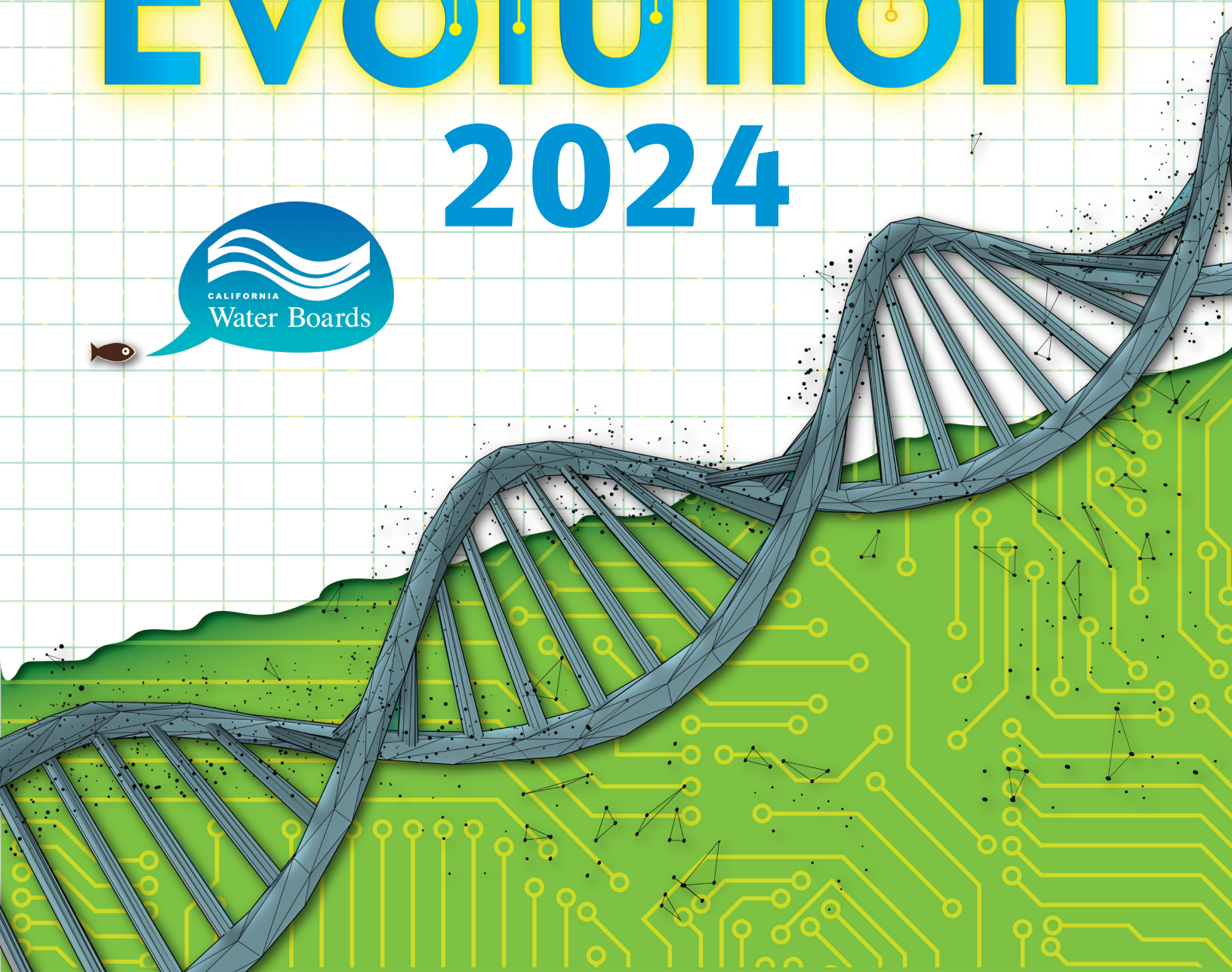
ELAP: Evolution 2024

CALIFORNIA
Water Boards



MESSAGE FROM THE 2024 ELAP CONFERENCE CHAIR

Welcome to the 4th ELAP Conference!

On behalf of the Environmental Laboratory Accreditation Program, it is my genuine pleasure to welcome you on this special occasion and I am delighted to have your participation. I am thrilled to have the opportunity to chair this event and welcome professionals like yourself to celebrate the adaptations made in the laboratory community with TNI-2 implementation. The laboratory community has truly evolved in the journey towards compliance.

This year's conference agenda was created to recognize the efforts so many laboratories have made to adopt TNI-2 and to celebrate the momentum building across California to bring transformative change to the environmental laboratory community. We have some great speakers lined up, from those conducting cutting edge research to a Special Agent in the FBI, all with the focus of helping your lab become... evolutionary!

I sincerely hope that this conference will have a great impact on all the participants who have joined. I am looking forward to meeting you on Slack and in the conference chat and wish all the participants a pleasant experience.

The conference would not have been a successful experience without the help of many people, and I would like to acknowledge their contributions. First, I would like thank all of the presenters for the excellent information. I also express sincere appreciation to those who developed the program, the steering committee members, graphics, and those who have been a point of reference.

Thank you for joining us this year!

Leann Castle

CALIFORNIA Water Boards

Environmental Laboratory Accreditation Program
STATE WATER RESOURCES CONTROL BOARD

CONFERENCE SCHEDULE

Day 1: ELAP 2.0

9:00 - 9:05 am - - - Introduction and welcome

9:05 - 9:30 am - - - - Keynote: **Robert Brownwood**

9:30 - 10:00 am - - - Effective Client Communication: **Christopher Hand**

10:00 – 10:30 am- - Conquering an Assessment After the TNI Transition: **Maria Friedman**

10:30 – 11:00 am- - Compliance Everyday Keeps Enforcement Away: **Michael Head**

11:00 – 11:30 am- - Cybersecurity in the Laboratory: **Special Agent Ewing, Federal Bureau of Investigation**

Day 2: Evolution in Action

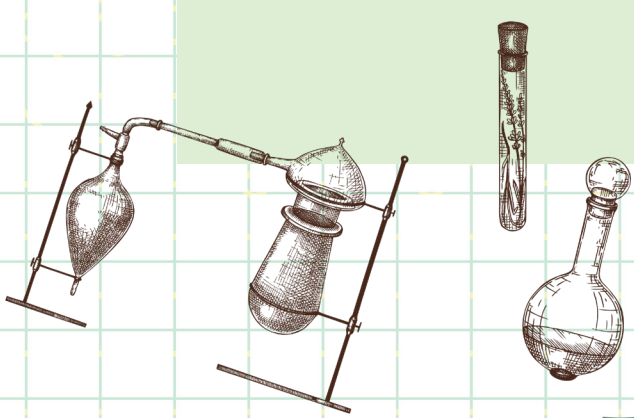
9:00 - 9:05 am - - - Introduction and welcome

9:05 - 9:30 am - - - The Evolution of PFAS: **Wendy Linck and Dan Newton**

9:30 - 10:00 am - - - The Future of Laboratory's Operations: An Evolutionary Shift from Manual to Automated Workflows: **Kelvin Yuen**

10:00 - 10:30 am - - San Diego County Implementation of Droplet Digital PCR for Beach Water Monitoring: **Samantha Hallis**

10:30 - 11:00 am - - Going Paperless and Achieving TNI Compliance for Sophisticated Technologies: **Ngoc Le and Terrence Egan**



CONFERENCE SPEAKERS

Conference Emcee, Karen Black, Environmental Scientist

Conference Emcee, Karen Black Environmental Scientist. Karen is an Environmental Scientist with the California Environmental Laboratory Accreditation Program in the Program Development, Research, and Enforcement Unit. Prior to joining ELAP, she managed the Beach Safety Monitoring Program in the State Water Board's Division of Water Quality. She has a Bachelor of Science in marine biology with a minor in chemistry from the University of Miami, FL, and a master's degree in coastal environmental management from Duke University.

Robert Brownwood

Robert is the Assistant Deputy Director for the Division of Drinking Water, Program Management Branch and is responsible for recycled water, regulations development, new treatment technologies, and the Environmental Laboratory Accreditation Program. His most noteworthy chemistry experiment occurred while in high school as he cleaned the floor of the restaurant and mixed ammonia and bleach. Fortunately, no one was hurt, and it was after hours so no customers needed to be evacuated.

Special Agent Ewing

Special Agent Ewing, Joined the FBI in 2010 where he has worked in four different FBI Field Offices and is currently assigned to the FBI Sacramento Field Office. SA Ewing received specialized training to work computer intrusion investigations involving SCADA computer networks. Throughout his Bureau career he has worked numerous investigations to include ransomware, industrial computer intrusion, business e-mail compromise, and investigations into illegal darknet markets.

CONFERENCE SPEAKERS

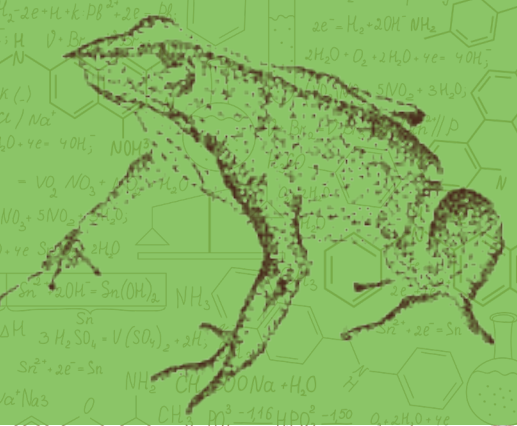
Christopher Hand

Christopher is a Senior Environmental Scientist with the California Environmental Laboratory Accreditation Program where he serves as ELAP's State Agency Liaison. Christopher is one of ELAP's Laboratory Certification Officers responsible for accrediting drinking water laboratories; and works in coordination with the Quality Assurance Units at the Division of Drinking Water and the Office of Information Management and Analysis in the State Water Board. He graduated with a Bachelor of Science in Chemistry from California State University at East Bay, and prior to his role at ELAP, has worked in both a research laboratory and as a lead analyst at an environmental laboratory.

Maria Friedman

Maria Friedman, ELAP Assessment Unit Supervisor. Ms. Friedman manages the Assessment Unit of the California Environmental Laboratory Accreditation Program and is a member of the program's management team. She has more than 25 years of experience in multiple roles in the environmental laboratory industry and served for 11 years as Quality Manager for commercial laboratories in California.

She is a US EPA Certification Officer for Organic and Inorganic Chemistry, Microbiology, and Parasitology (Cryptosporidium and Giardia) in drinking water, a certified ISO/IEC 17025 Lead Assessor, a Certified Quality Auditor, and a certified Lean Six Sigma Black Belt. She holds an MBA and a BS in Chemical Engineering.



CONFERENCE SPEAKERS

Michael Head

Michael Head is a Senior Environmental Scientist Supervisor with the Environmental Laboratory Accreditation Program where he manages the Program Develop, Research and Enforcement Unit. ELAP's Enforcement team investigates referrals and complaints submitted against ELAP accredited laboratories. He graduated with a Bachelor of Science in Evolution & Ecology from UC Davis, and worked for over 20 years in environmental, pharmaceutical and biotechnology laboratories prior to joining the state in 2019. His previous state positions include assisting a state agency lab in continuous improvement efforts, and investigating fraud cases in the Underground Storage Tank Cleanup Fund at the Water Board's Office of Enforcement.

Wendy Linck

Wendy Linck is a Senior Engineering Geologist at the State Water Resources Control Board (State Water Board) within the Division of Water Quality (DWQ). She is managing the State Water Board's response to the PFAS effort within DWQ and is a liaison with the Division of Drinking Water on the subject. Wendy graduated with a bachelor's of science degree in Geology from Sacramento State University. She is a registered professional geologist in the State of California and certified as a Project Manager Professional by the Project Management Institute.

Daniel Newton

Dan Newton is an Assistant Deputy Director with the State Water Board's Division of Drinking Water and oversees the Northern California Field Operations Branch. His team permits and regulates drinking water systems from Sacramento north. Prior to joining the Division of Drinking Water, Dan worked in the Waterboard's Division of Water Quality and Division of Financial Assistance. Work ranged from programs regulating groundwater cleanup to providing state and federal funding for recycled water and wastewater projects. The second half of his career includes time as a consulting engineer designing general civil improvements. Since 2019, Dan has been the drinking water lead for PFAS and works closely with Wendy on the Waterboard's larger PFAS efforts.

CONFERENCE SPEAKERS

Kelvin Yuen

Kelvin Yuen is the Laboratory Superintendent at the Los Angeles County Sanitation Districts (LACSD) overseeing a team responsible for a wide array of analytical testing. He earned his Bachelor of Science degree in Chemistry from the University of California, Los Angeles (UCLA) and a Master of Science degree in Environmental Engineering from Loyola Marymount University (LMU). With an extensive background spanning over 20 years in the environmental laboratory field, Kelvin currently serves as the Technical Manager for one of LACSD's main laboratories, which includes an additional eight satellite laboratories. In this capacity, he manages all aspects of laboratory operations including wet chemistry, semi-volatile organic analyses, toxicity assessments, microbiology, and various research projects. Kelvin is actively involved in professional committees, notably as an associate member of both the TNI Chemistry Expert Committee and the Quality Management Systems Committee. Most recently, Kelvin played a pivotal role in the successful implementation of the 2016 TNI Standard across the ten Districts' laboratories, positioning them as early adopters of the new ELAP regulations.

Sam Hallis, PhD, TS (ABB), SM (ASCP)CM

San Dlego County Public Health Laboratory (SDCPHL)

Dr. Hallis began her career in the environmental chemistry side and transitioned to the public health laboratory field during her participation in the Lab Aspire Program at USCL. She worked as a Public Health Microbiologist I/II at Orange County Public Health Laboratory for six years in Bacteriology and Virology/Serology. In 2021, she joined San Diego County Public Health Laboratory as a Supervising Public Health Microbiologist where she relocated the Waters Laboratory and launched ddPCR Beach Water Testing. Dr. Hallis was promoted to Assistant Lab Director in 2022 where she oversees Genomic Epidemiology/Sequencing Waters, Lab Support, and PHM Training Program.

CONFERENCE SPEAKERS

Ngoc Le,
Environmental Laboratory Supervisor-Trace Organics

Ngoc graduated from UC Davis with a BS in Biological Science and has been working in various laboratory environments since her senior year at Davis. Her experiences include laboratory work as an organic chemist at SGS Environmental laboratory performing organic extractions and GCMS instrument analyses, Enthalpy Analytical as the Semi-volatiles GC/GCMS and HPLC group leader. Ngoc has been a part of the ESD Laboratory as an organic chemist for over 5 years and Lab Supervisor for the Trace Organics section for over 3 years. During this timeframe, Ngoc has transitioned EPA 625.1 and 608.3 from LLE to SPE. In addition, Ngoc has implemented paperless solutions for her section by utilizing sharepoint resources and sophisticated instrument software. The paperless solutions have reduced paper waste significantly and streamlined the validation of paperless data. She has gone through two TNI-2 audits with the latest one yielding zero findings with the new paperless system.

Terrence Egan, Chemist

Terrence earned a Bachelor of Arts in Chemistry from San Jose State University in 2015. He has worked at the ESD Laboratory as both a Lab Tech and Chemist for 8 years, starting in 2016. During this time, Terrence has performed a wide variety of wastewater related analyses including TKN, TOC, Total Cyanide, TSS, Colilert, and BOD among many others. He has managed the implementation of a low level H2S analysis that proved valuable for plant operations air permit. For the past 6 years he has focused on wastewater EPA methods 608.3, 625.1, and 624.1. As part of the Trace Organics team within the lab, Terrence spearheaded the transition from liquid-liquid extraction to solid phase extraction for EPA 625.1. He has also played a major role in the adoption of Masshunter and software in the ESD Laboratory.

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