

PSL-Qlife Summer School 2024

Quantitative Phage-Bacteria Dynamics Across Scales – July 8th -12th

Monday, July 8 th	Tuesday, July 9 th	Wednesday, July 10 th	Thursday, July 11 th	Friday, July 12 th
9:00 - 9:20 am Patrick Charnay, Joshua Weitz Introduction				
9:20 - 10:35 am Joshua Weitz Virus Eco-Evolutionary Dynamics from Cells to Populations	9:00 - 10:15 am Laurent Debarbieux Optimizing phage therapy to treat pulmonary infections	9:00 - 10:15 am Namiko Mitarai Principles of spatial spreading of phage - diversity and dormancy	9:00 - 10:15 am Claudia Igler The evolution of resistance: phage, plasmids, and persisters	9:00 - 10:15 am David Demory Modeling Viruses Dynamics in the Global Oceans
10:35 - 11:00 am <i>Coffee break – Cafeteria ?</i>	10:15 - 10:45 am <i>Coffee break – Cafeteria ?</i>	10:15 - 10:45 am <i>Coffee break – Cafeteria ?</i>	10:15 - 10:45 am <i>Coffee break – Cafeteria ?</i>	10:15 - 10:45 am <i>Coffee break – Cafeteria ?</i>
11:00 - 12:15 am Ido Golding <i>Principles of Viral-Induced Transformation of Cell Fate</i>	10:45 - 12:00 am Jacopo Marchi Theory of Phage Therapy + Immunophage Synergy	10:45 - 12:00 am Remy Chait Chemotaxis and coexistence between phage and bacterial hosts	10:45 - 12:00 am Anne Chevallereau Ecology and evolution of phage counter-defense	10:45 - 12:00 pm Joshua Weitz Inefficient Viral Infections – Towards a New Marine Viral Paradigm
12:15 - 1:30 pm <i>Lunch</i>	12:00 - 1:30 pm <i>Lunch</i>	12:00 - 1:30 pm <i>Lunch</i>	12:00 - 1:30 pm <i>Lunch</i>	12:00 - 1:30 pm <i>Lunch</i>
1:30 - 5:00 pm Digital workshop Foundations of Modeling Phage-Bacteria Dynamics Across Scales Marian Dominguez-Mirazo Tasos Marantos	1:30 - 5:00 pm Digital workshop In vivo Phage Therapy Modeling Jacopo Marchi Jeremy Seurat Marian Dominguez-Mirazo	1:30 - 5:00 pm Digital workshop Spatial Modeling of Phage: From Individuals to Populations Tasos Marantos Jacopo Marchi Marian Dominguez-Mirazo	1:30 - 5:00 pm Digital workshop Probabilistic inference of anti-phage defense systems using hidden Markov models Florian Tesson Hugo Vaysset Jean Cury	1:30 - 5:00 pm Digital workshop Inference of quantitative viral traits from time series data David Demory Joshua Weitz Marian Dominguez-Mirazo
5:00 - 5:30 pm <i>Coffee break -</i>	5:00 - 5:30 pm <i>Coffee break -</i>	5:00 - 5:30 pm <i>Coffee break –</i>	5:00 - 5:30 pm <i>Coffee break - Room 305</i>	5:00 pm <i>Depart</i>
5:30 - 6:30 pm Student flash talks	5:30 - 6:30 pm Ido Golding Cell fate: a perspective from the single phage	5:30 - 6:30 pm Aude Bernheim Lessons from Anti-Phage Defense Systems	5:30 - 6:30 pm Britt Koskella Phage impacts on & influence by complex microbiomes	
6:30 - 8:00 pm Poster session I Wine & Cheese	7:30 pm Speakers / TAs dinner		6:30 - 8:00 pm Poster session II & cocktail	