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

1. 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.

Conference and Presentations:

1. 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.
11. 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.
13. 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.
16. 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.
18. 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

1. 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