



Colorado State University, June 3-12, 2017

Registration (5-6 PM) Room 304-306 Lory Center

June 3, 2017

Welcome and Opening Reception (6:30-9:30 PM)

June 3, 2017

Lory Center Room 304-315 and Longs Peak Room

6:30-7:00

Welcome and Opening Remarks

Jill Pecon Slattery and Sue Vandewoude

7:00-8:00

!2 Attendee Presentations

Attendees

6:30-9:30

Refreshments and Social Time

Day 1: NGS Introduction and Overview

June 4, 2017

Lory Center Room 304-315

Evening Plenary Talks Lory Center Long's Peak Room

7:00 – 8:00	Breakfast	Corbitt Dining Hall
8:15–8:40	Introduction to Workshop and Datasets Jill Pecon Slattery	
8:40–9:30	An Overview of NGS Data Mark Stenglein and Bob Fitak	
9:30–10:00	CSU Flash Talk Christie Mayo	
10:00–10:20	Coffee Break and Meet Invited Speaker	
10:20–10:35	Course Computers Joe Strecker	
10:35–12:15	Genome Mining Host and Pathogen Mark Stenglein and Bob Fitak	
12:15–1:15	Lunch Provided Onsite	
1:15–2:15	12 Attendee Presentations	
2:15–3:15	Exercises in Genome Mining Mark Stenglein and Bob Fitak	
3:15–3:35	Coffee Break	
3:35–5:00	Exercises in Genome Mining Mark Stenglein and Bob Fitak	
5:00–7:00	FREE TIME AND DINNER	Rams Horn Dining Center
7:30–8:30	Evening Plenary Speaker Series Christine K. Johnson, University of California-Davis	Longs Peak Room

8:30–9:30

Social Hour with Plenary Speaker

Longs Peak Room

Day 2: NGS evaluation, Quality and Genome assembly

June 5, 2017

Lory Center Room 304-315

Evening Plenary Talks Lory Center Long's Peak Room

7:00 – 8:00	Breakfast	Rams Horn Dining Center
8:15–9:30	Evaluating and Processing Raw Data Mark Stenglein and Bob Fitak	
9:30–10:00	CSU Flash Talk Mike Antolin	
10:00–10:20	Coffee Break and Meet Invited Speaker	
10:20–12:15	Genome Assemblies: Mapping to Reference and De Novo Mark Stenglein and Bob Fitak	
12:15–1:15	Lunch Provided Onsite	
1:15–3:15	Practice Assembly of Host and Pathogen Mark Stenglein and Bob Fitak	
3:15–3:35	Coffee Break	
3:35–5:00	Intro to Metagenomics and Disease Mark Stenglein	
5:00–7:00	FREE TIME AND DINNER	Rams Horn Dining Center
7:30–8:30	Optional Computer Lab with Instructor	

Day 3: Multiple Sequence Alignments

June 6, 2017

Lory Center Room 304-315

Evening Plenary Talks Lory Center Long's Peak Room

7:00 – 8:00	Breakfast	Rams Horn Dining Center
8:15–8:50	Introduction to Multiple Sequence Alignments Jill Pecon Slattery	
8:50–9:30	Whole genome alignments of related taxa or population data Bob Fitak	
9:30–10:00	CSU Flash Talk Justin Lee	
10:00–10:20	Coffee Break and Meet Invited Speaker	
10:20–12:15	Alignment Programs Jill Pecon Slattery	
12:15–1:15	Lunch Provided Onsite	
1:15–3:15	Computer Lab Alignment Programs Host/Pathogen Jill Pecon Slattery	
3:15–3:35	Coffee Break	
3:35–5:00	Computer Lab Whole Genome Alignments Host/Pathogen Bob Fitak	
5:00–7:00	FREE TIME AND DINNER	Rams Horn Dining Center
7:30–8:30	Evening Plenary Speaker Series Kelly Zamudio, Cornell University	Longs Peak Room
8:30–9:30	Social Hour with Plenary Speaker	Longs Peak Room

Day 4: Phylogenomics of Host and Pathogen

June 7, 2017

Lory Center Room 304-315

Evening Plenary Talks: Lory Center Long's Peak Room

7:00 – 8:00	Breakfast	Rams Horn Dining Center
8:15–8:50	Applications of Molecular Phylogenomics Jill Pecon Slattery	
8:50–9:30	The Primate Evolution Story Jill Pecon Slattery	
9:30–10:00	CSU Flash Talk Sue VandeWoude	
10:00–10:20	Coffee Break and Meet Invited Speaker	
10:20–12:15	Overview of Phylogenomic & Bayesian Methods Jim Wilgenbusch	
12:15–1:15	Lunch Provided Onsite	
1:15–3:15	Computer Lab Phylogenomics Jim Wilgenbusch	
3:15–3:35	Coffee Break	
3:35–5:00	Computer Lab Dating Nodes with BEAST Justin Lee	
5:00–7:00	FREE TIME AND DINNER	Rams Horn Dining Center
7:30–8:30	Social Hour with Jim Wilgenbusch	Longs Peak Room

Day 5: Signals of Selection and Adaptation

June 8, 2017

Lory Center Room 304-315

Evening Plenary Talks: Lory Center Long's Peak Room

7:00 – 8:00	Breakfast	Rams Horn Dining Center
8:15–8:50	Molecular Clocks and Gene Trees and Species Trees Jill Pecon Slattery	
8:50–9:30	Whole Genome Perspective Bob Fitak	
9:30–10:00	CSU Flash Talk Rebekah Kading	
10:00–10:20	Coffee Break and Meet Invited Speaker	
10:20–11:15	A Case Study in the Wild Jenn Malmberg/Justin Lee	
11:15–12:15	Testing for selection–PAML Jill Pecon Slattery	
12:15–1:15	Lunch Provided onsite	
1:15–2:15	Thought Exercise: What would I do? Jill Pecon Slattery , Attendees Coffee Break	
2:15–3:15	Practice with PAML	
3:15–3:35	Coffee Break	
3:35–5:00	Demo of HY-PHY , sliding window, and HY-PHY Justin Lee, Jill Pecon Slattery & Bob Fitak	
5:00–7:00	FREE TIME AND DINNER	Rams Horn Dining Center
7:30–8:30	Evening Plenary Series Jeff Foster	Longs Peak Room

8:30–9:30

Social Hour With Plenary Speaker

Longs Peak Room

Day 6: Population Genomics Day

June 9, 2017

Lory Center Room 304-315

Evening Plenary Talks: Lory Center Long's Peak Room

7:00 – 8:00	Breakfast	Rams Horn Dining Center
8:15–9:30	Population Genomics 101 Chris Funk	
9:30–10:00	CSU Flash Talk Daryl Trumbo	
10:00–10:20	Coffee Break and Meet Invited Speaker	
10:20–10:40	Population Genomics 101 (cont) Chris Funk	
10:40–11:40	Host Population Genomics in Disease Chris Funk	
11:40–12:15	Pathogen Population Genomics– a lions tale Jill Pecon Slattery	
12:15–1:15	Lunch Provided Onsite	
1:15–3:15	Computer Lab: Population Genomics Chris Funk and Daryl Trumbo	
3:15–3:35	Coffee Break	
3:35–5:00	Computer Lab: Population Genomics Chris Funk and Daryl Trumbo	
5:00–7:00	FREE TIME AND DINNER	Rams Horn Dining Center
7:30–8:30	Optional Computer Time with Instructor	

Day 7: Variant Discovery and Interpretation

June 10, 2017

Lory Center Room 304-315

Evening Plenary Talks: Lory Center Long's Peak Room

7:00 – 8:00	Breakfast	Rams Horn Dining Center
8:15–9:30	Lecture and Computer Lab: Intra–host Pools Mark Stenglein	
9:30–10:00	CSU Flash Talk Greg Ebel	
10:00–10:20	Coffee Break and Meet Invited Speaker	
10:20–11:15	Evolutionary Genomics and Variants Jill Pecon Slattery	
11:15–12:15	Computer Lab: Creating a Workflow Jill Pecon Slattery, Bob Fitak, Mark Stenglein & Attendees	
12:15–1:15	Lunch Provided Onsite	
1:15–3:15	Horizon Scanning Jill, Bob, Mark, and Attendees	
3:15–3:35	Coffee Break	
3:35–5:00	Working on your own with instructors	
5:30–8:00	OffSite BBQ (Buses depart from Academic Village).. BOARD BUSES 5:15 in front of Academic building.	
8:30–?	Mainline in Fort Collins (All Invited! but others can opt to return to dorms on bus)	

Workshop Wrap-Up and Evaluations

June 11, 2017

7:00-8:15	Breakfast	
8:15-9:30	Wrap-Up and Concluding Remarks	Horsetooth Room
	Instructors & Attendees	Rams Horn Dining Center
9:30	Departure	