

Genetic Code Expansion Workshop Schedule

August 2 to August 8, 2018

Oregon State University

Corvallis, OR

Contact phone numbers:

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Location on OSU Campus

Workshop lectures and laboratory sessions will be held in the Ag and Life Sciences Building (ALS) 2750 SW Campus Way <http://oregonstate.edu/campusmap/>

ALS rooms 2018 (lectures, coffee), 0023 (teaching laboratory), 2009A (lunches), 2124 (Synthetic Biology Core facility), Main Office 2011

Note: Schedule is subject to change.

8/1 Wednesday Arrival and Dorm Check in Instructions.

Arrive to Corvallis. Individual check-in for dorm between 3-8 pm at the Arnold Dining Hall Service Center. This is the building to the west of our ILLC dorm across the circle shaped lawn. If you arrive after 8 pm, go to the ILLC building main entrance and call “duty phone 541-974-6404. A dorm staff will let you in and help you to your room. Explore campus. If you arrive Thursday, you will be able to check into the dorm at the end of our lab work session.

8/2 Thursday

10:00 am-noon	ALS 2018	Check in Lecture: Ryan Mehl, GCE workshop goals
12:00-1:00 pm	ALS 2009A	Lunch provided
1:00-5:00 pm	ALS 0023	Lab: Transform cells with plasmids.
5:30-7:00 pm	LPSC 402	Dinner as a group— each participant provides a 3-5 minute description of their background in GCE and what they want to use it for.
7:30-9:00 pm	ALS 2018	Lecture: Ryan Mehl, GCE: When things don't work, “the good, the bad, the ugly”

8/3 Friday

8:00 am	AL 2018	Light breakfast provided
8:30 am	ALS 0023	Lab: Prepare starters and prepare reagents for your unnatural protein expression.
10:30-12:00	ALS 2018	Lecture: Ryan Mehl, Generation, selection and characterization of GCE components.
12:00-1:00	ALS 2009	Lunch provided
1:00-3:00	ALS 2018	Lecture: Rick Cooley, Categories of ncAA and their applications
3:00-5:30	ALS 0023	Lab: Express unnatural protein with autoinduction media
5:30-7:30		Dinner on your own

7:30-9	ALS 2018	Lecture: John Lueck, “Viral delivery methods for GCE and GCE with Oocytes”
8/4 Saturday		
8:00 am	ALS 2018	Light breakfast provided
8:30-10:00	ALS 0023	Lab: Check expressions for growth/OD. Temperature shifts if necessary. Mammalian culture Demo
10:30-12:00	ALS 2018	Lecture: John Perona, tRNA synthetase catalytic function and mechanisms
12:00-1:00	ALS 2009	Lunch provided
1:00-4:00	ALS 2018	Lab: Mammalian lab Demo
		Lab: Permissivity screens
4:15-5:30	ALS 0023	Lecture: John Perona, Characterizing ncAA tRNA/synthetases
5:30-6:00-9:00	ALS entrance	Meet bus outside building 2750 SW Campus Way. Dinner as a group at Gathering Together Farm – we will provide transportation
8/5 Sunday		
9:00-11:00	ALS 0023	Check on expressions and harvest samples as needed.
Afternoon off		
8/6 Monday		
8:00 am	ALS 2018	Light breakfast provided
8:30-10:30	ALS 0023	Lab: Assess permissivity screen 48/ hours and evaluate gels of crude and purified proteins
10:30-12:00	ALS 2018	Lecture: John Lueck, “Orthogonality and Eukaryotes expanded codes”
12:00-1:00	ALS 2009	Lunch provided
1:00-4:00	ALS 2018	Lab: Purify protein, SDS-PAGE on crude protein extracts, Evaluate mammalian GCE demo
4:30-6:00	ALS 0023	Lecture: Ryan Mehl, Bioorthogonal ligations -overview.
6:00-7:30		Dinner on your own
7:30-9:00	ALS 2018	Lecture: If needed
8/7 Tuesday		
8:00 am	ALSA 2018	Light breakfast provided
8:30-10:30	ALS 0023	Lab: Evaluate permissivity screen 48 hours, pure gels.
10:30-12:00	ALS 2018	Lecture: Rick Cooley, “GCE experimental considerations for membrane proteins and biorthogonal ligations”
12:00-1:00	ALS 2009	Lunch provided
1:00-4:00	ALS 2018	Lab: Characterize unnatural protein-gels on pure protein,
4:15-5:30	ALS 0023	Lecture: Joe Porter, “GCE for post-translational modifications”
6:00-9:00		Dinner on your own

8/8 Wednesday

8:00 am	ALS 2018	Light breakfast provided
8:30-10:30	ALS 0023	Complete lab recording and obtain plasmids for taking home.
10:30-12:00	ALS 2018	Lecture: Rick Cooley, "Painful Cloning Made Easy"
12:00-1:00	ALS 2009	Lunch provided