Haining Chen

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EDUCATION AND ACADEMIC BACKGROUND

- **Graduate**: The Graduate Field of Biochemistry, Molecular and Cell Biology (BMCB), Cornell University (2020-present)
- **Graduate**: Department of Molecular, Cellular, and Integrative Biosciences (MCIBS), Penn State University (2018-2020)
- **BS**: Microbiology, Shandong University, China (2014-2018)

RESEARCH AND PROFESSIONAL EXPERIENCE

Graduate Research

- 1. Using ChIP-exo as well as other biochemistry methods to study the molecular architecture on cis regulatory regions in human genome. Sponsor Dr. B Franklin Pugh. Cornell University.
- 2. Develop a novel ChIP-exo technique to barcode chromatin prior to ChIP in order to allowing experimental scale up. Sponsor Dr. B Franklin Pugh. Cornell University.

Professional Training

- 1. Biology 598 Experiential Teaching in Biology: improve teaching skills (Penn State)
- 2. BIOL 602: Supervised Experience in College Teaching : TA one semester in Biology 110 Lab section(Penn State)

Undergraduate Research

- 07/2017-05/2018 Structure analysis of a protein containing a pzp domain and functional interaction with histone substrates. Sponsor Dr. Li Haitao. Tsinghua University.
- 2. 05/2016-04/2017 Functional Assignment of Multiple ESCRT-III Homologs in Cell Division and Budding in *Sulfolobus Islandicus*. Sponsor Dr. Yulong Shen. Shandong University.
- 3. 07/2016-08/2016 The Target Signals of Msp1 in Yeast. Sponsor Dr. Jiang Hui. National Institute of Biological Sciences Beijing.
- 4. 07/2015-08/2015 Panda Feeder in Jinan Zoo. Shandong Province, China.

- Research presentation: "Same-molecule rotational relationship between transcription factors and nucleosomes" - Mechanisms of Eukaryotic Transcription, Cold Spring Harbor, NY, Aug. 29 – Sep. 2, 2023.
- 2. Research presentation: "Same-molecule rotational relationship between transcription factors and nucleosomes" Summer Symposium on Chromatin and Epigenetic Regulation of Transcription, State College, PA, Aug. 6-9, 2023.
- 3. Research presentation: "Protein molecular architecture of human promoters" BMCB Student Seminar, Cornell University, Nov. 14, 2022.
- 4. Research presentation: "Protein molecular architecture of human promoter" BMCB GGD symposium, Cornell University, Oct. 10, 2022.
- 5. Poster: "Protein molecular architecture of human promoter" 2022 ASBMB Conference, Snowbird, UT, Sep. 28-Oct. 2, 2022.
- 6. Research presentation: "Protein molecular architecture of human promoter" MBG Retreat, Cornell University, Aug. 16, 2022.
- 7. Research presentation: "High-throughput ChIP-exo by nuclei barcoding" BMCB Student Seminar, Cornell University, Feb. 14, 2022.
- 8. Event: "2021 Mechanisms of Eukaryotic Transcription" Cold Spring Harbor virtual meeting, Aug. 31, 2021 Sep. 3, 2021.
- 9. Research presentation: "High-throughput ChIP-exo by nuclei barcoding" BMCB Student Seminar, Cornell University, Mar. 8, 2021.
- 10. Event: "High-throughput ChIP-exo by nuclei barcoding" Annual Center for Eukaryotic Gene Regulation retreat, Penn State University, Oct. 17, 2020.
- Research presentation: "High-throughput ChIP-exo by nuclei barcoding" -Megameeting in Center for Eukaryotic Gene Regulation, Penn State University, Jun. 10, 2020.
- 12. Journal club talk: "Regulation of RNAPII Pool Is Integral to the DNA Damage Response" - Megameeting in Center for Eukaryotic Gene Regulation Zoom meeting online, Apr. 9, 2020.
- Research presentation: "High-throughput Chip-exo by nuclei barcoding" -Megameeting in Center for Eukaryotic Gene Regulation, 4th Floor Frear Bridge at Penn State University, Mar. 3, 2020.
- 14. Poster Presentation: "Bar-Chip-exo: High-throughput Chip-exo for large-scale DNA-binding proteins studies" Annual Center for Eukaryotic Gene Regulation retreat at 310 Elks Club Rd., Boalsburg, PA, Dec. 10, 2019.
- 15. Event: "Mechanisms of Eukaryotic Transcription" at Cold Spring Harbor Laboratory, Aug. 27, 2019 - Aug. 31, 2019.
- Poster Presentation: "Bar-Chip-exo: High-throughput Chip-exo for large-scale DNA-binding proteins studies" - MCIBS and Pathobiology Retreat at Toftrees Resort, State College, PA, Aug. 20, 2019.
- 17. Event: "Summer Symposium on Chromatin and Epigenetic Regulation of Transcription" at Penn State University, Jul. 30, 2019 Aug. 2, 2019.
- Research Presentation: "Bar-Chip-exo: High-throughput Chip-exo for large-scale DNA-binding proteins studies" - Megameeting in Center for Eukaryotic Gene Regulation, 4th Floor Frear Bridge at Penn State University, May 11, 2019.

RESEARCH PUBLICATIONS

- Liu, J., Gao, R., Li, C., Ni, J., Yang, Z., Zhang, Q. Chen, H., Shen, Y. (2017). Functional assignment of multiple ESCRT-III homologs in cell division and budding in *Sulfolobus islandicus*. Molecular microbiology, 105(4), 540-553.
- 2. **Chen, H**., & Pugh, B. F. (2021). What do transcription factors interact with?. *Journal of Molecular Biology*, 166883.
- 3. Zheng, S., Bi, Y., **Chen, H.,** Gong, B., Jia, S., & Li, H. (2021). Molecular basis for bipartite recognition of histone H3 by the PZP domain of PHF14. *Nucleic acids research*, *49*(15), 8961-8973.

HONORS

- 1. 09/2015 Excellent Student of Shandong University
- 2. 09/2015Second-class Scholarship of Shandong University