Bowen Jin

PH.D.   SYSTEM BIOLOGY AND BIOINFORMATICS

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Education

Case Western Reserve University   *Cleveland, Ohio*

PH.D., SYSTEM BIOLOGY AND BIOINFORMATICS   *07/2018 - 05/2023*

- Advisor: William S. Bush, Ph.D.
- Dissertation: "Study transcriptional variability with single-cell RNA-seq data"

Huazhong University of Science and Technology   *Hubei, China*

B.S., PHYSICS   *09/2014 - 06/2018*

- Advisor: Shengyou Huang, Ph.D.
- Thesis: "Protein-peptide docking with coarse-grained model"

Appointment

07/2023-current   **Postdoctoral Research Fellow**, Brigham & Woman's Hospital; Harvard Medical School
07/2018-05/2023   **Research Assistant; Teaching Assistant**, Case Western Reserve University
06/2017-06/2018   **Undergraduate Research Assistant**, Huazhong University of Science and Technology

Publications

PUBLISHED

Li B, **Jin B**, Capra JA, Bush WS. 2022. Integration of Protein Structure and Population-Scale DNA Sequence Data for Disease Gene Discovery and Variant Interpretation. Annual Review of Biomedical Data Science 5: 141–161.

Grunin M, de Jong S, Palmer E, **Jin B**, Rinker D, Moth C, Capra JA, Haines JL, Bush WS, Den Hollander AI. 2022. Spatial modeling of variants in complement genes associated with age-related macular degeneration. Investigative Ophthalmology & Visual Science 63: 2627.

Jin B, Capra JA, Benchek P, Wheeler N, Naj AC, Hamilton-Nelson KL, Farrell JJ, Leung YY, Kunkle B, Vadarajan B, et al. 2022. An association test of the spatial distribution of rare missense variants within protein structures identifies Alzheimer's disease–related patterns. Genome Res 32: 778–790.

Tang Z-Z, Sliwoski GR, Chen G, **Jin B**, Bush WS, Li B, Capra JA. 2020. PSCAN: Spatial scan tests guided by protein structures improve complex disease gene discovery and signal variant detection. Genome Biol 21: 217.

Zhou P, **Jin B**, Li H, Huang S-Y. 2018. HPEPDOCK: a web server for blind peptide-protein docking based on a hierarchical algorithm. Nucleic Acids Res 46: W443–W450.

IN REVIEW

Jin B, Feng H, Bush WS. 2022. Allelic Transcription Factor binding shape transcriptional kinetics in human cell lines. bioRxiv 2022.09.21.508743.

Presentations

CONFERENCE TALKS

Jin B, Capra JA, Benchek P, Wheeler N, Naj AC, Hamilton-Nelson KL, Farrell JJ, Leung YY, Kunkle B, Vadarajan B. 2022. *Spatial Distribution of Rare Missense Variants Within Protein Structures is Associated with AD Risk.* Alzheimer's Association International Conference, San Diego, CA.

Jin, B, Feng H, Bush WS. 2022. *Allelic-specific transcription factor binding and chromatin accessibility shape promoter kinetics in human cell lines.* American Society of Human Genetics Annual Meeting, Los Angeles, CA.

Jin, B. 2022. Allelic-specific transcription factor binding and chromatin accessibility shape promoter kinetics in human cell lines. Tohoku Symposium, Cleveland, OH.

POSTER PRESENTATIONS

Jin, B, Bush WS. 2021. Transcriptomic mapping of bursting kinetics in human cells. Poster: American Society of Human Genetics Annual Meeting, Virtual Meeting

Jin B, Bush WS. 2021. Transcriptomic mapping of bursting kinetics in human cells. Poster: The Biomedical Graduate Student Symposium, Cleveland, OH

Jin B, Capra JA, Benchek P, Wheeler N, Naj AC, Hamilton-Nelson KL, Farrell JJ, Leung YY, Kunkle B, Vadarajan B. 2020. A protein structure-based association test for studying rare variants. Poster: American Society of Human Genetics Annual Meeting, Houston, TX

Jin B, Capra JA, Benchek P, Wheeler N, Naj AC, Hamilton-Nelson KL, Farrell JJ, Leung YY, Kunkle B, Vadarajan B. 2020. A protein structure-based association test for studying rare variants. Poster: The Biomedical Graduate Student Symposium, Cleveland, OH

Awards

10/2022	**SYBB Graduate Student Travel Award**, Department of Nutrition.
07/2022	**Graduate Student Travel Award**, School of Graduate Studies

Teaching Experience

Fall 2022	**A Data-Driven Introduction to Genomics and Human Health**, Teaching Assistant/Lecturer	*Cleveland, OH*
Summer 2022	**Introduction to R Programming**, Teaching Assistant/Lecturer	*Cleveland, OH*
Summer 2022	**Introduction to Scientific Computing**, Teaching Assistant/Lecturer	*Cleveland, OH*

Professional Development

SERVICE

2022	**Case Western Reserve University Undergraduate Research: SOURCE Symposium**, Volunteer Judge	*Cleveland, OH*

PROFESSIONAL MEMBERSHIPS

American Society of Human Genetics

Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment (ISTAART)

PEER REVIEW

Nucleic Acids Research

PLOS Biology