

Genetic Code Expansion Workshop Schedule

August 5–10, 2016

Oregon State University
Corvallis, OR

Contact phone numbers:

Ryan Mehl—email best

Kari van Zee cell phone 541-602-5086; office 541-737-1773

Biochemistry Biophysics Department main office phone 541-737-4511 (8 am-5 pm PST)

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

8/4 Thursday

Arrive to Corvallis. Check into dorm per instructions in your confirmation email for UHDS. Explore campus.

8/5 Friday

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"

8/6 Saturday

8:30 am	ALS 0023	Lab: Prepare starters and prepare reagents for your unnatural protein expression.
10:30-12:00	ALS 2018	Lecture: Rick Cooley, Permissivity studies and expression optimization
12:00-1:00	ALS 2009	Lunch provided
1:00-3:00	ALS 2018	Lecture: Ryan Mehl/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: Ryan Mehl, Generation and selection of GCE components

8/7 Sunday

8:30-10:00	ALS 0023	Lab: Check expressions for growth/OD. Temperature shifts if necessary.
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Rest of day --on your own to explore area—

8/8 Monday

8:30-10:30	ALS 0023	Lab: Harvest cells and prepare permissivity screening
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: Purify protein, SDS-PAGE on crude protein extracts, set up permissivity screen
4:30-6:00	ALS 0023	Lecture: John Perona, Characterizing ncAA tRNA/synthetases
6:00-7:30		Dinner on your own
7:30-9:00	ALS 2018	TBA

8/9 Tuesday

8:30-10:30	ALS 0023	Lab: Assess permissivity screen 24 hours and evaluate gels of crude and purified proteins
10:30-12:00	ALS 2018	Lecture: (Staff) GCE for post-translational modifications
12:00-1:00	ALS 2009	Lunch provided
1:00-4:00	ALS 2018	Lab: Characterize unnatural protein-gels on pure protein, permissivity screen 30 hours
4:15-5:30	ALS 0023	Lecture: Rick Cooley, GCE for biorthogonal ligations and membrane proteins
6:00-9:00		Dinner as a group at Gathering Together Farm – we will provide transportation

8/10 Wednesday

8:30-10:30	ALS 0023	Lab: Evaluate permissivity screen 48 hours, pure gels.
10:30-12:00	ALS 2018	Lecture: John Lueck, Orthogonality and prokaryotes expanded codes
12:00-1:00	ALS 2009	Lunch provided
1:00-2:00	ALS 2018	Lab: Characterize unnatural protein and permissivity screen
2:00-3:00	ALS 0023	Lecture: John Lueck, GCE-viral delivery
3:30-5:00	ALS 2018	Complete lab recording and obtain plasmids for taking home.