

CURRICULUM VITAE

MICHELE SANTACATTERINA, PhD

180 Madison Avenue, Room 4-54

New York, NY, USA

Edu email: santam13@nyu.edu

Work email: michele.santacatterina@nyulangone.org

Work phone: 646-501-3642

CURRENT ACADEMIC APPOINTMENTS AND LEADERSHIP POSITIONS

2026 - Present	Associate Professor, Division of Biostatistics, Department of Population Health (DPH) New York University Grossman School of Medicine (NYUGSOM)
2021 - 2026	Assistant Professor, Division of Biostatistics, Department of Population Health (DPH) New York University Grossman School of Medicine (NYUGSOM)
2025 - 2026	Research Advisor, Google DeepMind
2023 - Present	Adjunct Professor of Biostatistics, Rockefeller University
2024 - Present	Affiliated Faculty, NYU Center for Data Science

EDUCATION AND TRAINING

Education

Year	Degree	Field	Institution
2009	B.S.	Statistics	University of Padua, Padua, Italy
2012	M.S.	Biostatistics	University of Milano-Bicocca, Milan, Italy
2018	Ph.D.	Biostatistics	Karolinska Institute, Stockholm, Sweden

Training

2012-2013	Research Assistant	Karolinska Institute, Stockholm, Sweden
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Postdoctoral Training

2018-2020	Data Science	Dr. Nathan Kallus, Cornell University, New York, NY
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PREVIOUS APPOINTMENTS AND LEADERSHIP POSITIONS

2020–2021	Assistant Professor, Biostatistics Center, Milken Institute School of Public Health, George Washington University, Washington D.C., District of Columbia
2022–2025	Visiting Researcher, Google, New York, NY

RESEARCH ACTIVITY

Personal statement

My research focuses on developing and applying causal inference, causal machine learning, and causal AI methods to enhance the rigor, interpretability, and clinical value of modern randomized clinical trials (RCTs). I build estimand-first frameworks that clarify treatment strategies and improve reliability in adaptive, platform, and data-integrative trial settings. A complementary line of work develops robust causal ML/AI methods for multimodal longitudinal data, including imaging, speech, and text, to strengthen inference in small, complex studies. Supported by NIH and NSF funding as PI and mPI, this work advances NYU-led trials in psychiatry and other clinical domains and has established my national reputation at the intersection of causal inference, machine learning, AI, and modern trial design.

Active, completed and pending grants

Active Awards														
Funding Agency	Role	Cal. Months	Effort (%)	Project Title	Individual Contribution	Award Type	Grant Number	Project ID	Start Date	End Date	Total Direct	Total Indirect	Total Costs	
NIH														
NIH	Co-I	0.48	4.00%	(Micro)structural Biomarkers of Skeletal Muscle Health Across the Lifespan	Statistician	R21	R21AG093093	274748	09/2025	08/2027	\$275,000	\$191,125	\$466,125	
NIAMD	MPI	1.95	16.25%	SCH: A structural causal framework for adaptive experiments	mPI and contact PI	R01	R01AI1197146	273615	08/2025	07/2029	\$707,222	\$499,995	\$1,207,217	
	Co-I	1.08	9.00%	Organizational factors associated with quality of care for opioid use disorders among transition-age adults in Medicaid	Statistician	R01	R01DA057267	261100	04/2023	02/2028	\$1,563,369	\$708,521	\$3,566,182	
NIDA	Co-I	0.91	7.58%	A comparative evaluation of overdose prevention programs in New York City and Rhode Island	Statistician	R01	R01DA058277	267235	05/2023	02/2027	\$3,422,706	\$950,912	\$5,811,393	
NIDCD	Co-I	0.55	4.58%	Effect of vocal fold injury on laryngeal muscle dysfunction	Statistician	R01	R01DC020730	268470	07/2023	06/2028	\$1,167,594	\$811,478	\$3,140,696	
NICHD	Co-I	0.84	7.00%	Center on Causal Data Science for Child and Adolescent Maltreatment Prevention	Statistician	P50	P50HD112027	267714	09/2023	08/2028	\$6,630,750	\$2,531,196	\$7,646,367	
NIDA	Co-I	1.92	16.00%	Evaluation of psilocybin as an adjunctive treatment for opioid use disorder in methadone-maintained patients who continue to use illicit opioids	Statistician	UG3	UG3DA062088	271909	09/2024	08/2026	\$4,670,490	\$1,746,998	\$6,417,488	NCE: Y
NIH – Research Foundation for Mental Hygiene, Inc.	Co-I	0.60	5.00%	1/7 Clozapine for the Prevention of Violence in Schizophrenia: a Randomized Clinical Trial	Statistician	Subcontract	R01MH120317	117046	07/2021	06/2027			\$532,747	
Non-NIH														
NSF	PI	1.92	16.00%	SCH: Interpretable survival analysis of complex longitudinal data	PI	NSF	2306556	268495	08/2023	07/2027	\$800,643	\$364,225	\$1,164,869	
Cornell University	PI	1.54	12.83%	Cornell NYU collaboration on novel AI methods	PI	Subcontract	1721171	274271	01/2025	12/2026			\$21,096	
Arthritis Foundation	Co-I	0.60	5.00%	A multi-modal model to predict and analyse rapid hip osteoarthritis progression in patients with femoroacetabular impingement	Statistician	Grant		274748	07/2025	06/2027			\$250,000	
Completed Awards														
Funding Agency	Role	Cal. Months	Effort (%)	Project Title	Individual Contribution	Award Type	Grant Number	Project ID	Start Date	End Date	Total Direct	Total Indirect	Total Costs	
DoD	Co-I		5.00%	Promoting Equity in Genetic Evaluation for Prostate Cancer Among Hispanic/Latinx Men	Statistician		HT94252311040	267880	10/2024	09/2025			\$1,410,866	
NIH	Co-I		20.00%	OTA-21-015A Post-Acute Sequelae of SARS-CoV-2 Infection Initiative. NYU Langone Health Clinical Science Core, Data Resource Core, and PASC Biorepository Core	Statistician	OT	3OT2HL161847-01S1	119518	05/2022	05/2023	\$33,203,136		\$33,203,136	
NIH	Co-I		15.00%	EHR nudges: Development and testing of a behavioral economics electronic health record module	Statistician	R33	5R33AG057382	115982	09/2022	08/2023	\$437,060	\$303,757	\$740,817	
NIH	Co-I		5.00%	Mechanisms Underlying Tongue Muscle Dysfunction and Dysphagia Following Concurrent Chemoradiation Therapy	Statistician	R21	5R21DC018081-02	114745	07/2022	06/2023	\$125,000	\$86,875	\$211,875	
NIH	Co-I		5.00%	Randomized trials using point of care-guided manipulation of dialysate potassium, dialysate bicarbonate, and ultrafiltration rate to prevent hemodialysis-associated arrhythmia	Statistician	R34	1R34HL140477-01	113080	03/2021	02/2022	\$258,596	\$108,569	\$367,165	
NIH	Co-I		5.00%	Reversing immune evasion and enhancing immune detection with topical resiquimod	Statistician	R01	5R01AR074797-04	111261	08/2021	07/2022	\$330,484	\$107,600	\$438,084	
NIH	Co-I		5.00%	Hippocampal memory circuits in delusions	Statistician	R01	5R01MH112733-05	108989	05/2022	04/2023	\$435,202	\$151,190	\$586,392	
NIH	Co-I		5.00%	Levetiracetam in First Episode Psychosis – Renewal	Statistician	R33	5R33MH112833-05	116389	02/2023	01/2024	\$454,461	\$219,382	\$673,843	
NIH	Co-I		5.00%	EPPIIC-NET DCC	Statistician	U24	3U24NS113844-05S2	119120	01/2023	12/2023	\$3,941,104	\$1,615,969	\$3,941,104	
NIH	Co-I		5.00%	Addressing Misinformation to Promote Equity in Prostate Cancer Care	Statistician	R01	R01CA278997	267287	02/2023	01/2024	\$395,967	\$231,414	\$627,381	
NCCAM	Co-I	0.96	8.00%	Elucidating Neural Mechanisms and Sex Differences in Response to Mindfulness Based Stress Reduction in Generalized Anxiety Disorder	Statistician	R01	R01AT011257	118221	07/2021	04/2026	\$2,048,921	\$1,424,000	\$3,472,921	
NINDS	Co-I	0.51	4.25%	EPPIIC-NET DCC – Supplement	Statistician	U24	U24NS113844	273199	09/2023	08/2026	\$5,601,828	\$3,893,271	\$3,941,107	
NIA	Co-I	0.60	5.00%	Depression Treatment and Aβ Dynamics: A Study of Alzheimer's Disease Risk (ABD Study)	Statistician	R01	R01AG070821	118334	08/2021	07/2026	\$3,271,943	\$993,179	\$3,865,122	
NIDA	Co-I	0.12	1.00%	Adaptation of the STAIR-NT Trauma Intervention for Polysubstance Populations	Statistician	R34	R34DA057678	266821	09/2022	09/2026	\$573,027	\$150,128	\$723,155	
NIDA	Co-I	0.12	1.00%	Randomized placebo controlled trial to determine the biological signature of cannabidiol as a treatment for social anxiety disorder	Statistician	R61	R61AT012026	260300	09/2022	02/2026	\$347,675	\$241,634	\$589,309	
Non-NIH														
Non-NIH	MPI	0.54	4.50%	Advancing the Treatment of Class V and Class II Lupus Nephritis Applying Modern Causal Inference Techniques	Statistician	DPH-DOM Pilot		53-B-11100-56676-NYUPRJ	03/2026	08/2026	\$20,727	\$20,727	\$20,727	
Pending Awards														
Funding Agency	Role	Cal. Months	Effort (%)	Project Title	Individual Contribution	Award Type	Grant Number	Project ID	Start Date	End Date	Total Direct	Total Indirect	Total Costs	Score Percentile Received/ Status
NIH														
NIH	Co-I	0.60	5.00%	Psilocybin-assisted Psychotherapy to Treat Fear of Cancer Recurrence in Early-Stage Breast Cancer	Statistician	R01	1R01CA294645-01A1	24-A1-00-1011108	04/2027	03/2032	\$3,259,026	\$927,519	\$4,186,545	N JIT
NIH	Co-I	1.20	10.00%	Suvorexant for paranoia	Statistician	R01	To be assigned	26-A1-00-1013803	07/2026	06/2031	\$7,001,566	\$2,688,807	\$9,630,464	Y JIT
NIH	Co-I	0.60	5.00%	Implications of Genetic Test Results with Variants of Uncertain Significance	Statistician		To be assigned	26-A0-00-1017980	04/2027	03/2032	\$1,597,318	\$547,322	\$2,144,640	N
NIH	Co-I	0.48	4.00%	Telehealth Research and Innovation for Veterans with Cancer (THRIVE)	Statistician		To be assigned	26-A0-S8-1007372	10/2026	07/2027	\$58,992	\$40,999	\$99,991	
NIH	Co-I	0.60	5.00%	A Randomized Controlled Trial to Reduce Medication for Opioid Use Disorder Intersectional Stigma in Rural Communities Using Photovoice	Statistician		To be assigned	25-A0-00-1014484	12/2026	11/2031	\$2,916,177	\$1,233,462	\$4,149,639	N
NIH	Co-I	1.20	10.00%	A new paradigm for precision hemodialysis: The Reducing Adverse outcomes in Dialysis by Adjusting the pRescription for dialysate Potassium Trial (RADAR-K)	Statistician		To be assigned	26-A0-00-1016613	04/2027	03/2032	\$3,008,684	\$823,993	\$3,832,677	N
NIH	Co-I	0.60	5.00%	ARIC Cares Study: Caregiving networks and their consequences among the oldest old	Statistician		To be assigned	26-A1-00-1012997	07/2026	06/2031	\$16,649,194	\$1,343,092	\$17,292,286	Y Award Notification Received
NIH	Co-I	2.40	20.00%	Enhancing brain bioenergetics via sodium-glucose cotransporter-2 inhibition in schizophrenia	Statistician		To be assigned	26-A1-00-1013100	07/2026	06/2031	\$5,841,589	\$2,008,157	\$7,849,746	N
Non-NIH														
None listed.														

EDUCATION ACTIVITY

I am committed to teaching and mentoring at NYUGSOM. Since 2023, I have co-directed Statistical Inference II for Vilcek graduate students and Statistical Learning; I now serve as course director for Statistical Inference II. I also designed and co-direct the graduate course Modern Methods for Causal Inference (since 2023) and teach introductory causal inference in the NYUGSOM Biomedical Informatics MS program and in summer schools. These teaching and mentoring activities contribute directly to NYUGSOM’s mission of training the next generation of biostatisticians equipped to bridge AI and clinical research.

Teaching Activities

Fall 2022 — Statistical Learning, Graduate Level Course for PhD students in Biostatistics, *Course Co-Director*, NYUGSOM

Spring 2023 — Statistical Inference II, Graduate Level Course for PhD students in Biostatistics, *Course Co-Director*, NYUGSOM

03/2023 — Applied Causal Inference for Real-World Observational Studies, half-day course, *Course Director*, ENAR

06/2023 — Causal Inference in Epidemiology, week-long course, *Course Director*, Summer School on Modern Methods in Biostatistics and Epidemiology

Fall 2023 — Modern Causal Inference Methods, Graduate Level Course for PhD students in Biostatistics, *Course Co-Director*, NYUGSOM

03/2024 — Applied Causal Inference for Real-World Observational Studies, 1-day course, *Course Director*, Harvard Catalyst

Spring 2024 — Statistical Inference II, Graduate Level Course for PhD students in Biostatistics, *Course Co-Director*, NYUGSOM

Spring 2025 — Statistical Inference II, Graduate Level Course for PhD students in Biostatistics, *Course Co-Director*, NYUGSOM

06/2025 — Causal Inference in Epidemiology, week-long course, *Course Director*, Summer School on Modern Methods in Biostatistics and Epidemiology

Invited Talks and Teaching of Peers

Internal

Sponsored by NYU Langone Health

09/2021 — Invited Talk, Real-World SARS-CoV-2 Vaccine Effectiveness in North Carolina: The COVID-19 Community Research Partnership., Division of Biostatistics Seminar, DPH, NYUGSOM

09/2022 — Invited Talk, Deep Survival Analysis with Longitudinal X-rays for COVID-19., DPH seminar series, NYUGSOM

10/2024 — Invited Lecture, Introduction to causal inference, NYUGSOM Biomedical Informatics Masters Training Program, NYUGSOM

10/2025 — Invited Lecture, Introduction to causal inference, NYUGSOM Biomedical Informatics Masters Training Program, NYUGSOM

External to NYU Langone Health and all other NYU schools

09/2014 — Poster, Antiretroviral therapy among HIV-infected people who inject drugs in Sweden: access and treatment response. HIV Nordic conference.

09/2015 — Invited Talk, Weight watchers: How to optimize your weight. Nordic and Baltic Stata Users Group meeting.

09/2016 — Talk, Optimal probability weights for inference with constrained precision. Royal Statistical Society International Conference.

04/2017 — Poster, Estimating treatment effects with optimal inverse probability weighting. UK Causal Inference Meeting.

09/2017 — Talk, Estimating treatment effects with optimal inverse probability weighting. Royal Statistical Society International Conference.

10/2017 — Invited Talk, Optimal probability weights for inference with constrained precision. MELODEM Selection Group Meeting.

04/2018 — Talk, Optimal balancing of time-dependent confounders for marginal structural models Second. EUROCIM Causal Inference 2018.

09/2018 — Invited Talk, Optimal Weighting for Causal Inference. Cornell - AI Seminar.

10/2018 — Talk, Optimal balancing of time-dependent confounders for marginal structural models Second. TRIPODS PI meeting.

05/2019 — Talk and poster, Optimal estimation of generalized average treatment effects using Kernel Optimal Matching. Atlantic Causal Inference Conference 2019.

09/2019 — Invited Talk, Kernel optimal orthogonality weighting: a balancing approach to estimating effects of continuous treatments. Cornell Machine Learning in Medicine.

01/2020 — Invited Talk, Kernel optimal orthogonality weighting: a balancing approach to estimating effects of continuous treatments. McGill Department of Biostatistics - Biostatistics Seminar.

03/2020 — Invited Talk, IMS invited session on challenges for precision medicine. ENAR 2020

08/2020 – Invited Talk, Optimal estimation of generalized average treatment effects using Kernel Optimal Matching., JSM 2020 - Health policy statistics section.

12/2020 – Talk, Optimal Weighting for Estimating Generalized Average Treatment Effects, Harvard - Machine Learning and Causal Inference Reading group.

02/2021 – Invited Talk, Optimal Weighting for Estimating Generalized Average Treatment Effects, GWU - Statistics Seminar Series.

03/2021 – Talk, Robust Weights that Optimally Balance Confounders for Estimating the Effect of Binary and Continuous Treatments with Time-to-event Data., ENAR 2021.

08/2021 – Talk, Optimal Weighting for Estimating Generalized Average Treatment Effects, JSM 2021.

04/2022 – Invited Talk, Optimal Weighting for Causal Inference, Columbia Causal Inference Learning Seminar 2022.

05/2022 – Poster, A double machine learning estimator to generalize survival curves from trials to real-world target populations, American Causal Inference Conference 2022.

05/2022 – Poster, Scalable Bootstrap Algorithms for Causal Inference with Large Real-World Data, American Causal Inference Conference 2022.

12/2022 – Invited Talk, Optimal Weighting for Causal Inference, 14th International Conference of the ERCIM WG on Computational and Methodological Statistics.

04/2023 – Invited Talk, Applied Causal Inference for Observational Studies, Seminar Series, Center for Biostatistics, Mount Sinai.

02/2024 – Invited Talk, Exploring the role of AI in medical research: a causal perspective, R³/AI talk, Rockefeller University, New York.

05/2024 – Invited Talk, Identification and estimation of causal effects using non-concurrent controls in platform trials, SCT 2024, Boston.

05/2024 – Invited Talk, Identification and estimation of causal effects using non-concurrent controls in platform trials, ACIC 2024, Seattle.

08/2024 – Invited Talk, Identification and estimation of causal effects using non-concurrent controls in platform trials, JSM 2024, Portland.

11/2024 – Invited Talk, Identification and estimation of causal effects using non-concurrent controls in platform trials, J & J Statistical seminar, online.

02/2025 – Invited Talk, Causal inference for small and large data: efficient data integration and scalable estimation, Purdue University Department of Statistics, La Fayette.

08/2025 – Invited Talk, Identification and estimation of causal effects using non-concurrent controls in platform trials, EcoStat 2025, Tokyo.

11/2025 – Invited Talk, Causal inference for small and large data: efficient data integration and scalable estimation, UCLA Department of Biostatistics, Los Angeles.

10/2026 – Invited Talk, Non-Concurrent Controls in Platform Trials: Estimands, Identification, and Efficiency Across Endpoint Types, ISBS 26, Madrid.

11/2026 – Invited Talk, Automatic, Debiased, and Invariant Counterfactual Generation under General Interventions, SLDS 26, New York.

TBD – Invited Talk, Identification and estimation of causal effects using non-concurrent controls in platform trials, Basel Biometric Society (BBS) Statistical seminar, online.

Mentoring and Advising

Predoctoral students supervised and/or mentored

Master students

07/2015 - 11/2017	Chiara Chiavenna	Biostatistics	Karolinska Institutet	Mentor
08/2017 - 12/2017	Claudia Carlucci	Biostatistics	Karolinska Institutet	Mentor
10/2019 - 06/2020	Yaniv Ravid	ORIE	Cornell	Research advisor
10/2020 - 08/2021	Nolan Kuenster	Epidemiology	GWU	Research advisor

Doctoral students

01/2022 - 04/2022	Axel Martin*	Biostatistics	NYUGSOM	Rotation advisor
05/2022 - Present	Axel Martin	Biostatistics	NYUGSOM	Research advisor
01/2023 - 04/2023	Federico Macchiavelli*	Biostatistics	NYUGSOM	Rotation advisor
05/2023 - 08/2023	Antonio D'Alessandro*	Biostatistics	NYUGSOM	Rotation advisor
09/2023 - Present	Antonio D'Alessandro	Biostatistics	NYUGSOM	Research advisor
08/2023 - 12/2023	Xinyi Zhang*	Biostatistics	NYUGSOM	Rotation advisor
08/2024 - Present	Xinyi Zhang	Biostatistics	NYUGSOM	Research advisor
08/2023 - 12/2023	Jiacheng Ge	Biostatistics	NYUGSOM	Rotation advisor
10/2024 - Present	Matas Griskaitis	Epidemiology	NYUGSOM	Rotation advisor
10/2024 - 01/2025	Richard Liu*	Biostatistics	NYUGSOM	Rotation advisor
08/2023 - 12/2023	Jiacheng Ge	Biostatistics	NYUGSOM	Rotation advisor
04/2025 - Present	Anushree Iyengar	Biostatistics	NYUGSOM	Rotation advisor

Dissertation committee

10/2021 - 2025,	Juan Gago	Epidemiology	NYUGSOM	Dissertation Committee Member
01/2023 - Present,	Danni Wu	Biostatistics	NYUGSOM	Dissertation Committee Member
08/2025 - Present,	Federico Macchiavelli	Biostatistics	NYUGSOM	Dissertation Committee Member
08/2024 - 09/2026,	Xiaoting Xing	Biostatistics	NYUGSOM	Dissertation Committee Member
08/2025 - Present,	Richard Liu	Biostatistics	NYUGSOM	Dissertation Committee Member

Post-Doctoral students

11/2025 - Present,	Raphael Kim	NYUGSOM/Cornell	Scientific Mentor
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NIH K award

INSTITUTIONAL, LOCAL/NATIONAL SERVICE AND RELATED ACTIVITY

Institutional Service

2022 - 2024	NYUGSOM Faculty Senator, NYUGSOM
2021 - Present	DPH Anti Racism Town Hall Member, NYUGSOM
2023 - Present	Working group development and symposium development, Co-Champion, DPH, NYUGSOM
2023 - Present	PhD program review and curriculum development, Co-Champion, NYU
2023 - 2024	Symposium in advances in causal inference methods, Co-Champion, NYU
2024 - 2025	Symposium in design and analysis of modern randomized clinical trials, Chair, NYU
2025 - 2026	Symposium in leveraging electronic health records for rigorous biomedical research, Co-Champion, NYU

Professional Service for Professional Organizations

2024-Present	Invited scientific reviewer for PCORI's Improving Methods for Conducting Patient-Centered Comparative Clinical Effectiveness Research
2024	Invited scientific reviewer for PCORI's Cycle 1, 2024 Broad Pragmatic Studies
2024	Invited reviewer for an NSF-NIH panel on Smart and Connected Health
2023	Chair of an abstract parallel session on generalizability, Society for Causal Inference
2018 - Present	Committee Member of the European Causal Inference Society (EUROCIM)

Peer Review Groups, Grant Application Review Groups, and Study Sections

2024 - Present	DSMB chair for the study Targeting Dopamine-Mediated Social Reward Sensitivity to Remediate Social Disconnection (NIH-R61 Project)
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Advisory Boards and Consultant Positions

2022 - Present	Data and Safety Monitoring Board (DSMB) for multiple studies funded by NIMH/NIH (role: statistician)
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Organizing Roles in Scientific Meetings

2019	Organizer of the symposium: Optimization methods for causal inference Atlantic Causal Inference Conference 2019
2019	Organizer of the workshop: "Do the right thing": machine learning and causal inference for improved decision making, NeurIPS, 2019
2021	Organizer and chair of the invited paper session: Leveraging real-world data for improved medical decision-making: challenges, opportunities, and recent developments ENAR 2021
2023	Program chair of the Generalization and Transportability session at ACIC 2023
2023	Member of the organizing committee for the Symposium in advances in causal inference methods, NYU
2024	Local organizing committee member LiDS 2025
2025	Chair of the organizing committee for the Symposium in design and analysis of modern randomized clinical trials, NYU

Editorial and Journal Positions

BIBLIOGRAPHY

Peer-reviewed Publications - Causal Inference, Statistical and AI Methodology

1. **Santacatterina**, M. and Bottai, M. (2016), ‘Inferences and conjectures in clinical trials: a systematic review of generalizability of study findings’, *Journal of Internal Medicine* **279**(1), 123–126
2. **Santacatterina**, M. and Bottai, M. (2018), ‘Optimal probability weights for inference with constrained precision’, *Journal of the American Statistical Association* **113**(523), 983–991
3. Su, Y., Wang, L., **Santacatterina**, M. and Joachims, T. (2019), Cab: Continuous adaptive blending for policy evaluation and learning, in ‘International Conference on Machine Learning’, PMLR, pp. 6005–6014
4. **Santacatterina**, M. et al. (2019), ‘Optimal probability weights for estimating causal effects of time-varying treatments with marginal structural cox models’, *Statistics in medicine* **38**(10), 1891–1902
5. Kallus, N., Pennicooke, B. and **Santacatterina**, M. (2021), ‘More robust estimation of average treatment effects using kernel optimal matching in an observational study of spine surgical interventions’, *Statistics in medicine* **40**(10), 2305–2320. *Authors listed alphabetically*; **Santacatterina** served as first and corresponding author.
6. Kallus, N. and **Santacatterina**, M. (2021), ‘Optimal balancing of time-dependent confounders for marginal structural models’, *Journal of Causal Inference* **9**(1), 345–369. *Authors listed alphabetically*; **Santacatterina** served as first and corresponding author.
7. Shu, M., Bowen, R. S., Herrmann, C., Qi, G., **Santacatterina**, M. and Zabih, R. (2021), Deep survival analysis with longitudinal x-rays for covid-19, in ‘Proceedings of the IEEE/CVF International Conference on Computer Vision’, pp. 4046–4055
8. Kallus, N. and **Santacatterina**, M. (2022), ‘Optimal weighting for estimating generalized average treatment effects’, *Journal of Causal Inference* **10**(1), 123–140. *Authors listed alphabetically*; **Santacatterina** served as first and corresponding author.
9. **Santacatterina**, M. (2023), ‘Robust weights that optimally balance confounders for estimating marginal hazard ratios’, *Statistical methods in medical research* **32**(3), 524–538
10. **Santacatterina**, M. et al. (2023), ‘Using repeated antibody testing to minimize bias in estimates of prevalence and incidence of sars-cov-2 infection’, *Epidemiologic Methods* **12**(1), 20230012
11. Behrouz, A., **Santacatterina**, M. and Zabih, R. (2024), ‘Chimera: Effectively modeling multivariate time series with 2-dimensional state space models’, *Advances in Neural Information Processing Systems* **37**, 119886–119918
12. Kosko, M., Wang, L. and **Santacatterina**, M. (2024), ‘A fast bootstrap algorithm for causal inference with large data’, *Statistics in Medicine* **43**(15), 2894–2927
13. Behrouz, A., Cao, D. Y., Parviz, A., **Santacatterina**, M. and Zabih, R. (2025), Leto: Modeling multivariate time series with memorizing at test time, in ‘Second Workshop on Test-Time Adaptation: Putting Updates to the Test! at ICML 2025’
14. Cao, D. Y., Behrouz, A., Parviz, A., Karami, M., **Santacatterina**, M. and Zabih, R. (2025), Effectively designing 2-dimensional sequence models for multivariate time series, in ‘ICLR 2025 Workshop on World Models: Understanding, Modelling and Scaling’

15. Matthay, E. C., Neill, D. B., Titus, A. R., Desai, S., Troxel, A. B., Cerdá, M., Díaz, I., **Santacatterina**, M. and Thorpe, L. E. (2025), 'Integrating artificial intelligence into causal research in epidemiology', *Current Epidemiology Reports* **12**(1), 6
16. **Santacatterina**, M. et al. (2025), 'Identification and estimation of causal effects using non-concurrent controls in platform trials', *Statistics in Medicine* **44**(6), e70017
17. D'Alessandro, A., Kim, J., Adhikari, S., Goff, D., Bargagli-Stoffi, F. J. and **Santacatterina**, M. (2026), 'Modern causal inference approaches to improve power for subgroup analysis in randomized controlled trials', *Statistics in Medicine* **45**(3-5), e70436
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Peer-reviewed Publications - Medical and Population Health research

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Abstracts

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