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. 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.
2. Using ChIP-exo as well as other biochemistry methods to get mammalian epigenome map. Sponsor Dr. B Franklin Pugh. Cornell University.
3. Develop Split-pool-ChIP-exo technique to achieve mammalian epigenome at single cell resolution and to study how epigenome regulates cellular heterogeneity. 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: BMCB Student Seminar: "High-throughput ChIP-exo by nuclei barcoding" Cornell, 02/14/22

2. “2021 Mechanisms of Eukaryotic Transcription” Cold Spring Harbor virtual meeting 08/31/2021-09/03/2021
3. Research presentation: BMCB Student Seminar: "High-throughput ChIP-exo by nuclei barcoding" Cornell, 03/08/21
4. Annual Center for Eukaryotic Gene Regulation retreat: “High-throughput ChIP-exo by nuclei barcoding” Penn State,10/17/20
5. Research presentation: Megameeting in Center for Eukaryotic Gene Regulation: “High-throughput ChIP-exo by nuclei barcoding” Penn State, 06/10/20
6. Journal club talk: “Regulation of RNAPII Pool Is Integral to the DNA Damage Response” Megameeting in Center for Eukaryotic Gene Regulation Zoom meeting online 04/09/2020
7. Research presentation: Megameeting in Center for Eukaryotic Gene Regulation 4th Floor Frear Bridge 03/03/2020 “High-throughput Chip-exo by nuclei barcoding”
8. 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. 12/10/2019
9. “2019 Mechanisms of Eukaryotic Transcription" at Cold Spring Harbor Laboratory 8/27/2019 - 8/31/2019
10. 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. 8/20/2019
11. “Summer Symposium on Chromatin and Epigenetic Regulation of Transcription” at Penn State University 7/30/2019 - 8/02/2019
12. 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 05/11/2019

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