AGUSTIN CALATRONI

Highly accomplished and motivated statistician with over 20 years of industry experience with excellent analytical and problem-solving skills. As an applied clinical trials statistician, I have supported more than 50 NIH/NIAID and commercially sponsored clinical trials, where I have led the design, implementation, analysis, and reporting of randomized, observational, and mechanistic studies. As such, I support regulatory agency interactions regarding the many biometrics' requirements of a study. For example, I was the lead statistician for the studies leading to the recent FDA and EMA approval of the first combination treatment for highly treatment-resistant tuberculosis. Additionally, I serve as a company-wide consultant for advanced statistical methodologies, statistical software, and programming and manage statisticians and programmers on the study teams.

💼 PROFESSIONAL EXPERIENCE

Present | 2005

Senior Director, Biostatistics
Rho, Inc
📍 Durham, NC
San Diego, CA

- 2011 - 2020   Principal Statistical Scientist
- 2006 - 2011   Senior Statistician
- 2005 - 2006   Statistician

Serves as the lead study statistician for multiple federally funded studies including complex, multi-center, multi-stage study designs. Advises external study team and educates internal statistical team on advanced statistical topics. Collaborates on large study teams with federal sponsors, pharmaceutical partners, and independent academic centers. Mentors statisticians throughout the company

2005 | 2002

Statistican
Center for Human Growth and Development
Univerity of Michigan
📍 Ann Arbor, MI
Served as statistician on a six universities multi-species research project on the brain and behavior in early iron deficiency

2002 | 1996

Computer Support Specialist
SMT (SportsMEDIA Technology)
📍 Durham, NC
Produced graphics, statistics and video enhancement software for live television sports broadcast networks. 🏆 2000 EMMY winner *ESPN Speedworld NASCAR coverage*

🎓 EDUCATION

2002 | 2000

North Carolina State University
Master of Science in Statistics
📍 Raleigh, NC 🇺🇸
🎖 Mu Sigma Rho Honors Society

1996 | 1995

Université Paris I - Panthéon-Sorbonne
Masters en Sciences Économiques
📍 Paris, FR 🇫🇷
🎖 Summa cum laude

1995

Erasmus School of Economics
Summer School in Econometrics and Statistics
📍 Rotterdam, NL 🇳🇱

1995 | 1991

Université d'Aix-Marseille III
Maîtrise en Sciences Économiques
📍 Aix-en-Provence, FR 🇫🇷
🎖 Summa cum laude

1991 | 1988

Lycée Franco-Argentin Jean Mermoz
Baccalauréat en Sciences Économiques
📍 Buenos Aires, AR 🇦🇷

CONTACT INFO

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○ agstn
🐦 @acalatr
in Agustin Calatroni
📞 (858) 754-8842
🏢 San Diego, California

STATISTICAL SKILLS

Linear (Mixed) Models
Additive (Mixed) Models
Prediction Models
Latent Class Models
Visualization
Study/Patients Dashboards
Clinical Trial Design
SDTM/ADaM data standards

SOFTWARE

R & RStudio
SAS
H2O.ai (ML)
HTML/CSS

STATISTICAL SOCIETIES

American Statistical Association
Statisticians in the Pharmaceutical Industry (PSI)
Society for Clinical Trials (SCT)

THERAPEUTIC AREAS

Asthma
Atopic Dermatitis
Food Allergy
Hematology
Immunology
Respiratory

📖 EXTRACURRICULAR ACTIVITIES

2022
|
2020

Wonderful Wednesday (WW) Challenge
Statisticians in the Pharmaceutical Industry (PSI) Visualization Special Interest Group (VIS SIG)
- Visualizations and Dashboards Contributions
- Visualization of multiple endpoints over times
- Interviewed for the Effective Statistician podcast

2021

🏅 RStudio Table Contest- Honorable Mention
Describer: An Interactive Table Interface for Data Summaries

2020

🏅 RStudio Table Contest- Honorable Mention
The Big Mac Index Tables

2020
|
2011

Industry Mentor
The Statistical and Applied Mathematical Sciences Institute (SAMSI) Industrial Math/Stat Modeling Workshop (IMSM)

Objective is to expose graduate students in mathematics, statistics, and computational science to challenging and exciting real-world problems arising in industrial and government laboratory research.
- Rho Participates in Graduate Student Workshop for the 8th Consecutive Time
- 2019 Continuous glucose monitors (CGMs) w/ Functional Data Analysis

2015

AstraZeneca-Sanger Drug Combination Prediction DREAM Challenge
Advancing Cancer Treatment with Artificial Intelligence

Open innovation competition hosted by Sage Bionetworks using crowdsourcing to identify new solutions to pressing pharmaceutical research and development challenges 🏅 Rho Innovation Award

🖥 SELECTED PRESENTATIONS

2022

Interactive dashboards without Shiny
UseR conference 📍 Virtual

2018

Visualization of The Museum of Modern Art (MoMA) Collection
Scalable, flexible, interactive approach to visualizing data 📍 Blog

2017

AAAAI NHLBI & NIAID Invited Course Faculty
Clinical Trial Designs to Predict Asthma Exacerbations 📍 Atlanta, GA

2016

Model Ensembles Using Cross Validation
UseR conference 📍 Palo Alto, CA

2014

AAAAI/NIEHS Invited Course Faculty
NHANES: Getting to Grips with the Big Data 📍 San Diego, CA

2013

▶ Rho Wide Corporate Training
Visualizing Multivariate Data ↻ Information Into Understanding 📍 Chapel Hill, NC

🏅 Rho Presidential Award for *Outstanding Innovation for statistical visualization*

2008

Correlation with Left Censored and Repeated Measures Data
Joint Statistical Meetings 📍 Denver, CO

🔖 SELECTED PUBLICATIONS FULL LIST

2022

Mepolizumab for Urban Children with Exacerbation-Prone Eosinophilic Asthma: A Randomised Controlled Trial (News Release)
The Lancet

2022

Risk factors for SARS-CoV-2 infection and transmission in households w/ children w/ asthma and allergy: A prospective surveillance study
Journal of Allergy and Clinical Immunology

📊 I have a passion for statistics and often practice it as an extracurricular activity. For almost a decade, I was a mentor for the Statistical and Applied Mathematical Sciences Institute (SAMSI) Statistical Modeling Workshop, where I mentored graduate students in mathematics, statistics, and computational science solutions to challenging real-world problems. Furthermore, I have contributed to the advancement of statistical data communication, through the application of novel tables, graphics, and interactive dashboards. These contributions have gained recognition in-house, with external clients, and among the statistical community.

2021

Development of a human skin commensal microbe for bacteriotherapy of atopic dermatitis and use in a phase 1 randomized clinical trial
Nature Medicine

2019

Distinct nasal airway bacterial microbiotas differentially relate to exacerbation in pediatric patients with asthma
Journal of Allergy and Clinical Immunology

2019

The nonlesional skin surface distinguishes atopic dermatitis with food allergy as a unique endotype
Science Translational Medicine

2019

Longitudinal Phenotypes of Respiratory Health in a High-Risk Urban Birth Cohort
American Journal of Respiratory and Critical Care Medicine

2019

Early decrease in basophil sensitivity to Ara h 2 precedes sustained unresponsiveness after peanut oral immunotherapy
Journal of Allergy and Clinical Immunology
▶ The Application of Data Driven Approaches to Flow Cytometric

2019

The association of allergic sensitization patterns in early childhood with disease manifestations and immunological reactivity at 10 years
Clinical & Experimental Allergy

2019

A computerized decision support tool to implement asthma guidelines for children and adolescents
The Journal of Allergy and Clinical Immunology: In Practice
○ Interactive figure lets users explore the data

2018

Early-life home environment and risk of asthma among inner-city children
Journal of Allergy and Clinical Immunology

2017

Effects of Omalizumab on Rhinovirus Infections, Illnesses, and Exacerbations of Asthma
American Journal of Respiratory and Critical Care Medicine

2017

Graphic depiction of bioinformatics data
Journal of Allergy and Clinical Immunology
○ Source code, data and results for all figures

2017

Can we predict fall asthma exacerbations? Validation of the seasonal asthma exacerbation index
Journal of Allergy and Clinical Immunology

2017

Minimally important differences and risk levels for the Composite Asthma Severity Index
Journal of Allergy and Clinical Immunology
○ Simulation material for the Composite Asthma Severity Index (CASI)

2015

Preseasonal treatment with either omalizumab or an inhaled corticosteroid boost to prevent fall asthma exacerbations
Journal of Allergy and Clinical Immunology

2011

Randomized trial of omalizumab (anti-IgE) for asthma in inner-city children
New England Journal of Medicine
○ GAMMapp : a Shiny app for exploring longitudinal and seasonal data

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☑ Together as a team of investigators, we are motivated by discovery and results to improve health, extend life, and enhance the quality of life. We achieve this by helping our industry, federal, and academic clients run clinical and epidemiological studies, while also guiding them through complex and novel statistical methodology in manuscript writing and presentations.

As the Senior Director of Biostatistics for the following Statistical and Clinical Coordinating Centers:

Inner-City Asthma Consortium (ICAC)
Childhood Asthma Clinical Research Network (CAUSE)
Atopic Dermatitis Research Network (ADRN)
Immune Tolerance Network (ITN)
Consortium of Food Allergy Research (CoFAR)
Human Epidemiology and Response to SARS-CoV-2 (HEROS)

I provide statistical expertise and scientific leadership in developing clinical trials to investigate asthma, allergen immunotherapy, and environmental exposure interventions and their roles in allergy and asthma using both translational research methodologies as well as the analysis of omics data.