## THE INDIANA UNIVERSITY O'BRIEN CENTER PRESENTS

## FROM BASIC INFORMATICS TO MACHINE LEARNING:

A hands-on, interactive tutorial to harness the power of kidney single cell and spatial transcriptomics data

Please CLICK HERE to register and join us

**MONDAY- DEC 2, 2024** 

TUESDAY- DEC 3, 2024

FROM 11:00AM- 3:00PM EST

DAY 1

DAY 2

- 1) Intro to single-cell multi-omics and spatial transcriptomics
- 2) Intro to biological analysis of the kidney (HANDS ON)
- 3) Localizing cells within spatial niches (HANDS ON)

- 1) Use ChatGPT and machine
- learning in single-cell studies
- 2) scRNA-seg model training using svGNN 3.0 and ChatGPT (HANDS ON)
- 3) Single-cell multiome analysis using
- DeepMAPS (HANDS ON)

Speakers include:

4) Spatial variable gene expression (HANDS ON)

Sponsored by:



O'Brien Kidney & CCBB

R01 DK138504 & DZK137328

Juexin Wang, PhD (Indiana Univ) Oin Ma, PhD (The Ohio State Univ) Ricardo Melo Ferreira, PhD (Indiana Univ)

Mingvao Li (Univ of Pennsylvania) Dong Xu (Univ of Missouri) Michael Eadon, MD (Indiana Univ)