Ran Dai

UNIVERSITY OF NEBRASKA MEDICAL CENTER
PHONE: 773-225-4614
EMAIL: ran.dai@unmc.edu

EDUCATION

University of Chicago   09. 2016-08.2020
Ph.D. candidate, Statistics
University of Chicago   09. 2015-06. 2016
M.S., Statistics
University of Minnesota Twin Cities   09. 2009-01. 2015
Ph. D., Medicinal Chemistry
Peking University   09. 2005-07. 2009
B.S., Pharmaceutical Sciences

ACADEMIC APPOINTMENTS

University of Nebraska Medical Center   09.2020-present
Assistant Professor, Biostatistics

HONORS AND AWARDS

2019-2020 Senior Consultant in Statiatics, University of Chicago   2020

NIC-ASA and ICSA Midwest Joint Fall Meeting Student Poster Competition, 2nd place   2018

The Workshop on Higher-Order Asymptotics and Post-Selection Inference (WHOA-PSI) Travel
Award   2018
International Conference on Machine Learning (ICML) Travel Award   2016

University of Chicago Graduate Student Fellowship   2016 - 2020

University of Minnesota Bighley Graduate Fellowship   2012 - 2013

American Crystallography Association Travel Grant   2012

Peking University Jiangzehan cup modeling competition, 3rd place   2008

National Physics Competition for Undergraduate students, (China) 3rd place   2006

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Statistical Association   2016-present

Institute of Mathematical Statistics   2019-present
American Crystallographic Association   2012-2015

COMMITTEE ASSIGNMENT

Admission Committee (PhD and MPH)   2020-2021
Seminar Committee   2020-2021

PRESENTATIONS

R. Dai, Y. Mai, M. Wu and W. He; Extrapolate clinical trial data on long-term survival benefit for health technology assessment; JSM 2020

A. Tomasovych, S. Kidwell and **R. Dai**; Modeling the transition of death assemblages from surface to subsurface: predicting the effects of burial, mixing, and disintegration on time averaging; EGU General Assembly 2020

R. Dai and M. Kolar; Post-selection inference for high dimensional varying coefficient quantile regression; WHOA-PSI; St. Louis, MO, USA, 2018

R. Dai and M. Kolar; Inference for varying coefficient quantile regression; NIC-ASA and ICAS Joint Fall Meeting; Glenview, IL, USA, October 2018

R. Dai, R. F. Barber; The knockoff filter for FDR control in group-sparse and multitask regression; JSM; Chicago, IL, USA, August 2016

R. Dai, R. F. Barber; The knockoff filter for FDR control in group-sparse and multitask regression; ICML; New York, NY, USA, June 2016

R. Dai, T. W. Geders, B. C. Finzel; Fragment-Based Optimization of an Inhibitor of Mycobacterium Tuberculosis BioA. ACS Annual Meeting; Boston, MA, USA, July 2012

PUBLICATIONS

Theory and Methodology:

H. Song, **R. Dai,** R. F. Barber, and G. Raskutti (2020) Convex and non-convex approaches for statistical inference with noisy labels. *(to appear in JMLR)* arXiv:1910.02348

R. Dai, H. Song, G. Raskutti and R. F. Barber, (2020) The bias of isotonic regression. *Electronic Journal of Statistics.* 14: 801-874

C. Zheng, **R. Dai,** P. Hari and M. J. Zhang. (2017) Instrumental variables with competing risk models. *Statistics in medicine.* 36: 1240-1255

R. Dai, R. F. Barber, (2016) The Knockoff filter for FDR control in group-sparse and multitask regression. *Proceedings of the 33rd international conference on Machine Learning (ICML).* arXiv:1602.03589

Scientific Applications:

C. Zheng, **R. Dai**, R. P. Gale, M. J. Zhang, (2019) Causal inference in randomized clinical trials. *Bone Marrow Transplantation.* 1-5

F. Liu, S. Dawadi, K. Maize, **R. Dai**, et al. (2017) Structure-Based Optimization of Pyridoxal 5'-Phosphate-Dependent Transaminase Enzyme (BioA) Inhibitors that Target Biotin Biosynthesis in Mycobacterium tuberculosis. *Journal of Medicinal Chemistry*, 60: 5507-5520.

R. Dai, T. W. Geders, F. Liu, S. W. Park, D. Schnappinger, C. C. Aldrich, B. C. Finzel. (2015) Fragment-based Exploration of Binding Site Flexibility in Mycobacterium tuberculosis BioA. *Journal of Medicinal Chemistry*, 58: 5208-5217.

S. W. Park, D. Cassalena, D. Wilson, **R. Dai**, P. P. Nag, F. Liu, J. P. Boyce, J. A. Bittker, S. L. Schreiber, B. C. Finzel, D. Schnappinger, C. C. Aldrich. (2015) Target-Based Identification of Whole-Cell Active Inhibitors of Blotin Biosynthesis in Mycobacterium tuberculosis. Chemistry and Biology, 22: 76-86.

R. Dai, D. J. Wilson, T. W. Geders, C. C. Aldrich, B. C. Finzel. (2014) Inhibition of Mycobacterium Tuberculosis Transaminase BioA by Aryl Hydrazines and Hydrazides. *ChemBioChem*, 15: 575-586.