



## **Yuan Ji, PhD**

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**Friday, October 18, 2024**

**12:00-1:00 pm**

**Biotechnology Center Auditorium  
or via Zoom**

<https://uwmadison.zoom.us/j/97615509019>

### ***A New Nonparametrics Bayesian Models for Grouped Data with Applications to Clinical Trials Borrowing External Data***

#### **Abstract:**

We consider a class of nonparametric Bayesian models called the Shared Atoms Model (SAM) based on the dependent Dirichlet processes. SAM uses a simple idea of atom skipping to generate group specific patterns of clustering, allow atoms to be common, unique, and shared across multiple groups. In finite data sets, SAM clusters experimental units in a similar fashion, facilitating interpretable and flexible inference. We consider an application of SAM to a real-world data set with measurements of patients of atopic dermatitis.



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