



# Transcriptomics Series: Single-cell analysis with Seurat

June 24, 2025



# Transcriptomics Series: Single-cell analysis with Seurat

**Today's Speaker:**



**Natalie Davidson, PhD**

Assistant Professor

Division of Reproductive Sciences

Department of Obstetrics and Gynecology

Today's sponsor

# LOZUPONE LAB

The Lozupone lab combines bioinformatics and experimental work to understand the driving factors of human microbiota composition, host:microbe interactions, and the intersection with diet in a variety of disease contexts. Our work has a particular focus on HIV, cancer and *Clostridioides difficile* infection.

# Who We R!?



R-Ladies Kick-off Event on Jul 25, 2024



RLA 2024 Co-organizer team: Jade, Keenan, Janani, Kewalin, Stacey (left to right)



Worldwide organization that promotes **gender diversity** in the **#rstats** community via meetups and mentorship in a **friendly** and **safe** environment



Part of **R-Ladies - 240 groups**

**R-Ladies Aurora**

Aurora, CO, USA

69 members · Public group

Organized by **R-Ladies Global** and **4 others**

# New Members?

1. Join us, RSVP for events on **Meetup**

<https://www.meetup.com/rladies-aurora/>

2. Join our discussion forum on **Discord**

<https://bit.ly/RLA-discord>



The screenshot shows the Meetup page for R-Ladies Aurora. At the top, there's a world map with a red pin over North America and a purple pin over Colorado, with the text 'We are here!' and the R-Ladies Aurora logo. Below this is a purple banner that says 'Welcome to R-Ladies Aurora! a local chapter of R-Ladies Global in Colorado, USA'. To the right, the group name 'R-Ladies Aurora' is displayed with a 4.5-star rating and 20 ratings. It lists the location as Aurora, CO, USA, has 211 members, and is a public group organized by R-Ladies Global and 6 others. A 'Contact members' button is visible. Below the banner, there's a navigation bar with links for About, Events, Members, Photos, Discussions, and More. A 'Create event' button and a 'Manage group' dropdown are also present. The main content area is titled 'What we're about' and includes the mission statement: 'R-Ladies is a worldwide organization that promotes gender diversity in the'. Below this, there's a section for 'Upcoming events (4)' with a 'See all' link. The first event is 'Transcriptomics Series: From Raw Data (fastq) to Counts' on Tuesday, April 29, 2025, at 5:00 PM MDT. It's held at P12-1203 | (first floor) Anschutz Health Sciences Building (ASHB), Colorado, CO. The event description includes 'RNA-Seq Hands-On: From FASTQ to Counts with command line basics' and a list of topics: 'Learn how to: Pull FASTQ files from public databases...'. There are 29 attendees listed, and a 'You're going!' button is shown. The second event is 'Monthly social & networking: Live Data Visualization Contest' on Tuesday, May 13, 2025, at 5:00 PM MDT. To the right of the event list, there's a section for 'Organizers' showing 'R-Ladies Global and 6 others' with a 'Message' button. Below this is a section for 'Members (211)' showing a grid of member profile pictures and names like KV, AS, TB, KM, and SP.

Part of **R-Ladies - 247 groups**

## R-Ladies Aurora

4.5 ★★★★★ 20 ratings

Aurora, CO, USA

211 members · Public group

Organized by **R-Ladies Global** and 6 others

Contact members

Share:

About Events Members Photos Discussions More

Create event Manage group

### What we're about

**Mission**  
R-Ladies is a worldwide organization that promotes gender diversity in the  
[Read more](#)

### Upcoming events (4)

[See all](#)

**TUE, APR 29, 2025, 5:00 PM MDT**

#### Transcriptomics Series: From Raw Data (fastq) to Counts

P12-1203 | (first floor) Anschutz Health Sciences Building (ASHB), Colorado, CO

**RNA-Seq Hands-On: From FASTQ to Counts with command line basics**  
Learn how to:

- Pull FASTQ files from public databases...

29 attendees [Manage](#) [You're going!](#)

**TUE, MAY 13, 2025, 5:00 PM MDT**

#### Monthly social & networking: Live Data Visualization Contest



# 2025 Workshops

- Monthly social + networking events
- Python in R
- Transcriptomics series
  - Data wrangling with transcriptomics
  - From Raw Data (fastq) to Counts
  - **Single-cell RNAseq analysis with Seurat (today!)**
  - RLA's year in review
  - Differential gene expression analysis



# Today! June 24, 2025

- Introduction to single-cell RNA seq data
- Overview of Seurat package
- Data Visualization



Ping us on Discord with any Questions –