

Mats Julius Stensrud

MD Dr.philos

Current job

2024- **Associate Professor (with tenure)**, Chair of Biostatistics, Inst. of Mathematics, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland.

Causal Inference, Statistical Methodology, Medicine, Epidemiology.

Previous positions

- 2020-2024 **Tenure-Track Assistant Professor**, *Chair of Biostatistics, Inst. of Mathematics*, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland.

 Causal Inference, Statistical Methodology, Medicine, Epidemiology.
- 2018-2020 **Fulbright scholar and Kolokotrones fellow**, *Dep. of Epidemiology*, Harvard School of Public Health, USA.
 - 2018 **Residency**, *Dep. of Medicine*, Diakonhjemmet Hospital, Oslo, Norway. 50% position March-September 2018. Clinical training in internal medicine (LIS 2)
 - 2018 **Postdoctoral fellow**, *Dep. of Biostatistics*, University of Oslo, Norway. 50% position. Causal Inference, Survival analysis, Epidemiologic methods
- 2016-2018 **Intern**, *Dep. of Medicine and Dep. of Surgery*, Diakonhjemmet Hospital, Oslo. Clinical training in internal medicine and general surgery (LIS 1 / Turnus)

Education

- 2016 MD, Medical Doctor, University of Oslo, Norway.
- 2015 **Dr.philos**, *Neuroscience*, University of Oslo, Norway.

 Dissertation: Non-classical release of classical neurotransmitters
- 2014 **MSc**, *Applied Statistics*, University of Oxford, United Kingdom. Best achievements in the MSc program
- 2013 BSc, Mathematics, University of Oslo, Norway.

Editorial boards

- 2022- **Biometrics**, Associate editor.
- 2022- Journal of the Royal Statistical Society Series A (JRSS-A), Associate editor.

Selected professional service

- 2026 **Isaac Newton Institute for Mathematical Sciences**, University of Cambridge. 1 out of 6 main organizers of "Causal inference: from theory to practice and back again"
- 2022- **EuroCIM Steering Committee**, Causal Inference Network in Europe.
- 2022 European Research Council (ERC), Starting Grant reviewer, EU.

Fellowships and grants

- 2023- SNSF Starting Grant (Replacement of ERC Starting Grant), Inst. of Mathematics, EPFL. 1'275'668 CHF (1'400'000 USD). Causal inference for infectious disease control
- 2022- **SNSF Research Grant**, *Inst. of Mathematics*, EPFL. 820'182 CHF (900'000 USD). Causal Inference when resources are limited
- 2019-2020 Kolokotrones Fellow, *Dep. of Epidemiology*, Harvard University. Causal Inference
- 2018-2019 **Fulbright Research Scholar**, *Dep. of Epidemiology*, Harvard University. Causal Inference
 - 2018 Unger Vetlesen Scholarship, Dep. of Epidemiology, Harvard University.
 - 2015 Eckbo Legat, Dep. of Statistics, University of Oxford.
 - 2014 Jansen Scholarship, Dep. of Statistics, University of Oxford.
 - 2013 **Norway Oxford Scholarship**, *Dep. of Statistics*, University of Oxford. Awarded to one Norwegian annually
 - 2013 **Senior Scholarship**, *Dep. of Statistics*, University of Oxford. For excellent academic records
- 2012, 2014 **Sønneland Scholarship**, Faculty of Medicine, University of Oslo.
 - 2011 **Apeland Viking Scholarship**, University of Wisconsin-Madison. Studies in Health Communication. Awarded to one Norwegian annually
 - 2009 **Fulbright Scholarship for Outstanding European Students**, Drexel University. Social science and American history

Awards

- 2024 **Sverdrup Prize**.
 - Norwegian Statistical Society. Awarded every two years to one person under 40 years.
- 2023 Lambert Award.
 - Swiss Statistical Society. Awarded every three years to one person under 35 years.
- 2023 Arthur-Linder Prize.
 - Swiss-Austrian Biometrics Society. Awarded biennially to one person under 35 years.
- 2023 International Statistics Institute.
 - Elected member.
- 2018 Rothman Prize (Runner Up).
 - Runner up for best article in Epidemiology in 2018.

- 2018 Statistical Excellence Award for Early-Career Writing (Runner Up).
 Runner up for best article in 2018 (Joint with Morten Valberg).
- 2018 **Best Paper Award**, Norwegian Epidemiological Association.

 Inequality in cancer risk suggests bad genes rather than bad luck, Nature Communications.
- Candidate at the Lindau Nobel Laureate Meeting.
 The Norwegian participant in the 68th Lindau Nobel meeting with 39 Nobel Laureates.
- 2014 **Gutierrez-Toscano Prize**, *Dep. of Statistics*, University of Oxford. I obtained the best achievements in the MSc program in Applied Statistics.

Teaching

- 2023 MATH-655 (Advanced Methods for Causal Inference), Department of Mathematics, EPFL.

 PhD course.
- 2022 MATH-614 (Foundations of Causal Inference), Department of Mathematics, EPFL.

 PhD course.
- 2022- MATH-352 (Causal Thinking), Department of Mathematics, EPFL.

 MSc and advanced BSc course (service course, not intended for mathematics students).
- 2021- MATH-336 (Randomization and Causation), Department of Mathematics, EPFL.

 3rd year BSc course.
- 2021- **MATH-449 (Biostatistics)**, *Department of Mathematics*, EPFL. 1st year MSc course.
- 2020-2021 **MF9570 (Causal Inference)**, *Department of Biostatistics*, University of Oslo. PhD course. 7 hours of lectures on mediation analysis and causal mechanisms.
- 2019-2020 **HT194 (Clinical Epidemiology)**, *Harvard Medical School*, Harvard University. Teaching assistant for Prof. Miguel Hernán.
 - 2019 EPI207 (Advanced Epidemiologic Methods), Harvard School of Public Health, Harvard University.
 Teaching assistant for Prof. James Robins.
 - 2017 **HEL8020 (Causal Inference)**, *Faculty of Medicine*, University of Tromsø, Norway. Lecturing PhD-students and researchers causal inference methods for Health Registry Data.
 - 2015 **MF9490 (Statistics)**, *Faculty of Medicine*, University of Oslo, Norway. Lecturing statistics for PhD students in the Laboratory animal handling course.
- 2014-2016 **MED1100 (Statistics)**, *Faculty of Medicine*, University of Oslo, Norway. Classroom teaching. Introduction to statistics for 1st year MD students.

Invited workshops

- 2023 **Causal Inference with Competing Events**, *with Jessica Young*, European Causal Inference Conference, Oslo, Norway.
- 2023 Causal Inference with Competing Events, Bayer Pharmaceuticals, Germany.

- 2022 **Competing Events in Epidemiology**, *with Jessica Young*, Karolinska Institutet, Stockholm, Sweden.
- 2022 **Causal Inference with Competing Events**, *with Jessica Young*, Society of Epidemiologic Research, Chicago, USA.

Invited plenary and colloquium talks

- 2023 Online Causal Inference Seminar, Invited speaker, Online.
- 2023 **BSU Seminar**, *Invited talk*, Cambridge, UK.
 BSU Seminar: 'From Data to Decisions: Causal Inference Motivated by Policy Questions'
- 2023 **Berlin Epidemiological Methods Colloquium**, *Invited talk*, Germany. On optimal treatment regimes assisted by algorithms
- 2023 **Statistics Seminar**, *Invited talk*, Tel Aviv University, Israel. Bridging data and decisions
- 2022 Center for Causal Inference Fall Seminar, Invited talk, University of Pennsylvania.
 Superoptimal Regimes
- 2022 **Biostatistics Seminar**, *Invited talk*, New York University, USA. Causal reasoning in the presence of competing and truncating events
- 2022 **Society of Epidemiologic Research**, *Symposium organizer*, Chicago, USA. What we think about when we think about fairness
- 2022 Swiss Statistics Seminar, Invited, Bern, Switzerland.
- 2021 **Centre for Statistical Methodology Series**, *Invited*, London School of Hygiene and Tropical Medicine (online), London, UK.
- 2021 **Biometrischen Kolloquium 2021**, *Invited*, (online), Germany. Causal inference Under Resource Constraints
- 2020 Center for Statistics Adolphe Quetelet Seminar Series, Invited, University of Ghent, Belgium.
 - Causal reasoning in settings with competing events and truncation by death
- 2019 **Ulm Mathematical Colloquium**, *Invited*, Ulm, Germany. Causal Inference in Continuous Time

Other selected talks

- 2023 Online Causal Inference Seminar, Invited speaker, Online.
- 2023 Interactive Causal Learning Conference, Invited talk, Boca Raton, USA.
- 2023 Society of Epidemiologic Research, Symposium speaker, Portland, USA.
- 2023 **Atlantic Causal Inference Conference**, *Contributed*, Austin, Texas. Superoptimal regimes
- 2022 **Applied Statistics Seminar**, *Invited talk*, ETH, Zurich.

 Bridging data and decisions: How strings of numbers can honestly guide future policies
- 2022 EFPSI Basel, Discussant, Basel, USA.

- 2022 **ISPM Bern Seminar**, *Invited talk*, Bern, Switzerland. Causal reasoning in settings with competing truncating events
- 2022 Statistics Seminar, Invited, University of Waterloo (online), Canada.
- 2021 Biostatistics Seminar at the Karolinska Institute, Invited, Stockholm, Sweden (Online).
 Causal effects conditional on post-treatment events
- 2021 **The 2021 Pacific Causal Inference Conference**, *Invited*, Beijing (online), China. Causal inference when resources are limited
- 2021 Online Causal Inference Meeting, Invited discussant, Stanford (online), USA.
- 2021 **Society of Epidemiologic Research**, *Contributed*, San Diego (online), USA. Non-discriminatory allocation of limited health resources
- 2021 **JGH Epidemiology Seminar 2021**, *Invited*, (online), Montreal. Causal inference in settings with competing events and truncation by death
- 2021 **CMStatistics 2020**, *Invited*, London (online), UK. Causal inference when resources are constrained
- 2020 **CMStatistics 2020**, *Invited*, London (online), UK. New estimands for causal inference conditional on post-treatment variables
- 2020 **Society of Epidemiologic Research**, *Contributed*, Boston (online), USA. New estimands for conditional causal effects
- 2020 Seminar in Probability Theory and Statistics, Invited, University of Basel, Switzerland.
 New estimands for causal inference conditional on a post-treatment event
- 2020 **Biostatistics seminar**, *Invited*, University of Geneva, Switzerland. Causal Inference Conditional on a Post-Treatment Variable
- 2020 **Joint Statistical Meeting**, *Contributed*, Philadelphia, USA. Causal Inference Conditional on a Post-Treatment Event
- 2020 European Causal Inference Meeting, Contributed, Oslo, Norway (Online due to COVID-19).
 Conditional Separable Effects
- 2020 **Boston University Causal Inference Seminar**, *Invited*, Boston University, USA. The separable effects: New estimands for causal inference in time-to-event settings
- 2019 Causal Inference Reading Group, Invited, University of Pennsylvania, USA. Separable Effects
- 2019 **Society of Epidemiologic Research**, *Invited*, Minneapolis, USA. Separable effects: new estimands for causal inference in competing risk settings
- 2019 **Lifetime Data Science: Foundations and Frontiers**, *Invited*, Pittsburgh, USA. New Estimands for Causal Inference in the Presence of Competing Risks
- 2019 Biostatistics group meeting, Harvard Pilgrim Health Care Institute, Invited, Boston, USA.
 Separable effects for competing risks settings.

- 2019 **Atlantic Causal Inference Conference**, *Contributed*, Montreal, Canada. Causal inference in the presence of competing risks
- 2019 **European Causal Inference Meeting**, *Contributed*, Bremen, Germany. Separable effects: New estimands for causal inference in competing risk settings
- 2018 European Causal Inference Meeting, Contributed, Florence, Italy.
 Marginal structural models for survival analysis in continuous time: Theoretically appealing and practically feasible
- 2017 Causal Inference for Longitudinal Data, Invited, Columbia University, USA.
- 2017 **Workshop on Causal Inference in Health Registry Research**, *Invited*, Oslo, Norway.
- 2016 NordStat, The Nordic Statistical Meeting, Invited, Copenhagen, Denmark.
- 2016 Bergen Biostatistical Seminar, Invited, Bergen, Norway.

Postdoc supervision

- 2023- **Elise Dumas**, *Department of Mathematics*, EPFL, Switzerland. Statistical methods for cancer research
- 2021- **Aaron Sarvet**, *Department of Mathematics*, EPFL, Switzerland. Theory and methods for causal inference with limited resources
- 2022-2023 **Anders Huitfeldt**, *Department of Mathematics*, EPFL, Switzerland. Causal inference in medicine
- 2020-2021 **Pål Christie Ryalen**, *Department of Mathematics*, EPFL, Switzerland. Theory and methods for survival analysis

PhD supervision (completed)

- 2020-2024 **Matias Janvin**, *Department of Mathematics*, EPFL, Switzerland. Research on causal inference methods in event history analysis (main supervisor).
- 2020-2021 **Aaron Sarvet**, *Harvard School of Public Health*, Harvard University, USA. Co-advisor and committee member
- 2017-2019 **Pål Christie Ryalen**, *Faculty of Medicine*, University of Oslo, Norway. Survival analysis (co-supervisor at the university of Oslo).

PhD supervision (ongoing)

- 2024 **Gellert Perenyi**, *Department of Mathematics*, EPFL, Switzerland. PhD student, research on methods for infectious disease control (main supervisor).
- 2023- **Julien Laurendeau**, *Department of Mathematics*, EPFL, Switzerland. PhD student, research on theory of causal inference (main supervisor).
- 2022- **Lorenzo Gasparollo**, *Department of Mathematics*, EPFL, Switzerland. PhD student, research on causal inference methods (main supervisor).
- 2021- **Amit Sawant**, *Department of Mathematics*, EPFL, Switzerland. PhD student, the EPFL Glboal leaders program (main supervisor).

Peer review service 2017-2024

- o Journal of the Royal Statistical Society Series B (JRSS-B) (2022,2023,2024)
- Annals of Statistics (2023)
- Statistical Science (2020, 2021, 2023)
- Journal of the American Statistical Association (2021,2022,2023)
- o PNAS (2021)
- o Biometrika (2019, 2020, 2021,2022)
- o Epidemiology (2018, 2019, 2020, 2021, 2022)
- o Annals of Internal Medicine (2018, 2019, 2020, 2021)
- o British Medical Journal (BMJ) (2018, 2021)
- o Annals of Applied Statistics (2017, 2021)
- o Biometrics (2020, 2021, 2022)
- o Lifetime Data Analysis (2020,2021)
- European Journal of Epidemiology (2020, 2021)
- o American Journal of Epidemiology (2019, 2020, 2023)
- Scandinavian Journal of Statistics (2019, 2020)
- Statistics in Medicine (2019,2022)
- Biometrical Journal (2018)
- o Journal of Causal Inference (2023)

Other professional activities

- 2022- **Berrow Foundation Scholarships**, *Committee member*, Oxford, UK.
- 2022- Occasional private consulting on causal inference, Switzerland and Germany.
- 2021 Causal report for Armasuisse, Report on Causality Research, Switzerland.
- Joint Statistical Meeting (JSM), Contributed Session Organizer Causal Inference When Resources Are Limited, USA (Virtual due to COVID-19).
- 2021 Conference on Uncertainty in Artificial Intelligence (UAI), Senior Program Committee Member, USA (Virtual due to COVID-19).
- 2021 Research Council, Grant reviewer, Israel.
- 2020 Conference on Uncertainty in Artificial Intelligence (UAI), Program Committee, Vancouver (Virtual due to COVID-19).
- 2019-2020 **Kolokotrones Symposium on Data Science**, *Organizer of monthly seminars*, Harvard School of Public Health.
- 2017-2018 Medical Research Council, Grant reviewer, UK.