## SISG MODULE 16 PATHWAY & NETWORK ANALYSIS FOR OMICS DATA

## Schedule and Overview

Welcome to Module 16. We will have lectures all day (with plenty of breaks and discussions), starting at 8:00 am P.S.T. *While we will try to stick to this timing, please plan to reserve your full days will minimal distractions so that we have flexibility.* 

Dr. Alison Motsinger-Reif will teach the first half of the class, and Dr. Ali Shojaie will teach the second. An introduction and overview of the course is explained in an <u>introductory video</u>. It is expected that you have watched this video before class.

Here is the basic schedule for Part 1:

Monday, July 25 2022 8-8:45 am PST: Pathway and Gene Set Analysis Part 1 9:9:45 am PST: Pathway/Gene Set Analysis in Genome Wide Association Studies 10:10:45 PST: Pathway Analysis in other Data Type 12-12:45 PST: Alison/Ali — Pathway and Gene set Analysis Part 2/Network Intro 1-1:45 PST: Ali — Analysis of Network-Structured Data

Tuesday, July 26 2022

8-8:45 am PST: Ali — Analysis of Network-Structured Data 9:9:45 am PST: Ali — WGCNA and NetGSA Demo 10:10:45 PST: Ali — Learning Undirected Networks 12-12:45 PST: Ali — Learning Undirected Networks 1-1:45 PST: Ali — Learning Directed Networks

Wednesday, July 27 2022

8-8:45 am PST: Pathway and Gene set Analysis Part 3 9:9:45 am PST: XGR Pathway Analysis R package and GSEA Demos 10:10:45 PST: Dr. Benedict Anchang, introduction to scRNAseq

Each lecture is planned for around 30 minutes, so we'll have time to regroup and refresh between meetings.

For any questions, please contact: Dr. Alison Motsinger-Reif – <u>alison.motsinger@gmail.com</u> Dr. Ali Shojaie - <u>ashojaie@uw.edu</u> Dillon Lloyd – <u>dtlloyd@ncsu.edu</u>