

## **DEMA 2021** Seminars and Schedule





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### Friends

For 44 years the DEMA Show has been a cornerstone annual event for the dive industry. After a challenging 2020 and 2021, we are excited to be back with our members and fellow industry professionals once again to connect over our shared love of diving.

Throughout the past couple of years the people of this industry demonstrated exceptional dedication, perseverance, and adaptability. For our part, we've continued to develop new safety, training, and educational content to keep you, your dive business, and your customers safe and informed.

Now reunited, we are eager to collectively look ahead to a great year for the dive industry. Enjoy these engaging seminars, and have a great week.



President & CEO Divers Alert Network

| UESDAY, NOVEMBER 16   | TIME        | RO                |
|---|-------------|-------------------|
| Recompression Chambers: What They Are and How They're Used  | 8am-9am     | S22               |
| Bubble Update: Advances in Monitoring Venous Gas Bubbles After Dives  | 9am-10am    | S22               |
| DAN Medical Emergency Calls   | 10am-11am   | S22               |
| Emergency Planning: Creating Emergency Action Plans for Your Dive Operation   | 11am-12pm   | S22               |
| Hyperbaric Oxygen Therapy for Sea Turtles   | 1pm-2pm     | S22               |
| DAN Examiner Update   | 2pm-3pm     | S22               |
| DAN Training Programs   | 3pm-4pm     | S22               |
| DAN Instructor Update   | 4pm-5pm     | S22               |
| VEDNESDAY, NOVEMBER 17  | TIME        | RO                |
| 40 Years of the DAN Emergency Hotline   | 8am-9am     | S22               |
| DAN Medical Information Calls and Emails  | 9am-10am    | S22               |
| Diving Incident and Fatality Reporting at DAN   | 10am-11am   | S22               |
| Recompression Chambers: What They Are and How They're Used  | 11am-12pm   | S22               |
| Out of the Blue   | 1pm-2pm     | S22               |
| DAN Instructor Update   | 2pm-3pm     | S22               |
| DAN Training Programs   | 3pm-4pm     | S22               |
| HURSDAY, NOVEMBER 18  | TIME        | RO                |
| Confounding Cases: Where Medicine and Engineering Come Together   | 8am-9am     | S22               |
| DAN Instructor Upgrade, Instructor Qualification Course, and Instructor Trainer Workshop (Day 1)                        | 8am-5pm     | S23               |
| Bubble Update: Advances in Monitoring Venous Gas Bubbles After Dives  | 9am-10am    | S22               |
| DAN Medical Emergency Calls   | 10am-11am   | S22               |
| 40 Years of the DAN Emergency Hotline   | 11am-12pm   | S22               |
| Out of the Blue   | 1pm-2pm     | S22               |
| DAN World Member Forum (en Español)   | 2pm-3pm     | S22               |
| RIDAY, NOVEMBER 19  | TIME        | ROO               |
| Emergency Planning: Creating Emergency Action Plans for Your Dive Operation   | 8am-9am     | S22               |
|   | 8am-5pm     | S23               |
| DAN Instructor Qualification Course and Instructor Trainer Workshop (Day 2)   | · · · · · F |                   |
|   | 9am-10am    | S22               |
| DAN Instructor Qualification Course and Instructor Trainer Workshop (Day 2)   | •           |                   |
| DAN Instructor Qualification Course and Instructor Trainer Workshop (Day 2)<br>DAN Medical Information Calls and Emails | 9am-10am    | S22<br>S22<br>S22 |

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### **TUESDAY, NOVEMBER 16**

### Recompression **Chambers:** What They Are and **How They're Used** Matias Nochetto, M.D., & Francois Burman. Pr.Eng., M.Sc NOV 16 ► 8AM

We probably all know the nearest recompression chamber facility to our dive operation, but we may not be exactly sure what the chamber looks like or how it's used. This is especially likely given the diversity of health care systems around the world. Chambers can be simple or very complex, but an injured diver can be effectively treated in nearly any type. Only a few basic systems are needed; the staff is more important than the equipment. This two-part presentation will cover both the chamber itself and the approach taken by the medical team.

### **Bubble Update:** Advances in Monitoring **Venous Gas Bubbles** After Dives Frauke Tillmans, Ph.D. NOV 16 ► 9AM

Studies using doppler and ultrasound technology to quantify gas bubbles in divers' bloodstreams have been conducted for decades. While advances have been made, many questions are still unanswered: Why are some people more likely to bubble than others? How common are postdive bubbles in recreational divers? How accurate are bubble measurements and analyses with today's technology? This talk will cover recent advances in bubble science, why it's important, and what we hope to achieve by studying bubbles.

### **DAN Medical Emergency Calls** Camilo Saraiva, M.D., MBA NOV 16 ► 10AM

This session will be an interactive discussion of the operational and medical aspects of recently reported dive accidents. In it we will review DAN's role and capabilities in managing emergencies with the goal of increasing your and your divers' safety and enhancing your understanding of DAN's services.

### **Emergency Planning: Creating Emergency Action Plans for Your Dive Operation** Francois Burman. Pr.Eng., M.Sc NOV 16 ► 11AM

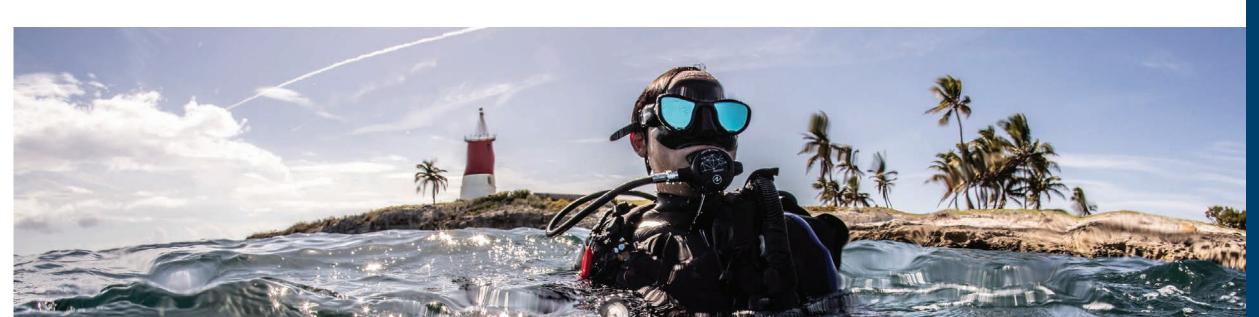
Accidents are an unfortunate reality in our industry, and the outcomes can be disastrous. Even when an accident is contained, the exposure to liability may loom large. Being prepared means knowing how to recognize potential emergencies, planning for them, and having the staff and equipment you need to manage them. Drafting your own realistic and achievable emergency action plans is key to all of this. In this talk we'll cover how to compile emergency plans using a simple but effective tool DAN has created.

### **Hyperbaric Oxygen Therapy** for Sea Turtles James Holm, M.D. NOV 16 ► 1PM

Hyperbaric chambers have been used for decades to deliver lifesaving therapies for a variety of diseases and conditions, both in humans and animals. Join us to learn about Tucker. a sea turtle that required hyperbaric oxygen in a most unusual setting for a turtle.

### **DAN Examiner** Update (for active **DAN Examiners**) **Jim Gunderson** NOV 16 ► 2PM

This presentation will cover the role of DAN Examiners in the launch of Version 3.0 of DAN's first aid courses. Other pertinent information about DAN first aid training will be covered as well. This presentation is for current DAN Examiners only.



### **DAN Training Programs Jim Gunderson** NOV 16 ► 3PM

This session is open to all dive professionals and dive shop staff. We will cover DAN first aid programs, the release of Version 3.0, how to become a DAN Instructor, and the practicality and profitability of teaching DAN courses. We'll include information about the bridging program from other agencies' courses to DAN's.

### **DAN Instructor Update** (for DAN Instructors & Instructor Trainers) **Jim Gunderson** NOV 16 ► 4PM

This presentation will provide details about the rollout and implementation of Version 3.0 of DAN's first aid courses and include other pertinent information about DAN first aid training. This session is open to all DAN Instructors and Instructor Trainers, whether active or inactive.



Scan this QR code to view the digital version of DAN's 2021 DEMA seminar schedule.

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### WEDNESDAY, NOVEMBER 17

### 40 Years of the DAN **Emergency Hotline** Matias Nochetto, M.D. NOV 17 ► 8AM

This is how DAN started it's what we're best known for. Join us to learn about our journey, your calls, your emergencies, where we've been, and where we are heading. Ultimately it's all about DAN being there for you.



### **DAN Medical** Information **Calls and Emails** Camilo Saraiva, M.D., MBA NOV 17 ► 9AM

This session will be an interactive discussion of DAN medical information calls and emails. We will review the most frequently asked questions as well as some unusual ones. The purpose of this session is to demystify calling DAN and encourage dive professionals and their students to reach out to us when they need us.

### **Diving Incident** and Fatality **Reporting at DAN** Frauke Tillmans. Ph.D. NOV 17 ► 10AM

Among DAN's injury monitoring initiatives are surveillance of fatal diving injuries and the Diving Incident Reporting System (DIRS). The two have different objectives, but both are designed to increase awareness of common safety concerns in diving and provide learning opportunities for the diving community. This talk will introduce DIRS and fatality surveillance and reveal how they started, their current status, where they are headed, and how you can help.

### **Recompression Chambers: What** They Are and **How They're Used** Matias Nochetto, M.D., & Francois Burman, Pr.Eng., M.Sc. NOV 17 ► 11AM

We probably all know the nearest recompression chamber facility to our dive operation, but we may not be exactly sure what the chamber looks like or how it's used. This is especially likely given the diversity of health care systems around the world. Chambers can be simple or very complex, but an injured diver can be effectively treated in nearly any type. Only a few basic systems are needed; the staff is more important than the equipment. This two-part presentation will cover both the chamber itself and the approach taken by the medical team.

### Out of the Blue **Richie Kohler**

NOV 17 ► 1PM

This talk will focus on Richie Kohler's experiences on technical diving expeditions and the knowledge he gained from them. He'll discuss his approaches to risk assessment, risk mitigation, and safety and share what he learned for the benefit of recreational dive professionals.

### **DAN Instructor Update** (for DAN Instructors & Instructor Trainers) **Jim Gunderson** NOV 17 ► 2PM

This presentation will provide details about the rollout and implementation of Version 3.0 of DAN's first aid courses and include other pertinent information about DAN first aid training. This session is open to all DAN Instructors and Instructor Trainers, whether active or inactive.



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### **THURSDAY, NOVEMBER 18**

**DAN Instructor Upgrade,** Instructor Qualification Course (IQC), and Instructor Trainer Workshop (ITW) **Jim Gunderson** 

### RM S230 ► NOV 18 8AM to 5PM

This DAN IQC/ITW is open to anyone who meets the requirements to become a DAN Instructor or Instructor Trainer. This two-day course is available to dive professionals who wish to become DAN full-suite Instructors (Version 3.0) and DAN Instructors who meet the prerequisites and wish to become DAN Instructor Trainers. The first day of this workshop is also for any current DAN Instructors who wish to expand their teaching credentials.

Pre-registration is required, and there is a cost for this workshop. Email Oxygen@DAN.org to register.

### **FRIDAY, NOVEMBER 19**

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#### NOTE: ALL FULL-DAY SEMINARS HELD IN ROOM S230

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### **THURSDAY, NOVEMBER 18**

### **Confounding Cases:** Where Medicine and Engineering **Come Together** Matias Nochetto, M.D., & Francois Burman. Pr.Eng., M.Sc. NOV 18 ► 8AM

Not all causes of accidents are clear-cut. Critical thinking is often needed to identify the likely causes of an injury before determining the best course of action to reach a diagnosis. Join us in this interactive discussion, and bring along your own expertise.

### **Bubble Update: Advances in Monitoring Venous Gas Bubbles** After Dives Frauke Tillmans, Ph.D. NOV 18 ► 9AM

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### DAN World Member Forum (en Español) Virginia Albertengo, Laura Johnson, & Matias Nochetto, M.D.

NOV 18 ► 2PM

El equipo de DAN World Latinoamérica/Caribe presentará los nuevos programas y recursos en español para buceadores y empresas de buceo. Hablaremos sobre los recursos médicos de DAN y presentaremos la nueva Línea de Emergencias de DAN en Español. También discutiremos la campaña Volver a Bucear con Seguridad, los cursos actualizados de primeros auxilios en la plataforma e-learning de DAN y otros recursos de seguridad disponibles para operadores de buceo. Finalmente, daremos a conocer los nuevos programas de cobertura de accidentes de buceo disponibles para su staff, sus estudiantes y sus clientes. Sea el primero en conocer y aprovechar estos programas en su idioma.

NOTE: ALL ONE-HOUR SEMINARS HELD IN ROOM S229

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### **SPEAKER BIOS**



### Francois Burman, Pr.Eng., M.Sc.

is the Director of Risk Mitigation at DAN. He is responsible for all of DAN's safety and accident-prevention initiatives as well as the recompression chamber network. He has traveled around the world to conduct safety assessments at facilities used to treat injured divers and has written two books: The Risk Assessment Guide for Dive Operators and Professionals, and The Risk Assessment Guide for Recompression Facilities.



### **Jim Gunderson**

is a member of DAN's risk mitigation team and oversees DAN Training. Jim's diving career began in 1986 in his hometown of Casper, Wyoming. He holds degrees in marine science from the University of Hawaii at Hilo and in psychology from the University of Wyoming. He holds scuba certifications from PADI and NAUI and has an inactive AAUS rating. Jim is a NAUI Course Director Trainer and a DAN Examiner.



#### Matias Nochetto. M.D.

is the Director of Medical Services at DAN, where he has worked since 2006. He is co-director of the DAN-UHMS continuing medical education program and a faculty member of several national and international diving medicine courses and programs. He became a dive instructor (1999) during medical school, which led him to complete a three-year clinical and research fellowship in hyperbaric and diving medicine to combine the two passions.



Camilo Saraiva, M.D., MBA is the Assistant Director of Medical Services at DAN. He is board certified in radiation oncology and hyperbaric medicine and is a former director of the Brazilian Hyperbaric Medical Society. Dr. Saraiva is a member of the Undersea and Hyperbaric Medical Society and the American College of Healthcare Executives. A former cave diver, he has been a PADI divemaster since 2000.



Frauke Tillmans. Ph.D. is the Research Director at DAN. She has a degree in human biology and a Ph.D. in oxidative stress, a condition associated with acute diving injuries. Dr. Tillmans is an experienced public safety diver, scientific diver, and dive safety officer. She has worked as a researcher in global collaborative projects focused on decompression stress, inert gas narcosis, and oxygen toxicity and was employed by the German Navy before she began working at DAN in 2019.





James Holm, M.D. is the Medical Director at the Center for Hyperbaric Medicine at Virginia Mason Medical Center in Seattle, Washington and a past president of the Undersea and Hyperbaric Medical Society (UHMS). Dr. Holm has been a certified diver since 1969 and an instructor since 1978. His research interests include decompression illness, iatrogenic gas embolism, carbon monoxide poisoning, and the use of hyperbaric oxygen to treat chronic radiation tissue injury.

# **GUEST SPEAKER BIOS**





**Richie Kohler** is a filmmaker, author, and explorer who has spent the past 40 years identifying and diving on lost shipwrecks around the globe. Kohler has explored some of the world's most famous wrecks, and he focuses on the human aspect of shipwreck tragedies, seeking answers and closure for families. He has produced and hosted numerous television series and is committed to the historical preservation of the ocean's wreck resources.

### NOTES

### **NDAN**<sup>°</sup>

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### EXPLORE WITH DAN



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