of the TL1 doctoral fellowship that will support her dissertation work. We co-author one manuscript under revision.

Activities at Columbia University: Post-doctoral Candidate Advising

2023 - Arce Domingo-Relloso
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Co-Mentors: Kiros Berhane, Jeff Goldsmith, Ana Navas-Acien
Arce's research concerns the development of causal inference approaches for environmental mixtures with multivariate time-to-event mediators and outcomes in the presence of competing risks.

2020 - 2022 Xiaoxuan Cai
Mentor: Dr. Linda Valeri Columbia University Mailman School of Public Health, Department of Biostatistics
Xiaoxuan's research concerns the development of causal inference approaches for mHealth studies in psychiatry. We co-author three manuscripts in preparation. Xiaoxuan presented her work as invited speaker at the 2021 International Society of Clinical Biostatistics Conference and contributed presentations at the 2021 Joint Statistical Meeting, 2022 ENAR meeting and 2022 American Causal Inference Conference. She will present her second paper as invited speaker at JSM 2023. We co-author three manuscripts in preparation for submission. Xiaoxuan has accepted a tenure track position at the Department of Statistics of Ohio State University.

Activities at Columbia University: Committee Member

2023 - 2024	<p>Irene Morata Doctoral Student, class of 2023 Dissertation committee member (primary mentor: Dr. Ana Navas-Acien) Department of Environmental Health Sciences Columbia University MSPH Irene's dissertation investigates metal mixtures effects on cardiovascular time to event outcomes in the Strong Heart Study cohort.</p>
09/2022-	<p>Soohyun Kim Doctoral Student, class of 2023 Dissertation committee member (primary mentor: Dr. Yuanjia Wang) Department of Biostatistics Columbia University MSPH Soohyun's dissertation develops novel methods for Psychiatric biostatistics with a focus on detection of disease states and transportability of cognitive remediation clinical trial results.</p>
09/2022-	<p>Sumera Aziz Doctoral Student, class of 2023. Dissertation committee member (primary mentor: Dr. Louise Khun) Department of Sociomedical Sciences Columbia University MSPH Sumera dissertation investigated the role of iron deficiency as mediator of the effect of maternal malnutrition on fetal growth using mediation analysis.</p>
2019 - 2021	<p>Jianqing Zhang Doctoral Student, class of 2021. Dissertation committee member (primary mentor: Dr. Bryan Keller) Columbia University Teacher's College, Department of Human Development Jianqing's dissertation concerns the development of statistical approaches to explain treatment effect modification through mediating pathways. Jiaqing has accepted a Senior Analyst position at Johnson and Johnson. We co-author one manuscript in preparation for submission.</p>
2019 - 2020	<p>Ayana Sanders Doctoral Student, class of 2020. Dissertation committee member (primary mentor: Dr. Tehranifar Parisa) Columbia University Mailman School of Public Health, Department of Sociomedical Sciences Ayana's dissertation concerns the investigation of the mechanisms explaining the effect of social stressors on</p>

2018 - 2019	<p>metabolic syndrome through pubertal maturation timing in the Latinx population.</p> <p>Eleanor Hayes-Larson</p> <p>Doctoral Student, class of 2019.</p> <p>Dissertation committee member (primary mentor: Dr. Sharon Schwartz)</p> <p>Columbia University Mailman School of Public Health, Department of Epidemiology</p> <p>Eleanor's dissertation concerns the evaluation of critical assumptions upon which generalizability of epidemiological investigations rely upon.</p>
2018 - 2021	<p>Nicole Comfort</p> <p>Doctoral Student, class of 2022.</p> <p>Dissertation committee member (primary mentor: Dr. Andrea Baccarelli)</p> <p>Columbia University Mailman School of Public Health, Department of Environmental Health Sciences</p> <p>Nicole's dissertation concerns the investigation of biological mechanisms (e.g. extracellular vesicles) of chronic disease in children and adults. Nicole has accepted a post-doctoral position at the Department of Environmental Health Sciences of MSPH.</p>

Activities at Harvard University: Master Students Advising

2017 - 2018	<p>Yiwen Zhu</p> <p>Master's Student, class of 2018</p> <p>Mentor: Dr. Linda Valeri Harvard T.H. Chan School of Public Health, Department of Biostatistics</p> <p>Yiwen's dissertation concerns a meta-analysis of the role of cardiometabolic and neurological adverse events on the efficacy of antipsychotics in clinical trials involving schizophrenia patients</p> <p>Yiwen had accepted a position as Senior Data Analyst at the Psychiatric and Neurodevelopmental Genetics Unit of Massachusetts General Hospital and is now a doctoral student in Epidemiology at Harvard University. We co-author two published papers. Yiwen has worked as teaching fellow for my Winter session course at Harvard T.H. Chan School of Public Health for the past three years.</p>
2016 - 2017	<p>Erin Schnellinger</p> <p>Master Student, class of 2017. Harvard T.H. Chan School of Public Health, Department of Biostatistics.</p> <p>Primary mentor: Dr. John Jackson, Co-mentor: Dr. Linda Valeri</p> <p>Erin developed a SAS macro for diagnostics of selection bias due to study drop-out. Erin has accepted the offer to join a</p>

2016 - 2017 Ph.D. program in Epidemiology at University of Pennsylvania.
We co-author one published paper.
Xue Zou
Master's Student, class of 2017. Harvard T.H. Chan School of
Public Health, Department of Biostatistics
Mentor (funded by the OPTICS pilot grant): Dr. Linda Valeri
Xue analyzed data from clinical trials involving schizophrenia
patients to investigate the relation between neurological
adverse events and efficacy of antipsychotics. Xue has joined
the Ph.D. program in Bioinformatics at Duke University. We co-
author one published paper.

Activities at Harvard University: Doctoral Candidate Advising

2015 - 2018 Katrina Devick
Doctoral Candidate, class of 2018
Harvard T.H. Chan School of Public Health, Department of
Biostatistics
Dissertation mentor (mentors: Linda Valeri and Brent Coull)
PhD thesis on Bayesian statistical methods for causal inference.
The first paper, published in Biostatistics, proposes a Bayesian
density regression approach with applications in causal
mediation analysis and disparities research. The second paper
develops a Bayesian Kernel Machine Regression approach for
mediation analysis in the presence of multiple exposures. The
third paper develops a Bayesian Kernel Machine Regression
approach for mediation analysis in the presence of multiple
exposures, mediators and outcomes. We co-author two articles
published in Biostatistics and Statistics in Medicine. Katrina
has won the "JSM 2018 award of the Health Policy Statistics
section" and the "ENAR 2019 Student Paper Award" presenting
these two papers. Katrina accepted a position of Research
Assistant Professor at Mayo Clinic.

Activities at Harvard University: Post-doctoral Fellow Advising

2016 - 2017 Andrea Bellavia, Ph.D.
Post-doctoral fellow (funded by the OPTICS pilot grant,
mentor: Dr. Linda Valeri)
Harvard T.H. Chan School of Public Health, Department of
Environmental Health
We co-author seven published papers. Andrea has been
appointed Research Scientist at TIMI group of Brigham and
Women's Hospital and Adjunct Assistant Professor at the
Department of Environmental Health at Harvard T.H. Chan
School of Public Health.

Linda Valeri

- 2015 - 2016 Cathy Yuen Yi Lee, Ph.D.
Post-doctoral fellow (Primary mentor: Dr. Brent Coull, Co-mentor: Dr. Linda Valeri)
Harvard T.H. Chan School of Public Health, Department of Biostatistics
Cathy investigated via simulation the effects of model misspecification in the estimation of high dimensional exposure-response functions via propensity score adjustment and weighting. Cathy accepted an offer to join Google.
- 2015 - 2016 Jeremy Stewart, Ph.D.
Post-doctoral fellow (Primary Mentor: Dr. Randy Auerbach)
Harvard Medical School, Department of Psychiatry
We co-author one paper. Jeremy has been recently appointed Assistant Professor at the Toronto University.

Activities at Harvard University: Committee Member

- 2017 - 2019 Hari Iyer
Doctoral Candidate, class of 2021.
Harvard T.H. Chan School of Public Health, Department of Epidemiology
Dissertation committee member (primary mentor: Timothy Rebbeck)
Hari is investigating the role of greenness and physical activity in explaining racial and socio-economic disparities in prostate cancer. Hari has accepted a post-doctoral fellowship with Timothy Rebbeck and then an Assistant Professor position at Rutgers University. We co-author three published articles.
- 2016 - 2019 Vy Nguyen
Doctoral Candidate, class of 2019.
Harvard T.H. Chan School of Public Health, Department of Environmental Health
Dissertation committee member (primary mentor: Marc Weisskopf)
Vy has investigating mediating mechanisms that might explain the effect of pollution on cognitive decline. Vy has accepted a post-doctoral fellowship with Marc Weisskopf. We co-author one published article.
- 2015 - 2019 Leah Comment
Doctoral Candidate, class of 2019.
Harvard T.H. Chan School of Public Health, Department of Biostatistics
Dissertation committee member (primary mentor: Corwin Ziegler)
PhD thesis on Bayesian statistical methods for mediation analysis.

I am last author of her article published in Biometrics and of the R package *medBSA*.
Leah has accepted a position at Foundation Medicine.
2015 - 2017 Kelsey Gleason
Doctoral Candidate, class of 2017. Harvard T.H. Chan School of Public Health, Department of Environmental Health
Dissertation committee member (primary mentor: Maitreyi Mazumdar) We co-author two published articles. Kelsey has accepted an Assistant Professor position at Dartmouth University

ARTICLES UNDER REVIEW

* Indicates Linda Valeri as last author.

1. **Valeri L**, Rahimi H, Liebenthal E, Schutt R, Dixon L, Onnela JP, Baker J (2022). Mobility, Social Activity and Loneliness Monitored Using a Smartphone Application Before and During the Coronavirus Disease 2019 (COVID-19) Epidemic Among Bipolar and Schizophrenia Patients. *Minor revision submitted to Schizophrenia*.
2. *Fowler C, Baker JT, Onnela JP, **Valeri L** (2022). Testing unit root non-stationarity in the presence of missing data in univariate time series of mobile health studies. *Under review, JRSS-C*.
3. *Cai X, Wang X, Baker JT, Onnela JP, **Valeri L** (2021). State space model multiple imputation for missing data in non-stationary multivariate time series in mHealth. (*Manuscript accepted by NeurIPS 2021 Workshop on Causal Inference Challenges in Sequential Decision Making: Bridging Theory and Practice*), *under review, Statistics in Medicine*.
4. *Mayer MM, Domingo-Relloso A, Kioumourtzoglou MA, Coull BA, Navas-Acien A, **Valeri L** (2022). Machine Learning Approaches for Environmental Mixtures Studies with Time-to-Event Outcomes and their Application to the Strong Heart Study. *Under review, Statistics in Medicine*.
5. *Zhang J & **Valeri L** Causal mediation analysis for effect heterogeneity. *Under review, American Journal of Epidemiology*.
6. Xu M, Feng R, Liu Z, Zhou X, **Valeri L**,....., Lin X. Host Genetic Variants, Epstein-Barr Virus Subtypes and the Risk of Nasopharyngeal Carcinoma: An Assessment of Interaction and Mediation, *under review, JAMA network open*.
7. Schildroth S, **Valeri L**, Shi B, Friedman A, Horton M, Wright B, Smith D, Lucchini R, Placidi D, White R, Kordas K, Claus Henn B. An Industry-Relevant Metal Mixture, Neurodevelopment, and Mediation by Iron Status in Italian Adolescents from the Public Health Impact of Metals Exposure Study. *Under review, Environmental Health*.
8. Vieira J, Nuwagira E, Tayebwa M, Muyanja D, Huang C-Y, Kim M, Lam N, Wallach E, Wiens M, Tsai AC, **Valeri L**, Vallarino J, Allen JG, Lai PS. A solar

- lighting intervention changes the gut microbiome and improves respiratory symptoms of adult women in rural Uganda: a randomized controlled trial. *Under review, Environmental Health Perspectives.*
9. Hernandez D, Branas C, Navas-Acien A, Giovenco D, **Valeri L**, Albert D. A Randomized Control Trial to support smoke-free policy compliance in public housing. *Under review, Trials.*
 10. Miller E, **Valeri L**, Robinson W. Comparing decomposition approaches for investigating the explanatory role of premenopausal gynecological surgery and menopausal hormone use in racial differences in breast cancer incidence, *under revision, Medicine.*
 11. *Shao J, Yin M, Cai X, & **Valeri L**. Generalized Synthetic Control Method with State-Space Model. *Manuscript accepted by NeurIPS 2022 Workshop on Causality for Real-world Impact.*

MANUSCRIPTS IN PREPARATION

* Indicates Linda Valeri as last author.

12. *Shao J, Cai X, Onnela JP & **Valeri L**. smmimpute an R package for missing data imputation of non-stationary multivariate time series. (*Manuscript in preparation*).
13. **Valeri L**, Cai X, Rahimi H, Liebenthal E, Rauch S, Ongur D, Schutt R, Dixon L, Baker J, Onnela JP. Smartphone-Based Markers of Social Activity in Schizophrenia and Bipolar Disorder. (*Manuscript in preparation*).
14. *Chai Z, Navas-Acien A, Coull BA, **Valeri L**. Bayesian kernel machine regression for environmental mixtures in the presence of time-dependent confounding. (*Manuscript in preparation*).
15. *Chai Z, Devick K, Navas-Acien A, Coull BA, **Valeri L**. causalmixtures an R package for causal inference and mediation analysis for environmental mixtures in the presence of time-dependent confounding and missing data. (*Manuscript in preparation*).
16. *Cai X, Onnela JP, Baker JT, **Valeri L**. Causal identification for time-varying effects in non-stationary time series from N-of-1 observational mobile health data.
17. *Mayer MM, Coull BA, Navas-Acien A, **Valeri L**. Statistical Methods for Transporting an Environmental Mixture Effect. (*Manuscript in preparation*).
18. *Yin J, Proust-Lima C, Fan W, Chen JT, Jacqmin-Gadda H, **Valeri L**. (2022). A new R command within the CMAverse R package for stochastic interventions on a time-to-event mediator in the presence of semi-competing risks. (*Manuscript in preparation*)
19. Le Bourdonnec K, Samieri C, **Valeri L**, Proust-Lima C. Continuous time mediation analysis for repeated mediators and outcomes. (*Manuscript in preparation*)

ARTICLES PUBLISHED IN INTERNATIONAL PEER-REVIEWED JOURNALS

* Indicates Linda Valeri as last author.

2023

1. **Valeri L**, Proust-Lima C, Fan W, Chen JT, Jacqmin-Gadda H. (2023). A multistate approach for mediation analysis in the presence of semi-competing risks with application in cancer survival disparities. *Statistical Methods in Medical Research*, in press
2. **Valeri L**. (2023). Invited Perspective: A Multivariate Disease Process Perspective for Environmental Epidemiology. *Environmental Health Perspectives*, 131(1), 011302.
3. Amsalem D, Jankowski SE, Pagdon S, **Valeri L**, Yang LH, Markowitz JC, ... & Martin A. (2023). Selfie Videos to Reduce Stigma and Increase Treatment Seeking Among Youths: Two Noninferiority Randomized Controlled Trials. *Psychiatric Services*, 74(3), 229-236.
4. Krasnova A, Tom SE, **Valeri L**, Crane PK, & Bennett DA (2023). Direct Effect of Life Course Socioeconomic Status on Late Life Cognition and Cognitive Decline in the Rush Memory and Aging Project. *American Journal of Epidemiology*, kwad033.
5. Kelsall NC, Sanchez SE, Rondon MB, **Valeri L**, Juvinao-Quintero D, Kirschbaum C, ... & Gelaye B (2023). Association between trauma exposure and glucocorticosteroid concentration in hair during pregnancy. *Psychoneuroendocrinology*, 151, 106072.
6. Meneses A, Uccelli P, & **Valeri L**. (2023). Teacher Talk and Literacy Gains in Chilean Elementary Students: Teacher Participation, Lexical Diversity, and Instructional Non-present Talk. *Linguistics and Education*, 73, 101145.
7. Lucchini M, Rayport YK, **Valeri L**, Fifer WP, Jelic S, Alcántara C, & O'Brien LM. (2023). Racial/ethnic disparities in sleep disorder breathing during pregnancy. *American Journal of Obstetrics & Gynecology*, 226(1), S358-S359.

2022

8. *Devick KL, Bobb JF, Mazumdar M, Henn BC, Bellinger DC, Christiani DC, ... & **Valeri L**. (2022). Bayesian kernel machine regression-causal mediation analysis. *Statistics in Medicine*, <https://doi.org/10.1002/sim.9255>.
9. *Comment L, Coull BA, Zigler C, & **Valeri L**. (2022). Bayesian data fusion: Probabilistic sensitivity analysis for unmeasured confounding using informative priors based on secondary data. *Biometrics*, <https://doi.org/10.1111/biom.13436>.
10. Liu J Z, Lee J, Lin PID, **Valeri L**, Christiani DC, Bellinger DC, ... & Coull BA (2022). A Cross-validated Ensemble Approach to Robust Hypothesis Testing of Continuous Nonlinear Interactions: Application to Nutrition-Environment Studies. *Journal of the American Statistical Association*, (Preprint), 1-13.
11. Burris HH, **Valeri L**, James-Todd T. Statistical methods to examine contributors to racial disparities in perinatal outcomes. *Seminars in Perinatology* 2022 Aug 27 (p. 151663). WB Saunders.

12. Amsalem D, **Valeri L**, Jankowski SE, Yang LH, Bello I, Nossel I, Smith S, Ngo H, Lieff SA, Pagdon S, Lipp A, Markowitz JC, Neria Y, Dixon L.(2022). Reducing Public Stigma Towards Individuals with Psychosis Across Race and Gender: A Randomized Controlled Trial of Young Adults. *Schizophrenia Research*.
13. Amsalem D, Jankowski SE, Pagdon S, **Valeri L**, Smith S, Yang LH, ... & Dixon L. B. (2022). "It Is Hard to Be a Woman With Schizophrenia": Randomized Controlled Trial of a Brief Video Intervention to Reduce Public Stigma in Young Adults. *The Journal of Clinical Psychiatry*, 84(1), 44740.
14. Banzon, T. M., Kelly, M. S., Bartnikas, L. M., Sheehan, W. J., Cunningham, A., Harb, H., **Valeri, L.**, ... & Lai, P. S. (2022). Atopic dermatitis mediates the association between an IL4RA variant and food allergy in school-aged children. *The Journal of Allergy and Clinical Immunology: In Practice*.
15. Correia da Silva, A. T., Mascayano, F., **Valeri, L.**, de Medeiros Jr, M. E., Souza, M. P. E., Ballester, D., ... & Susser, E. (2022). COVID-19 Pandemic Factors and Depressive Symptoms Among Primary Care Workers in São Paulo, Brazil, October and November 2020. *American journal of public health*, 112(5), 786-794.
16. Mascayano F, ..., **Valeri L**, Alvarado R, Susser E. (2022). The impact of the COVID-19 pandemic on the mental health of health care workers: study protocol for the COVID-19 HEalth caRe wOrkErS (HEROES) study. *Social Psychiatry and Psychiatric Epidemiology*.
17. Zhao, D., Domingo-Relloso, A., Tellez-Plaza, M., Nigra, A. E., **Valeri, L.**, Moon, K. A., ... & Navas-Acien, A. (2022). High level of selenium exposure in the Strong Heart Study: a cause for incident cardiovascular disease?. *Antioxidants and Redox Signaling*, (ja).
18. Graf GH, Crowe CL, Kothari M, Kwon D, Manly JJ, Turney IC, **Valeri L**, Belsky D. (2022). Testing Black-White disparities in biological aging in older adults in the United States: analysis of DNA-methylation and blood-chemistry methods. *American Journal of Epidemiology*, kwab281, <https://doi.org/10.1093/aje/kwab281>.
19. Lam NL, Wallach ES, Nuwagira E, Muyanja D, **Valeri L**, Tsai AC, Vallarino J, Allen J, Lai PS. (2022). Effect of a solar lighting intervention on fuel-based lighting use and exposure to household air pollution in rural Uganda: A randomized controlled trial. *Indoor Air*.
20. Raggi M, Dugravot A, **Valeri L**, Machado-Fragua MD, Dumurgier J, Kivimaki M, Sabia S, Singh-Manoux A. Contribution of smoking towards the association between socioeconomic position and dementia: 32-year follow-up of the Whitehall II prospective cohort study. *The Lancet Regional Health-Europe*. 2022 Dec 1;23:100516.

2021

21. *Shi B, Choirat C, Coull, BA, VanderWeele, TJ, **Valeri L**. (2021). *CMAverse* an R package for reproducible causal mediation analysis. *Epidemiology*, 32(5), e20-e22.

22. **Valeri L**, Amsalem D, Jankowski SE, Dixon L (2021). Effectiveness of a video-based intervention on reducing perceptions of fear, loneliness, and public stigma related to COVID-19: a Randomized Controlled Trial. *International Journal of Public Health*, (Preprint), 66.
23. Woo Baidal JA, Nichols K, Charles N, Chernick L, Duong N, Finkel MA, Falbe J, **Valeri L**. (2021). Text Messages to Curb Sugar-Sweetened Beverage Consumption Among Pregnant Women and Mothers: A Mobile Health Randomized Controlled Trial. *Nutrients*, *accepted*.
24. Hughes KC, Gao X, Baker JM, Stephen CD, Kim I Y, **Valeri L**, ... & Ascherio, A. (2021). Non-Motor Features of Parkinson's Disease in Women. *Journal of Parkinson's Disease*, (Preprint), 1-10.
25. Nimgaonkar I, **Valeri L**, Susser E, Hussain S, Sunderram J, Aviv A. (2021) The Age Pattern of the Male- to- Female Ratio in Mortality from COVID-19 Mirrors that of Cardiovascular Disease but not Cancer in the General Population. *Impact Aging*, (Albany NY), 13(3), 3190.
26. Amsalem D, Markowitz JC, Jankowski SE, Yang LH, **Valeri L**, Lieff SA, Neria Y, Dixon L. Sustained Effect of a Brief Video in Reducing Public Stigma Towards Individuals with Psychosis: A Randomized Controlled Trial of Young Adults. (2021). *American Journal of Psychiatry*, appi. ajp. 2020.20091293.
27. Tse J, LaStella D, Chow E, Kingman E, Pearlman S, **Valeri L**, Wang H, Dixon L. Telehealth acceptability and feasibility among people served in a community behavioral health system during the COVID-19 pandemic. (2021). *Psychiatric Services*, appi. ps. 202000623.

2020

28. *Zhu Y, Jackson J, Centorrino F, Fitzmaurice GM, **Valeri L**. Meta-analysis of the total effect decomposition in the presence of multiple mediators: Integrating evidence across trials for schizophrenia treatment. (2020). *Epidemiology*, 32(1), 120-130.
29. Schnellinger E, **Valeri L**, Jackson J. (2020). Data Visualization Tools for Confounding and Selection-bias in Longitudinal Data: The %LENGTHEN, %BALANCE, and %MAKEPLOT (confoundr) Macros and R Package. *American Journal of Epidemiology*, 189(12), 1633-1636.
30. Gleason KM, **Valeri L**, Obrycki JF, Shankar AH, Ibne Hasan MOS, Mostofa G, Wright RO, Quamruzzaman Q, Christiani DC, Bellinger DC, Mazumdar M (2020). Stunting increases the adverse effect of low-level lead exposure on cognitive scores among 2-3 year old children in Bangladesh. *Journal of Developmental Disorders*, 12. 10.1186/s11689-020-09346-x.
31. Eick SM, Thepaksorn EKH, Izano MA, Cushing LJ, Wang Y, Smith SC, ..., **Valeri L**, Woodruff, TJ, Morello-Frosch, R. (2020). Associations between prenatal maternal exposure to per-and polyfluoroalkyl substances (PFAS) and polybrominated diphenyl ethers (PBDEs) and birth outcomes among pregnant women in San Francisco. *Environmental Health*, 19(1), 1-12.
32. Iyer HS, James P, **Valeri L**, Bajunirwe F, Nankya-Mutyoba J, Njelekela M, ... & Holmes M. (2020). Neighborhood Greenness and Burden of Non-

- communicable Diseases in Sub-Saharan Africa: A Multi-country Cross-sectional Study. *Environmental Research*, 110397.
33. Devick KL, **Valeri L**, Chen J, Jara A, Bind MA, & Coull BA. (2020). The Role of Body Mass Index at Diagnosis on Black-White Disparities in Colorectal Cancer Survival: A Density Regression Mediation Approach. *Biostatistics*, kxaa034, <https://doi.org/10.1093/biostatistics/kxaa034>.
 34. Iyer HS, James P, **Valeri L**, Hart JE, Pernar CH, Mucci LA, Holmes MD, Laden F, Rebbeck TR. (2020). The association between neighborhood greenness and incidence of lethal prostate cancer: A prospective cohort study. *Environmental Epidemiology*. 4(2):e091.
 35. Blum MGB, **Valeri L**, François O, Cadiou S, Siroux V, Lepeule J, Slama, R. (2020). Challenges raised by mediation analysis in a high dimension setting. *Environmental Health Perspectives*, 128(5), 055001.
 36. Iyer HS, **Valeri L**, James P, Chen JT, Hart JE, Laden F, Holmes MD, Rebbeck TR. (2020). The contribution of residential greenness to mortality among men with prostate cancer: a registry-based cohort study of Black and White men. *Environmental Epidemiology*; 4:e087.

2019

37. *Bellavia A, Centorrino F, Jackson JW, Fitzmaurice G, **Valeri L**. The role of weight gain in explaining the effects of antipsychotic drugs on positive and negative symptoms: An analysis of the CATIE schizophrenia trial. *Schizophr Res*. 2019 04; 206:96-102.
38. Nguyen V, Rotem R, Breteler M, **Valeri L**, Sparrow D, Hu H, Weisskopf M. (2019). Lead Exposures and Psychological Symptoms: Modification by Uric Acid. *Environmental Epidemiology*. Oct 1;3:287-8.
39. Hughes KC, Gao X, Molsberry S, **Valeri L**, Schwarzschild MA, Ascherio A. Physical activity and prodromal features of Parkinson disease. *Neurology*. 2019 Dec 03; 93(23): e2157-e2169.
40. Lim JT, Tan YQ, **Valeri L**, Lee J, Per PG, Chia SE, Ong CE, Seow WJ. Association between serum heavy metals and prostate cancer risk – A multiple metal analysis. *Environ Int*. 2019 11; 132:105109.
41. Andersen MP, **Valeri L**, Starkopf L, Mortensen RN, Sessa M, Kragholm KH, Vardinghus-Nielsen H, Bøggild H, Lange T, Torp-Pedersen C. The Mediating Effect of Pupils' Physical Fitness on the Relationship Between Family Socioeconomic Status and Academic Achievement in a Danish School Cohort. *Sports Med*. 2019 Aug; 49(8):1291-1301.
42. Driollet B, Bayer F, Chatelet V, Macher MA, Salomon R, Ranchin B, Roussey G, Lahoche A, Garaix F, Decramer S, Mérieau E, Fila M, Zaloszc A, Deschênes J, **Valeri L**, Launay L, Couchoud C, Leffondré K, Harambat J. Association between social deprivation and kidney transplantation outcome in children. *Kidney Int*. 2019 Sep; 96(3):769-776.
43. Chouinard VA, Henderson DC, Dalla Man C, **Valeri L**, Ryan KP, Gray BE, Cypess AM, Cobelli C, Cohen BM, Öngür DO. Visual hallucinations associated with multimodal hallucinations, suicide attempts and morbidity of illness in psychotic disorders. *Schizophr Res*. 2019 Jun; 208:196-201.

44. VanderWeele TJ, **Valeri L**, Ananth, CV. (2019). Mediation Formulas with Binary Mediators and Outcomes and the "Rare Outcome Assumption". *Am J Epidemiol*. 2019 Jul 01; 188(7):1204-1205.
45. Petimar J, Tabung FK, **Valeri L**, Rosner B, Chan AT, Smith-Warner SA, Giovannucci EL. Mediation of associations between adiposity and colorectal cancer risk by inflammatory and metabolic biomarkers. *Int J Cancer*. 2019 06 15; 144(12):2945-2953.
46. Fasanelli F, Giraudo MT, Ricceri F, **Valeri L**, Zugna D. Marginal Time-Dependent Causal Effects in Mediation Analysis With Survival Data. *Am J Epidemiol*. 2019 May 01; 188(5):967-974.
47. Chouinard VA, Henderson DC, Dalla Man C, **Valeri L**, Gray BE, Ryan KP, Cypess AM, Cobelli C, Cohen BM, Öngür D. Impaired insulin signaling in unaffected siblings and patients with first-episode psychosis. *Mol Psychiatry*. 2019 Oct; 24(10):1513-1522.
48. Votaw VR, Witkiewitz K, **Valeri L**, Bogunovic O, McHugh RK. Nonmedical prescription sedative/tranquilizer use in alcohol and opioid use disorders. *Addict Behav*. 2019 01; 88:48-55.

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49. *Discacciati A, Bellavia A, Lee JJ, Mazumdar M, **Valeri L**. Med4way: a Stata command to investigate mediating and interactive mechanisms using the four-way effect decomposition. *Int J Epidemiol*. 2018 Nov 16; 48(1):15-20.
50. Hughes KC, Gao X, Baker JM, Stephen C, Kim IY, **Valeri L**, Schwarzschild MA, Ascherio A. Non-motor features of Parkinson's disease in a nested case-control study of US men. *J Neurol Neurosurg Psychiatry*. 2018; 12; 89(12):1288-1295.
51. **Valeri L**, Sugarman DE, Reilly ME, McHugh RK, Fitzmaurice GM, Greenfield SF. Group therapy for women with substance use disorders: In-session affiliation predicts women's substance use treatment outcomes. *J Subst Abuse Treat*. 2018; 11; 94:60-68.
52. Bobb JF, Claus Henn B, **Valeri L**, Coull BA. Statistical software for analyzing the health effects of multiple concurrent exposures via Bayesian kernel machine regression. *Environ Health*. 2018 08 20; 17(1):67.
53. Rahman ML, Liang L, **Valeri L**, Su L, Zhu Z, Gao S, Mostofa G, Qamruzzaman Q, Hauser R, Baccarelli A, Christiani DC. Regulation of birthweight by placenta-derived miRNAs: evidence from an arsenic-exposed birth cohort in Bangladesh. *Epigenetics*. 2018; 13(6):573-590.
54. Wilcox MA, Savitz AJ, Addington AM, Gray GS, Guinan EC, Jackson JW, Lehner T, Normand SL, Ranu H, Senthil G, Spertus J, **Valeri L**, Ross JS. The Open Translational Science in Schizophrenia (OPTICS) project: an open-science project bringing together Janssen clinical trial and NIMH data. *NPJ Schizophr*. 2018 Jun 27; 4(1):14.
55. Bellavia A, Zota AR, **Valeri L**, James-Todd T. Multiple mediators approach to study environmental chemicals as determinants of health disparities. *Environ Epidemiol*. 2018 Jun; 2(2).

56. Lee JJ, **Valeri L**, Kapur K, Ibne Hasan MOS, Quamruzzaman Q, Wright RO, Bellinger DC, Christiani DC, Mazumdar M. Growth parameters at birth mediate the relationship between prenatal manganese exposure and cognitive test scores among a cohort of 2- to 3-year-old Bangladeshi children. *Int J Epidemiol*. 2018 08 01; 47(4):1169-1179.
57. Chiu YH, Bellavia A, James-Todd T, Correia KF, **Valeri L**, Messerlian C, Ford JB, Mínguez-Alarcón L, Calafat AM, Hauser R, Williams PL. Evaluating effects of prenatal exposure to phthalate mixtures on birth weight: A comparison of three statistical approaches. *Environ Int*. 2018 04; 113:231-239.
58. *Zou X, Zhu Y, Jackson JW, A, Fitzmaurice GM, Centorrino F, **Valeri L**. The role of PANSS symptoms and adverse events in explaining the effects of paliperidone on social functioning: a causal mediation analysis approach. *NPJ Schizophr*. 2018 Jun 27; 4(1):13.
59. Rahman ML, Kile ML, Rodrigues EG, **Valeri L**, Raj A, Mazumdar M, Mostofa G, Quamruzzaman Q, Rahman M, Hauser R, Baccarelli A, Liang L, Christiani DC. Prenatal arsenic exposure, child marriage, and pregnancy weight gain: Associations with preterm birth in Bangladesh. *Environ Int*. 2018 03; 112:23-32.
60. Blakely T, Disney G, **Valeri L**, Atkinson J, Teng A, Wilson N, Gurrin L. Socioeconomic and Tobacco Mediation of Ethnic Inequalities in Mortality over Time: Repeated Census-mortality Cohort Studies, 1981 to 2011. *Epidemiology*. 2018 07; 29(4):506-516.
61. *Bellavia A, **Valeri L**. Decomposition of the Total Effect in the Presence of Multiple Mediators and Interactions. *Am J Epidemiol*. 2018 06 01; 187(6):1311-1318.
62. Luque-Fernandez MA, Belot A, **Valeri L**, Cerulli G, Maringe C, Rachet B. Data-Adaptive Estimation for Double-Robust Methods in Population-Based Cancer Epidemiology: Risk Differences for Lung Cancer Mortality by Emergency Presentation. *Am J Epidemiol*. 2018 04 01; 187(4):871-878.
63. Stewart JG, **Valeri L**, Esposito EC, Auerbach RP. Peer victimization and suicidal thoughts and behaviors in depressed adolescents. *Journal of abnormal child psychology*. 2018 04; 46(3):581-596.

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64. Lai PS, Bebell LM, Meney C, **Valeri L**, White MC. Epidemiology of antibiotic-resistant wound infections from six countries in Africa. *BMJ Glob Health*. 2017; 2(Suppl 4):e000475.
65. Rahman ML, **Valeri L**, Kile ML, Mazumdar M, Mostofa G, Qamruzzaman Q, Rahman M, Baccarelli A, Liang L, Hauser R, Christiani DC. Investigating causal relation between prenatal arsenic exposure and birthweight: Are smaller infants more susceptible? *Environ Int*. 2017 11; 108:32-40.
66. Admon R, Treadway MT, **Valeri L**, Mehta M, Douglas S, Pizzagalli DA. Distinct Trajectories of Cortisol Response to Prolonged Acute Stress Are Linked to Affective Responses and Hippocampal Gray Matter Volume in Healthy Females. *J Neurosci*. 2017 08 16; 37(33):7994-8002.

67. **Valeri L.** Causal mediation analysis in pregnancy studies: the case of environmental epigenetics. *Current Epidemiology Reports*. 2017; 4(2): 117-123.
68. Chouinard VA, Kim SY, **Valeri L**, Yuksel C, Ryan KP, Chouinard G, Cohen BM, Du F, Öngür D. Brain bioenergetics and redox state measured by 31P magnetic resonance spectroscopy in unaffected siblings of patients with psychotic disorders. *Schizophr Res*. 2017 09; 187:11-16.
69. North CM, **Valeri L**, Hunt PW, Mocello AR, Martin JN, Boum Y, ... & Siedner MJ. (2017). Cooking fuel and respiratory symptoms among people living with HIV in rural Uganda. *ERJ Open Research*, 3(2), 00094-2016.
70. Muyanja D, Allen JG, Vallarino J, **Valeri L**, Kakuhikire B, Bangsberg DR, Christiani DC, Tsai AC, Lai PS. Kerosene lighting contributes to household air pollution in rural Uganda. *Indoor air*. 2017 Sep;27(5):1022-9.
71. **Valeri L**, Mazumdar MM, Bobb JF, Claus Henn B, Rodrigues E, Sharif OIA, Kile ML, Quamruzzaman Q, Afroz S, Golam M, Amarasiriwardena C, Bellinger DC, Christiani DC, Coull BA, Wright RO. The Joint Effect of Prenatal Exposure to Metal Mixtures on Neurodevelopmental Outcomes at 20-40 Months of Age: Evidence from Rural Bangladesh. *Environ Health Perspect*. 2017 06 26; 125(6):067015.
72. **Valeri L**, Reese SL, Zhao S, Page CM, Nystad W, Coull BA, London SJ. Misclassified exposure in epigenetic mediation analyses. Does DNA methylation mediate effects of smoking on birthweight? *Epigenomics*. 2017 03; 9(3):253-265.

2016

73. Gleason KM, **Valeri L**, Shankar AH, Hasan MO, Quamruzzaman Q, Rodrigues EG, Christiani DC, Wright RO, Bellinger DC, Mazumdar M. Stunting is associated with blood lead concentration among Bangladeshi children aged 2-3 years. *Environ Health*. 2016 11 04; 15(1):103.
74. **Valeri L**, Patterson-Lomba O, Gurmu Y, Ablorh A, Bobb J, Townes FW, Harling G. Predicting Subnational Ebola Virus Disease Epidemic Dynamics from Sociodemographic Indicators. *PLoS One*. 2016; 11(10):e0163544.
75. **Valeri L**, Coull BA. Estimating causal contrasts involving intermediate variables in the presence of selection bias. *Stat Med*. 2016; 35(26):4779-4793.
76. Rodrigues EG, Bellinger DC, **Valeri L**, Hasan MO, Quamruzzaman Q, Golam M, Kile ML, Christiani DC, Wright R.O, Mazumdar M. Neurodevelopmental outcomes among 2- to 3-year-old children in Bangladesh with elevated blood lead and exposure to arsenic and manganese in drinking water. *Environ Health*. 2016; 15(1):44.
77. **Valeri L**, Chen JT, Garcia-Albeniz X, Krieger N, VanderWeele TJ, Coull BA. The role of stage at diagnosis in colorectal cancer Black-White survival disparities: A counterfactual causal inference approach. *Cancer Epidemiol Biomarkers Prev*. 2016; 25(1):83-89.

2015

78. Mazumdar M, **Valeri L**, Rodrigues EG, Ibne Hasan MO, Hamid R, Paul L, Selhub J, Silva F. Mostofa MG, Quamruzzaman Q, Rahman M, Christiani D.C. Polymorphisms in maternal folate pathway genes interact with arsenic in drinking water to influence risk of myelomeningocele. *Birth Defects Res A: Clin Mol Teratol*. 2015; 103(9):754-762.
79. Mazumdar M, Ibne Hasan MO, Hamid R, **Valeri L**, Paul L, Selhub J, Rodrigues EG, Silva F, Mia S, Mostofa MG, Quamruzzaman Q, Rahman M. Christiani DC. Arsenic is associated with reduced effect of folic acid in myelomeningocele prevention: A case control study in Bangladesh. *Environ Health*. 2015; 14(1):34.
80. Pieters N, Janssen BG, **Valeri L**, Cox B, Cuypers A, Dewitte H, Plusquin M, Smeets K. Nawrot TS. Molecular responses in the telomere-mitochondrial axis of aging in the elderly: A candidate gene approach. *Mech Ageing Dev*. 2015; 145:51-57.
81. Lai PS, Hang JQ, **Valeri L**, Zhang FY, Zheng BY, Mehta JA, Shi J, Su L, Brown D, Eisen EA. Christiani DC. Endotoxin and gender modify lung function recovery after occupational dust exposure: a 30-year study. *Occup Environ Med*. 2015; 72(8):546-552.
82. **Valeri L**, VanderWeele TJ. SAS macro for causal mediation analysis with survival data. *Epidemiology*. 2015; 26(2):e23-24.
83. Bobb JF, **Valeri L**, Claus Henn B, Christiani DC, Wright RO, Mazumdar M, Godleski JJ, Coull BA. Bayesian kernel machine regression for estimating the health effects of multi-pollutant mixtures. *Biostatistics*. 2015; 16(3):493-508.

2014

84. **Valeri L**, Lin X, VanderWeele TJ. Mediation analysis when a continuous mediator is measured with error and the outcome follows a generalized linear model. *Stat Med*. 2014; 33(28):4875-4890.
85. **Valeri L**, VanderWeele TJ. The estimation of direct and indirect causal effects in the presence of misclassified binary mediator. *Biostatistics*. 2014; 15(3):498-512.

2013

86. **Valeri L**, VanderWeele TJ. Mediation analysis allowing for exposure-mediator interaction and causal interpretation: Theoretical assumptions and implementation with SAS and SPSS macros. *Psychol Methods*. 2013; 18(2):137-150.
87. Bellavia A, Urrutia B, Speck M, Brook RD, Scott JA, Albetti B, Behbod B, North M, **Valeri L**, Bertazzi PA, Silverman F, Gold D, Baccarelli AA. DNA hypomethylation, ambient particulate matter and increased blood pressure: findings from controlled human exposure experiments. *J Am Heart Assoc*. 2013; 2(3): e000212.

2012

88. Garcia-Albeniz X, Nan H, **Valeri L**, Morikawa T, Kuchiba A, Phipps AI, Hutter CM, Peters U, Newcomb, PA, Fuchs CS, Giovannucci EL, Ogino S, Chan AT.

- (2012). Phenotypic and tumor molecular characterization of colorectal cancer in relation to a susceptibility SMAD7 variant associated with survival. *Carcinogenesis*. 34(2):292-298.
89. VanderWeele TJ, **Valeri L**, Ogburn EL. The role of measurement error and misclassification in mediation analysis: Mediation and measurement error. *Epidemiology*. 2012; 23(4):561-564.

Book Chapters

1. Valeri, L. (2021). Measurement Error in Causal Inference. In *Handbook of Measurement Error Models* (pp. 453-480). Chapman and Hall/CRC.

Invited and/or Peer Selected Presentation

Note: Linda Valeri is presenting author in all presentations listed below.

Local

Seminars

- | | |
|------|--|
| 2022 | Mediation analysis when outcome and mediator are semi-competing events.
Colloquium Seminar, Department of Statistics Columbia University, New York, NY. |
| 2020 | Formalizing and Estimating the Impact of Interventions in Continuous Time with Application in Health Disparities Research.
Causal Inference Learning Group, Department of Biostatistics, Columbia University Mailman School of Public Health, New York, NY. |

Regional

Seminars

- | | |
|------|---|
| 2022 | Causal inference and missing data imputation for non-stationary time series data in digital Psychiatry, Colloquium Seminar, Boston University, Boston, MA. |
| 2022 | Smartphone sensing of social behavior and its role in severe mental illness: challenges and opportunities for causal inference, Colloquium Seminar, PRIISM Center, New York University, New York, NY. |
| 2021 | Mediation analysis when outcome and mediator are semi-competing events, Colloquium Seminar, Center for Causal Inference, University of Pennsylvania, Philadelphia, PA. |
| 2020 | Mediation analysis when outcome and mediator are semi-competing events, Colloquium Seminar, Department of Biostatistics, Johns Hopkins University, Baltimore, MD. |

- 2020 Mediation analysis when outcome and mediator are semi-competing events, Colloquium Seminar, Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA.
- 2019 Causal Inference for Public Health
Data Science Institute, Columbia University, New York University, New York, NY.
- 2019 Integrating Information across efficacy trials to gain insights on antipsychotics mechanism of action
Tom Ten Have Symposium on Mental Health Statistics, Yale University, New Haven, CT.
- 2019 Sensitivity analyses for unmeasured confounding. Department of Epidemiology, Columbia University, New York, NY.
- 2018 Explaining efficacy of antipsychotic medications: A causal mediation approach
Opal Center Meeting, New York Psychiatric Institute, New York, NY.
- 2018 A synthetic instrumental variable approach for measurement error-robust mediation analysis in environmental epidemiology
Department of Environmental Health Sciences, Columbia University Mailman School of Public Health, New York, NY.
- 2018 Metal mixtures and child neurodevelopment in Bangladesh: investigating joint effects and windows of susceptibility using Bayesian Kernel Machine Regression
Department of Environmental Health Sciences, Columbia University Mailman School of Public Health, New York, NY.
- 2017 The impact of exposure measurement error in mediation analyses for environmental epigenetic studies
Department of Environmental Health, Columbia University, New York, NY.
- 2017 Explaining efficacy of antipsychotic medications: A causal mediation approach (Brain Health Seminar Series)
Harvard T.H. Chan School of Public Health, Boston, MA.
- 2017 Explaining efficacy of antipsychotic medications: A causal mediation approach (McLean Research Day)
McLean Hospital, Belmont, MA.
- 2016 The potential for inflated mediation effects in the presence of exposure measurement error in environmental epigenetic studies (Environmental Statistics Seminar Series)
Department of Biostatistics, Harvard T.H. Chan School of Public Health, Boston, MA.
- 2016 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Colloquium Seminar)

- Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA.
- 2016 Measurement error in mediation analysis (Harvard Catalyst Journal Club)
Department of Biostatistics, Harvard T.H. Chan School of Public Health, Boston, MA.
- 2015 Does smoking behavior mediate the effect of genetic variants on lung cancer? An assessment of mediation and gene-environment interaction in the presence of measurement error
McLean Brain Imaging Center, Belmont, MA.
- 2015 Does DNA methylation mediate the effect of maternal smoking on birth weight? An assessment of exposure misclassification in environmental epigenetic studies
Department of Biostatistics, Harvard T.H. Chan School of Public Health, Boston, MA.
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Colloquium Seminar)
Department of Biostatistics, Columbia University, New York, NY.
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Colloquium Seminar) Department of Statistics, University of Vermont, Burlington, VT.
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Colloquium Seminar) Department of Biostatistics, Yale University, New Haven, CT.
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Colloquium Seminar) Department of Biostatistics, Brown University, Providence, RI.
- 2014 Measurement error in mediation analysis: Bias and remedies
Harvard National Institute of Environmental Health Sciences (NIEHS) Center Annual Meeting, Boston, MA.
- 2012 Causal mediation analysis in the presence of exposure-mediator interaction
Boston University School of Medicine, Boston, MA.

Invited Presentations at Professional Meetings

- 2023 Bayesian Kernel Machine Regression for environmental mixtures mediating mechanisms.
Eastern North American Region of the Biometric Society, Nashville, TN.
- 2022 Bayesian Kernel Machine Regression for environmental mixtures.

- 2022 Second Penn Conference on Big Data in Biomedical and Population Health Sciences.
G-Bayesian Kernel Machine Regression for time-varying confounding and generalizable causal inference of environmental mixtures.
Eastern North American Region of the Biometric Society, Houston, TX
- 2021 Smartphone sensing of social behavior and its role in severe mental illness: challenges and opportunities for causal inference. 3rd Annual Social Networks in Medicine Symposium. Boston, MA.
- 2021 Causal inference for Health Disparities Research.
Invited leader of Roundtable discussion.
Eastern North American Regional meeting of the International Biometric Society, Washington, D.C.
- 2019 Bayesian data fusion for unmeasured confounding. New England Statistics Symposium, Hartford, CT.
- 2017 The role of epigenetic factors in health disparities: Some considerations for causal inference (National Epigenomics Symposium, How Disadvantage Gets “Under the Skin”: Using Epigenomic Methods to Better Understand & Address Health Disparities)
Harvard Medical School, Boston, MA.
- 2013 Misclassification of a binary mediator - effects and remedies
Modern Modeling Methods (M3) Conference, Storrs, CT.
- 2012 Mediation analysis with non-linearities and mediator measured with error
Eastern North American Regional meeting of the International Biometric Society, Washington, D.C.

Peer-Selected Presentations at Professional Meetings

- 2022 The Effect of COVID-19 Shelter in Place Orders on Loneliness of Schizophrenia and Bipolar Disorder Patients. (McLean Research Day), McLean Hospital, Belmont, MA.
- 2021 Smartphone sensing of social behavior and its role in severe mental illness: challenges and opportunities for causal inference. 3rd Annual Harvard Health Data Science Symposium, Boston, MA.

**National
Seminars**

- 2022 Causal inference and missing data imputation for non-stationary time series data in digital Psychiatry, Colloquium Seminar, Department of Biostatistics, University of Washington, Seattle, WA.
- 2021 Novel interventional approaches to causal mediation analysis: Theory and Practice.
Discussant of invited session. Joint Statistical Meeting, Seattle, WA
- 2021 Mediation analysis when outcome and mediator are semi-competing events, Colloquium Seminar, Department of Biostatistics, University of Michigan, Ann Arbor, MI.
- 2018 Metal mixtures and child neurodevelopment in Bangladesh: investigating joint effects and windows of susceptibility using Bayesian Kernel Machine Regression (Webinar)
Department of Environmental Health Sciences, University of California San Francisco, San Francisco, CA.
- 2018 Exposure misclassification in environmental epigenetic studies: is DNA-methylation a mediator or a biomarker? (Colloquium Seminar)
Department of Biostatistics and Computational Biology, University of Rochester, Rochester, NY.
- 2016 The impact of exposure measurement error in mediation analyses for environmental epigenetic studies
Department of Environmental Health, University of Albany, Albany, NY.
- 2015 The role of stage at diagnosis in colorectal cancer racial/ethnic survival disparities – A causal inference perspective (Webinar Lecture)
Sponsored by NEWCONNECTIONS, Robert Wood Johnson Foundation Program. Attended by students and junior investigators in the fields of health policy, social behavioral sciences, and statistics.
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Colloquium Seminar) Department of Biostatistics, Duke University, Durham, NC.
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Colloquium Seminar)
Group Health Research Institute, Seattle, WA.
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual

- and missing data issues (Colloquium Seminar) Quantitative Science Unit, Stanford Medical School, Palo Alto, CA.
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Colloquium Seminar) Department of Biostatistics, University of Minnesota, Minneapolis, MN.
- 2013 Causal mediation analysis - unveiling mechanisms in complex systems
Italian Scientists and Scholars North America Foundation (Award Finalist) Italian Embassy, Washington, D.C.

Invited Presentations at Professional Meetings

- 2023 Bayesian kernel machine regression for mediation analysis
Lifetime data science conference, Raleigh, NC.
- 2018 Marching toward progress on causal inference for health disparities
Society for Epidemiologic Research, Baltimore, MD.
- 2018 Integrating Information across efficacy trials to gain insights on antipsychotics mechanism of action
Conference of the World Psychiatry Association Epidemiology and Public Health Session, Columbia University, New York, NY.
- 2017 Explaining comparative efficacy of antipsychotic medications: A causal mediation approach
Society of Biological Psychiatry Annual Meeting, San Diego, CA.
- 2016 The role of stage at diagnosis in colorectal cancer racial/ethnic survival disparities – A causal inference perspective
Academy Health Annual Research Meeting (ARM), Boston, MA.
- 2012 Mediation analysis with mediator measured with error
Society for Prevention Research, Washington, DC.
- 2011 Natural direct and indirect effects for mediation analysis- advantages and limitations compared with principal stratification
Society for Prevention Research, Washington, DC.

Peer-Selected Presentations at Professional Meetings

- 2021 Smartphone-Based Markers of Social Activity in Schizophrenia and Bipolar Disorder. (poster presentation)
Society of Biological Psychiatry, Virtual.
- 2021 The Effect of COVID-19 Shelter in Place Orders on Loneliness of Schizophrenia and Bipolar Disorder Patients. (poster presentation)
Society of Biological Psychiatry, Virtual.
- 2021 Loneliness of Schizophrenia and Bipolar Disorder Patients in a Multi-Year mHealth Study (poster presentation)
Society of Biological Psychiatry, Virtual.

- 2019 Identifying and addressing sources of bias in causal inference. (Organizer and Discussant of Selected oral topic contributed session)
Joint Statistical Meetings (JSM, founded by the American Statistical Association, International Biometric Society, Institute of Mathematical Statistics, Statistical Society of Canada), Denver, CO, USA.
- 2018 Integrating data from clinical trials for more powerful mediation and interaction analyses Joint Statistical Meetings (JSM, founded by the American Statistical Association, International Biometric Society, Institute of Mathematical Statistics, Statistical Society of Canada), Vancouver, Canada.
- 2017 Explaining the total effect in the presence of multiple mediators and interactions (Selected oral topic contributed abstract)
Joint Statistical Meetings (JSM, founded by the American Statistical Association, International Biometric Society, Institute of Mathematical Statistics, Statistical Society of Canada), Baltimore, MD.
- 2016 The impact of exposure measurement error in mediation analyses for environmental epigenetic studies (Selected oral topic contributed abstract)
Joint Statistical Meetings (JSM, founded by the American Statistical Association, International Biometric Society, Institute of Mathematical Statistics, Statistical Society of Canada), Chicago, USA.
- 2016 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Selected oral abstract)
Atlantic Causal Inference Conference (ACIC), New York, NY.
- 2014 Selection bias in causal mediation analysis (Selected oral abstract)
Joint Statistical Meetings Boston, MA.
- 2014 The estimation of direct and indirect causal effects in the presence of a misclassified binary mediator
Joint Statistical Montreal, QC, Canada.
- 2013 Mediation analysis allowing for exposure-mediator interaction and causal interpretation with SAS and SPSS macros. (Selected oral abstract)
Joint Statistical Meetings (JSM, founded by the American Statistical Association, International Biometric Society, Institute of Mathematical Statistics, Statistical Society of Canada), Montreal, QC, Canada

- 2021 Mediation analysis when outcome and mediator are semi-competing events, Colloquium Seminar, Department of Statistics, University of Haifa, Israel.
- 2021 Mediation analysis when outcome and mediator are semi-competing events, Colloquium Seminar, Department of Biostatistics and Epidemiology, McGill University, Canada.
- 2020 Mediation analysis when outcome and mediator are semi-competing events
Université de Bordeaux, Department of Biostatistics, Bordeaux, France.
- 2018 Metal mixtures and child neurodevelopment in Bangladesh: investigating joint effects and windows of susceptibility using Bayesian Kernel Machine Regression
MELODEM (Methods in longitudinal dementia research) Working Group Webinar.
- 2017 Explaining the total effect in the presence of multiple mediators and interactions
Department of Applied Mathematics PARIS 5, Université Paris Descartes, Paris, France.
- 2017 Causal mediation analysis for environmental studies
Université de Bordeaux, Department of Biostatistics, Bordeaux, France.
- 2017 Explaining the total effect in the presence of multiple mediators and interactions
National Institute for Research in Computer Science and Control (Inria), Bordeaux, France.
- 2016 The potential for inflated mediation effects in the presence of exposure measurement error in environmental epigenetic studies
Department of Occupational Health, Università' Statale degli Studi di Milano, Milan, Italy.
- 2016 The potential for inflated mediation effects in the presence of exposure measurement error in environmental epigenetic studies
Department of Statistics and Quantitative Methods, Bicocca University, Milan, Italy.
- 2016 The potential for inflated mediation effects in the presence of exposure measurement error in environmental epigenetic studies (Plenary session)
Department of Epidemiology, Karolinska Institutet, Stockholm, Sweden.
- 2016 Concepts of mediation and interaction from a causal inference perspective
International Society of Environmental Epidemiology (ISEE) Student and New Researcher Network (SNRN) Webinar
(attended by national and international students, post-doctoral

- trainees, and other members of the International Society of Environmental Epidemiology).
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues
Department of Statistics and Quantitative Methods, Bicocca University, Milan, Italy.
- 2015 Understanding the determinants of racial/ethnic disparities in cancer survival – A causal inference approach for conceptual and missing data issues (Colloquium Seminar)
Department of Biostatistics and Epidemiology, McGill University, Montreal, QC.
- 2015 The role of stage at diagnosis in colorectal cancer racial/ethnic survival disparities – A causal inference perspective
Department of Statistics, University of Florence, Florence, Italy.
- 2013 Causal mediation analysis for environmental studies
Department of Environmental Epidemiology, Hasselt University, Hasselt, Belgium.
- 2012 Mediation analysis in the presence of non-linearities
Department of Statistics and Quantitative Methods, Bicocca University, Milan, Italy.

Invited Presentations at Professional Meetings

- 2023 Causal inference with mobile health data.
Organizer and Discussant of invited session Joint statistical meeting, Toronto, CA
- 2022 Testing non-stationarity and quantifying associations in the presence of missing data in time series of mHealth studies.
Conference of the European Research Consortium for Informatics and Mathematics Working Group (ERCIM WG) on Computational and Methodological Statistics, London, United Kingdom.
- 2022 Causal inference with mobile health data.
Organizer and Discussant of invited session.
Conference of the European Research Consortium for Informatics and Mathematics Working Group (ERCIM WG) on Computational and Methodological Statistics, London, United Kingdom.
- 2022 Mediation analysis when outcome and mediator are semi-competing events, International Society of Clinical Biostatistics, Newcastle, UK.
- 2022 Missing data imputation via state space model for non-stationary multi-variate time series in digital Psychiatry
2022 International Chinese Statistical Association (ICSA) Applied Statistics Symposium, Gainesville, Florida, United States.

- 2021 Causal inference in continuous time with mobile health data.
Organizer and Discussant of invited session.
International Society of Clinical Biostatistics, Lyon, France.
- 2017 Explaining the total effect in the presence of multiple
mediators and interactions
Conference of the European Research Consortium for
Informatics and Mathematics Working Group (ERCIM WG) on
Computational and Methodological Statistics, London, United
Kingdom.
- 2017 The potential for inflated mediation effects in the presence of
exposure measurement error in environmental epigenetic
studies (Keynote Lecture)
Epigenetic & High-Dimension Mediation Data Challenge,
Aussois, France.

Peer-Selected Presentations at Professional Meetings

- 2021 Missing data imputation via state space model for non-
stationary multi-variate time series in digital Psychiatry
Conference of the European Research Consortium for
Informatics and Mathematics Working Group (ERCIM WG) on
Computational and Methodological Statistics, London, United
Kingdom.
- 2021 Mediation analysis when outcome and mediator are semi-
competing events
MELODEM (Methods in longitudinal dementia research)
Working Group Annual Conference.
- 2020 Mediation analysis when outcome and mediator are semi-
competing events, EuroCIM Conference, Oslo, Norway. (zoom
conference due to COVID-19)
- 2019 Mediation analysis when outcome and mediator are semi-
competing events with application in health disparities
research, CMstatistics Conference, London, UK.
- 2019 A synthetic instrumental variable approach for measurement
error-robust mediation analysis in environmental
epidemiology. International Society of Environmental
Epidemiology (ISEE), Utrecht, Netherlands.
- 2018 Integrating data from clinical trials for more powerful
mediation and interaction analyses International Biometric
Conference (International Biometric Society Meeting),
Barcelona, Spain.
- 2016 The joint effect of metal mixtures exposure on child
neurodevelopment: Evidence from rural Bangladesh (Selected
oral abstract)
International Society of Environmental Epidemiology (ISEE),
Rome, Italy.

- 2016 The potential for inflated mediation effects in the presence of exposure measurement error in environmental epigenetic studies (Selected oral abstract)
International Society of Environmental Epidemiology (ISEE), Rome, Italy.
- 2014 Heavy metal mixtures exposure and child neuro-development: evidence from rural and urban Bangladesh (Selected oral abstract)
International Society for Environmental Epidemiology, Basel, Switzerland.