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WELCOME

2024 Postdoctoral Fall Symposium

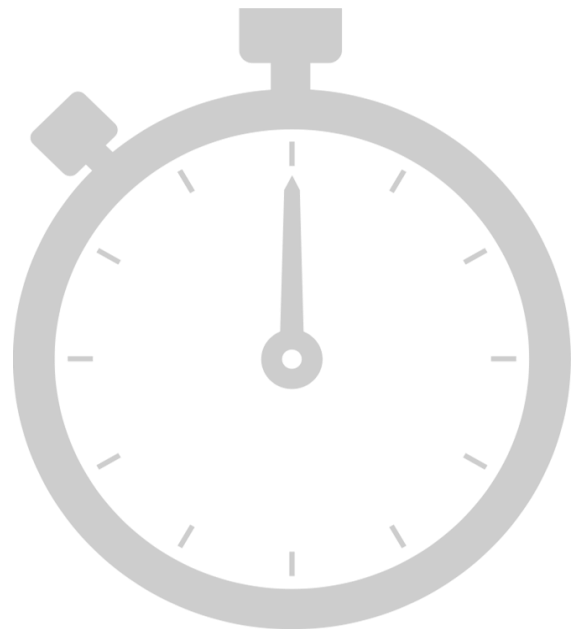
The Office of Postdoctoral Affairs

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Presents:



FIVE
MINUTE
RESEARCH
POSTDOC COMPETITION



Florida State University

THANK YOU TEAM!

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Application Developer, Designer

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Graduate Assistant - Office of Postdoctoral Affairs

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Postdoctoral Scholar MagLab

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Acting Director Office of Graduate Awards & Fellowships

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Past Senior Advisor*

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Event Administrative Specialist

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College of Medicine Coordinator

Geoset Studios!
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Postdoctoral Association Leadership Team! - *Olivia Cook (President), Kasey Longley (Vice President), Betsy Mansfield (Senior Advisor), Luna Hiron (Past Senior Advisor), and Mohammad Nooranidoost (Past Senior Advisor)*

THANK YOU JUDGES!

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Jennifer Winegardner
*RW Law Firm
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Behrouz Ghazi Esfahani

Institute of Molecular Biophysics

*SPOT-RASTR: A Novel Method to Prepare CRYO EM
Samples*

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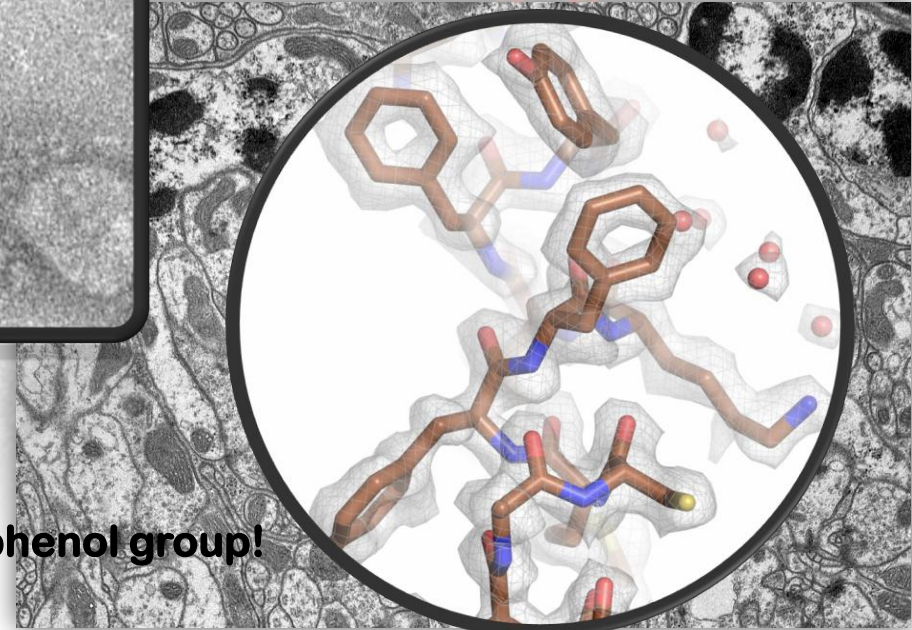
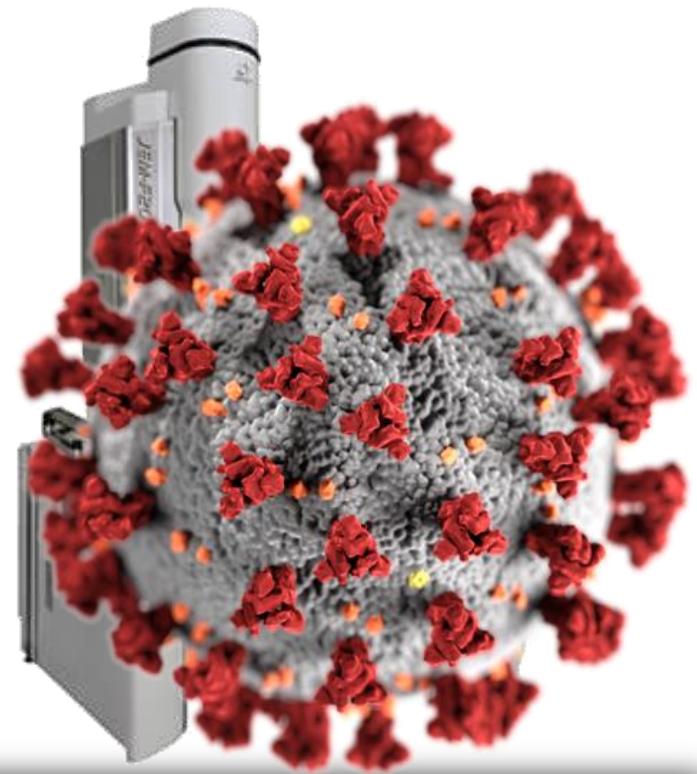
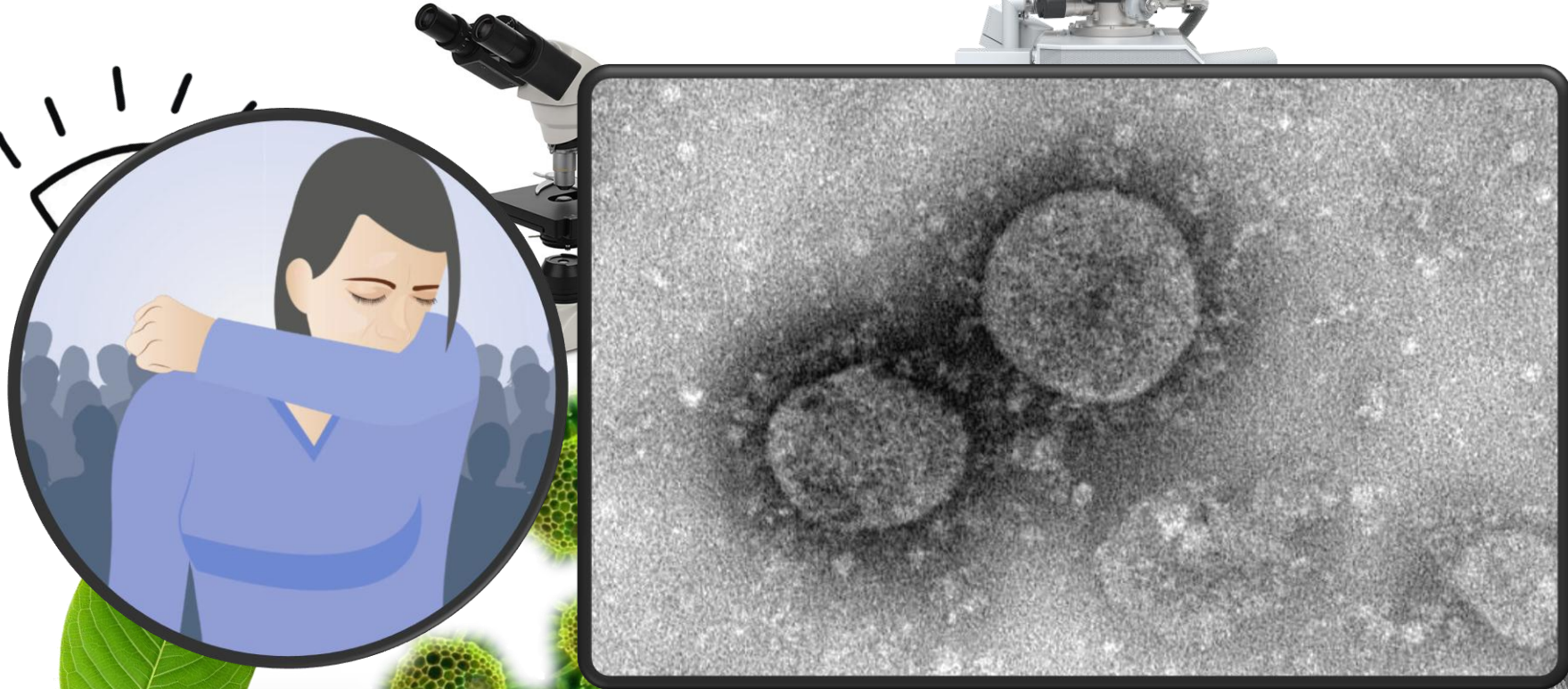
Introducing the SPOT-RASTR

- Behrouz Ghazi Esfahani
- 5-minute research
- September 27th, 2024

Well, let's look!

s?

Zooming in!

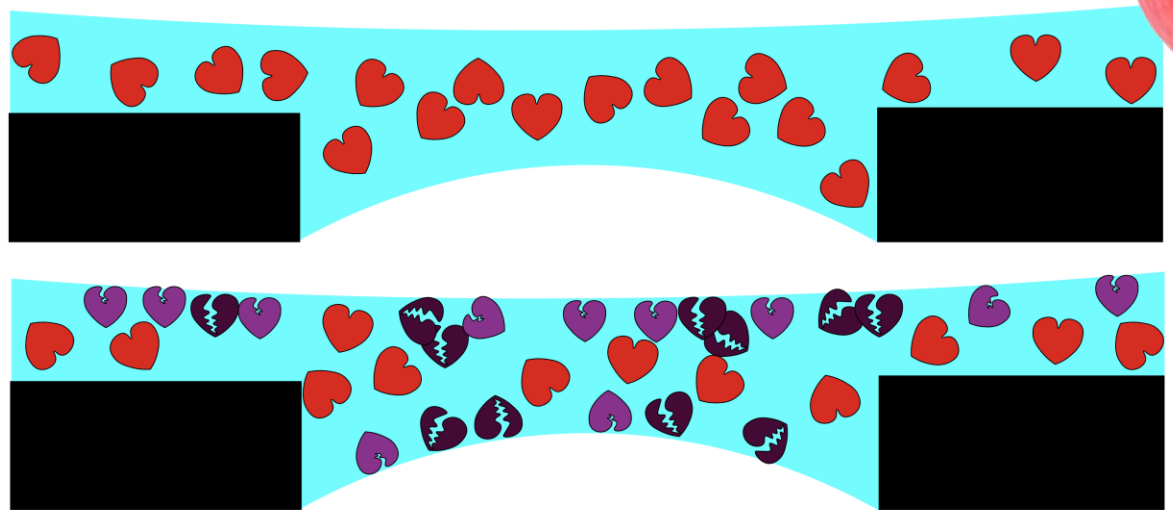


~2 Å Resolution!

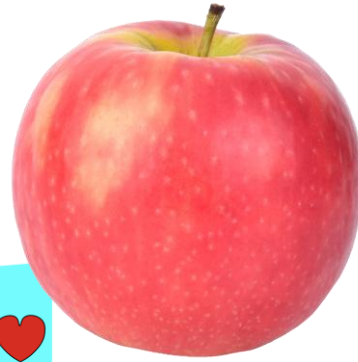
You can see the lack of electron density in the phenol group!

Many challenges are present in sample prep

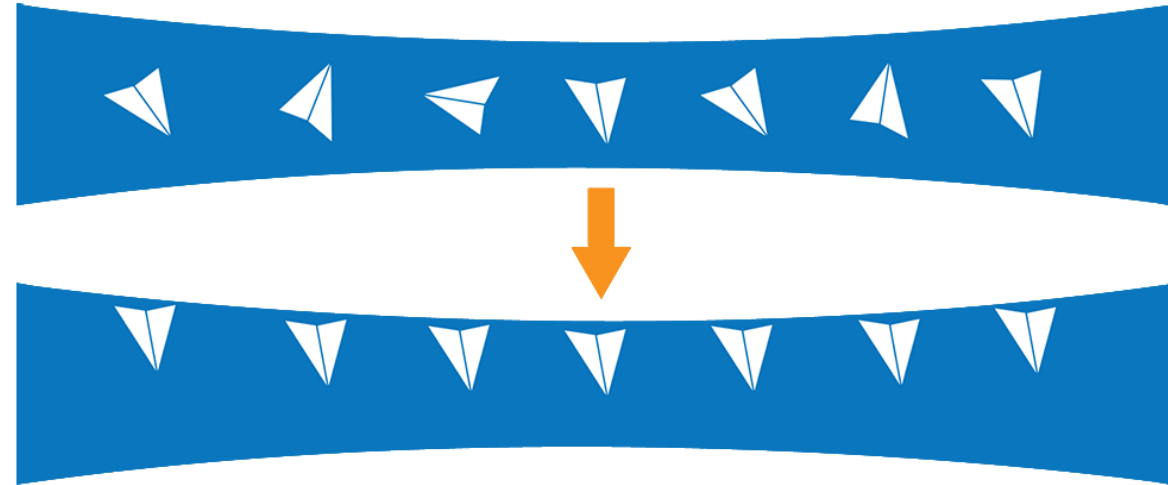
Sample denaturation



♥ Intact protein ♥ Partially denatured protein ♥ Completely denatured protein



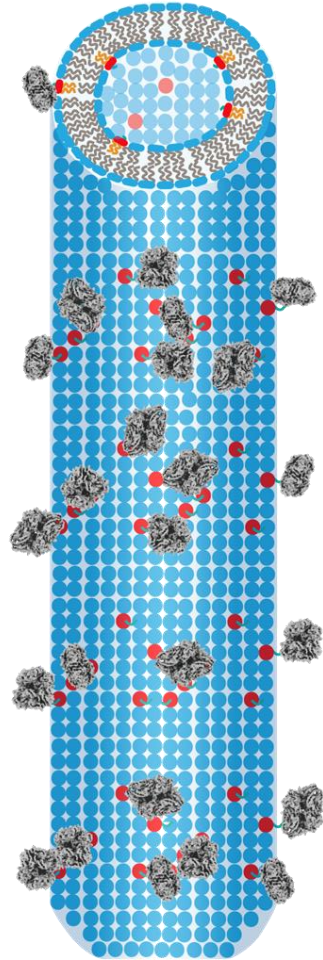
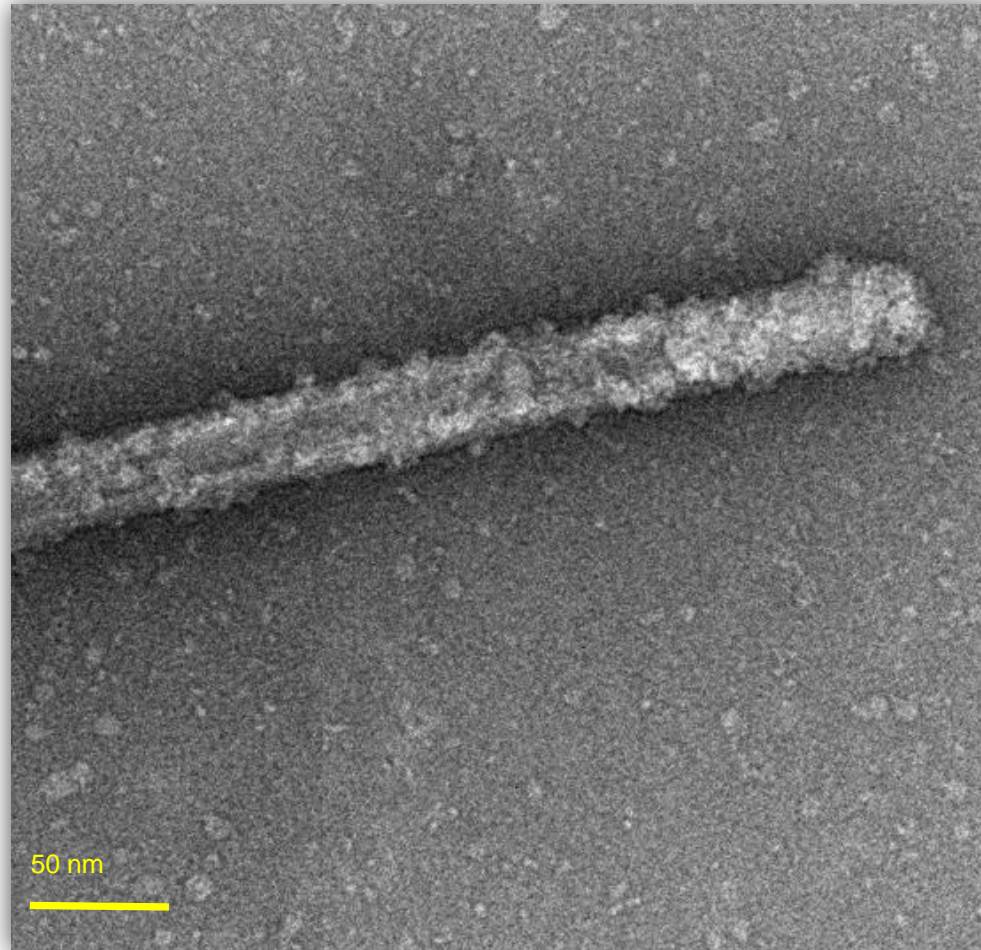
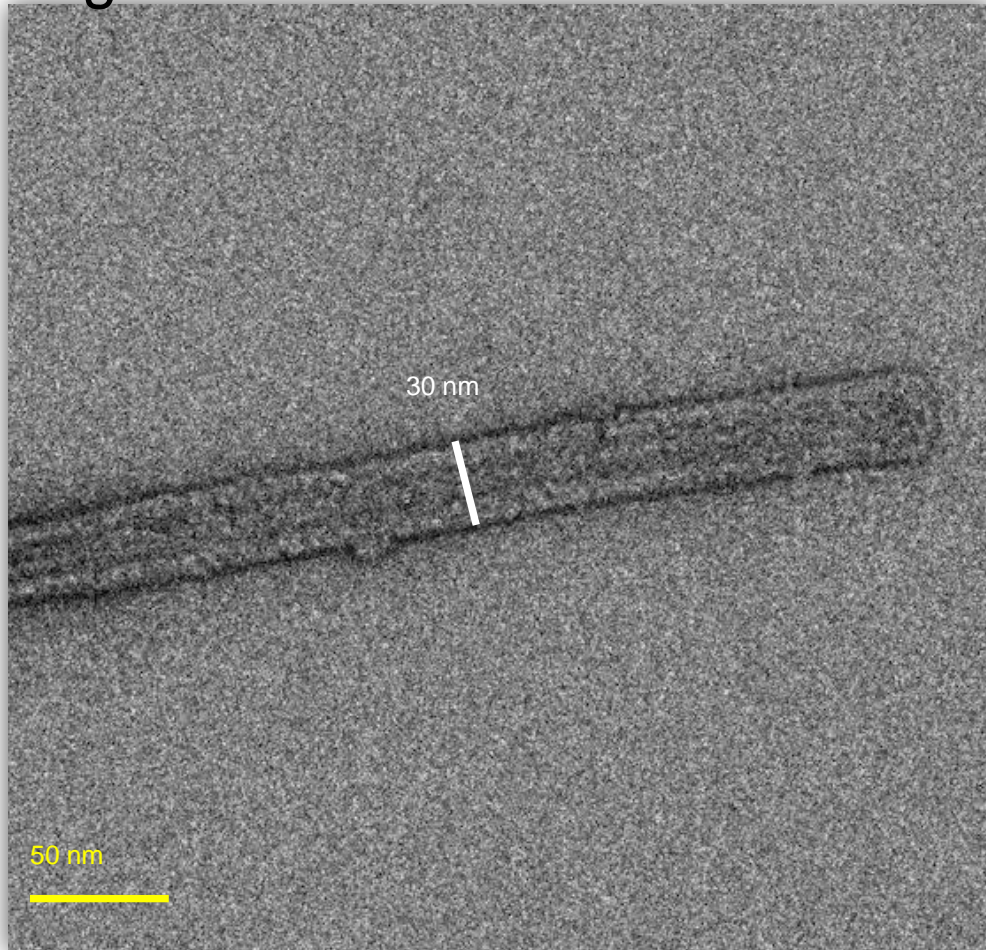
Preferred orientation



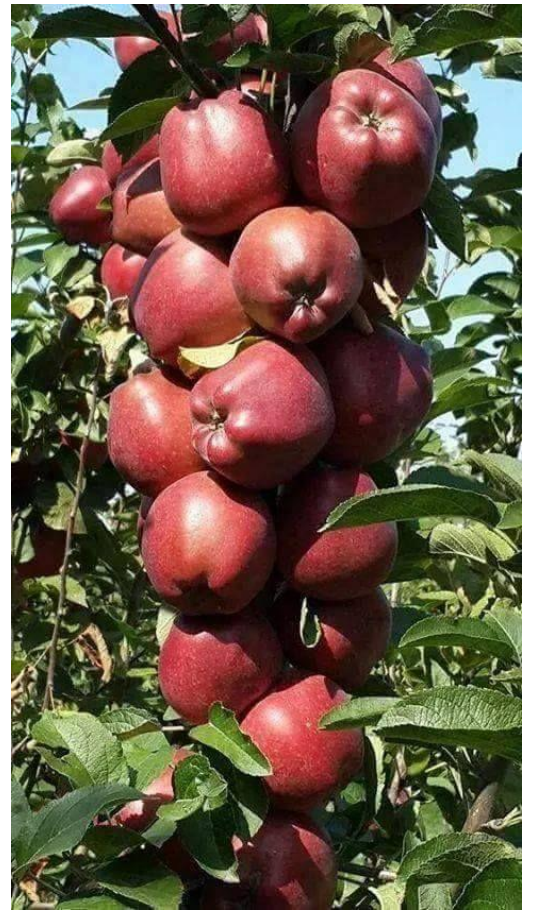
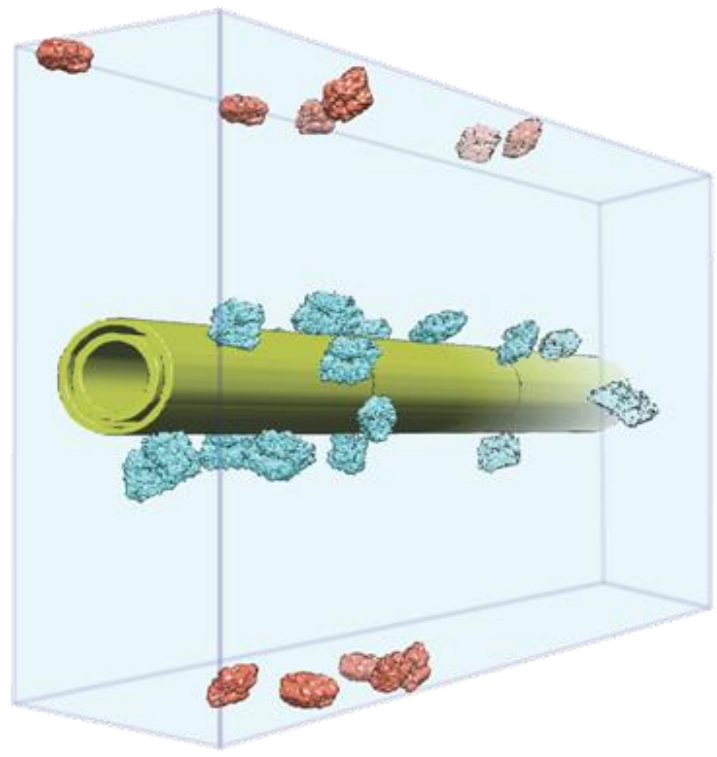
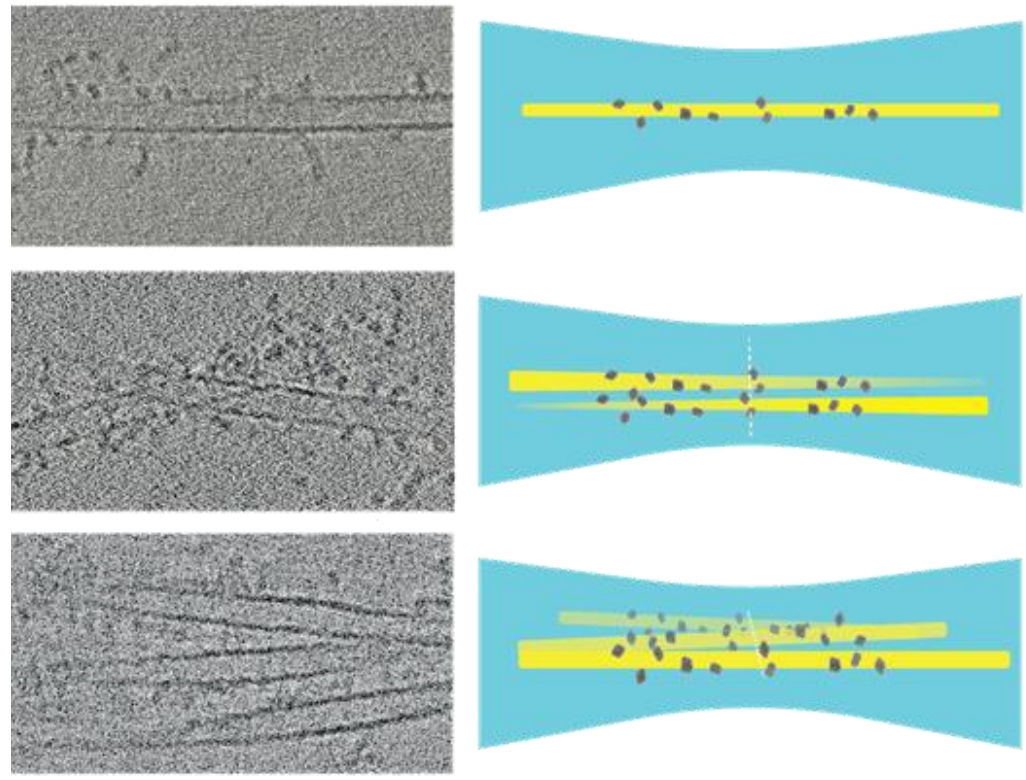
Proposing SPOT-RASTR to prevent the issues



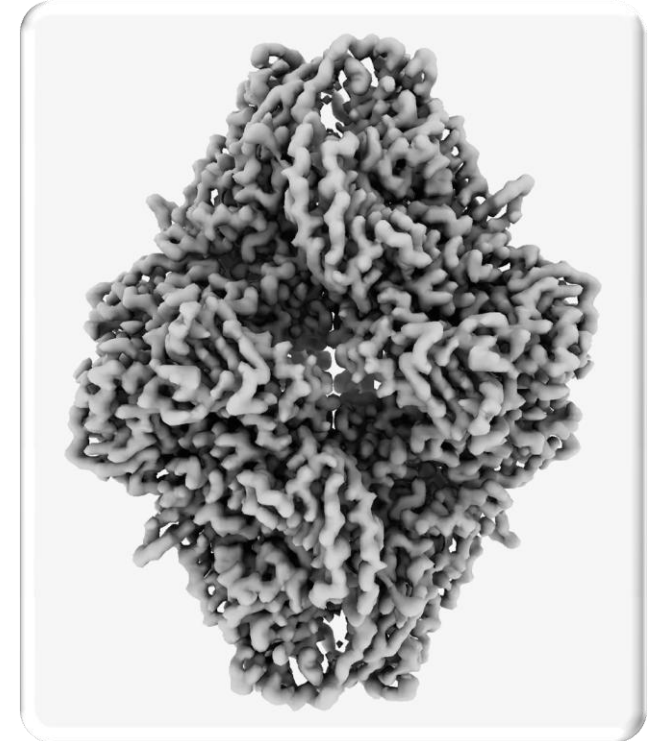
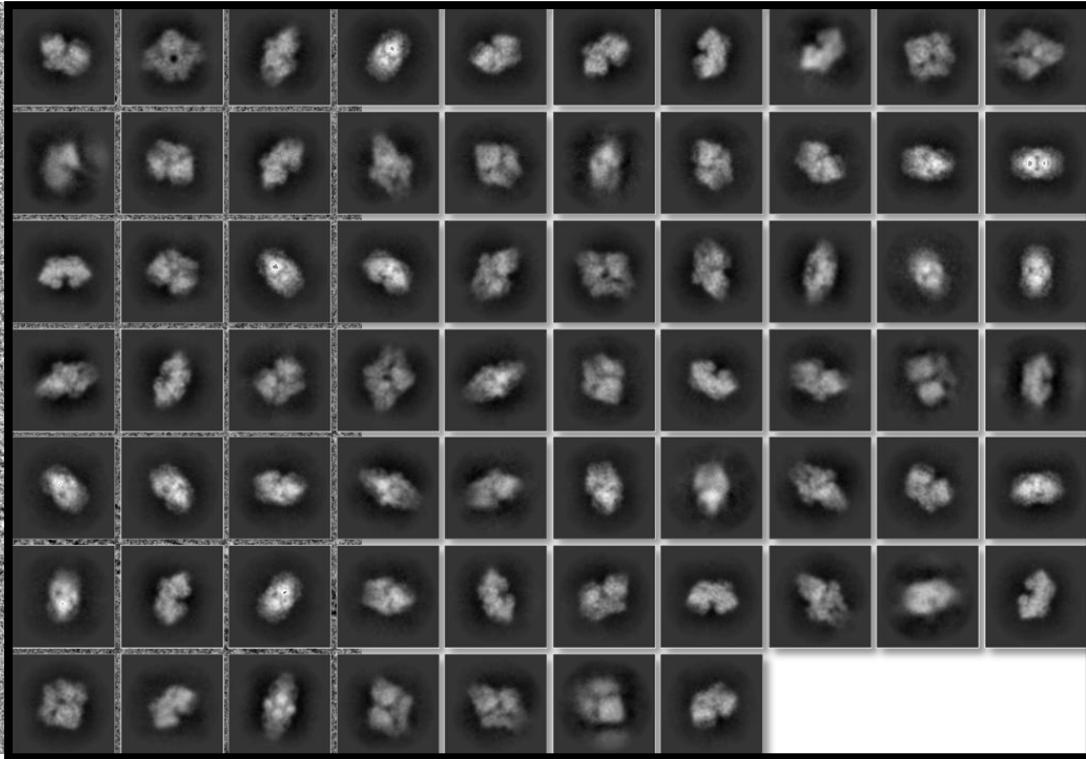
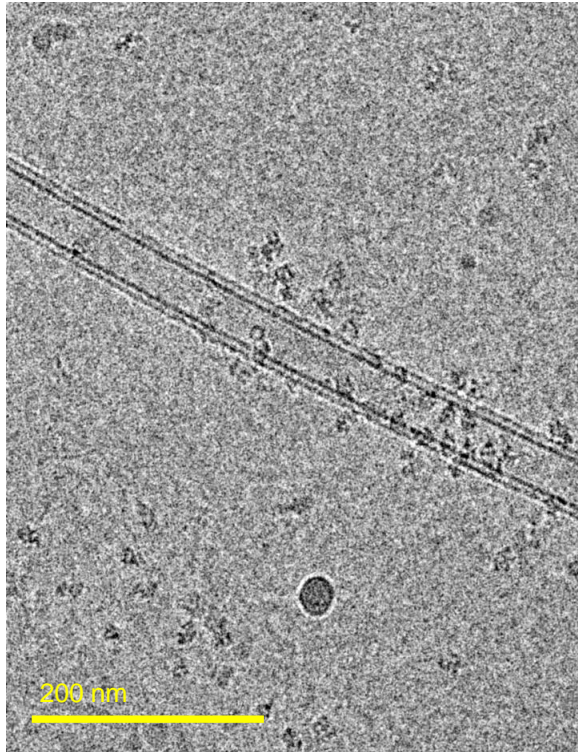
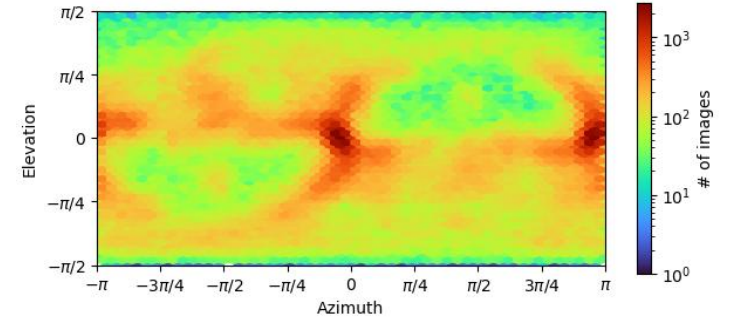
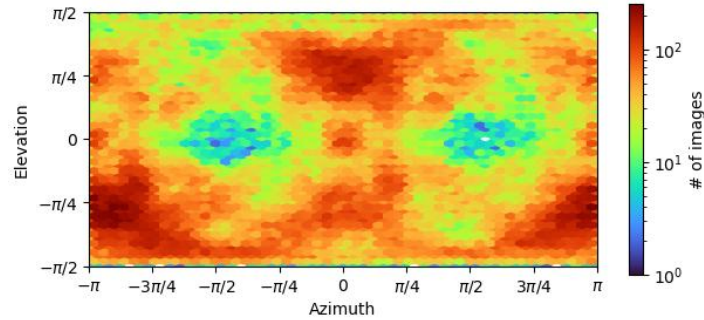
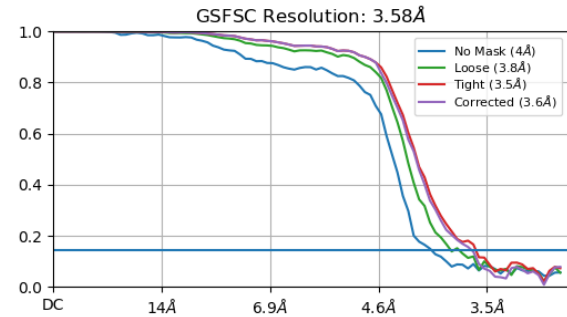
Sample Preparation On Tubes - Reconstruction of Azimuthal Subtracted Tubular Regions



Proof of concept



Data processing to high resolution!



Acknowledgements



Jing Wang
Dean and Professor
PhD, MPH, RN, FAAN



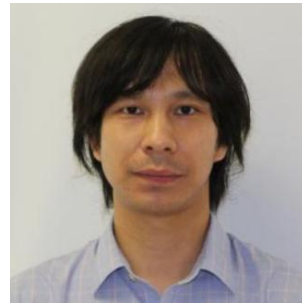
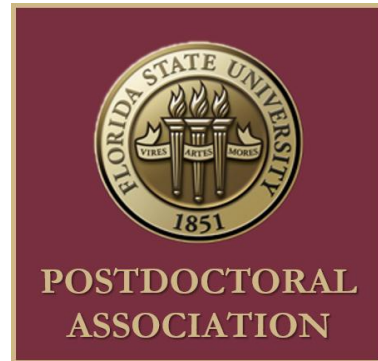
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PhD, RN



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Science & Symptom
Management Center
PhD



Dan Song
Postdoctoral Scholar
RN, PhD



Chengdong Li
Data Scientist



Buna Bhandari
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Assistant Professor
PhD, MPH, MSN, RN



Brittany Lane
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PEOPLE'S CHOICE AWARD

**Vote for your favorite
presentation!**

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PEOPLE'S CHOICE AWARD

**To Vote = Scan the QR Code and Then
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1 – Ahinsa Ranaweera

The HIV Capsid: A Promising Target for Anti-HIV...

2 – Behrouz Ghazi Esfahani

SPOT-RASTR: A Novel Method To Prepare CRYO-EM Samples

3 – Herschel Chawdhry

Particle Physics and the Quest for High Precision

4 – Kasey Longley

Caring for Grandparent Caregivers: Identifying Support Needs for Older Adults Raising their Grandchildren

5 – Katherine Odegard

A Matter of Taste: Unveiling the “New” Region in Taste Processing

6 - Li Guo

How Does Overnutrition Lead to Diabetes?

7 - Pearl Rivers Key

Mate Choice Under the Sea: Exploring the Genetic Blueprint of Reproduction in Sea Urchins

8 – Shannon Griffin

Engineering Superconducting Magnets via Structural Simulations

9 – Stephen Yuwono

How Electrons Dance When Things Go Heavy and Fast

10 – Yijiong Yang

Addressing ADRD and COVID-19 Vaccination Hesitancy: Strategies for Enhancing Health Outcomes

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AWARDS & RECEPTION

**Please join us for refreshments
and award presentations**

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PROGRAM END

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