HOW TO ACHIEVE A TRUE CONSENSUS FOR BEST ENVIRONMENTAL DNA PRACTICES
University of California, Davis • AGR Room, Buehler Alumni Center • Wednesday January 29th 2020

8:30 CHECK-IN

9:00-9:10 WELCOME
RICHARD E. CONNON, Symposium Chair, UC Davis and Coastal and Marine Sciences Institute
LOUISE CONRAD, Lead Scientist, Delta Stewardship Council, Delta Science Program

9:10 – 10:20 THEME 1: Current Challenges
MODERATOR: ANDREA SCHREIER
9:10-9:50 KRISTY DEINER, Natural History Museum of London, UK.
Strengths and limitations of methods for eDNA detection from water
9:50-10:10 ALISON WATTS, University of New Hampshire
Estuarine DNA – Contrasts with Freshwater and Marine Systems and Implications for Estuarine Monitoring
10:10-10:15 Q&A

10:15 – 10:40 BREAK (25 min)

10:40 – 11:50 THEME 2: Current eDNA efforts in California
MODERATOR: MELINDA BAERWALD
10:40-11:00 RACHEL MEYER, University of California Los Angeles
CAleDNA Successes and Challenges
11:00-11:20 GREGG SCHUMER, Cramer Sciences, Sacramento
Contextualizing eDNA Detections in the Sacramento-San Joaquin Bay Delta
11:20-11:40 ANDREA SCHREIER, UC Davis
Aquatic eDNA studies in the San Francisco Bay Delta by UC Davis Researchers
11:40-11:50 STUDENT PRESENTATION: Anne Holmes
eDNA in Estuaries: Enclosure Experiment Shows Capabilities and Limitations of eDNA Detection of Delta Smelt
11:50-11:55 Q&A

11:55 – 1:10 LUNCH (1h 15 min)

1:10 – 2:20 THEME 3: Policy, Monitoring, and Consensus
MODERATOR: DAPHNE GILLE
1:10-1:30 CHRIS JERDE, UC Santa Barbara
eDNA Informing Policy Decisions: Analysis and Management Implications
1:30-1:50 GORDON LUIKART, University of Montana
National eDNA Monitoring Program
1:50-2:10 CAREN GOLDBERG, Washington State University
Recommendations for eDNA Consensus
2:10-2:20 STUDENT PRESENTATION: Mary McElroy
Validating eDNA Metabarcoding for Fish Species Richness
2:20-2:25 Q&A

2:25 – 2:40 BREAK (15 min)

2:40 – 3:40 THEME 4: Further uses and benefits of eDNA technology
MODERATOR: SHAWN ACUÑA
2:40-3:00 MATT BARNES, Texas Tech
  Detection of Rare Species

3:00-3:20 MARGARET HUNTER, USGS
  eDNA and Invasive Species

3:20-3:40 SUSANNA THEROUX, Southern California Coastal Water Research Project
  Analysis and Data Management: Databases, Archiving, sampling

3:40-3:50 STUDENT PRESENTATION: Thiago Sanches
  Using eDNA to Understand Chinook Salmon Outmigration in the San Francisco Estuary

3:50-3:55 Q&A

3:55 – 4:10  BREAK

4:10 – 4:40  PANEL DISCUSSION and Q&A
MODERATORS: RAVI NAGARAJAN & MALLORY BEDWELL
PANELISTS
  1. KRISTY DEINER: eDNA Tools, Strengths and Limitations
  2. RACHEL MEYER: eDNA and Sediments and Contrasts with Water Column
  3. CHRIS JERDE: eDNA Informing Policy Decisions: Analysis and Management Implications
  4. GORDON LUIKART: National eDNA Monitoring Program
  5. CAREN GOLDBERG: Recommendations for eDNA Consensus
  6. MARGARET HUNTER: eDNA and Invasive Species
  7. TED SOMMER: Agency perspective on utility of eDNA