
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 - 9:30 AM	Welcome Location: International Room
9:30 AM - 10:30 AM	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, Mark McCauley

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

Profiling Earth's marine biota by standardizing and unifying global genetic research.

11:00 AM - 12:15 PM

Location: Sound

Speaker: Mark McCauley

11:00 AM - 12:15 PM

Monitoring elusive species in challenging environments

Location: Marina

Speakers: Madeleine Pacheco, Sadie Roth, Oliver Stringham, Alan Xavier, 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 Tumbler legless lizard (Anniella alexanderae)

11:00 AM - 12:15 PM

Location: Marina

Speaker: Oliver Stringham

Environmental DNA Reveals Hidden Diversity and Endangered Echinoderms of Deep-sea Seamounts and Plateaus of the Arabian Sea, Indian Ocean

11:00 AM - 12:15 PM

Location: Marina

Speaker: Alan Xavier

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, Vivian Lin Hou, 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 Smolaka 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

Robotic tracking of metabolism and diversity in coastal plankton microbiome communities during successive blooms following upwelling

11:00 AM - 12:15 PM

Location: Cove

Speaker: Vivian Lin Hou

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. de Silva, 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. de Silva

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

Speaker: Kate Wing

12:15 PM - 1:30 PM

Smith Root: eDNA Sampling Technology Demonstrations

Location: Dockside (outside on the dock)

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

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, 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

Optimizing Bioinformatics Workflows for Accurate Teleost Fish Species Detections with eDNA

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, Gabrielle Scheffer

The Klamath River Renewal Project Molecular Library, describing landscape-scale aquatic biodiversity change following historic dam-removal and restoration

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, Khadijah Homolka, 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

eDNA Metabarcoding for Marine Biodiversity Baselines in Bull Kelp (Nereocystis luetkeana) habitat in the Strait of Juan de Fuca, Washington
1:30 PM - 3:00 PM
Location: Pacific
Speaker: Khadijah Homolka

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: Mark 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: Mark 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, Jia Jin Marc Chang, Mars Giethbrock, Devin Leopold, Joseph Craine

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: Jia Jin 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: Devin Leopold

Cross-phylum fourth-generation environmental DNA analyses with targeted capture: freshwater and marine applications

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* subsp.) 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 Zabihisari, Camille Pagniello, Ian Estaphan Owen, Jan-Maarten Luursema

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 Zabihisari

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

Integrating Aquatic Drones and Seawater Filtration for Enhanced eDNA Monitoring

10:30 AM - 12:00 PM

Location: Bay Auditorium

Speaker: Andrew Rhyne

Passive aerial eDNA sampling: design, experiences, and challenges

10:30 AM - 12:00 PM

Location: Bay Auditorium

Speaker: Jan-Maarten Luursema

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 Kubiатko, Lorraine Joyce Del Rosario, Colin Grosvenor

Increasing detections of elasmobranchs in 12S-V5 eDNA metabarcoding protocols with a modified forward primer

10:30 AM - 12:00 PM

Location: Marina

Speaker: Annie Masterman

Estimates of α -diversity are more sensitive to choice of bioinformatic pipeline than are estimates of β - and γ -diversity and 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 Kubiатko

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 Mar  n, Hiroki Yamanaka, Lisette Waits, Henrik Cornelisson Van De Ven

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 Mar  n

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: Lisette Waits

Understanding plant  arthropod interaction networks across native and introduced plant species in Hawai  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, Beatriz Rodrigues, 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

Evaluating the performance of active and passive eDNA sampling methods for sea turtle detection in controlled experiments

10:30 AM - 12:00 PM
Location: Pacific
Speaker: Beatriz Rodrigues

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: JeanPaul 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, Michael Bunce, Kristian Meissner, Emily Patrolia, Evan Howell

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 G. 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 G. 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, Maddalen 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: Maddalen 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 TaxalD: 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

3:30 PM - 5:00 PM

Detecting Rare, Endangered and Elusive Species

Location: Pacific

Speakers: Julie Lockwood, Lauren Carter, Emily Skinner, Mark Johnson, Nathaniel 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: Nathaniel 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 - 7:00 PM

Poster Session and Reception

Location: Waterlink

Speakers: Ashton Bandy, Subba Rao Changanti, Luciana Alves Pereira, Jennifer Adams, Richard Kane, Mae Sierra, Matthew Barnes, Khadijah Homolka, Carlos Esperanza, Elise Snyder, Loic Jacquemot, Danielle Schmidt, Grace Rosburg-Francot, 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 - 7:00 PM

Location: Waterlink

Speaker: Lena Stasiak

Quagga Mussel Environmental Nucleic Acid Detection after a Rapid Response Treatment

5:00 PM - 7:00 PM

Location: Waterlink
Speaker: Madeleine Malmfeldt

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

5:00 PM - 7:00 PM
Location: Waterlink
Speaker: Reneisha K Sweet

eDNA Metabarcoding for Native Biodiversity Assessment and Invasive Species Monitoring in the Lake Tahoe Basin

5:00 PM - 7:00 PM
Location: Waterlink
Speaker: Grace Rosburg-Francot

Seismic 4D

5:00 PM - 7:00 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 - 7:00 PM
Location: Waterlink
Speaker: Miwa Takahashi

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

5:00 PM - 7:00 PM
Location: Waterlink
Speaker: Paul Jeffrey

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

5:00 PM - 7:00 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 - 7:00 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 - 7:00 PM
Location: Waterlink
Speaker: Alexandra Sousa

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

5:00 PM - 7:00 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 - 7:00 PM
Location: Waterlink
Speaker: Luciana Alves Pereira

Effects of Copper Sulfate Treatment on Biofiltration in Saltwater Aquaria

5:00 PM - 7:00 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 - 7:00 PM
Location: Waterlink
Speaker: Carlos Esperanza

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

5:00 PM - 7:00 PM
Location: Waterlink
Speaker: Anderson Tate

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

5:00 PM - 7:00 PM
Location: Waterlink
Speaker: Thomas Stjernegaard Jeppesen

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

5:00 PM - 7:00 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 - 7:00 PM
Location: Waterlink
Speaker: Leigh Sanders

Estimating population size of imperiled taxa with eDNA: Do field estimates of genetic diversity or eDNA concentration better predict abundance of the IUCN red-listed wood turtle (*Glyptemys insculpta*)?

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Liam Zarri

Marine metaphylogeographic structure across the North Central Pacific

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Taylor Ely

Monitoring the Marine Ecosystem of Seyðisfjörður in Response to Anthropogenic Activity

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Emmett Smith

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

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Dylan Comb

Testing automated eDNA extraction methods and lysis buffers

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Kenneth Macdonald

Comparing the efficacy of eDNA and eRNA for community metabarcoding of fish in small streams and rivers

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Elise Snyder

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

5:00 PM - 7:00 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 - 7:00 PM

Location: Waterlink

Speaker: Emma Strand

Advancements in genetic monitoring of a circumarctic carnivore

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Jennifer Adams

A Paired-marker environmental DNA approach to constraining spatiotemporal biodiversity patterns and cross-trophic linkages across Santa Monica Bay

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Ashton Bandy

Predatory diets of Cintura snails: stomach content analysis and eDNA metabarcoding

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Gaby Hoenig

Molecular Assessment Of Sea Star Diversity In Tampa Bay: A Genetic Baseline For Coastal Conservation

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Emma Onder

Field to OBIS/GBIF Data Management Templates and Codebase for eDNA Analysis on Hydrographic Cruises

5:00 PM - 7:00 PM

Location: Waterlink

Speaker: Zachary Gold

Trust, but Verify: An Independent Audit of eDNA Yields from Smith-Root Self-Preserving Filters

5:00 PM - 7:00 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 - 7:00 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 - 7:00 PM

Location: Waterlink

Speaker: Khadijah Homolka

Use of Environmental DNA for Species Surveys in High Energy Marine Environments

5:00 PM - 7:00 PM

Location: Waterlink
Speaker: Owen Leiser

Environmental DNA (eDNA) as a complementary tool for mammal detection in environmental impact assessment projects in northern Chile

5:00 PM - 7:00 PM
Location: Waterlink
Speaker: Kiara Fernandez

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

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

From Prototype to Adoption: Lessons Learned Transitioning Environmental Genomics from Research to Application

10:30 AM - 12:00 PM

Location: Sound

Speaker: Peter Thielen

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

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

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 in the sea? Marine fish eDNA concentration measured with spike-in metabarcoding offers potential universal metric of fish abundance

10:30 AM - 12:00 PM

Location: Marina

Speaker: Mark Stoeckle

Geospatial Modeling of eDNA-Derived Abundance for Pelagic Fishes in the California Current System

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

Seagrass Decline in Palau as a Case Study for Comparing eDNA and Traditional Survey Methods in Tropical Biodiversity Monitoring

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, Mark 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: Mark 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, Michael Bunce, Peter Teye Busumprah, Dita Cahyani

Engaging citizen scientists 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 monitoring: implications for community-based stewardship 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: Michael 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

Evaluating elasmobranch distributions along the U.S. West Coast using environmental DNA metabarcoding

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, Gregory 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: Gregory 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

Molecular Lab Network: Establishing a Nationwide Network for Invasive Species Monitoring

3:15 PM - 4:45 PM

Location: Cove

Speakers: Steven Gardner, 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

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

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

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

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

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

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

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

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

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

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

4:45 PM - 5:15 PM

Closing

Location: Bay Auditorium