



Thomas Jefferson University
Sidney Kimmel Medical College

Nanopore Sequencing of Epigenetics of RNA Biology

Two NIH-funded postdoc positions are available with Professor Ya-Ming Hou at Thomas Jefferson University, Philadelphia. We study systems biology of RNA epigenetics and post-transcriptional modifications. A strong focus is on exploring the Oxford Nanopore technology of direct sequencing of human transcriptome to precisely map RNA post-transcriptional modifications.

We are interested in the following questions:

- How to achieve direct and accurate Nanopore sequencing of RNA?
- How to identify RNA modifications in the transcriptome using Nanopore?
- What is the “ground truth” in Nanopore sequencing of each RNA modification?
- How does each RNA modification change in stress and in disease?

For more information, please see the following publications and our website:

Cell Reports (2022). PMID: [36288695](#)

J. Mol Biol. (2022). PMID: [34995554](#)

eLife (2021). PMID: [34382933](#)

Nat Communications (2021). PMID: [33436566](#)

Cell Chem Biol (2020). PMID: [32553119](#)

ACS Catal (2020). PMID: [32904895](#) (Featured as the cover)

Ann Neurol (2020). PMID: [32715519](#)

Cell Systems (2019). PMID: [30981730](#) (Featured in Faculty 1000 Prime)

PNAS (2016). PMID: [27849575](#) (Featured in PNAS commentary)

Nat Struct Mol Biol (2016). PMID: [27571175](#). (Featured in Science)

Nature Communications (2015). PMID: [26009254](#)

Chem and Biol (Cell Press) (2014). PMID: [25219964](#)

Nature (2014). PMID: [24919148](#) (Featured in Nature News and Views)

<https://houlaboratory.com/research>

<https://www.jefferson.edu/university/research/researcher/researcher-faculty/hou-laboratory.html>

Please send a cover letter, CV, and contact information of three references to:

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