

Gao Wang

ASSISTANT PROFESSOR
VAGELOS COLLEGE OF PHYSICIANS AND SURGEONS
COLUMBIA UNIVERSITY
630 W. 168TH ST. PH 19 RM 304, NEW YORK, NY 10032

☎ 1 212 305 9149
✉ wang.gao@columbia.edu
🌐 wanggroup.org
🌐 tigerwang.org

EDUCATION

- 2009 - 2014 PhD Structural and Computational Biology and Molecular Biophysics graduate program, Baylor College of Medicine, Houston, TX, USA
Thesis advisor: Prof. Suzanne M. Leal
- 2009 - 2013 Visiting PhD student, Department of Statistics, Rice University, Houston, TX, USA
- 2005 - 2009 BSc Bioscience undergraduate program, Beijing Forestry University, Beijing, China
Thesis advisor: Prof. Jürg Ott at Beijing Institute of Genomics & The Rockefeller University
Outstanding Undergraduate Thesis Award

POSTDOCTORAL FELLOWSHIP

- 2015 - 2020 Postdoctoral scholar Matthew Stephens Lab, The University of Chicago
2014 - 2015 Postdoctoral associate Center for Statistical Genetics, Baylor College of Medicine

ACADEMIC POSITIONS

- 2020 - Assistant Professor of Neurological Science, Department of Neurology,
Vagelos College of Physicians and Surgeons, Columbia University, New York, NY, USA

AWARDS AND HONORS

- 2022 *Reviewer's Choice Abstract Award*, American Society of Human Genetics
2018 *Reviewer's Choice Abstract Award*, American Society of Human Genetics
2014 *Nominated Williams Award*, International Genetic Epidemiology Society
2010 *Professor John J. Trentin Award for Scholastic Excellence*, Baylor College of Medicine
2009 *Outstanding Graduate of Beijing City*, Beijing Forestry University
2008 *National College Science Innovation Funds Recipient*, Beijing Forestry University
2007 *First Prize in Science and Technology Contest*, Beijing Forestry University

PROFESSIONAL ACTIVITIES

Journal Referee

- 2022 - present Journal of Clinical Investigation
2021 - present Nature Genetics, eLife, Annals of Applied Statistics
2020 - present Genetics, Genetic Epidemiology, Nature Communications
2019 - present PLOS Genetics, Computational Biology and Chemistry
2016 - present Scientific Reports
2015 - present GENE, Bioinformatics
2014 - present American Journal of Human Genetics, PLOS ONE

TEACHING

Short Courses and Workshops

| | | |
|-------------------|--------------------|---|
| 2021.01 - present | Instructor | <i>Advanced Gene Mapping</i> , taught every year in Winter The Rockefeller University, New York, NY, USA |
| 2018.07 | Instructor | <i>Analysis of Large-Scale Rare Variant Association Studies</i> , Tutorial workshop at the 26th ISCB on Intelligent Systems for Molecular Biology, Chicago, IL, USA |
| 2014.09 | Instructor | <i>Integrated Analysis of Next Generation Sequence Data</i> , Tutorial workshop at the 5th ACM Conference on Bioinformatics, Computational Biology and Health Informatics, Los Angeles, CA, USA |
| 2014.04 | Instructor | <i>Analysis of Next Generation Sequence Data Workshop</i> , Perelman School of Medicine, University of Pennsylvania, PA, USA |
| 2013.06 | Instructor | <i>Annual Advanced Topics in Genome-Wide Association Studies Course</i> , Ontario Institute for Cancer Research, Toronto, Canada |
| 2009.06 | Teaching Assistant | <i>Statistical Gene Mapping Course: Case-control Association Data</i> , Beijing Institute of Genomics, Beijing, China |

Undergraduate and Graduate Courses

| | | |
|-------------------|--------------------|--|
| 2020.09 - present | Instructor | <i>COMS 6901 Projects in Computer Science</i> , Columbia University |
| 2020.09 - present | Instructor | <i>COMS 3998 Undergraduate Projects in Computer Science</i> , Columbia University |
| 2010.01 | Teaching Assistant | <i>Quantitative Genetics</i> , Baylor College of Medicine |
| 2009.03 | Teaching Assistant | <i>Statistical Genetics</i> , Beijing Institute of Genomics |

Other teaching and mentoring experiences

| | | |
|-------------------|--------|--|
| 2022.08 - 2023.08 | Mentor | <i>Careers through Mentoring and training in Omics and Data for Early-stage investigators</i> , Columbia University and national-wide |
|-------------------|--------|--|

SEMINARS AND SYMPOSIUMS PRESENTATIONS

Invited Talks

| | |
|---------|---|
| 2021.04 | Invited talk at 23andme StatGen and CompBio groups |
| 2020.11 | TAMU Statistics Colloquium Series, Texas A&M, College Station, TX, USA |
| 2020.11 | Biostatistics Seminar Series, Department of Public Health Sciences, Penn State College of Medicine, Philadelphia, PA, USA |
| 2019.06 | Symposium on Advances in Genomics, Epidemiology and Statistics, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA |
| 2018.11 | <i>Bayesian variable selection and multivariate analysis for genetic association studies</i> , University of Texas Southwestern Medical Center, Dallas, TX, USA |
| 2018.11 | <i>The Script of Scripts workflow system for reproducible research in computational biology</i> , University of Texas Southwestern Medical Center, Dallas, TX, USA |

Conferences

- 2015.10 *Pitfalls in development of statistical methods for rare variant association studies*,
Annual conference of American Society of Human Genetics, Baltimore, MD, USA
- 2014.08 *The collapsed haplotype pattern method for linkage analysis of sequencing data*,
Annual conference of International Genetic Epidemiology Society, Vienna, Austria
- 2012.10 *Variant Association Tools for quality control and association analysis of exome data*,
Annual conference of International Genetic Epidemiology Society, Stevenson, WA, USA

PUBLICATIONS

- Before 2020 (as a trainee) https://tigerwang.org/research_details/2019
- After 2020 (as a faculty member) https://wanggroup.org/project_resource/publication

SOFTWARE PROJECTS

- Before 2020 (as a trainee) <https://tigerwang.org/software>
- After 2020 (as a faculty member) https://wanggroup.org/project_resource/compbio_tools