

**6 Agosto 2023**

Procedura selettiva per la copertura di n. 1 posto/i di Professore universitario di seconda fascia per il settore concorsuale 06/M1 - IGIENE GENERALE E APPLICATA SCIENZE INFERMIERISTICHE E STATISTICA MEDICA - settore scientifico disciplinare MED/01 - STATISTICA MEDICA da coprire mediante chiamata ai sensi dell' art. 18, commi 1 e 4, Legge 30.12.2010 n. 240 presso il Dipartimento di Fisiopatologia Medico-Chirurgica e dei Trapianti - Codice concorso 5367

**Curriculum Vitae**  
**ELENA COLICINO, PhD, MSc**  
**Associate Professor**  
[elena.colicino@mssm.edu](mailto:elena.colicino@mssm.edu)

**ESPERIENZA LAVORATIVA**

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<b>Postdoctoral Research Fellow</b> Department of Environmental Health Harvard T.H. Chan School of Public Health, Boston, MA	07/01/2012 – 05/31/2016
<b>Postdoctoral Research Scientist,</b> Department of Environmental Health Sciences Columbia University Mailman School of Public Health, New York, NY	06/01/2016 – 08/31/2017
<b>Assistant Professor,</b> Division of Biostatistics, Department of Environmental Medicine and Public Health Icahn School of Medicine at Mount Sinai, New York, NY	09/01/2017 – 02/28/2022
<b>Associate Professor,</b> Division of Biostatistics, Department of Environmental Medicine and Public Health Icahn School of Medicine at Mount Sinai, New York, NY	03/01/2022

**ISTRUZIONE**

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<b>Laurea – Economia, Statistica e Informatica per l'azienda</b> Dipartimento di Economia Universita' Milano-Bicocca, Milano, Italia	12/16/2004
<b>Master – Statistical Sciences and Economics, <i>summa cum laude</i></b> Dipartimento di Statistica Universita' Milano-Bicocca, Milano, Italia Mentori: Drs. Peretti A. e Quatto P.	04/18/2007
<b>Ph.D. – Statistics</b> Dipartimento di Scienze delle Decisioni Universita' Luigi Bocconi, Milan, Italy <u>Mentore:</u> Dr. Bonetti M. <u>Thesis title:</u> Dependence analysis: from subgroup population analysis to generalized Lorenz curve. <u>Focus della Ricerca:</u> Distorsione inferenziale legata alla dipendenza di sottogruppi di popolazioni: soluzioni e applicazioni in clinical trials del cancro al seno e in economia. ( <a href="#">manuscripto #6</a> per un riassunto della PhD tesi)	04/16/2012
<b>Postdoctoral Research Fellow</b> Department of Environmental Health Harvard T.H. Chan School of Public Health, Boston, MA <u>Mentore:</u> Andrea Baccarelli	07/01/2012 – 05/31/2016

Focus della Ricerca: Epidemiologia ambientale e molecolare, con attenzione agli effetti dell'inquinamento atmosferico sulle funzioni cognitive in popolazioni anziane

**Postdoctoral Research Scientist**

06/01/2016 – 08/31/2017

Department of Environmental Health Sciences

Columbia University Mailman School of Public Health, New York, NY

Mentore: Andrea Baccarelli

Focus della Ricerca: Epigenetic ambientale, con attenzione alla metilazione del DNA come biomcatore e i suoi legami con l'invecchiamento, condizioni legati all'invecchiamento e mortalita.

**CERTIFICATION**

Statistics and Probability: Optimal Stopping. 07/2008  
Drs G.Peskir and J.du Toit The Manchester University

Modern Methods in Biostatistics and Epidemiology. 07/2009  
Dr. G.Fitzmaurice, Harvard University; Dr. P.Dickman, Karolinska Institute

**LICENZE**

Abilitazione Scientifica Nazionale: 06/M1 I Fascia 2022 - 2031  
Abilitazione Scientifica Nazionale: 06/M1. II Fascia 2019 - 2028

**AWARDS**

Top Italian Scientist (Biomedical Sciences) 2023  
Overall Rank: 1761, Women Rank: 426

Thesis Funding Award, Bareggio, Milano, Italia 04/2007

Borsa di studio nazionale. Universita' L. Bocconi, Milano, Italia 09/2007 – 08/2011

Borsa di studio nazionale. Universita' di Milano, Milano, Italia 02/2012 – 05/2012

Manoscritto fra i 10 migliori paper del 2017 dall'American Journal of Epidemiology and the Society for 2018  
Epidemiologic Research. Titolo del manoscritto: "Ambient Fine Particulate Matter,  
Outdoor Temperature and Risk of Metabolic Syndrome". Ruolo: Primo autore.

Editor's Highlight della Toxicological Sciences Journal in 2017. Titolo del manoscritto: "Long-term 2018  
ambient particle exposures and blood DNA methylation age: findings from the VA normative aging study".  
Ruolo: Statistico.

**ALTRI RUOLI PROFESSIONALI**

Eletta pappresentante degli studenti, PhD School, Universita' L.Bocconi, Milano, Italia 2008-2012

Membership:

- Membro dell'Editorial Review Board, Environmental Epigenetics 2016- present
- Membro, International Society of Environmental Epidemiology (ISEE) 2016- present
- Membro and Organizzatore, Rladies (i.e. women in STEM coding in R) in NewYork 2017- present
- Membro, Association for International Italian Researchers (AIRI) 2018- present
- Membro dell'Editorial Review Board, Reproductive Epidemiology: 2020- present
- Membro Society of Epidemiological Research (SER) 2020- present

#### Revisore di grant/finanziamenti (invited reviewer):

- P30 Pilot invited Reviewer, Columbia University 08/2017
- Invited grant reviewer (Study section cycles: 2018, 2019, 2020, 2022) 2018- present  
Association for International Italian Researchers (AIRI). Role: biostatistician
- Invited grant reviewer 2021 (March cycle)  
Health Effects Institute (HEI). Role: biostatistician 2023 (October cycle)
- Invited grant reviewer – Scientific Advisory Board: SALMON Trial (June cycle) 2021  
ONCORADIOMICS Society. Role: biostatistician
- Invited ad hoc grant reviewer 2022 (February)  
Israel Science Foundation (ISF). Role: biostatistico 2023 (June)
- Ad hoc grant reviewer for Outstanding New Environmental Scientist (ONES) Program 2022  
National Institute of Health – Environmental Science Branch (NIEHS).
- Ad hoc reviewer for Pregnancy and Neonatology Study Section 2023 (June cycle)

#### Visiting professor and educational committee member:

- Advisor: The Career MODE program: Careers through Mentoring and training in Omics and Data for Early-stage investigators, 2022-present  
Columbia University program
- Visiting Professor, University of Genoa, Italy, 04/2023
- Thesis Committee member for Dr. Arce Domiglo Rellosa, Universidad de Valencia, Spain, 04/11/2023

#### **PROFILO DI RICERCA**

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I miei principali interessi coinvolgono sia la biostatistica che l'epidemiologia ambientale, con particolare attenzione all'epidemiologia molecolare di grandi dimensioni.

I miei lavori di biostatistica si focalizzano nello sviluppare metodi statistici Bayesiani per miscugli di esposizioni ambientali. Negli ultimi anni, ho esteso un metodo frequentista nato per miscugli di esposizioni ambientali all'ambito Bayesiano per superare le limitazioni dell'approccio classico, e ho arricchito questo metodo Bayesiano con una struttura ad effetti misti per accomodare traiettorie degli outcome. Mi hanno anche finanziato per espandere questo approccio Bayesiano per aumentare la generalizzabilità dei risultati sui miscugli di esposizioni ambientali quando si analizzano molteplici studi di popolazione ([NIH – Duke University U2C OD023375-05](#)).

Il mio lavoro applicativo si focalizza sulla scoperta di esposizioni ambientali che sono dannose per la salute materna, e sulla identificazione di biomarcatori molecolari di grandi dimensioni che possono inasprire, riflettere e predire gli effetti dannosi sulla salute. Ho recentemente vinto un finanziamento ([R01: NIEHS R01 ES032242](#)) per investigare il ruolo delle esposizioni a particolato sottile e stress durante la gravidanza in relazione alla risposta cardio-metabolica materna e per determinare come queste associazioni cambiano a seconda di biomarcatori epigenetici e metabolomici.

Durante gli anni di postdoctoral training, ho ricostruito delle concentrazioni ambientali di un metallo tossico (piombo) in due esposizioni temporali basandomi da biomarcatori epigenetici di grandi dimensioni facendo leva della mia esperienza con algoritmi di machine-learning; in seguito questi algoritmi predittivi sono stati adattati ad altre popolazioni con le stesse informazioni epigenetiche ma senza informazioni sul piombo. Per avere delle predizioni più accurate sulle esposizioni ambientali in popolazioni eterogenee, sto arricchendo questi predittori con errore di propagazione.

In risposta alle richieste del dipartimento di statistica applicata e supporto per i fondi, organizzo e dirigo meetings bimensili (Bayesian Working Group), dove sia i trainees che i professori possono avere il supporto per la loro ricerca e posso ampliare la loro esperienza in statistica Bayesiana. Per facilitare la riproducibilità nella scienza e supportare applicazioni, ho creato due pacchetti statistici per il software R, e salvo la maggior parte dei miei codici sono dei repository pubblici.

## **INCLUSIONE DELLA DIVERSITÀ**

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Nella mia carriera, i miei mentori e istituzioni hanno fornito un ambiente lavorativo equo per donne in Scienza, Tecnologia, Ingegneria e Matematica (STEM), quale sono io. La cultura istituzionale diversificata e l'implementazione di strategie educative del laboratorio in cui ero inserita ha creato un circolo virtuoso in cui sono cresciuta scientificamente e personalmente. Con queste esperienze positive e arricchenti, ho iniziato collaborazioni con gruppi di ricercatori diversi etnicamente e ho contribuito con la mia ricerca a capire disparità sociali a New York city (pubblicazione [# 65](#)). Riconosco di essere stata privilegiata avendo incontrato durante il mio percorso mentori e colleghi in grado di supportarmi, e così ho iniziato a promuovere la cultura STEM tra le donne a New York unendosi, come organizzatrice e membro, alle R-ladies nel 2017. Questo gruppo facilita la collaborazione tra le donne e minoranze sia in accademia che in industria sfruttando il software di programmazione R.

## **ESPERIENZA DI MENTORING**

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Sono stata mentore di alcuni postdoctoral fellows in collaborazione con degli altri professori del Department of Environmental Medicine and Public Health at Mount Sinai. Insieme ai postdoctoral fellows stiamo attivamente scrivendo dei manoscritti. Inoltre ho coinvolto un postdoctoral fellow nel Epigenetic Boot-Camps, che si sono tenuti dal 2018-2022, al fine di supportare le sessioni computazionali. I commenti riguardo quelle sessioni sono state estremamente positive. Infine, ho aiutato un postdoctoral fellow con codici statistici e una spiegazione considerevole del metodo statistico (pubblicazione: [# 65](#)); il nostro lavoro è ora considerato per una pubblicazione su *Nature Communications*.

Ho infine fatto da mentore a un candidato di PhD in Biostatistics e uno studentessa di Master di Statistica dell'Università Milano-Bicocca, e due studenti di Master del Biostatistics Department at Columbia University. Durante la loro tesi, ho fornito supporto con meeting regolari e descrizioni analitiche dei metodi applicati. Ho anche incoraggiato gli studenti del master a conseguire un PhD in Biostatistics e uno di loro è stato inserito con successo nel PhD program dell'University of Pittsburgh nel 2020. Due manoscritti scritti con la collaborazione di questi studenti sono attualmente in fase di sottomissione.

## GRANTS, FINANZIAMENTI, E SUPPORTI DI FONDAZIONI

### Grant Attivi

Fonte del Finanziamento, Titolo & Numero	Ruolo nel Progetto	Date	Costi Diretti Totali	Informazioni Supplementali
NIEHS P30 Pilot P30 ES023515 Metal exposure and brain autoantibodies in pregnancy and child neurodevelopment	Principal Investigator (PI)	7/1/18-6/30/22	\$20,000	Contact PI: Colicino, E. MPI: Colicino, E. Laserson U.
NIH R01 ES013744 Stress Chemical Interactions and Neurobehavior in School Age Children	Co-Investigator: Statistician working on mixture approaches for chemical interactions	9/1/17-7/31/22	\$619,651	PI: Wright, RO
NIEHS U2C ES026555 CHEAR/HHEAR Center for Data Science	Co-Investigator: Statistician supporting Data Center with analyses	9/30/15-8/31/25	\$1,346,924	PI: Teitelbaum, S
NIEHS P30 ES23515 The Mount Sinai Transdisciplinary Center on Early Environmental Exposures	Co-Investigator: Statistician supporting other PIs' works with analyses	6/18/14-3/31/23	\$999,543	PI: Wright, RO
NIEHS P30 Pilot P30 ES023515 Ambient air pollution, lipidomics, and overweight/obesity in an Italian adolescent cohort	Principal Investigator (PI)	7/1/19-6/30/22	\$20,000	Contact PI: Colicino, E. MPI: Colicino E. Niedzwiecki, M.
NCMHHD MD013310 Maternal trauma, circulating microRNA in extracellular vesicles, and programming of childhood respiratory outcomes	Co-Investigator: Statistician providing approaches to analyze jointly multiple exposures, and multiple molecular marks	9/18/18-5/31/23	\$549,169	PI: Lee, AG
NIOSH 1 U01 OH011314 Structural and Functional Neuroimaging of Post-Traumatic Stress Disorder and Cognitive Impairment in World Trade Center Responders	Co-Investigator: Statistician	9/01/16-8/31/20	\$599,715	PI: Lucchini
NIH-Harvard School of Public Health SPP1, ES029097 Oxidative Stress, and Lead Toxicity	Co-Investigator: Statistician	9/30/18-8/31/23	\$33,713	PI: Lu, Q. (Subcontract)
NIEHS R01 ES030302 Prenatal metal mixtures and neurodevelopment: Role of placental extracellular microRNAs	Co-Investigator: Statistician	4/01/19-3/31/24	\$494,259	MPI: Li Q, Wright RJ
NIEHS U2C ES026555 Human Health Exposure Analysis Resource (HHEAR) Data Center	Co-Investigator: Statistician supporting Data Center with analyses	8/1/19-7/31/24	\$1,619,083	PI: Teitelbaum, S
NIEHS U2C ES026561 Mount Sinai HHEAR Network Targeted Lab Hub	Co-Investigator: Statistician supporting the Lab with analyses	9/5/19-5/31/24	\$766,962	PI: Wright, RO
NIOSH OH012075 Risk and resilience factors for adverse mental and physical health outcomes related to WTC exposure	Co-Investigator: Statistician providing novel approaches to analyze multiple exposures	7/1/20-6/30/22	\$234,205	PI: Horton, M.
NIOSH OH012068 The Aging Process of WTC Responders: Assessment and Consequences of Frailty	Co-Investigator: Statistician	7/1/20-6/30/22	\$293,973	PI: Ornstein, K.
NIH – Duke University (Subcontract) Cross-cohort mixture analysis: prenatal metals exposure and birth outcomes	Principal Investigator (PI)	9/1/20-8/31/22	\$50,820	PI: Colicino E.
NIEHS R01 ES032242 Air Particulate Pollution and Stress: Effects and Mechanisms for Long-term Maternal Obesity	Principal Investigator (PI)	7/1/20-6/30/25	\$377,659	Contact PI: Colicino E MPI: Colicino E.

Risks				Baccarelli, A.
NIEHS P30 Pilot P30 ES023515 Air Pollution, Mitochondrial Heteroplasmy, and Vaccine Efficacy in Children	Principal Investigator (PI)	7/1/22-6/30/24	\$25,000	Contact PI: He M MPI: He, M. Yitshak-sade, M. Colicino, E.
NIEHS R01: Lung Function and metals in pregnancy	Co-Investigator: Statistician	7/1/22 6/30/27	Funded	PI: Rosa
NIEHS R01: Extreme temperature, humidity, air pollution and spontaneous preterm birth	Co-Investigator: Statistician	2/1/22 1/31/27	Funded	PI: Just
NIEHS R01: Teeth metals and brain development	Co-Investigator: Statistician	9/1/21-8/31/26	Funded	PI: Horton
NIEHS R01 ES034521 Early-life metal exposures, mitochondrial heteroplasmy, and child antibody response to vaccination	PI	9/1/22-6/30/27	\$609,805	Contact PI: Colicino E MPI: Colicino E. Jusko, T.

MPI: Multiple Principal Investigator

#### Pending Grant

Fonte del Finanziamento, Titolo & Numero	Ruolo nel Progetto	Date	Costi Diretti Totali	Informazioni Supplementali
NIEHS R01: Lung Function and metals in pregnancy	Co-Investigator: Statistician	XXX	\$XXX	PI: Rosa
NIEHS R01: Teeth metals and brain development	Co-Investigator: Statistician	XXX	\$XXX	PI: Horton
NIEHS R01: Metabolites and post partum depression	Co-Investigator: Statistician	XXX	\$XXX	MPI: Niedzwiecki; Petrick
NIEHS R21: Metabolites and testicular cancer	Co-Investigator: Statistician	XXX	\$XXX	PI: Petrick
NIEHS R21: Metabolites and neuroblastoma	Co-Investigator: Statistician	XXX	\$XXX	PI: Petrick

#### TRAINEES

Nome	Livello del Trainee	Ruolo nel Training & Date	Training Venue	Trainees' Status/Employment
Johnathan Heiss	Post-doctoral Fellow, Mount Sinai	Role: Provide guidance in analysis with high-dimensional molecular markers. Co-mentored with Dr. Just AC. 12/01/2017-12/31/2019	Bioinformatics	Staff Bioinformatics Company, Chicago, IL
Daniel Carrion	Post-doctoral Fellow, Mount Sinai	Role: Provide guidance in statistical analysis. Co-mentored with Dr. Just AC. 12/01/2019-Present	Biostatistics	Assistant Professor At Yale University, New Haven, CT
Nicolo' Foppa Pedretti	MSc., Statistician II	Role: Provide Bayesian training 11/02/2019-Present	Biostatistics	MSc. Statistician II at Mount Sinai, New York, NY
Shuwai Liu	MSc. candidate, Columbia University	Role: Provide Bayesian training 10/2019-05/2020	Biostatistics	PhD in Biostatistics, Univ. Of Pittsburgh, PA
Huabein Ge	MSc. candidate, Emory University	Role: Provide Bayesian training 10/2019-02/2020	Biostatistics	Staff at Emory University
Nicola Pesenti	PhD Candidate, Univ. Milano-Bicocca, Milan, Italy	Role: Provide Bayesian training jointly with Drs. Quatto & Zambon 08/2019-07/2023	Biostatistics	PhD Candidate Univ. Milano-Bicocca, Milan, Italy
Lucia	MSc. Candidate,	Role: External advisor	Biostatistics	MSc. Candidate, Univ.

Gerbi	Univ. Milano-Bicocca, Milan, Italy	08/2021-12/2021		Milano-Bicocca, Milan, Italy
Aurora Scotti	MSc. Candidate, Univ. Milano-Bicocca, Milan, Italy	Role: External advisor 03/2023-Present	Biostatistics	MSc. Candidate, Univ. Milano-Bicocca, Milan, Italy
Viola Cabrini	MSc. candidate, Emory University	Role: External advisor 03/2023-Present	Biostatistics	MSc. Candidate, Univ. Milano-Bicocca, Milan, Italy
Luca Sammarini	PhD Candidate, Univ. Milano-Bicocca, Milan, Italy	Role: External advisor 06/2023-Present	Biostatistics	MSc. Candidate, Univ. Milano-Bicocca, Milan, Italy
Luigi Annichiarico	MSc. Candidate, Univ. Milano-Bicocca, Milan, Italy	Role: External advisor 06/2023-08/2023	Biostatistics	MSc. Candidate, Univ. Milano-Bicocca, Milan, Italy
Alexandra Chirvasuta	MSc. Candidate, Univ. Milano-Bicocca, Milan, Italy	Role: External advisor 05/2023-Present	Biostatistics	MSc. Candidate, Univ. Milano-Bicocca, Milan, Italy
Jesse Goodrich	Postdoctoral fellow at University of Southern California	Role: Mentor Career MODE program 08/2022-06/2023	Biostatistics/ Molecular Epidemiology	Assistant Professor at University of Southern California, Los Angeles, CA
Hachem Saddiki	Post-doctoral Fellow, Mount Sinai	Role: Mentor 01/2023-present	Biostatistics/ Molecular Epidemiology	Post-doctoral Fellow, Mount Sinai
Sandra India-Aldana	Post-doctoral Fellow, Mount Sinai	Role: Mentor 03/2023-Present	Biostatistics/ Molecular Epidemiology	Post-doctoral Fellow, Mount Sinai
Azzurra Invernizzi	Post-doctoral Fellow, Mount Sinai	Role: Mentor 03/2023-Present	Biostatistics/ Molecular Epidemiology	Post-doctoral Fellow, Mount Sinai

#### ATTIVITA' DI INSEGNAMENTO

Attività di Insegnamento	Livello	Ruolo	Livello e Numero di studenti, e sede di insegnamento	Numero di ore	Anno Accademico
Applied Linear Model II	MPH (graduate)	Instructor (Titolare e organizzatore del Corso)	MPH Students (50), Mount Sinai	3 hours/week (Spring II - 12 weeks)	2023
Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.	PhD (Graduate)	Instructor (Titolare e organizzatore del Corso)	Faculty, postdocs, students (60) - Columbia University	8hours/day x 2 days	2023
Applied Linear Model II	MPH (graduate)	Instructor (Titolare e organizzatore del Corso)	MPH Students (60), Mount Sinai	3 hours/week (Spring II - 12 weeks)	2022
Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.	PhD (Graduate)	Instructor (Titolare e organizzatore del Corso)	Faculty, postdocs, students (60) - Columbia University	8hours/day x 2 days	2022
Applied Linear Model II	MPH (graduate)	Instructor (Titolare e organizzatore del Corso)	MPH Students (50), Mount Sinai	3 hours/week (Spring II - 12 weeks)	2021

				weeks)	
Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.	PhD (Graduate)	Instructor (Titolare e organizzatore del Corso)	Faculty, postdocs, students (60) - Columbia University	8hours/day x 2 days	2021
Big Data Epidemiology: Introduction to OMICS research	MPH (graduate)	Instructor	MPH Students (10), Mount Sinai	2 hours (on May 5) (Spring II- 12 weeks)	2021
Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.	PhD (Graduate)	Instructor (Titolare e organizzatore del Corso)	Faculty, postdocs, students (60) - Columbia University	8hours/day x 2 days	2020
Applied Linear Model II	MPH (graduate)	Instructor (Titolare e organizzatore del Corso)	MPH Students (60), Mount Sinai	3 hours/week (Spring II - 12 weeks)	2020
Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.	PhD (Graduate)	Instructor (Titolare e organizzatore del Corso)	Faculty, postdocs, students (60) - Columbia University	8hours/day x 2 days	2019
Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.	PhD (Graduate)	Instructor (Titolare e organizzatore del Corso)	Faculty, postdocs, students (60) - Columbia University	8hours/day x 2 days	2018
Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.	PhD (Graduate)	Instructor (Titolare e organizzatore del Corso)	Faculty, postdocs, students (60) - Columbia University	8hours/day x 2 days	2017
Analysis of Environmental Health Data	MPH (graduate)	(Titolare e organizzatore del Corso)	MPH Students of Environmental Health Sciences (26), Columbia University	3 hours/week per 14 weeks	2017
Statistics for Econometrics	PhD (graduate)	Teaching Assistant	PhD Students of Econometrics and Finance (11), Bocconi University	2 hours/week per 6 weeks	2012
Fundamental Statistics	BSc (undergraduate)	Teaching Assistant	BSc Students of Economics (27), Bocconi University	2 hours/week per 24 weeks	2012
Data Analysis	MSc (graduate)	Teaching Assistant	MSc Students of Economics (20), University of Milan	10 hours	2012
Probability and Statistics	BSc (undergraduate)	Teaching Assistant	BSc Students of Statistics (40), University of Milan-Bicocca	12 hours	2010
Inference Statistics	BSc (undergraduate)	Teaching Assistant	BSc Students of Statistics (60), University of Milan-Bicocca	12 hours	2007
Environmental Statistics	BSc	Teaching	BSc Students of Statistics (30),	30 hours	2006 &



	(undergraduate)	Assistant	University of Milan-Bicocca	per year	2007
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## SUPPORTO AMINISTRATIVO DI LEADERSHIP

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### Internal

Statistico nei Journal Clubs del Dipartimento 2018- present  
Department of Environmental Medicine and Public Health; Icahn School of Medicine at Mount Sinai  
I seminari bimensili includono tutti i trainees e facilitano la ricerca tra trainees attraverso discussioni di manoscritti peer-reviewed. I ricercatori senior del Dipartimento supportano i trainees discutendo con loro gli argomenti proposti.  
I trainees supportati durante gli anni:  
Sandy Wong 06/07/2018  
Elza Rechtman 12/06/2018  
Laura McGuinn 05/23/2019  
Daniel Carrion 02/06/2020

Leader e organizzatore per il Bayesian Working Group (insieme a Dr. DeFelice) 2020- present  
Department of Environmental Medicine and Public Health; Icahn School of Medicine at Mount Sinai  
I seminari bimensili includono tutti i trainees e professori che lavorano con statistica Bayesiana e invitano speaker la cui ricerca si allinea con gli obiettivi del dipartimento e si incentra su metodi Bayesiani.

### External

Chair insieme a David Savitz (Brown University): 08/26/2019  
Nome della Committee: Cardiometabolic effects of chemical exposures (Session 18)  
International Society of Environmental Epidemiology (ISEE): Utrecht, the Netherlands

Chair con Stefano Calza (Universita di Brescia): 02/27-28/2021  
Nome della Committee: Trainees and Early Investigators' Lightning Talks  
2021 USA-European Exposome Symposium: Web-conference

### Organizer & Moderator

- Exposome Symposium (at Brescia University, Italy): 04/28-30/2023  
- Exposome Symposium (in Mexico City, Mexico): 05/21-24/2023

### External Mentorship

2022-present  
The Career MODE program: Careers through Mentoring and training in Omics and Data for Early-stage investigators  
Mentee: Dr. Jesse Goodrich

### Revisore ad-hoc per:

Giornali di alto impact factor:  
Nature Communications (2020);  
Scientific Report (2021)

Giornali di Environmental Health:  
Environmental Health Perspective (2017, 2018, 2019, 2021),  
Environmental Research (2017, 2019, 2020, 2021),  
International Journal of Hygiene and Environmental Health (2018, 2019),  
Environmental International (2018, 2020):

## PUBBLICAZIONI

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**Summary:** I have a total of **123** peer-reviewed manuscripts (21 as first/co-first author, and 5 as last author). Since 2022—when I became Associated Professor—I have **3** manuscripts as first author, **2** as last author and a total of **34** manuscripts. I have also created **2 R-software packages**; and I have currently a few manuscripts under review in high-impact factor journals.

### Original Contribution in peer-reviewed journal

#### 2012

- 1) Margaritella, N; Mendozzi, L; Garegnani, M; **Colicino, E**; Gilardi, E; Deleonardis, L; Tronci, F; Pugnetti, L. Sensory evoked potentials to predict short-term progression of disability in multiple sclerosis. *Neurological Sciences*; 33(4):887-892; 2012. Role: Statistician
- 2) Margaritella, N; Mendozzi, L; Garegnani, M; Nemni, R; **Colicino, E**; Gilardi, E; Pugnetti, L. Exploring the predictive value of the evoked potentials score in MS within an appropriate patient population: a hint for an early identification of benign MS? *BMC neurology*; 12(1):80; 2012. Role: Statistician

#### 2013

- 3) Margaritella, N; Mendozzi, L; Tronci, F; **Colicino, E**; Garegnani, M; Nemni, R; Gilardi, E; Pugnetti, L. The evoked potentials score improves the identification of benign MS without cognitive impairment *European journal of neurology*; 20(10):1423-142; 2013. Role: Statistician

#### 2014

- 4) **Colicino, E**; Power, MC; Cox, DG; Weisskopf, MG; Hou, L; Alexeeff, SE; Sanchez-Guerra, M; Vokonas, P; Spiro III, A; Schwartz, J; Baccarelli AA. Mitochondrial haplogroups modify the effect of black carbon on age-related cognitive impairment. *Environmental Health*; 13(1):42; 2014
- 5) Prada, D\*; **Colicino, E\***; Power, Power, MC; Cox, DG; Weisskopf, MG; Hou, L; Spiro III, A; Vokonas, P; Zhong, J; Sanchez-Guerra, M; Herrera, LA, Schwartz, J; Baccarelli AA. Influence of multiple APOE genetic variants on cognitive function in a cohort of older men—results from the Normative Aging Study. *BMC psychiatry*; 14(1):223; 2014 (\* equal contribution)  
Role: Co-lead author, contributed to the ideation of the manuscript, performed statistical analyses, and drafted the manuscript
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  - 115) Rosa, MJ; Lamadrid-Figueroa, H; Alcala, C; **Colicino, E**; Tamayo-Ortiz, M; Mercado-Garcia, A; Kloog, I; Just, AC; Bush, D; Carroll, KN; Wright RJ Associations between early-life exposure to PM<sub>2.5</sub> and reductions in childhood lung function in two North American longitudinal pregnancy cohort studies. *Environmental Epidemiology*; 7(1); 2023
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  - 119) Kotsakis Ruehlmann, A; Sammallahhti, S; Cortés Hidalgo, AP; Bakulski, KM; Binder, EB; Campbell, ML; Caramaschi, D; Cecil, CAM; **Colicino, E**; Cruceanu, C; et al. Epigenome-wide meta-analysis of prenatal maternal stressful life events and newborn DNA methylation. *Molecular Psychiatry*; 44937; 2023
  - 120) Kaali, S; Jack, DW; Mujtaba, MN; Chillrud, SN; Kinney, PL; Kaali, EB; Gennings, C; **Colicino, E**; Osei, M; Wylie, BJ; Identifying sensitive windows of prenatal household air pollution on birth weight and infant pneumonia risk to inform future interventions. *Environment International*; 178:108062; 2023
  - 121) Merced-Nieves, FM; **Colicino, E**; Enlow, MB; Goldson, B; Mathews, N; Lerman, B; Wright, RO; Wright, RJ. Associations between a prenatal stress mixture and preschoolers' temperament: Impact of race/ethnicity. *Neurotoxicology and Teratology*; 98:107265; 2023
  - 122) Mansolf, M; Blackwell, CK; Chandran, A; **Colicino, E**; Geiger, S; Harold, G; McEvoy, C; Santos Jr, HP; Sherlock, PR; Bose, S; et al. Caregiver Perceived Stress and Child Sleep Health: An Item-Level Individual Participant Data Meta-Analysis. *Journal of Child and Family Studies*; 44941; 2023
  - 123) Lewis, JV; Knapp, EA; Bakre, S; Dickerson, AS; Bastain, TM; Bendixsen, C; Bennett, DH; Camargo, CA; Cassidy-Bushrow, AE; **Colicino, E**; et al. Associations between area-level arsenic exposure and adverse birth outcomes: An Echo-wide cohort analysis. *Environmental Research*; 116772; 2023

- 124) **Colicino, E**; Ascari, R; Saddiki, H; Merced-Nieves, F; Pedretti, NF; Huddleston, K; Wright, RO; Wright RJ. Cross-cohort mixture analysis: a data integration approach with applications on gestational age and DNA-methylation-derived gestational age acceleration metrics. Medrxiv 2023

#### Other Peer Reviewed Publications: Software development

- Cannas, M; Arpino, B; **Colicino, E**. CMatching: Matching Algorithms for Causal Inference with Clustered Data. R-package, v2019 2019

#### RISORSE MEDIATICHE EDUCATIVE

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Online Ergon Professional Hub: comunita' di professionisti designata per amentare le opportunita' di carriera e lo sviluppo di nuove competenze.

- Titolo: Career in healthcare analytics 07/2020
- Titolo: The Emergence and Future of Data Science (accompagnata da Dr. Jeff Goldsmith) 09/2020
- Titolo: Experience in Data Science 02/2021

#### Materiale di programmazione statistica:

- **Colicino E**. Contributor to codes for Epigenetic Analyses, together with Drs. Cardenas, Heiss, Just (<https://github.com/allanjust/methylation-lab>; <https://github.com/cardenasca/DNAmethylation-lab>) 2017-present
- Cannas, M; Arpino, B; **Colicino, E**. CMatching: Matching Algorithms for Causal Inference with Clustered Data. R-package, v2019 2019
- Foppa-Pedretti, N; **Colicino E**. BWQS R-package & vignette (<https://github.com/ElenaColicino/bwqs>) 2020
- **Colicino E**. Bayesian Factor Analysis for interaction on Untargeted Metabolomics ([https://github.com/ElenaColicino/PRISM\\_Birthweight\\_Metabolomics](https://github.com/ElenaColicino/PRISM_Birthweight_Metabolomics)) 2021

#### INVITI A LEZIONI/ PRESENTAZIONI

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- Karolinska Institutet, Stockholm, Sweden. Dep. of Biostatistics 11/2011  
Titolo: Dependence: from subgroup analyses to generalized Lorenz curve.
- Harvard T.H. Chan School of Public Health Boston, MA USA. 06/2015  
Titolo: Epigenome-Wide DNA Methylation Data: handling and analyzing big-data. Invited Speaker within the course Environmental Epigenetics (BPH 326).
- Harvard T.H. Chan School of Public Health Boston, MA USA. 06/2016  
Titolo: Epigenome-Wide DNA Methylation Data and survival. Invited Speaker within the course Environmental Epigenetics (BPH 326).
- Symposium at the International Society for Environmental Epidemiology Conference, Rome, Italy 08/2016  
Instructor. Epigenetics: Analyzing DNA Methylation Studies.
- R-ladies NYC meet-up, Flatiron Health, New York, NY, USA. 01/2017  
Titolo: Fingerprint of Lead Exposure in US population.
- University of Milano Bicocca, Milan, Italy. 04/2018  
Titolo: Developing DNA Methylation Biosensors of Environmental Exposure
- University of Brescia, Brescia, Italy. 04/03/2019  
Titolo: Statistical methods for Epigenomics.
- University of Salento, Lecce, Italy. 04/06/2019

Titolo: Statistical methods for epigenetics and their link to metal exposures.

Symposium at the International Society for Environmental Epidemiology (ISEE) Conference, Utrecht, the Netherlands. Organizer and Invited Speaker. 08/25/2019

Titolo: Mixtures Analysis with Weighted Quantile Sum (WQS) Regression and its Extensions.  
Invited speakers: Gennings C, Curtin P, Tanner E, Renzetti S, Colicino E.

Cyprus Intern. Inst. of Environmental and Public Health; Univ. of Technology, Limassol, Cyprus 09/05/2019  
Titolo: The Bayesian Weighted Quantile Sum Regression.

University of Southern California, Los Angeles, CA, USA (virtual) 10/01/2019  
Titolo: From classical to the Bayesian Weighted Quantile Sum Regression

Icahn School of Medicine New York, NY, USA. Ground Rounds 12/2019  
Ground Rounds at Environmental Health and Preventive Medicine  
Titolo: The Bayesian Weighted Quantile Sum Regression

Berkeley and Columbia Superfund Research Programs: Metals Epigenetics 06/24/2020  
Titolo: DNA Methylation Biomarkers of Lead Exposure

University of California, Berkley, CA, USA: Bay Area Mixtures Meeting 07/16/2020  
Titolo: From classical to the Bayesian Weighted Quantile Sum Regression

Duke University, The Environmental influences on Child Health Outcomes (ECHO) program 09/10/2020  
Titolo: Cross-cohort mixture analysis: prenatal metal exposures & birth outcomes

NIH Human Health Exposure Analysis Resource (HHEAR) meeting 06/24/2021  
Title: Data integration for mixture analysis: the importance of the HHEAR data repository

University of Genoa, Department of Biostatistics 06/30/2021  
Titolo: Machine learning and mixture approaches for environmental health data

University of Padua, Unit of Biostatistics, Epidemiology and Public Health 07/16/2021  
Titolo: Machine learning and mixture approaches for environmental health data

Columbia Mailman School of Public Health, New York, NY, USA. 02/15-16/2022  
Invited Instructor, Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.

Columbia Mailman School of Public Health, New York, NY, USA. 06/27-28/2022  
Invited Instructor, Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.

University of Genoa, Italy 04/14/2023  
Invited Speaker: Data Analysis for Environmental Health

University of Tel-Aviv 04/17/2023  
Invited Speaker: High-dimensional molecular data for environmental health

Columbia Mailman School of Public Health, New York, NY, USA. 06/28-29/2023  
Invited Instructor, Epigenetic Bootcamp: Planning and Analyzing DNA Methylation Studies.

- International Society for Environmental Epidemiology (ISEE) Conference, Basel, Switzerland. 08/2013  
**Colicino, E**; Giuliano, G; Power, MC; Lepeule, J; Wilker, EH; Vokonas, P; Brennan, KJM; Fossati, S; Hoxha, M; Spiro III, A; Weisskopf, MG; Schwartz, J; Baccarelli, AA. Single Nucleotide Polymorphisms in MicroRNA Processing Genes and Susceptibility to the Effects of Black Carbon on Cognition in a Cohort of Older Men. (Oral)
- International Society for Environmental Epidemiology (ISEE) Conference, Basel, Switzerland 08/2013  
**Colicino, E**; Power, MC; Cox, DG; Weisskopf, MG; Hou, L; Alexeeff, SE; Sanchez-Guerra, M; Vokonas, P; Spiro III, A; Schwartz, J; Baccarelli AA. Mitochondrial Haplogroup Clusters Modify the Effect of Black Carbon on Age-related Cognitive Impairment. (Poster)
- The Program in Quantitative Genomics (PQG) Conference, Boston, MA 11/2013  
 Carmona, J; Barfield, R; Just, A; **Colicino, E**; Testa, P; Pafundi, P; Mehta, A; Peng, C; Chen, J; Schwartz, J; Baccarelli AA. DNA methylation signatures in the Normative Aging Study: Epigenome-wide association analyses of air pollution exposure, biological aging, metabolism, and lung function decline. Ruolo: Statistico. (Poster)
- International Society for Environmental Epidemiology Conference, Seattle, WA, USA 09/2014  
**Colicino, E** Wilson, A; Frisardi, MC; Prada, D; Power, MC; Hoxha, M; Dioni, L; Spiro III, A; Vokonas, P; Weisskopf, MG; Schwartz, J; Baccarelli AA. Blood Telomere Length as Modifier of the Association between Long Term Exposure to Traffic Particles and Cognition in Aging Men (Oral)
- Conference of American Heart Association (AHA), Chicago, IL, USA 11/2014  
 Zhong, J; **Colicino, E**; Lin, X; Mehta, A; Kloog, I; Zanobetti, A; Byun, HM; Bind, Ma; Cantone, L; Prada, D; Tarantini, L; Sparrow, D; Vokonas, P; Schwartz, J; Baccarelli AA. Toll-like receptor 2 methylation and dietary flavonoid intake modify the association between fine particle exposure and cardiac autonomic dysfunction: The normative aging study. Abstract on Circulation;130 suppl\_2; A15898-A15898; Ruolo: Statistico (Orale)
- International conference and Exhibition on Biometrics and Biostatistics, San Antonio, TX, USA 11/2015  
 Pennoni, F; Bartolucci, F; Baccarelli, A; **Colicino, E**; Vittadini, G; Causal analysis of the relation between epigenetic pathways and air pollution based on the joint use of mixed latent Markov models and the propensity score method. Abstract: Journal of Applied and Computational Mathematics;4:38; 2015; Ruolo: Statistico (Orale)
- International Society for Environmental Epidemiology Conference, Rome, Italy. 08/2016  
**Colicino, E**; Wallwork, RS; Kloog, I; Coull, BA; Vokonas, P; Schwartz, JD; Baccarelli, AA. Fine Particulate Matter, Outdoor Temperature and Risk of Metabolic Syndrome. (Orale)
- International Society for Environmental Epidemiology (ISEE) Conference, Rome, Italy. 08/2016  
 Mordukhovich, I; Wright, R; Lin, X; Amarasinghwardena, C; Shen; Just, A; Brennan, K; Hou, L; Colicino, E; Sparrow, D; Baccarelli, AA; Schwartz, J. Heavy Metal Exposures and Pathway-Based DNA Methylation Pattern (Poster)
- Conference of American Heart Association (AHA), New Orleans, LA, USA 11/2016  
 Aslibekyan, S; Agha, G; **Colicino, E**; Do, AN; Lahti, J; Ligthart, S; Marioni, RE; Marzi, C; Mendelson, MM; Tanaka, T; Wielscher, M; Absher, D; Ferrucci, L; Franco, OH; Gieger, C; Grallert, H; Hernandez, D; Huan, T; Iurato, S; Joehanes, R; Just, AC; Kunze, S; Lin, H; Liu, C; Meigs, JB; Van Meurs, J; Moore, AZ; Peters, A; Prokisch, H; Räikkönen, K; Rathmann, W; Roden, M; Schramm, K; Schwartz, J; Starr, J; Uitterlinden, AG; Vokonas, P; Waldenberger, M; Yao, C; Zhi, D; Baccarelli, AA; Bandinelli, S; Deary, IJ; Dehghan, A; Eriksson, J; Herder, C; Jarvelin, MR; Levy, D; Arnett DK. Novel DNA methylation loci associated with circulating tumor necrosis factor-alpha, a marker of systemic inflammation. Abstract on Circulation; 134; A18708-A18708; Ruolo: Co-primo autore per lo studio Normative Aging Study. (Orale)
- American Thoracic Society International Conference, San Diego, CA, USA 05/2018  
 Lee, JM; Rasmussen, SG; Brennan, K; **Colicino, E**; Just, AC; Vokonas, P; Lin, X; Hou, L; Litonjua, AA; DeMeo, DL; Sparrow, D; Schwartz, J; Baccarelli AA. Epigenetic Age Acceleration and Lung Function Decline in the

Normative Aging StudyA75. COPD: TARGETS, MODELS, AND CLINICAL STUDIES. Abstract: American Journal of Respiratory and Critical Care Medicine 197:A2400; 2018; Ruolo: Statistico Epigenetico. (Orale)

International Society for Environmental Epidemiology (ISEE) Conference, Ottawa, Canada. 08/2018  
Fang, J; Kang, CM; **Colicino, E**; Osorio-Yáñez, C; Barrow, TM; Wang, H; Liu, H; Xu, H; Li, PH; Byun, HM; Guo, L. The Effect of Maternal PM2.5 Exposure on the Risk Pre-Term Births: Results from Project ELEFANT.  
Ruolo: Statistico. (Orale)

International Society for Environmental Epidemiology (ISEE) Conference, Ottawa, Canada. 08/2018  
Cardenas, A; Sordillo, JE; Rifas-Shiman, Sheryl L; Coull, B; Luttmann-Gibson, H; Hivert, MF; **Colicino, E**; DeMeo, DL; Brennan, KJ; Baccarelli, A; Gold D. The Nasal Methylome as Biomarker of PM2.5 Exposure in Children.  
Ruolo: Statistico Epigenetico. (Orale)

International Society for Environmental Epidemiology (ISEE) Conference, Ottawa, Canada. 08/2018  
Wang, C; Baccarelli, A; Hou, L; **Colicino, E**; Shen, J; Lin, X; Vokonas, P; Koutrakis, P; Schwartz, JD. Short-Term Exposure to Ambient Particulate Elements and Epigenome-Wide DNA Methylation in Older Men: The Normative Aging Study. Ruolo: Statistico Epigenetico. (Orale)

International Society for Environmental Epidemiology (ISEE) Conference, Ottawa, Canada. 08/2018  
Niedzwiecki, M; **Colicino, E**; Schnaas, L; Kloog, I; Pizano, ML; Téllez-Rojo, MM; Wright, R; Baccarelli, A; Just, AC; Wright, R; Petrick, L. Particulate Air Pollution Exposure during Pregnancy and Mitochondrial-Associated Plasma Metabolites in Mothers at 48 Months Postpartum: A Pilot Study. Ruolo: Statistico. (Orale)

International Society for Environmental Epidemiology (ISEE) Conference, Ottawa, Canada. 08/2018  
**Colicino, E**; Just, AC; Kioumourtoglou, MA; Vokonas, P; Cardenas, A; Sparrow, D; Weisskopf, M; Nie, LH; Hu, H; Schwartz, J; Wright, RO; Baccarelli AA. Lead Exposure Biosensors from Epigenome-Wide Blood DNA-Methylation in Adults. (Orale)

International Society for Environmental Epidemiology (ISEE) Conference, Ottawa, Canada. 08/2018  
Wu, S; Hivert, MF; Cardenas, A; Zhong, J; Rifas-Shiman, SL; Agha, G; **Colicino, E**; Just, AC; Amarasiwardena, C; Lin, X; Litonjua, AA; DeMeo, DL; Gillman, MW; Wright, RO; Oken, E; Baccarelli, AA. An Epigenome-Wide Association Study for Prenatal Lead Exposure and Umbilical Cord Blood DNA Methylation in Project Viva (Poster)

International Society for Environmental Epidemiology (ISEE) Conference, Ottawa, Canada. 08/2018  
Moody, EC; **Colicino, E**; Wright, RO; Mupere, E; Jaramill, EG; Amarasiwardena, C; Cusick, SE. Environmental exposure to metal mixtures and linear growth in healthy Ugandan children. Ruolo: Statistico (Poster)

American Academy of Allergy, Asthma & Immunology, San Francisco, CA 02/2019  
Flom, JD; Niedzwiecki, M; **Colicino, E**; Berin, C; Wright, RJ; Characterizing the prenatal inflammatory milieu associated with maternal asthma: A proteomics approach. Abstract: Journal of Allergy and Clinical Immunology;143(2):AB6; 2019. Ruolo: Statistico (Poster)

International Society for Environmental Epidemiology (ISEE) Conference, Utrecht, the Netherlands. 08/2019  
Cowell, W; **Colicino, E**; Kloog, I; Just, A; Coull, B; Wright, R; Associations between PM2. 5 and mid-pregnancy inflammation measured using a novel proteomics chip. Abstract: Environmental Epidemiology; 3:82; 2019. (Orale)

International Society for Environmental Epidemiology (ISEE) Conference, Utrecht, the Netherlands. 08/2019  
**Colicino, E**; Deierlein, A; Just, A; Hair, G; Svensson, K; McRae, N; Pizano-Zarate, M; Pantic, I; Schnaas, L; Tamayo Ortiz, M, Baccarelli AA, Wright RO, Sanders AP. Combined phthalates exposure in pregnancy and increased children's blood pressure at age 4 to 6 years. Abstract: Environmental Epidemiology;3:(78-79); 2019 (Poster)

International Society for Environmental Epidemiology (ISEE) Conference, Utrecht, the Netherlands. 08/2019  
**Colicino, E**; Wright, R; Knuth, R; Levy, S; Hourigan, S; Huddleston, K. Metals mixture exposure in pregnancy is associated with increased fetal growth. Abstract: Environmental Epidemiology;3:(78-79); 2019 (Poster)

- International Society for Environmental Epidemiology (ISEE) Conference, Utrecht, the Netherlands. 08/2019  
 Rechtman, E; Papazaharias, D; Renzetti, S; Cagna, G; **Colicino, E**; Hazeltine, D; Peli, M; Levin-Schwartz, Y; de Water, E; Placidi, D; Lucchini, R; Horton, M. Sex-specific associations between exposure to multiple metals and visuospatial memory skills in adolescents. Abstract: Environmental Epidemiology; 3:328; 2019 (Poster)
- International Society for Environmental Epidemiology (ISEE) Conference, Utrecht, the Netherlands. 08/2019  
 Busgang, S; Waller, L; **Colicino, E**; Hertz-Picciotto, I; Gennings, C. Selecting external controls for internal cases using stratification score matching methods. Abstract: Environmental Epidemiology:3(46); 2019; (Poster)
- Meeting of Society of Biological Psychiatry, Chicago, IL, USA 05/2019  
 Zilverstand, A; Horton, M; **Colicino, E**; Hazeltine, D; Schneider, KM; Alia-Klein, N; Todd, AC; Goldstein, RZ. Life-Time Lead Exposure and its Association With Cognitive Function and Resting-State Connectivity in Cocaine Addiction. Abstract: Biological Psychiatry; 85(10):S356; 2019. Ruolo: Statistico. (Orale)
- International Society for Environmental Epidemiology (ISEE) Conference, virtual. 08/2020  
**Colicino, E**; Cowell, W; Bozack, A; Joshi, A; Niedzwiecki, MM; Bollati, V; Berin, C; Wright, RO; Wright, RJ. Association between mid pregnancy immune phenotyping and cord blood telomere length: PRISM pregnancy cohort (Poster)
- International Society for Environmental Epidemiology (ISEE) Conference, virtual. 08/2020  
**Colicino, E**; Rechtman, E; Dasaro, C; Hahn, C; Navarro, E; Teitelbaum, S; Todd, A; Horton, M. World Trade Center exposome: risk and protective factors for symptoms of post-traumatic stress disorder among WTC General Responders (Poster)
- International Society for Environmental Epidemiology (ISEE) Conference, virtual. 08/27/2020  
**Colicino, E**; Margetaki, K; Foppa, N; Stratakis, N; Vafeiadi, M; Roumeliotaki, T; Kyrtopoulos SA; Kiviranta H; Stephanou, E; Kogevinas, M; McConnell, R; Berhane, K; Chatzi, L; Conti, D. Prenatal exposure to multiple persistent organic pollutants and childhood BMI trajectories- a comparison of three different methods for exposure mixture analysis in a mixed model framework. (Orale)
- International Society for Clinical Biostatistics (ISCB) 07/19/2021  
**Colicino, E**; Ferrari, F; Cowell, W; Niedzwiecki, MM; Pedretti, NF; Joshi, A; Wright, RO; Wright, RJ. Non-linear and non-additive associations between the pregnancy exposome and birthweight (Poster)
- International Society for Environmental Epidemiology (ISEE) Conference, virtual. 08/27/2021  
**Colicino, E**; Ferrari, F; Cowell, W; Niedzwiecki, MM; Pedretti, NF; Joshi, A; Wright, RO; Wright, RJ. Non-linear and non-additive associations between the pregnancy exposome and birthweight (Orale)
- International Society for Environmental Epidemiology (ISEE) Conference, Athens Greece. 09/18/2022  
**Colicino, E**; Gerbi, L; Austin, C; Pedretti, NP; Rosa, MJ; McRae, N; Quataert, SA; Feiler, MO; Thevenet-Morrison, K; Tellez-Rojas, MM; Lamadrid-Figueroa, H; Arora, M; Wright, RO; Jusko TA. Identifying critical windows of perinatal lead exposure for serum antibody levels following childhood vaccination (Poster)
- The U.S. Developmental Origins of Health and Disease (DOHaD) Society meeting 10/10-11/2022  
**Colicino, E**; Ascari, R; Saddiki, H; Merced-Nieves, F; Pedretti, NF; Huddleston, K; Wright, RO; Wright RJ. Cross cohort mixture analysis: a data integration approach with applications on gestational age and DNA methylation-derived gestational age acceleration metrics (Oral)
- ECHO Spring Meeting 04/19/2023  
**Colicino, E**; Ascari, R; Saddiki, H; Merced-Nieves, F; Pedretti, NF; Huddleston, K; Wright, RO; Wright RJ. Cross cohort mixture analysis: a data integration approach with applications on gestational age and DNA-methylation-derived gestational age acceleration metrics (Poster)

**VOLUNTARY PRESENTATIONS OF MENTEES** (underlined the name of the mentee)

International Society for Environmental Epidemiology (ISEE) Conference, Athens Greece. 09/18/2022

Invernizzi, A; Rechtman, E; Renzetti, S; Patrono, A; van Thriel, C; Papazaharias, D; **Colicino, E**; Ambrosi, C; Mascano, L; Cagna, G; Horton M. SARS-CoV-2 infection is associated with functional changes in resting-state neural mechanisms among Italian adolescents and young adults: a longitudinal case control study.

International Society for Environmental Epidemiology (ISEE) Conference, virtual. 08/27/2021

Carrión, D; Rush, H; **Colicino, E**; Just, AC; Residential segregation, air temperature, and circulatory mortality: Exposure model choice matters for disparities analyses

International Society for Environmental Epidemiology (ISEE) Conference, virtual. 08/27/2021

Carrión, D; Gutiérrez Avila, Iván; Rush, H; Rush; **Colicino, E**; Just, AC; Ambient temperature from satellite-hybrid models and preterm birth: A time-stratified case-crossover analysis of 70,000+ preterm births in Central Mexico