Build-a-Genome Annual Workshop

August 15-18th, 2019

Loyola University Maryland

Baltimore, MD

\*Schedule tentative and subject to change\*

## Day 1, Thursday August 15

Arrival

Day 2, Friday August 16

8:00-8:30 Breakfast

8:30-9:30 Introduction to Synthetic Biology

*Dr. Rob Newman, NC A&T University*

9:30-10:30 Introduction to Build-a-Genome

*Dr. Eric Cooper, Hartwick College*

10:30-11 Break

11:00-12 The future of synthetic biology (online seminar and discussion)

*Dr. Jef Boeke, NYU; Human Genome Project-Write*

12:00-1 Lunch

1:00-2 Introduction to 3 BAG workflows

*Dr. Lisa Scheifele, Loyola University Maryland*

2:00-3 Lab: Gene Assembly

3:00-3:30 Break

3:30-4:30 Bacteriophages: Genomes and Therapies

*Intralytix, Inc. (date to be confirmed)*

4:30-5:30 Poster session and social hour

5:30-7:30 Dinner

7:30-8:30 Neochromosomes: Construction and Applications

*Dr. Leslie Mitchell, NYU*

Day 3, Saturday August 17

8:00-8:30 Breakfast

8:30-9:30 Introduction to DNA synthesis

*Twist Biosciences and/or IDT, Inc. (date to be confirmed)*

9:30-10:30Introduction to DNA sequencing

*Dr. Vince Buonaccorsi, Juniata College*

10:30-11 Break

11:00-12 Group discussion: Models for incorporating BAG into your curriculum/class

12:00-1 Lunch

1:00-2 Lab: Synthesizing and verifying genomes

2:00-3 Group discussion: Problems and challenges with implementation

3:30-5 Working session: Incorporating BAG into syllabi

5:00-7:30 Dinner

7:30-9:00 Ethical issues in synthetic biology

*Dr. Todd Kuiken, NC State University*

Day 4, Sunday August 18

8:00-8:30 Breakfast

8:30-9:30 Working session: Assessment

*Dr. Nancy Boury, Iowa State University*

9:30-10:30Lab: Yeast culture and transformation, Phage electroporation and culture, or Scramble method

10:30-11 Break

11:00-12 Introduction to QUBEShub and first posting

12:00-1 Lunch

1:00 Departure