

Diving Sciences Symposium

March 27, 2020

Sign In 8:30 a.m. to 8:45 a.m.

Lectures Begin at 9:00 a.m.

Meadowlands Expo Center

Fee: \$90 Lunch will be included.

The Diving Sciences Symposium is a series of lectures that offer current and up to date information related to Dive Safety, Dive Technology and Dive Medicine.

The speakers are experts in national and international subject matter in their respective fields. The intended audience is divers of all classifications and all levels of experience including dive leadership and dive teams. The symposium is approved for Category 1 Continuing Medicine Education Credit through the Undersea and Hyperbaric Medicine Society.

Is This Decompression Sickness? : Understanding the very nature of Decompression Sickness (DCS) will allow us a better opportunity to recognize its sometimes-elusive symptoms. An overview of the causes of DCS, risk factors, and risk mitigation will be discussed. Real-life cases will be used to illustrate these very important concepts.

David Charash DO, CWS, FACEP, FUHM is Board certified in Emergency Medicine and Undersea and Hyperbaric Medicine, He is the founder of Dive Medicine and Hyperbaric Consultants and Medical Director of Hyperbaric Medicine in Northern Virginia where he has a medical practice specializing in Dive Medicine. He is a DAN Instructor and a DAN Referral Physician. He lectures locally and nationally on topics related to Dive Medicine, Dive Safety, and Dive Technology.

Critical Planning in Technical Diving: As an internationally acclaimed author and storyteller, Jill Heinreth will review the key concepts necessary when planning a technical/cave dive. Jill will illustrate these critical points with stories from her many adventures, assignments and life experiences. Having an understanding of the importance of critical planning will enhance every diver's safety profile, making diving not only safer but more enjoyable,

Jill Heinreth: Ocean Explorer, Author, Cinematographer, Explorers Club, Women Divers Hall of Fame, Wyland ICON award recipient, Medal of Exploration: Royal Canadian Geographical Society

Women in Diving: Dr Mihai will review the **current** understanding of health and medical issues as it relates to women in Diving. Topics of discussion will include pregnancy, decompression illness and decompression susceptibility, fitness to dive, thermal tolerance and equipment.

Aurel Mihai MD: Family Practice and Undersea and Hyperbaric Fellowship trained, he currently works in the Wound and Hyperbaric Medicine Clinic at the Concord Hospital in New Hampshire. He lectures on a variety of topics related to Undersea Medicine and Diving.

Adaptive Scuba Diving: Adaptive Scuba Diving is a method of training divers with a variety of disabilities to participate in scuba diving as independently as they can safely dive. Studies show the many benefits divers with mental and physical challenges get from the sport. An overview of the history of adaptive diving as well as the current state will be discussed. Both the challenges as well as the rewards will be illustrated with many examples of past and current divers in the community. An understanding of the physical and psychological challenges as well as benefits will be reviewed.

Rosemary Ciotti APRN provides health care coordination and advocacy for persons with disabilities. As a wheelchair user, Rosemary has been involved with Diveheart Scuba, bringing the benefits of SCUBA to persons with disabilities. Rosemary is a Civil and Human Rights Advocate, Ocean Lover, Mid Atlantic Adaptive Scuba Program: Marine Science & Scuba Camp for Kids with Disabilities Volunteer.

Fluid Management for Divers: “More Water – Less Bubbles” has become common knowledge in the diving population, and while this is very true and has been thoroughly tested, only a few people know that there is a “too much” in fluid consumption. In this talk, we will examine both ends, hyper- and hypo hydration, the risks associated with it, ways to measure or at least estimate your fluid demand, and ongoing participative research on the topic.

Frauke Tillmans PhD is the Research Director at Divers Alert Network (DAN). She has a degree in Biology and a PhD specializing in oxidative stress (free radicals) involved in acute diving injuries and their effect on long term health of divers. Dr. Tillmans is also a very experienced scuba diver, diving instructor, and scientific diver. She has worked as a researcher in collaborative projects covering decompression stress and was employed with the German Navy until joining DAN.

Overview of Medical Fitness in Diving: It is each diver’s responsibility to understand how their unique underlying medical condition may impact their fitness to dive. Common medical conditions will be discussed illustrating the concepts of Medical Fitness in Diving. Guidelines for Return to Diving after Diving Injury will be reviewed.

Michael Parenteau MD,JD,MPH UMO/DMO Lieutenant Commander, United States Navy He is an Undersea Medical Officer at the Naval Undersea Medical Institute (NUMI). He teaches physicians early in their careers how to care for Submariners and Navy Divers around the world. In addition Lt. Parenteau acts as legal adviser to his organization.