Event Agenda

Global eDNA Conference

Wednesday, October 28, 2026

8:00 AM - 5:00 PM

Registration Open
Location: Main Lobby

8:00 AM - 9:00 AM

Coffee and Continental Breakfast
Location: All rooms

9:00 AM - 10:30 AM

Welcome and Opening Plenary
Location: International Room

10:30 AM - 11:00 AM

Break
Location: All rooms

11:00 AM - 12:15 PM

eDNA in Practice: Policy, Industry, and Management
Location: Bay Auditorium
Speakers: Rachel Brown, Austen Thomas, Mario Hernandez, John Darling, Fouad El Baidouri

> **Toward a Unified Great Lakes Early Detection Network: Applying eDNA Metabarcoding Across Jurisdictions to Identify Emerging Aquatic Invaders**
> 11:00 AM - 12:15 PM
> Location: Bay Auditorium
> Speaker: Rachel Brown
>
> **Perspectives from a Decade in the eDNA Industry**
> 11:00 AM - 12:15 PM
> Location: Bay Auditorium
> Speaker: Austen Thomas
>
> **Quantifying Biodiversity Co-Benefits in Forest Carbon Markets: Evidence from Longleaf Pine Forests**
> 11:00 AM - 12:15 PM
> Location: Bay Auditorium
> Speaker: Mario Hernandez
>
> **Interpreting eDNA metabarcoding data to support actionable reporting of species of concern**
> 11:00 AM - 12:15 PM
> Location: Bay Auditorium
> Speaker: John Darling
>
> **Leveraging aquatic eDNA to understand how a century of water diversion impacted insular estuaries**
> 11:00 AM - 12:15 PM
> Location: Bay Auditorium
> Speaker: Fouad El Baidouri

11:00 AM - 12:15 PM

GBIF, Reference Databases & Data Standards I
Location: Sound
Speakers: Kristy Deiner, Luke Thompson, Keith VanGraafeiland, Clement Coclet

> **The Ocean DNA Explorer: An Open-Source Portal for Global Marine eDNA Synthesis**
> 11:00 AM - 12:15 PM
> Location: Sound
> Speaker: Luke Thompson
>
> **From eDNA Detection to Spatial Decision Support: Operationalizing GBIF eDNA Data with ArcGIS for Scalable Biodiversity Analytics**
> 11:00 AM - 12:15 PM
> Location: Sound
> Speaker: Keith VanGraafeiland
>
> **LUCA: An Open Platform for Integrated Biodiversity Intelligence Across eDNA and Ecological Monitoring Systems**
> 11:00 AM - 12:15 PM
> Location: Sound
> Speaker: Kristy Deiner
>
> **Multi-marker eDNA metabarcoding uncovers uneven planktonic diversity and reveals underrepresentation of deep-sea protist lineages in reference databases**
> 11:00 AM - 12:15 PM
> Location: Sound
> Speaker: Clement Coclet

11:00 AM - 12:15 PM **Monitoring elusive species in challenging environments**

Location: Marina
Speakers: Madeleine Pacheco, Sadie Roth, Oliver Stringham, Kathleen Kyle, Lindsey Davis, Samantha Engster, Dylan Hicks

> **Sampling for the Amphibian Pathogen Batrachochytrium dendrobatidis (Bd) in Isolated Desert Waters**
> 11:00 AM - 12:15 PM
> Location: Marina
> Speaker: Sadie Roth
>
> **Improving monitoring of a protected burrowing lizard: coverboard eDNA outperforms visual surveys for the Temblor legless lizard (Anniella alexanderae)**
> 11:00 AM - 12:15 PM
> Location: Marina
> Speaker: Oliver Stringham
>
> **Evaluation of a new eDNA field method: detection of a protected amphibian species and overall amphibian biodiversity assessment in Pineland vernal pools**
> 11:00 AM - 12:15 PM
> Location: Marina
> Speaker: Kathleen Kyle
>
> **Evaluating Spatial and Temporal Patterns of Mitochondrial Haplotype Diversity in Endangered Shiner Species of the Upper Brazos River Basin**
> 11:00 AM - 12:15 PM
> Location: Marina
> Speaker: Lindsey Davis
>
> **Comparing manual phenol-chloroform against automated bead-based KingFisher extraction for eDNA samples**
> 11:00 AM - 12:15 PM
> Location: Marina
> Speaker: Samantha Engster
>
> **How effective is eDNA as a monitoring tool for amphibians inhabiting temporary wetlands and other temporary, highly variable, or difficult-to-sample aquatic habitats?**
> 11:00 AM - 12:15 PM
> Location: Marina
> Speaker: Dylan Hicks

11:00 AM - 12:15 PM **Plankton & nutrient dynamics**

Location: Cove
Speakers: Hsin-Ting Li, Daniela Maric Pfannkuchen, Kristin Saltonstall, Paula Pappalardo, Nick Adams

> **Nitrogen-Iron serial limitation in phytoplankton communities in the eastern subtropical Indian Ocean**
> 11:00 AM - 12:15 PM
> Location: Cove
> Speaker: Hsin-Ting Li
>
> **Beyond Detection: Integrating Metabarcoding and Metatranscriptomics Reveals Hidden Diversity and Metabolic Activity of Harmful Algal Bloom Species in the Northern Adriatic Sea**
> 11:00 AM - 12:15 PM
> Location: Cove
> Speakers: Mirta Smodlaka Tankovic, Daniela Maric Pfannkuchen
>
> **Effects of salinity on plankton distribution in the Panama Canal**
> 11:00 AM - 12:15 PM
> Location: Cove
> Speaker: Kristin Saltonstall
>
> **Reference database choice shapes species detection in marine metabarcoding studies**
> 11:00 AM - 12:15 PM
> Location: Cove
> Speaker: Paula Pappalardo
>
> **Tracking phytoplankton communities with automated eDNA monitoring and satellite water mass movement**
> 11:00 AM - 12:15 PM
> Location: Cove
> Speaker: Nick Adams

11:00 AM - 12:15 PM **Gulf eDNA**

Location: Pacific
Speakers: Yasmina Shah Esmaeili, Marissa Kordal, Pedro A. Peres, Kate Overly

> **Building Connections Across the Gulf: The Gulf eDNA Network (GeN) as a Collaborative Framework for Regional Biodiversity Monitoring and Reference Library Development**
> 11:00 AM - 12:15 PM
> Location: Pacific
> Speaker: Yasmina Shah Esmaeili
>
> **Using environmental DNA to assess the prevalence of Dermo Disease across oyster reefs along the Texas Coastal Bend.**
> 11:00 AM - 12:15 PM
> Location: Pacific
> Speaker: Marissa Kordal
>
> **Insights into the association between environmental DNA and net detection in deep-pelagic environments**
> 11:00 AM - 12:15 PM
> Location: Pacific
> Speaker: Pedro A. Peres
>
> **Evaluating Environmental DNA and Optical Sampling as Complementary Tools for Marine Monitoring**
> 11:00 AM - 12:15 PM
> Location: Pacific
> Speaker: Kate Overly

12:15 PM - 1:30 PM **Lunch**

Location: All rooms

12:15 PM - 1:30 PM **Gulf eDNA Networking Meeting**

Location: Pierside

12:15 PM - 1:30 PM **AI-assisted eDNA data publishing session**

Location: Pacific
Speakers: Kate Wing, Stephen Formel, Peter Bull

12:15 PM - 1:30 PM **Smith Root: eDNA Sampling Technology Demonstrations**

Location: Dockside (outside on the dock)

12:15 PM - 1:30 PM **US Federal Lunchtime Social**

Location: Sound

12:15 PM - 1:30 PM **Business Implications for Scaling up eDNA**

Location: Cove
Speaker: Kai Lee

1:30 PM - 3:00 PM **Monitoring network design & readiness**

Location: Bay Auditorium
Speakers: Kristen Westfall, Jake Lawlor, John Logan, Nicolas Locatelli, Denise Silva

> **Biodiversity power analysis supports eDNA for regional-scale monitoring**
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: Jake Lawlor
>
> **Using eDNA monitoring to guide the timing of coastal construction in winter flounder estuarine habitat**
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: John Logan
>
> **SCALE: Monitoring ecological change in Adirondack lakes through eDNA metabarcoding and targeted multiplex PCR of invasive species**
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: Nicolas Locatelli
>
> **Building an Island-Wide eDNA Monitoring Framework to Link Reef Fish Biodiversity, Ecosystem Condition, and Conservation Priorities in Moorea Lagoon**
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: Denise Silva
>
> **Making eDNA work for marine protected areas: a scalable implementation framework for species monitoring and performance evaluation**
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: Kristen Westfall

1:30 PM - 3:00 PM

GBIF, Reference Databases & Data Standards II

Location: Sound
Speakers: Kathleen Pitz, Caren Goldberg, Katy Klymus, Katherine Silliman, Berenice Talamantes Becerra, Hayley DeHart, Kristina Zudock

Developing International Standards for eDNA Workflows

1:30 PM - 3:00 PM
Location: Sound
Speaker: Katy Klymus

Developing a Transferable Proficiency Testing Scheme for Filtration-Based Aquatic eDNA Workflows

1:30 PM - 3:00 PM
Location: Sound
Speaker: Caren Goldberg

BeBOP protocol templates: Better Biomolecular Ocean Practices through standard formatting, controlled vocabularies, and archiving with version control

1:30 PM - 3:00 PM
Location: Sound
Speaker: Kathleen Pitz

Supporting NOAA Omics with a Standards-based Environmental DNA Data Analysis and Publishing Toolkit

1:30 PM - 3:00 PM
Location: Sound
Speaker: Katherine Silliman

Automating FAIR Marine eDNA data Acquisition and Contextual Observation Workflows for OBIS and Biodiversity repositories.

1:30 PM - 3:00 PM
Location: Sound
Speaker: Berenice Talamantes Becerra

Implementing eDNA at Sea: Rapid Molecular Workflows and Automated Metadata Management

1:30 PM - 3:00 PM
Location: Sound
Speakers: Kristina Zudock, Hayley DeHart

1:30 PM - 3:00 PM

Who's there? Getting the best species identification from eDNA

Location: Marina
Speakers: David Duffy, Luke McCartin, Samantha Setta, Isaac Schuman, Claudia Baeyens González, Eldridge Wisely, Linnea Cooley

Accounting for Intra- and Intergenomic Sequence Variation in Reference Barcodes through Genome Skimming Improves eDNA Metabarcoding Biodiversity Assessment

1:30 PM - 3:00 PM
Location: Marina
Speaker: Luke McCartin

A la carte taxonomic classification: Best practices for taxonomic classification of metabarcoding data

1:30 PM - 3:00 PM
Location: Marina
Speaker: Samantha Setta

Beyond Metabarcoding: Genome Technologies Enable Novel eDNA-Based Applications

1:30 PM - 3:00 PM
Location: Marina
Speaker: David Duffy

Monitoring fish parasite communities in the Grand Canyon using eDNA

1:30 PM - 3:00 PM
Location: Marina
Speaker: Isaac Schuman

Two out of three: removing the saturated codon position sharpens taxonomy under incomplete databases

1:30 PM - 3:00 PM
Location: Marina
Speaker: Claudia Baeyens González

“Denoising” DADA2 Denoising: Amplicon sequence variant generation and effects of the OMEGA_A parameter

1:30 PM - 3:00 PM
Location: Marina
Speaker: Linnea Cooley

Marine Metamitogenomics: Targeted Massively Parallel Species-Level eDNA Biodiversity Assessments

1:30 PM - 3:00 PM
Location: Marina
Speaker: Eldridge Wisely

1:30 PM - 3:00 PM **Restoration Applications**

Location: Cove
Speakers: Dylan Keel, Evan Davies, Alex Santillan-Sarmiento, Ronan Davis, Cheryl Dean, Julie Stanford

> **Rapid, community-wide reorganization of fishes following the world's largest dam removal**
> 1:30 PM - 3:00 PM
> Location: Cove
> Speaker: Dylan Keel
>
> **Coupling eDNA and Traditional Sampling to Assess Estuarine Fish Communities Prior to Hydrologic Restoration**
> 1:30 PM - 3:00 PM
> Location: Cove
> Speaker: Evan Davies
>
> **Soil metabarcoding assessment in a restoration initiative in the Ecuadorian Chocó**
> 1:30 PM - 3:00 PM
> Location: Cove
> Speaker: Alex Santillan-Sarmiento
>
> **Assessing Community Shifts in Maine Streams After Large Wood Addition Restoration**
> 1:30 PM - 3:00 PM
> Location: Cove
> Speaker: Ronan Davis
>
> **Exploring the links between physical and biological changes in a restored tidal wetland using low-impact monitoring tools.**
> 1:30 PM - 3:00 PM
> Location: Cove
> Speaker: Cheryl Dean
>
> **To be a reference site or not to be a reference site - that is the question**
> 1:30 PM - 3:00 PM
> Location: Cove
> Speaker: Julie Stanford

1:30 PM - 3:00 PM **Adventures in the Benthos**

Location: Pacific
Speakers: Holly Bik, Robert Cassidy, William Johnson, Marina Vingiani, Hana Kim, Kylie Holt

> **Sponge nsDNA reveals spatial and semi-quantitative trends of benthic biodiversity in deep-sea fishing grounds of the Porcupine Bank**
> 1:30 PM - 3:00 PM
> Location: Pacific
> Speaker: Robert Cassidy
>
> **An eDNA Approach to Characterizing Neighboring Marine Habitats: Kelp Forests and Urchin Barrens**
> 1:30 PM - 3:00 PM
> Location: Pacific
> Speaker: William Johnson
>
> **Tracing and Interpreting Benthic Biodiversity in Posidonia oceanica Meadows with eDNA Metabarcoding: Ecological Insights from Integrated Environmental Compartments and Molecular Markers**
> 1:30 PM - 3:00 PM
> Location: Pacific
> Speaker: Marina Vingiani
>
> **Evaluating the Applicability of eDNA Metabarcoding for Advanced Detection of polychaetes in Marine Benthic Communities: A Comparison with Morphological Identification**
> 1:30 PM - 3:00 PM
> Location: Pacific
> Speaker: Hana Kim
>
> **Benthic eDNA reliably predicts ecosystem health in Southern California estuaries**
> 1:30 PM - 3:00 PM
> Location: Pacific
> Speaker: Holly Bik
>
> **Macroalgae as natural eDNA samplers of grazer-epiphyte interactions in coral reef ecosystems**
> 1:30 PM - 3:00 PM
> Location: Pacific
> Speaker: Kylie Holt

3:00 PM - 3:30 PM **Break**

Location: All rooms

3:00 PM - 3:30 PM **MBARI: eDNA Sampling Technology Demonstrations**

Location: Dockside (outside on the dock)

3:30 PM - 5:00 PM

eDNA for Decision-Making

Location: Bay Auditorium
Speakers: Madeline Green, Thomas Gibson, Laura Huber, Melinda Baerwald, William (Cody) Fleece, Jason Landrum

Environmental nucleic acids for policy relevant marine monitoring, advances in the United Kingdom

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: Thomas Gibson

The Trophic Rapid Assessment and Integrated Toolkit (TRAIT): Turning eDNA sequences into actionable information for decision makers

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: Laura Huber

Operationalizing eDNA to Inform California Water Management

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: Melinda Baerwald

ASSESSING THE POTENTIAL FOR ENVIRONMENTAL DNA TO PROVIDE THE BASIC INFORMATION NEEDED FOR REGULATORY DETERMINATIONS

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: William (Cody) Fleece

Closing the Gap: eDNA Adoption in U.S. Marine and Coastal Management

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: Jason Landrum

Can eDNA Become Evidence? Moving from Species Detection to Decision-Making

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: Madeline Green

3:30 PM - 5:00 PM

GBIF, Reference Databases & Data Standards III

Location: Sound
Speakers: Louie Lopez, Tobias Frøslev, Sean McAllister, Meredith Everett, Susanna Theroux, Nerida Wilson

From Frozen Snapshots to Living Data: A Global eDNA Reference Library Catalogue and Continuous Taxonomic Reinterpretation at GBIF

3:30 PM - 5:00 PM
Location: Sound
Speaker: Tobias Frøslev

Effective strategies and tools for creating, curating, and deploying better reference databases and choosing markers for environmental DNA applications with METRO

3:30 PM - 5:00 PM
Location: Sound
Speaker: Sean McAllister

Relevance of Curated Sequence Reference Database in eDNA Metabarcoding Standardization

3:30 PM - 5:00 PM
Location: Sound
Speaker: Louie Lopez

Octocoral biodiversity across the central Pacific: Application of a novel geographically focused eDNA database to characterize deep-sea coral communities.

3:30 PM - 5:00 PM
Location: Sound
Speaker: Meredith Everett

An authoritative reference library for eDNA in Australia: the National Biodiversity DNA Library

3:30 PM - 5:00 PM
Location: Sound
Speaker: Nerida Wilson

Filling California DNA Reference Library Gaps: How hard can it be?

3:30 PM - 5:00 PM
Location: Sound
Speaker: Susanna Theroux

3:30 PM - 5:00 PM

Beyond short reads: new methods for community composition studies

Location: Marina
Speakers: Aden Ip, Whitley Stewart, Zachary Gold, Marc Chang, Mars Giethbrock, Joseph Craine, John Darcy

Using Long-read 16S rRNA Gene Sequencing to Characterize Sensitivity and Specificity of a New Endotoxin-based Method to Detect Fecal Pollution in Coastal Waters

3:30 PM - 5:00 PM
Location: Marina
Speaker: Whitley Stewart

Better Counting Through Chemistry: Validation of Census Of Unique Nucleotide Tags (COUNT) Metabarcoding for Reliable and Accurate Quantitative Metabarcoding

3:30 PM - 5:00 PM
Location: Marina
Speaker: Zachary Gold

Going to great lengths for long-read metabarcoding: is longer better for species identification?

3:30 PM - 5:00 PM
Location: Marina
Speaker: Marc Chang

No power, no lab, no internet: eDNA to species, by anyone, anywhere

3:30 PM - 5:00 PM
Location: Marina
Speaker: Aden Ip

Two-Year Assessment of Aquatic Plant Biodiversity Using Chloroplast-Based eDNA Metabarcoding

3:30 PM - 5:00 PM
Location: Marina
Speaker: Mars Giethbrock

Transitioning eDNA Metabarcoding sequencing to Oxford Nanopore

3:30 PM - 5:00 PM
Location: Marina
Speaker: John Darcy

Cross-phylum fourth-generation aquatic environmental DNA analyses with targeted hybridization capture

3:30 PM - 5:00 PM
Location: Marina
Speaker: Joseph Craine

3:30 PM - 5:00 PM

Marine eDNA for wildlife ecology and conservation

Location: Cove
Speakers: Chloe Robinson, Emma Laqua, Natalia Benejam, Emma Horton, Kim Parsons, Amy Migneault, Madeleine Pacheco

Sexing from Seawater & Marine Microsatellites: Application of Environmental DNA Beyond Species Detection for Cetaceans

3:30 PM - 5:00 PM
Location: Cove
Speaker: Emma Laqua

Species Movement Ecology as a Factor in Detectability by eDNA

3:30 PM - 5:00 PM
Location: Cove
Speaker: Natalia Benejam

Using multiple eDNA sampling methods to distinguish killer whale (Orcinus orca subspp.) ecotypes

3:30 PM - 5:00 PM
Location: Cove
Speaker: Emma Horton

Examining Ecosystem Drivers For Shifts In The Summer Ranging Patterns Of An Endangered Killer Whale Population Through In Situ Edna Sampling.

3:30 PM - 5:00 PM
Location: Cove
Speaker: Kim Parsons

Finding a star in a galaxy: rapid eDNA-based mapping of the critically endangered sunflower sea star (Pycnopodia helianthoides) across California

3:30 PM - 5:00 PM
Location: Cove
Speaker: Madeleine Pacheco

Non-Invasive Genetic Monitoring of North Pacific Humpback Whales Using Environmental DNA

3:30 PM - 5:00 PM
Location: Cove
Speaker: Amy Migneault

What's on the Menu? Environmental DNA as a Tool to Serve Up Insights on Whale Diets

3:30 PM - 5:00 PM
Location: Cove
Speaker: Chloe Robinson

3:30 PM - 5:00 PM

Ecology of eDNA & Algae Blooms

Location: Pacific
Speakers: Pedro Brandao-Dias, Madison Gard, Meghan Shea, Maggie Harings, Ryan Guillemette, Sarah Cotten

> **Blooming Concerns: Alexandrium catenella in Puget Sound**
> 3:30 PM - 5:00 PM
> Location: Pacific
> Speaker: Madison Gard
>
> **Quantifying Environmental DNA (eDNA) Shedding and Decay Rates for the Sunflower Sea Star (Pycnopodia helianthoides)**
> 3:30 PM - 5:00 PM
> Location: Pacific
> Speaker: Meghan Shea
>
> **Quantitative aging of environmental DNA using multiple components**
> 3:30 PM - 5:00 PM
> Location: Pacific
> Speaker: Pedro Brandao-Dias
>
> **Evaluating spatial and temporal patterns in environmental DNA concentrations during historically low salmon runs in a Yukon River tributary, Alaska**
> 3:30 PM - 5:00 PM
> Location: Pacific
> Speaker: Maggie Harings
>
> **A Novel Method for Dissolved eDNA Recovery Reveals Drivers of Fraction-Specific eDNA Decay**
> 3:30 PM - 5:00 PM
> Location: Pacific
> Speaker: Ryan Guillemette
>
> **Influence of Salinity on eDNA Degradation**
> 3:30 PM - 5:00 PM
> Location: Pacific
> Speaker: Sarah Cotten

Thursday, October 29, 2026

8:00 AM - 5:00 PM

Registration Open

Location: Main Lobby

8:30 AM - 9:00 AM

Coffee and Continental Breakfast

Location: All rooms

9:00 AM - 10:00 AM

Plenary: Melania Cristescu: "From Species Detection to Ecological Interpretation: The Promise of eRNA"

Location: International Room

10:00 AM - 10:30 AM

Break

Location: All rooms

10:00 AM - 10:30 AM

Nuquantic and Wilderlabs: eDNA Sampling Technology Demonstrations

Location: Dockside (outside on the dock)

10:30 AM - 12:00 PM

Autonomous & Novel Sampling Platforms I

Location: Bay Auditorium
Speakers: Adam Sepulveda, Alireza Zabihihesari, Camille Pagniello, Ian Estaphan Owen, Jan-Maarten Luursema, Andrew Rhyne

Development and Field Evaluation of an Autonomous Sampler for Rapid Triplicate Environmental DNA Sampling

10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Alireza Zabihihesari

Study design considerations when using eDNA autonomous samplers for biological surveillance and monitoring

10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Adam Sepulveda

eDNA MODE: A student-designed, autonomous eDNA Modular On-site eDNA Encapsulator

10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Camille Pagniello

Passive aerial eDNA sampling: design, experiences, and challenges

10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Jan-Maarten Luursema

Integrating Aquatic Drones and Seawater Filtration for Enhanced eDNA Monitoring

10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Andrew Rhyne

10:30 AM - 12:00 PM

Offshore Energy Applications I

Location: Sound
Speakers: Lenaig Hemery, Nicolas Tsesmetzis, McKenzie Zauel, Michael Marnane

Fishing for answers: Advancing eDNA biodiversity monitoring with insights from high-energy marine environments

10:30 AM - 12:00 PM
Location: Sound
Speaker: Lenaig Hemery

Environmental DNA vs. Conventional Methods: Evidence and Implications for Energy Sector Monitoring

10:30 AM - 12:00 PM
Location: Sound
Speaker: Nicolas Tsesmetzis

eDNA Applications for Evaluating Biodiversity Outcomes of Nature-based Solutions

10:30 AM - 12:00 PM
Location: Sound
Speaker: McKenzie Zauel

Accelerating the uptake and acceptance of eDNA methods within the energy industry through the Environmental Genomics Joint Industry Program

10:30 AM - 12:00 PM
Location: Sound
Speaker: Michael Marnane

10:30 AM - 12:00 PM **Improved Biodiversity assessments: methods and applications**

Location: Marina
Speakers: Shannon O'Leary, Annie Masterman, Leonce Ngirinshuti, Laura Kubiatko, Lorraine Joyce Del Rosario, Colin Grosvenor

> **Modifying the 12S-V5 forward primer in eDNA metabarcoding workflows to broaden marine biodiversity detections**
> 10:30 AM - 12:00 PM
> Location: Marina
> Speaker: Annie Masterman
>
> **Diversity estimates are more sensitive to choice of bioinformatic pipelines than are diversity-environment models**
> 10:30 AM - 12:00 PM
> Location: Marina
> Speaker: Leonce Ngirinshuti
>
> **Hidden Reservoirs: Native Fishes Harbor Greater Genetic Diversity Than Nonnatives in the Lower Colorado River's “Grand Canyon Ecosystem"**
> 10:30 AM - 12:00 PM
> Location: Marina
> Speaker: Colin Grosvenor
>
> **A Comparison of Three Intertidal Biosurveying Methods: Conventional Quadrat Surveying and eDNA Metabarcoding of Sediment and Water**
> 10:30 AM - 12:00 PM
> Location: Marina
> Speaker: Laura Kubiatko
>
> **Feature or Bug? Reframing eDNA bycatch as a window into coastal marine biodiversity**
> 10:30 AM - 12:00 PM
> Location: Marina
> Speaker: Shannon O'Leary
>
> **Temporal and Spatial Characterization of Biodiversity and Community Structure of Selected Port Areas in the Philippines as identified by Environmental DNA Metabarcoding using Uni-Minibar Primers**
> 10:30 AM - 12:00 PM
> Location: Marina
> Speaker: Lorraine Joyce Del Rosario

10:30 AM - 12:00 PM **Terrestrial eDNA, Soil & Underground I**

Location: Cove
Speakers: Pritam Banerjee, Daniela Martinelli MarÃn, Hiroki Yamanaka, Henrik Cornelisson Van De Ven, Elise Stacy

> **VERTEBRATE DIVERSITY IN CAVE SYSTEMS OF COLOMBIA: AN APPROACH BASED ON ENVIRONMENTAL DNA METABARCODING ANALYSIS**
> 10:30 AM - 12:00 PM
> Location: Cove
> Speaker: Daniela Martinelli MarÃn
>
> **Birdbath traps as an attractant-based eDNA sampling approach for terrestrial bird monitoring**
> 10:30 AM - 12:00 PM
> Location: Cove
> Speaker: Hiroki Yamanaka
>
> **Individual matching of Sitka black-tailed deer fecal pellet samples with a GTseq SNP panel**
> 10:30 AM - 12:00 PM
> Location: Cove
> Speaker: Elise Stacy
>
> **Understanding plantâ€“arthropod interaction networks across native and introduced plant species in Hawaiâ€¯i using non-lethal terrestrial environmental DNA**
> 10:30 AM - 12:00 PM
> Location: Cove
> Speaker: Pritam Banerjee
>
> **Designing a national airborne eDNA network - technical considerations and practicalities**
> 10:30 AM - 12:00 PM
> Location: Cove
> Speaker: Henrik Cornelisson Van De Ven

10:30 AM - 12:00 PM

From method performance to effective eDNA monitoring

Location: Pacific
Speakers: Sean Lyons, Erin Fischell, Stephanie Matthews, Kat Stewart, Jessica Glass

Accessible sampling systems for environmental DNA

10:30 AM - 12:00 PM
Location: Pacific
Speaker: Erin Fischell

A framework for calculating the marginal value of an eDNA data stream

10:30 AM - 12:00 PM
Location: Pacific
Speaker: Stephanie Matthews

Evaluating Cost-Effective eDNA Sampling Approaches for Monitoring Amphibians in Vernal Pools Along the Atlantic Coast

10:30 AM - 12:00 PM
Location: Pacific
Speaker: Sean Lyons

Prospecting for Hybrids in the Waters They Leave Behind

10:30 AM - 12:00 PM
Location: Pacific
Speaker: Kat Stewart

Novel passive eDNA device enables cost-effective aquatic biodiversity monitoring

10:30 AM - 12:00 PM
Location: Pacific
Speaker: Jessica Glass

12:00 PM - 1:00 PM

Lunch

Location: All rooms

12:00 PM - 1:00 PM

Airborne eDNA Enthusiasts Meetup

Location: Pierside

12:00 PM - 1:00 PM

eDNA in Large Ocean States(LOS)/Small Island Developing States (SIDS) Roundtable

Location: Pacific
Speaker: Collin Closek

12:00 PM - 1:00 PM

From Species Lists to Answers: Interpreting eDNA with PHYLO

Location: Cove
Speaker: Jean-Paul Cozzatti

12:00 PM - 1:00 PM

McLane: Nuquantic: eDNA Sampling Technology Demonstrations

Location: Dockside (outside on the dock)

1:00 PM - 2:00 PM

Plenary Panel: Policy to Accelerate eDNA Adoption in Natural Resource Management

Location: International Room
Speakers: David Lodge, Shaun Wilkinson, Mike Bunce, Kristian Meissner, Emily Patrolia, Clay Porch

2:00 PM - 3:00 PM

Autonomous & Novel Sampling Platforms II

Location: Bay Auditorium
Speakers: Kevan Yamahara, Kelly Swindle, Christina Preston, Shannon Brown

Integrating Passive eDNA Sampling with Autonomous Underwater Vehicles to Assess Biodiversity at the USS Monitor Shipwreck

2:00 PM - 3:00 PM
Location: Bay Auditorium
Speaker: Kelly Swindle

Benchmarking Emerging Autonomous eDNA Technologies for Aquatic Sampling Observations

2:00 PM - 3:00 PM
Location: Bay Auditorium
Speaker: Kevan Yamahara

Scaling Biodiversity Observations in Remote Marine Environments using An Autonomous Uncrewed Vessel to Collect eDNA Samples

2:00 PM - 3:00 PM
Location: Bay Auditorium
Speaker: Christina Preston

Monitoring the Unreachable: Operational Realities of a Moored Autonomous eDNA Fleet for Biodiversity Assessment

2:00 PM - 3:00 PM
Location: Bay Auditorium
Speaker: Shannon Brown

2:00 PM - 3:00 PM

Offshore Energy Applications II

Location: Sound
Speakers: Jeanine Brantschen, Erin Conlon, Michael Cyrana, Mauro Rebelo

Integration of environmental DNA surveys in biological ocean observation in Monterey Bay for future place-based management and offshore energy

2:00 PM - 3:00 PM
Location: Sound
Speaker: Jeanine Brantschen

Integrating New Jersey Community Scientists in Fisheries eDNA Monitoring of Offshore Wind

2:00 PM - 3:00 PM
Location: Sound
Speaker: Erin Conlon

Connecting Molecular, Ecological, and Oceanography to Advance Marine Biodiversity Assessment

2:00 PM - 3:00 PM
Location: Sound
Speaker: Michael Cyrana

Autonomous eDNA Sampling Around Offshore Oil and Gas Infrastructure Using an Unmanned Surface Vehicle and the Environmental Sample Processor

2:00 PM - 3:00 PM
Location: Sound
Speaker: Mauro Rebelo

2:00 PM - 3:00 PM

Terrestrial eDNA, Soil & Underground II

Location: Cove
Speakers: Karen Dyson, Halle-Mari Santiago, Madeline Slimp, Sven Weber

Assessing the Utility of Airborne eDNA for Detection of At-Risk Bats and Pseudogymnoascus destructans

2:00 PM - 3:00 PM
Location: Cove
Speaker: Halle-Mari Santiago

Edge-to-Edge Soil Sampling: A Practical eDNA Protocol for Heterogeneous Terrestrial Landscapes

2:00 PM - 3:00 PM
Location: Cove
Speaker: Karen Dyson

eDNA and Canopy Signatures Track Biodiversity Across the Western Cape's Managed and Disturbed Landscapes

2:00 PM - 3:00 PM
Location: Cove
Speaker: Madeline Slimp

Leaf-derived eDNA reveals invasion-linked arthropod turnover across Hawaiian forest refugia

2:00 PM - 3:00 PM
Location: Cove
Speaker: Sven Weber

2:00 PM - 3:00 PM

Food webs & diet analysis

Location: Pacific
Speakers: Fouad El Baidouri, Kameryn Kimbrough, Zacchaeus Compson, Robert Mollenhauer, Andy Lara

Using eDNA Metabarcoding to Assess the Effects of Predator Exclusion on Salt Marsh Microbial and Microeukaryotic Communities

2:00 PM - 3:00 PM
Location: Pacific
Speaker: Kameryn Kimbrough

Of Metabarcoding and Metawebs: Using eDNA to enhance food web analysis in NEON streams

2:00 PM - 3:00 PM
Location: Pacific
Speaker: Zacchaeus Compson

Beyond Species Lists: Standardized eDNA Reveals Haplotype Mosaics Across a Continental Estuary Network

2:00 PM - 3:00 PM
Location: Pacific
Speaker: Fouad El Baidouri

Absence or imperfect detection? A multiscale occupancy approach to ghost alleles in predator diet samples

2:00 PM - 3:00 PM
Location: Pacific
Speaker: Robert Mollenhauer

Integrating qPCR and DNA Metabarcoding to Characterize Multi-Guild Predation on Pacific Lamprey and Anadromous Salmonids Across the Columbia River Basin.

2:00 PM - 3:00 PM
Location: Pacific
Speaker: Andy Lara

3:00 PM - 3:30 PM

Break

Location: All rooms

3:00 PM - 3:30 PM

Acbotics: eDNA Sampling Technology Demonstrations

Location: Dockside (outside on the dock)

3:30 PM - 5:00 PM

Autonomous & Novel Sampling Platforms III

Location: Bay Auditorium
Speakers: Kevan Yamahara, Wen-Chia Chen, Lynsey Wilcox Talbot, Christina Biggs, Ellen Pikitch

From eDNA to Electrical Current: Engineering a Living Bioelectronic Sensor for Environmental Surveillance

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: Wen-Chia Chen

In-field detection of common bottlenose dolphin eDNA with the NS2 ddPCR biosensor

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: Lynsey Wilcox Talbot

Engineering and Validating a SCUBA-Tow eDNA Sampling Platform

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: Christina Biggs

Conception, Development and First eDNA Biodiversity Survey of an Autonomous, Self-Righting, Solar-Powered Vehicle in an Estuarine Hope Spot

3:30 PM - 5:00 PM
Location: Bay Auditorium
Speaker: Ellen Pikitch

3:30 PM - 5:00 PM

Offshore Energy Applications III

Location: Sound
Speakers: Alberto Lopez, Tim O'Donnell, Liz Alter, Luciana Alves Pereira, Caitlin McGarigal

Validation of eDNA and Visual Biodiversity Monitoring to Streamline Reef Planning and Permitting

3:30 PM - 5:00 PM
Location: Sound
Speaker: Alberto Lopez

Evaluating the impact of offshore wind development on fisheries biodiversity using environmental DNA

3:30 PM - 5:00 PM
Location: Sound
Speaker: Tim O'Donnell

Environmental DNA as a Tool for Marine Biodiversity Assessment and Long-Term Ecosystem Monitoring in the New York Bight

3:30 PM - 5:00 PM
Location: Sound
Speaker: Liz Alter

Current affairs: eDNA and eRNA monitoring surfaces hidden fish diversity at marine energy sites

3:30 PM - 5:00 PM
Location: Sound
Speaker: Luciana Alves Pereira

New Jersey Research and Monitoring Initiative (RMI) for offshore Wind: Integrating eDNA into regional ecological monitoring systems to inform offshore energy development

3:30 PM - 5:00 PM
Location: Sound
Speaker: Caitlin McGarigal

3:30 PM - 5:00 PM

Quantification, Statistics & Multi-source Data I

Location: Marina
Speakers: Katrina West, Kaley Cave, Shan En Chen, Trevor Ruiz, Aden Ip, Patrick Lewis, Maddalena Tibone, Raksha Doddabele

Modeling environmental, molecular, and taxon-level drivers of fish detection from eDNA metabarcoding in a Southern Great Plains river

3:30 PM - 5:00 PM
Location: Marina
Speaker: Kaley Cave

Modelling PCR Bias for Relative Abundance Calibration in eDNA Metabarcoding

3:30 PM - 5:00 PM
Location: Marina
Speaker: Katrina West

Using UML-Based Species Delimitation to Improve Environmental DNA Metabarcoding-Based Marine Biodiversity Assessment

3:30 PM - 5:00 PM
Location: Marina
Speaker: Shan En Chen

Statistical prediction with amplicon data: modeling the ecological habitat of baleen whales

3:30 PM - 5:00 PM
Location: Marina
Speaker: Trevor Ruiz

Unlocking the dark taxa of deep-sea eDNA: classifying the unclassifiable with a custom-trained AI

3:30 PM - 5:00 PM
Location: Marina
Speaker: Aden Ip

Developing an eDNA mass balance index to estimate reach-wide riverine fish abundances

3:30 PM - 5:00 PM
Location: Marina
Speaker: Patrick Lewis

Assessing qualitative and quantitative applications of environmental DNA to study mesopelagic fish layers in the Northeast Atlantic

3:30 PM - 5:00 PM
Location: Marina
Speaker: Maddalena Tibone

Extending eDNA to capture population genetic variation for estimates of white shark local abundance

3:30 PM - 5:00 PM
Location: Marina
Speaker: Raksha Doddabele

3:30 PM - 5:00 PM

Operationalizing eDNA for Monitoring

Location: Cove
Speakers: Kevin Lafferty, Robin Sleith, Noelle Helder, Yuan Liu

More accurate and interpretable taxonomic assignments with TaxaID: an AI-capable Bayesian R package for metabarcoding

3:30 PM - 5:00 PM
Location: Cove
Speaker: Kevin Lafferty

Unlocking New Scales of Ecological Inference: A Large-Scale eDNA Metabarcoding Study of Maine's Changing Waters

3:30 PM - 5:00 PM
Location: Cove
Speaker: Robin Sleith

Operationalizing eDNA in Deep-Sea Exploration: Experiences and Future Directions from E/V Nautilus

3:30 PM - 5:00 PM
Location: Cove
Speaker: Noelle Helder

Practical Lessons for Long-Term eDNA Monitoring in Coastal Ecosystems

3:30 PM - 5:00 PM
Location: Cove
Speaker: Yuan Liu

Finding a Needle in a Haystack: Utilizing eDNA to Reveal Aquatic Plant Diversity

3:30 PM - 5:00 PM
Location: Waterlink
Speaker: Simone Kirkeby

Quagga Mussel Environmental Nucleic Acid Detection after a Rapid Response Treatment

3:30 PM - 5:00 PM
Location: Cove
Speaker: Madeleine Malmfeldt

3:30 PM - 5:00 PM

Detecting Rare, Endangered and Elusive Species

Location: Pacific
Speakers: Julie Lockwood, Lauren Carter, Emily Skinner, Mark Johnson, Nate Marshall, Kayla McCulloch, Peter Dutton

Using Environmental DNA to Detect Bonnethead Sharks in Tampa Bay, Florida

3:30 PM - 5:00 PM
Location: Pacific
Speaker: Lauren Carter

Cost-effective isolation of long eDNA fragments for sea turtle natal origin determination from air, water and sand samples

3:30 PM - 5:00 PM
Location: Pacific
Speaker: Emily Skinner

Environmental DNA analysis for conservation of threatened and endangered species on military lands

3:30 PM - 5:00 PM
Location: Pacific
Speaker: Mark Johnson

Implementation of eDNA Metabarcoding for Freshwater Mussel Surveys in Infrastructure and Conservation Projects

3:30 PM - 5:00 PM
Location: Pacific
Speaker: Nate Marshall

Enhancing detection of Critically Endangered rhino rays using species-specific eDNA and ddPCR approaches

3:30 PM - 5:00 PM
Location: Pacific
Speaker: Kayla McCulloch

Detecting Pacific leatherback turtle presence on the U.S. West Coast using eDNA

3:30 PM - 5:00 PM
Location: Pacific
Speaker: Peter Dutton

An eDNA tool for noninvasive detection of the endangered Rio Grande Silvery Minnow

3:30 PM - 5:00 PM
Speaker: Richard F. Lance

5:00 PM - 8:00 PM

Location: Waterlink
Speakers: Ashton Bandy, Subba Rao Chaganti, Luciana Alves Pereira, Richard Kane, Mae Sierra, Matthew Barnes, Khadijah Homolka, Carlos Esperanza, Elise Snyder, Loic Jacquemot, Danielle Schmidt, Valeria Lugo-Mesa, Liam Zarri, Reneisha K Sweet, Emma Strand, Miwa Takahashi, Zachary Gold, Simone Kirkeby, Leigh Sanders, Taylor Ely, Emma Onder, Emmett Smith, Anthony Vastano, Alexandra Sousa, Gaby Hoenig, Madeleine Malmfeldt, Lena Stasiak, Thomas Stjernegaard Jeppesen, William Crespo Guizarra, Kenneth Macdonald, Johannes Weinrich, Owen Leiser, Anderson Tate, Paul Jeffrey, Caroline Terry

Rapid eDNA-based assessment of green turtle abundance in Southern California

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Lena Stasiak

Evaluating Fecal and Stomach Content eDNA Metabarcoding Approaches for Dietary Analysis of Red Snapper (Lutjanus campechanus)

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Reneisha K Sweet

Seismic 4D

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: William Crespo Guizarra

FAIR eDNA (FAIRe) practice guidelines, metadata standards, and emerging community collaboration and tools for interoperable eDNA data

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Miwa Takahashi

Generating Genomic Resources for Hydrilla verticillata Using Long-Read Whole-Genome Sequencing

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Paul Jeffrey

On a Roll! Roadside eDNA surveys for detection of invasive Spotted Lanternfly (Lycorma delicatula)

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Anthony Vastano

Assessment of Environmental DNA Surveys for the Cryptic Salamander Mussel (Simpsonaias ambigua): A Comparison of qPCR and Metabarcoding Approaches

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Mae Sierra

On-Farm Conservation Strategies and Genetic Monitoring of Pirarucu (Arapaima gigas) in the Baixo Amazonas: Subsidies for eDNA Technologies.

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Alexandra Sousa

Coupling environmental DNA with bioacoustics: Toward quantifying borealization impact on the Arctic twilight zone

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Loic Jacquemot

Adopting environmental DNA (eDNA) for fish monitoring at tidal and riverine energy project sites under the U.S. regulatory framework

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Luciana Alves Pereira

Effects of Copper Sulfate Treatment on Biofiltration in Saltwater Aquaria

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Valeria Lugo-Mesa

Bringing portable, accessible CRISPR-based diagnostics to eDNA detection in low-resource settings through 3D printed equipment and reagent lyophilization

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Carlos Esperanza

Using environmental DNA and metabarcoding to inventory vernal pools on federal refuge lands

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Anderson Tate

Searching the World's eDNA: A Sequence-Based Discovery Infrastructure for GBIF-Mediated Occurrence Data

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Thomas Stjernegaard Jeppesen

Applications of eDNA methods for diverse ecological questions in an urbanized temperate estuary.

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Richard Kane

Genetic Tool Development for Biological Monitoring: Integrating Tow-Net Sampling with Fish eDNA Metabarcoding in the San Francisco Estuary

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Leigh Sanders

Estimating population density of a rare and imperiled freshwater turtle from in-stream measurements of eDNA diversity

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Liam Zarri

Marine metaphylogeographic structure across the North Central Pacific

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Taylor Ely

Monitoring the Marine Ecosystem of Seyðisfjörður in Response to Anthropogenic Activity

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Emmett Smith

What Are We Missing? Comparing eDNA and Traditional Surveys in Coastal Fish Monitoring in Massachusetts

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Caroline Terry

Optimizing MagMax eDNA Extractions on the KingFisher

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Kenneth Macdonald

Exploring the linkages between environmental nucleic acids (eNA) and the aquabiome in streams and rivers

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Elise Snyder

Development of a rapid eDNA detection tool to improve invasive mussel biosecurity in British Columbia

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Danielle Schmidt

Exploring the potential of recovering epigenetic signatures for epigenetic ageing clocks from environmental DNA (eDNA) samples

5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Emma Strand

A Paired-marker environmental DNA approach to constraining spatiotemporal biodiversity patterns and cross-trophic linkages across Santa Monica Bay
5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Ashton Bandy

Predatory diets of Cintura snails: stomach content analysis and eDNA metabarcoding
5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Gaby Hoenig

Molecular Assessment Of Sea Star Diversity In Tampa Bay: A Genetic Baseline For Coastal Conservation
5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Emma Onder

Field to OBIS/GBIF Data Management Templates and Codebase for eDNA Analysis on Hydrographic Cruises
5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Zachary Gold

Trust, but Verify: An Independent Audit of eDNA Yields from Smith-Root Self-Preserving Filters
5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Johannes Weinrich

Back to the future with environmental DNA: repurposing previously collected samples to study historical Texas freshwater jellyfish invasion
5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Matthew Barnes

Beyond the Net: Evaluating eDNA as a non-lethal tool for species identification of hydroacoustic data
5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Rachael Aber

Use of Environmental DNA for Species Surveys in High Energy Marine Environments
5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Owen Leiser

eDNA Metabarcoding for Marine Biodiversity Baselines in Bull Kelp (Nereocystis luetkeana) habitat in the Strait of Juan de Fuca, Washington
5:00 PM - 8:00 PM
Location: Waterlink
Speaker: Khadijah Homolka

Friday, October 30, 2026

8:00 AM - 5:00 PM	**Registration Open** Location: Main Lobby
8:30 AM - 9:00 AM	**Coffee and Continental Breakfast** Location: All rooms
9:00 AM - 10:00 AM	**Plenary: Phil Levin: The Magic of Knowing: Science, Stewardship, and the Living World** Location: International Room
10:00 AM - 10:30 AM	**Break** Location: All rooms
10:00 AM - 10:30 AM	**Ocean Diagnostics: eDNA Sampling Technology Demonstrations** Location: Dockside (outside on the dock)

10:30 AM - 12:00 PM **Indigenous Program Design & Management Application**

Location: Bay Auditorium
Speakers: Rebecca Martone, John Hagan, Michael Allison, Steve Palumbi, Rosie Gradoville, Keri Baugh

Integrating environmental DNA into tribal resource management.
10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: John Hagan

From Sequence to Relative: Indigenous Relational Frameworks for eDNA Data Governance
10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Keri Baugh

Spawning dynamics of Oolichan (Thaleichthys pacificus) in Haisla territory: Annual eDNA monitoring and implications for Indigenous stewardship
10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Michael Allison

Co-developing biodiversity monitoring programs using eDNA to inform First Nations' stewardship in British Columbia, Canada
10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Rebecca Martone

Ocean heritage and marine ecosystem change in the Chumash Heritage National Marine Sanctuary measured with citizen science and eDNA
10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Steve Palumbi

Piloting eDNA multi-marker metabarcoding for ecosystem monitoring in the Columbia River estuary and plume
10:30 AM - 12:00 PM
Location: Bay Auditorium
Speaker: Rosie Gradoville

10:30 AM - 12:00 PM **Sampling & Molecular Innovations**

Location: Sound
Speakers: Katy Klymus, Abhinaya Srikanth, Sarah Trilesky, Diana Muñoz, Andy Lara, Peter Thielen, Natalie Schmitt, Penny Demetriades

CRISPR-based detection of North Atlantic Right Whale DNA
10:30 AM - 12:00 PM
Location: Sound
Speaker: Abhinaya Srikanth

Lighting the Way: Development of a rapid LAMP assay for New World Screwworm detection
10:30 AM - 12:00 PM
Location: Sound
Speaker: Katy Klymus

Enabling Environmental Surveillance of Avian Influenza Through Innovative Environmental RNA Detection Methods
10:30 AM - 12:00 PM
Location: Sound
Speaker: Sarah Trilesky

Hiring a Molecular Bounty Hunter: CRISPR-based SHERLOCK Assays for Biological Monitoring Using eDNA
10:30 AM - 12:00 PM
Location: Sound
Speaker: Diana Muñoz

Lowering barriers to adopting next-generation eDNA approaches in water quality monitoring through an eDNA Source Tracking Toolkit and Workshop
10:30 AM - 12:00 PM
Location: Sound
Speaker: Penny Demetriades

Environmental RNA (eRNA) distinguishes sex and maturity in tanks containing Pacific Lamprey: results from a common garden experiment
10:30 AM - 12:00 PM
Location: Sound
Speaker: Dan Bingham

Bringing Molecular Detection into the Field: Ultra-Rapid DNA Identification for Frontline Conservation and Biosecurity
10:30 AM - 12:00 PM
Location: Sound
Speaker: Natalie Schmitt

From Prototype to Adoption: Lessons Learned Transitioning Environmental Genomics from Research to Application
10:30 AM - 12:00 PM
Location: Sound
Speaker: Peter Thielen

10:30 AM - 12:00 PM **Quantification & Multi-source Data II**

Location: Marina
Speakers: Ceyenna Tillman, Kristin Robinson, Mark Stoeckle, Michelle Hauer, Pedro Brandao-Dias, Gledis Guri, Nastassia Patin

Paired environmental DNA and dive surveys provide distinct but complementary snapshots of marine biodiversity in a temperate fjord
10:30 AM - 12:00 PM
Location: Marina
Speaker: Kristin Robinson

How many fish and how many copies of fish eDNA in the sea? Spike-in metabarcoding offers potential universal metric of fish abundance
10:30 AM - 12:00 PM
Location: Marina
Speaker: Mark Stoeckle

Spatiotemporal Modeling of Depth-Resolved Pelagic Fish eDNA in the California Current
10:30 AM - 12:00 PM
Location: Marina
Speaker: Michelle Hauer

Estimating Organism Abundance Using Within-Sample Haplotype Frequencies of eDNA Data
10:30 AM - 12:00 PM
Location: Marina
Speaker: Pedro Brandao-Dias

Quantitative eDNA abundances for multispecies monitoring at a meso-continental scale
10:30 AM - 12:00 PM
Location: Marina
Speaker: Gledis Guri

Beyond Biodiversity: Incorporating Uncertainty Into Metabarcoding Data for Improved Inference of Ecological Relationships
10:30 AM - 12:00 PM
Location: Marina
Speaker: Nastassia Patin

Trust the Water? Benchmarking eDNA Against Traditional Surveys in Palau's Seagrass Meadows
10:30 AM - 12:00 PM
Location: Marina
Speaker: Ceyenna Tillman

10:30 AM - 12:00 PM **Freshwater Fish Diversity Across Space and Time**

Location: Cove
Speakers: Kimberly Ledger, Kara Andres, Martinus Scheepers, Michael Kinnison, Kristine Moody, Grayson Huston

Nuclear eDNA tracks early- and late-run pink salmon in a small stream
10:30 AM - 12:00 PM
Location: Cove
Speaker: Kimberly Ledger

Metaphylogeography of Lake Tanganyika cichlid diversity revealed by eDNA metabarcoding
10:30 AM - 12:00 PM
Location: Cove
Speaker: Kara Andres

Developing a standardised environmental DNA approach to freshwater fish biodiversity monitoring in South Africa
10:30 AM - 12:00 PM
Location: Cove
Speaker: Martinus Scheepers

An ecosystem-scale experiment on the spatiotemporal dynamics of eDNA and sedDNA from transient fish in a north temperate lake
10:30 AM - 12:00 PM
Location: Cove
Speaker: Michael Kinnison

Environmental DNA and RNA surveys reveal endemic and protected aquatic species in the Apalachia Cutoff Reach of the Hiwassee River
10:30 AM - 12:00 PM
Location: Cove
Speaker: Kristine Moody

Validating the application of sedimentary DNA metabarcoding to detect historic periods of diadromous fish passage
10:30 AM - 12:00 PM
Location: Cove
Speaker: Grayson Huston

12:00 PM - 1:30 PM **Lunch**

Location: All rooms

12:00 PM - 1:30 PM

Closing the Gap: eDNA Adoption in U.S. Marine and Coastal Management (NOAA SAB Ecosystem Science and Management Working Group (ESMWG) Listening Session)

Location: Pacific

12:00 PM - 1:30 PM

Scaling-up eDNA metabarcoding: challenges and opportunities

Location: Cove

12:00 PM - 1:30 PM

DOT: eDNA Sampling Technology Demonstrations

Location: Dockside (outside on the dock)

1:30 PM - 3:00 PM

Monitoring Life at Scale I

Location: Bay Auditorium
Speakers: Collin Closek, Emilie Boulanger, E. Ikelau Otto, Louie Lopez, Daniel Allen, Salvador Babinet, Diana Pazmino

> **A global eDNA observatory of marine biodiversity for question-driven, locally engaged conservation.**
>
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: Emilie Boulanger
>
> **Palau eDNA Project: Integrating accessible and innovative technologies to understand biodiversity across large ocean space and the interconnection between coral reef and pelagic ecosystems.**
>
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: E. Ikelau Otto
>
> **Open-access tools for robust design and validation of species-targeted environmental DNA assays for biodiversity and environmental monitoring**
>
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: Louie Lopez
>
> **Comparing traditional and genomic biodiversity assessments of stream invertebrates across a subcontinental scale**
>
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: Daniel Allen
>
> **Assessing biodiversity at continental scales using a hierarchical approach to eDNA sampling**
>
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: Salvador Babinet
>
> **A multimodal approach to develop a baseline for the Hermandad Marine Reserve (Ecuador): bioregionality and management implications.**
>
> 1:30 PM - 3:00 PM
> Location: Bay Auditorium
> Speaker: Diana Pazmino

1:30 PM - 3:00 PM

Community Science + Building Global Capacity for eDNA

Location: Sound
Speakers: Rachel Meyer, Bianca Perla, Cecile Vimond, Mike Bunce, Peter Teye Busumprah, Dita Cahyani

Engaging volunteers in an eDNA based assessment of juvenile Chinook salmon presence in small non-natal streams

1:30 PM - 3:00 PM
Location: Sound
Speaker: Bianca Perla

Integrating active and passive environmental DNA sampling into coral reef assessments: implications for community-based biomonitoring in Hawai‘i"

1:30 PM - 3:00 PM
Location: Sound
Speaker: Cecile Vimond

From PCR to people - though the lens of eDNA how can we get people to both care and help in monitoring their blue backyard?

1:30 PM - 3:00 PM
Location: Sound
Speaker: Mike Bunce

Four years of eDNA training workshops in Rwanda to assist with rewilding African Parks: building the next generation of molecular ecology leadership

1:30 PM - 3:00 PM
Location: Sound
Speaker: Rachel Meyer

Integrating Environmental DNA, Indigenous Knowledge, and Community-Led Mapping for Ocean Biodiversity Monitoring and Blue Carbon Restoration in Africa

1:30 PM - 3:00 PM
Location: Sound
Speaker: Peter Teye Busumprah

Bridging the Gap for eDNA in Indonesia: Challenges, Success Stories, and Lessons Learned

1:30 PM - 3:00 PM
Location: Sound
Speaker: Dita Cahyani

1:30 PM - 3:00 PM

Quantification & Multi-source Data III

Location: Marina
Speakers: Ryan McMinds, Catherine Richter, Andrew Shelton, Liz Clark, Gledis Guri, Hassan Moustahfid

Integrating eDNA into habitat change modeling

1:30 PM - 3:00 PM
Location: Marina
Speaker: Ryan McMinds

Spatial distribution and relative biomass of bigheaded carps in Lake Balaton, Hungary estimated from an environmental DNA survey

1:30 PM - 3:00 PM
Location: Marina
Speaker: Catherine Richter

Forget occupancy: Management uses of eDNA run through estimates of concentration

1:30 PM - 3:00 PM
Location: Marina
Speaker: Andrew Shelton

How sampling gear shapes marine biodiversity estimates in marine biodiversity surveys: Comparing environmental DNA metabarcoding with trawls and traps across coastal habitats

1:30 PM - 3:00 PM
Location: Marina
Speaker: Liz Clark

No single sensor sees biodiversity in full

1:30 PM - 3:00 PM
Location: Marina
Speaker: Gledis Guri

Rethinking AI for Marine Environmental Genomics: Successes, Limitations, and Future Directions in Deep Learning

1:30 PM - 3:00 PM
Location: Marina
Speaker: Hassan Moustahfid

1:30 PM - 3:00 PM

Innovations in eDNA Sampling, processing and detection

Location: Cove
Speakers: Brittany Hanser, Akli Zarouri, Krista Ruppert, Tomohiro Kuroita, Tait Algayer, Jessica Zehnpfennig, Kiirah Green

A Reusable Biosampler Cartridge for Open and Closed Environmental DNA Extraction

1:30 PM - 3:00 PM
Location: Cove
Speaker: Akli Zarouri

Optimizing eDNA Methodologies for Marine Mammal Monitoring: Evaluating Extraction Efficiency and Filtration Delay in a Controlled Setting

1:30 PM - 3:00 PM
Location: Cove
Speaker: Brittany Hanser

Fish soup, fish cakes, and beyond: Preparation methods for environmental DNA (eDNA) injectate solutions

1:30 PM - 3:00 PM
Location: Cove
Speaker: Krista Ruppert

QuickConc: A highly sensitive eDNA concentration method with cationic-assisted capture

1:30 PM - 3:00 PM
Location: Cove
Speaker: Tomohiro Kuroita

A high-throughput qPCR platform for identifying multiple biological threats in the Great Lakes

1:30 PM - 3:00 PM
Location: Cove
Speaker: Tait Algayer

Evaluating Sediment eDNA Sampling and Extraction Methods for Estuarine Systems

1:30 PM - 3:00 PM
Location: Cove
Speaker: Jessica Zehnpfennig

A SALP in the Tide Pool: Pilot study and Protocol Standardization of a Submersible Aquatic Low Volume Pump for eDNA Sampling

1:30 PM - 3:00 PM
Location: Cove
Speaker: Kiirah Green

1:30 PM - 3:00 PM

Beyond detection: eRNA and ePopulation Genetics

Location: Pacific
Speakers: Simone Miklosi, Aden Ip, Liz Weller, Svenja Markley, Aubrie Onoufriou, David Ernst, Isabella Errigo

Toward population genetics from seawater: eDNA recovers individual tiger shark haplotypes across Malaysia

1:30 PM - 3:00 PM
Location: Pacific
Speaker: Aden Ip

Developing Environmental RNA Biomarkers for Aquatic Stress

1:30 PM - 3:00 PM
Location: Pacific
Speaker: Liz Weller

How Stress Reshapes Aquatic Life: Tracking real time biological responses with environmental RNA

1:30 PM - 3:00 PM
Location: Pacific
Speaker: Simone Miklosi

Toward genetic-based population monitoring: evaluating pairwise relatedness from eDNA sampling of polar bears in Alaska using microsatellite and SNP data

1:30 PM - 3:00 PM
Location: Pacific
Speaker: Svenja Markley

Beyond Detection: Characterizing intraspecific diversity of endangered cetaceans using novel eDNA metabarcoding primer sets

1:30 PM - 3:00 PM
Location: Pacific
Speaker: Aubrie Onoufriou

Tracking marine larvae with stage-specific environmental RNA tools

1:30 PM - 3:00 PM
Location: Pacific
Speaker: David Ernst

Beyond Species Detection: Intraspecific eDNA in a whole-lake manipulation experiment

1:30 PM - 3:00 PM
Location: Pacific
Speaker: Isabella Errigo

3:00 PM - 3:15 PM

Break

Location: All rooms

3:15 PM - 4:45 PM

Monitoring Life at Scale II

Location: Bay Auditorium
Speakers: Jennifer Sunday, Mirta Smodlaka Tankovic, Neha Acharya-Patel, Nastassia Patin, Collin Closek, Miwa Takahashi

Using a continental-scale coastal eDNA observatory to track fish communities and ranges through time

3:15 PM - 4:45 PM
Location: Bay Auditorium
Speaker: Jennifer Sunday

Integrating eDNA into Long-Term Marine Monitoring: Lessons from the Adriatic Sea

3:15 PM - 4:45 PM
Location: Bay Auditorium
Speaker: Mirta Smodlaka Tankovic

Toward Sustained Biodiversity Monitoring in the High Seas: Integrating eDNA into Global Ocean Observing Systems

3:15 PM - 4:45 PM
Location: Bay Auditorium
Speaker: Neha Acharya-Patel

Pairing Molecular Observations with a Long-Term Marine Ecosystem Monitoring Program to Characterize Ecosystem Shifts and Identify Vulnerable Taxa

3:15 PM - 4:45 PM
Location: Bay Auditorium
Speaker: Nastassia Patin

Innovations for biomolecular observing in large ocean spaces

3:15 PM - 4:45 PM
Location: Bay Auditorium
Speaker: Collin Closek

eDNA-based marine biodiversity monitoring in Australia through the Integrated Marine Observing System (IMOS)

3:15 PM - 4:45 PM
Location: Bay Auditorium
Speaker: Miwa Takahashi

3:15 PM - 4:45 PM

Conservation Program Design & Management Application

Location: Sound
Speakers: Zachary Gold, Karen James, Megan Shaffer, Ravi Nagarajan, Lisa Crosson

Scaling up and implementing eDNA in coastal management and conservation: lessons from Maine-eDNA

3:15 PM - 4:45 PM
Location: Sound
Speaker: Karen James

Operationalizing Paired eDNA and Hydrographic Time series to Characterize Climate Driven Ecosystem Shifts in the US West Coast and Bering Sea Regions

3:15 PM - 4:45 PM
Location: Sound
Speaker: Zachary Gold

Toward using eDNA data to support chondrichthyan management on the U.S. West Coast

3:15 PM - 4:45 PM
Location: Sound
Speaker: Megan Shaffer

Fish eDNA metabarcoding methodology and data interpretation for management relevance in the San Francisco Bay-Delta upper estuary

3:15 PM - 4:45 PM
Location: Sound
Speakers: Ravi Nagarajan, Leigh Sanders

Integrating eDNA into Resource Management: Case Studies from the Washington Department of Fish and Wildlife

3:15 PM - 4:45 PM
Location: Sound
Speaker: Lisa Crosson

3:15 PM - 4:45 PM

Quantification & Multi-source Data IV

Location: Marina
Speakers: Ryan Kelly, Andy Rominger, Jill Tupitza, Shaun Wilkinson, Jonathan Whitney, Richard F. Lance

Agent-based modeling with likelihood-free inference to test hypotheses with high throughput biodiversity data

3:15 PM - 4:45 PM
Location: Marina
Speaker: Andy Rominger

A 5-Year Adventure in eDNA with Space, Time, and Organismal Abundance

3:15 PM - 4:45 PM
Location: Marina
Speaker: Ryan Kelly

Mass Appeal: Linking target species biomass to eDNA detections

3:15 PM - 4:45 PM
Location: Marina
Speaker: Jill Tupitza

Taxon-Independent Community Indices (TICI): Transforming eDNA Metabarcoding Data into Actionable Measures of Ecosystem Health

3:15 PM - 4:45 PM
Location: Marina
Speaker: Shaun Wilkinson

From Reads to Reef Biomass: Integrating eDNA, Visual Surveys, and Remote Sensing to Quantify Coral Reef Fish Biomass

3:15 PM - 4:45 PM
Location: Marina
Speaker: Jonathan Whitney

Filling the Gap: Characterizing Black Carp Populations Using Structured eDNA Detection Density Surveys

3:15 PM - 4:45 PM
Location: Marina
Speaker: Richard F. Lance

3:15 PM - 4:45 PM

Invasive Species

Location: Cove
Speakers: Stephen Spear, Sarah Stinson, Emily Funk, Greg Santangeli, Gregg Schumer, Maggie Hunter, Jessica Rieder

Using Genetic Tools for the Early Detection and Monitoring of Invasive Species in California

3:15 PM - 4:45 PM
Location: Cove
Speaker: Sarah Stinson

Development of a field-deployable SHERLOCK assay for detecting invasive Dreissenid mussels using eDNA and eRNA

3:15 PM - 4:45 PM
Location: Cove
Speaker: Emily Funk

Early Detection of Pests at Ports: Evaluation of Airborne eDNA for Invasive Species Detection in Shipping Containers in the Pacific Islands

3:15 PM - 4:45 PM
Location: Cove
Speaker: Stephen Spear

A Novel Approach to Early Detection: Exploring eRNA`s Potential in Monitoring the Invasive Tunicate Didemnum vexillum

3:15 PM - 4:45 PM
Location: Cove
Speaker: Greg Santangeli

Catching what you can`t see: Targeted removal of invasive loaches using eDNA

3:15 PM - 4:45 PM
Location: Cove
Speaker: Gregg Schumer

A systematic review of eDNA metabarcoding for aquatic invasive species detection with evidence-base guidelines

3:15 PM - 4:45 PM
Location: Cove
Speaker: Maggie Hunter

Scaling up eDNA Surveillance for Aquatic Species in the Southeast (U.S.A.)

3:15 PM - 4:45 PM
Location: Cove
Speaker: Jessica Rieder

3:15 PM - 4:45 PM

Fisheries + Fish Ecology

Location: Pacific
Speakers: Ingrid Vasconcellos Bunholi, Kelly Goodwin, Peter Countway, Jason Adolf, Ichun Lee, Darcy Philpott

Scaling up eDNA metabarcoding for regional assessment of seagrass-associated fish assemblages

3:15 PM - 4:45 PM
Location: Pacific
Speaker: Darcy Philpott

Revealed by eDNA, obscured by taxonomic gaps: reef-fish biogeography across the Amazon–Orinoco plume

3:15 PM - 4:45 PM
Location: Pacific
Speaker: Ingrid Vasconcellos Bunholi

Spatio-temporal variability of marine eDNA signals reveals site-specific phenological patterns in fish communities

3:15 PM - 4:45 PM
Location: Pacific
Speaker: Ichun Lee

Environmental DNA surveys of fish community composition across the mid-Atlantic region: One method, many habitats

3:15 PM - 4:45 PM
Location: Pacific
Speaker: Jason Adolf

Development & Application of eDNA Tools to Support Seafood Safety and Aquaculture

3:15 PM - 4:45 PM
Location: Pacific
Speaker: Peter Countway

A Range of eDNA Use Cases: Fisheries Stocks to Marine Microbiome Models

3:15 PM - 4:45 PM
Location: Pacific
Speaker: Kelly Goodwin

4:45 PM - 5:15 PM

Closing

Location: Bay Auditorium