

SUMMER INSTITUTE CALENDAR 2022

SUN	MON	TUE	WED	THU	FRI	SAT
						July 02
						Early Arrival Airport Arrivals and Check-in
July 03	04	05	06	07	08	09
Early Arrival Airport Arrivals and Check-in	Airport Arrivals and Check-in 6:00pm: 4th of July Celebrations	9:30am-12pm: Campus tour, Panther ID & ISSS Check-in 12-2pm Lunch 2:00-6:00pm, Shuttle to local grocery store	9:30am-11:30am ISSS, OII, & Housing Orientation & Presentation 2:30-4:30pm: Welcome Reception and Buddy Meet & Greet Event	Classes begin! 9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 INTRO - TRAINING	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 DNA PREPARATION	Free Day
10	11	12	13	14	15	16
12:00-4:00pm: The World Coca-Cola and Georgia Aquarium	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 PROTEOMICS I	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 PROTEOMICS II	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 PROTEOMICS III 6:00-10:00pm: Atlantic Station Shopping & Movie (Sign-up)	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 PROTEOMICS IV ?	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 RNA PREPARATION	6:00-9:00pm: Dinner in America (Sign-up)
17	18	19	20	21	22	23
Free Day	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 qPCR & AUTOMATION	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 DNA SEQUENCING	MINI BREAK	9-11:20am: Morning course CDC TRIP 1:30-4:30pm: BIOL4905 MICROSCOPY / AFM	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30 - 4:30pm: BIOL4905 NEXT GEN SEQ. 5:30-7:30pm: Meet & Greet BBQ event @ The Commons	9:00am - 6:00pm: Outlet Mall
24	25	26	27	28	29	30
Free Day	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 MICROARRAY I	9-11:20am: Morning course 12:30 - 1:30pm: Lunch and LearnGrad School Info Session 2:00 - 5:00pm: BIOL4905 MICROARRAY II	9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 NANOSTRING	Last day of classes 9-11:20am: Morning course 11:20am-2:00pm: Lunch break 1:30-4:30pm: BIOL4905 FLOW CYTOMETRY	FINALS	Free Day
31	August 01	02	03	04		
Free Day	Activity Day at the Recreation Center (Sign-up)	Free Day	9:30-11:00am: Georgia Capitol Tour (Sign-up) 2:00-4:00pm: Closing Reception	Departures (check-out at 12:00pm)		

Note: Students may arrive prior to the program date with an extra charge of \$35 per night. Earliest day to check-in to University Commons is July 2.

Legend:

Orange: Courses Blue: Lunch Break Red: Sign-up events



**Capillary DNA Sequencers
(ABI/Life Technologies) Model 3500xl**



GSU Biology Core Facility

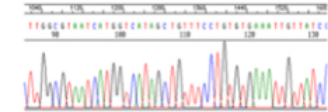
Supporting Life Sciences at GSU

http://biotech.gsu.edu/core_facility/index.html

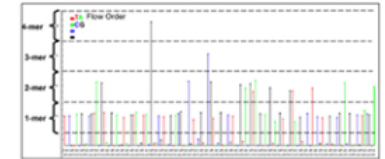


DNA Sequence Analysis: Profiling DNA

Sanger Sequencing –
>800 base pairs/run



High Throughput Genomic Sequencing –
100,000 base pairs/run

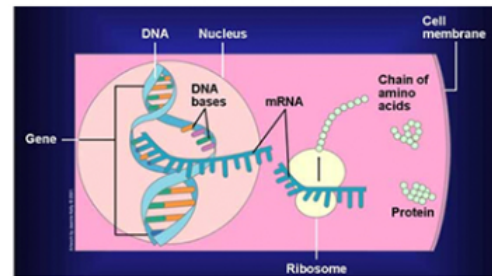


RNA Expression

Microarray: Analysis Profiling mRNA



Colour of pin-point dots demonstrates the presence / absence of gene sequences



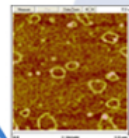
Protein Expression

Proteomics Profiling Proteins

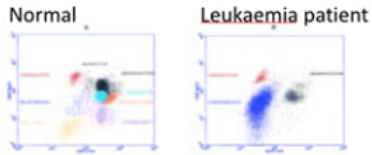
2D Protein gel
Protein separation using
Electric charge and molecular weight

Atomic Force Microscopy Imaging at the Ångström level

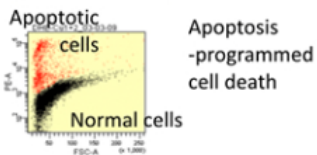
Protein structure analysis



Flow Cytometry Profiling Cells

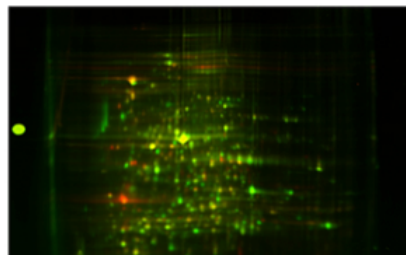
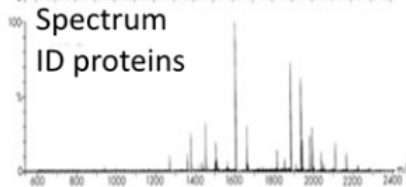


See effects of different drugs on Cell cycle



Cellular Functions

Mass Spectrometry



Simple, Natural Chemistry

