

## 2019 AAUS Board of Directors Elections Director-At-Large Nominees



Scott Chapman

DSO/Senior Manager of Diver Operations, Monterey Bay Aquarium

Scott started his career at the Monterey Bay Aquarium in 2003 as a seasonal staff member for the Underwater Explorers program. He was hired as a full-time dive officer in 2010 in support of the volunteer dive team and was promoted to Dive Safety Officer in 2015.

Prior to employment in the underwater world, Scott earned a Bachelor of Science in Electrical Engineering from San Jose State University and worked as a software and quality assurance engineer for various companies in Silicon Valley. He also has an MA in Exercise Physiology which he (sort of) used while teaching SCUBA and fitness classes at a community college.

*1. In what direction should the AAUS be heading in the next decade?*

Over the next decade, I think it's important that the AAUS remain focused on the development and support of membership and the role of dive safety officer. As industry and technology evolve, it's essential that our membership maintain relevance and knowledge of tools and practices that best support the AAUS's mission to advance and facilitate safe and productive scientific diving. In support of this, it may be worth considering the merits of utilizing an e-learning platform to provide an additional avenue for professional development beyond in-person meetings.

One of the most important benefits of AAUS membership is the ability to communicate with industry colleagues. The AAUS should continue to provide a platform for discussion and collaboration between organizational members. This not only serves as a mechanism for idea sharing, it helps establish community and strengthens relationships. The updated website and Google group support this endeavor; however, it's important that the AAUS maintain pace with emerging technologies.

As discussed in recent business meetings, the time has come for the AAUS to drive discussions with regulating agencies to ensure the scientific exemption is reflective of current practices and serves the broader scientific community. In this regard, it would be beneficial to engage non-member organizations to better understand the scope and variety of tasks being conducted under the scientific exemption. Whether or not AAUS OM's and others can come to consensus on what should fall under the exemption remains to be seen, but the discussion should move forward.

*2. Describe your scientific diving experience and indicate its relevance to AAUS governance.*

My first taste of scientific diving was through Moss Landing Marine Labs. I participated in a semester long scientific diving course in preparation for my master's thesis comparing post-dive fatigue following air and EAN36 dives. I later got involved with Reef Check California (RCCA) conducting nearshore assessments of kelp forests. I have participated in numerous Monterey Bay Aquarium (MBA) research projects focused on collections, animal care, growth rates, and behavior (e.g., white sharks, seven gill sharks, giant sea bass) along with collaborative projects focused on coral restoration. I also help co-teach scientific diving courses to MBA

staff divers. Our dive team is currently retraining on blue water and black water diving techniques in support of an upcoming temporary exhibit.

My experience has exposed me to various operations conducted by AAUS organizational members and non-member scientific programs. I've gained an appreciation for quality training and the importance of reciprocity. Operating in alignment with AAUS standards helped provide support for decisions on risk management and staffing considerations.

*3. What relationships/networks/professional contacts/nonprofit board experiences do you have that will benefit AAUS by electing you to the AAUS BOD?*

I serve on the MBA and RCCA diving control boards and as the IT Committee Chair for the Association of Dive Program Administrators (ADPA). I am also in frequent contact with numerous colleagues at MBA who serve on Association of Zoos & Aquariums (AZA) committees focused on safety and dive-related practices and accreditation.

I have a strong technical background with a focus on web application development. Most recently, I helped create a cloud-based dive program management system for the ADPA. I also contract as a web developer for the Sanctuary Integrated Monitoring Network (SIMoN), a program affiliated with the Office of National Marine Sanctuaries.



Nicole Grinnan  
Archeologist, University of West Florida

As a Public Archaeologist and Research Associate for the University of West Florida's Florida Public Archaeology Network (FPAN), my primary position with the University is to design and implement multiscalar public education and outreach projects related to Florida archaeology. I also serve as the University's Assistant Dive Safety Officer, helping maintain administrative records, facilitate annual scientific diver training programs, and ensure safe diving practices during research projects. My academic background includes two B.A. degrees in History and Anthropology from the University of Central Florida and a M.A. degree in Historical Archaeology from the University of West Florida. Currently, I am pursuing a Ph.D. at the Ironbridge Institute for Cultural Heritage at the University of Birmingham in the United Kingdom.

Scientific diving has been one of the most important tools for exploring my research concentration on maritime communities and how they are situated within a broader historical, social, and ecological landscape. My interest and experience in diving has thus been a strong motivator for supporting the University of West Florida's recent application to become an Organizational Member and my own individual involvement with AAUS over the last six years. I am grateful for the role the Academy has played in facilitating valuable scientific work across disciplines and the opportunity to give back as a Board member would be a significant honor for me.

*1. In what direction should the AAUS be heading in the next decade?*

Since its initial organization, the American Academy of Underwater Sciences (AAUS) has successfully established scientific diving as a reputable endeavor unto itself. The Academy's strengths lie in its commitment to safety and its support of multi-disciplinary, collaborative scientific research initiatives. With the streamlining of the AAUS Standards for Scientific Diving in 2018, the many marked improvements to the website, and new efforts to better brand the organization (e.g., through social media), the Academy has made many significant

strides toward building its professional and public presence. I believe it is imperative that AAUS builds on this recent momentum as it seeks to develop its Strategic Plan for the next five years and beyond.

As with many non-profits, two of the most important issues facing AAUS are membership and funding. While these are not new issues, I believe that the Academy's recent progress toward an improved public presence has laid the groundwork for cultivating both. With relative ease and minimal time investment, AAUS should solicit membership from new organizations with visually engaging and informational outreach products (both digital and print). Most long-time Organizational Members recognize the benefits of AAUS and continue to renew their membership based on their dedication to the Academy's mission. As a non-profit, however, AAUS should not take established members for granted. In recent years, the number of new OMs has been about equal to the number of those who, for a variety of reasons, no longer pursue membership. A yearly "benefits" reminder to existing OMs and recently non-renewed OMs could potentially assist in helping grow an increasingly static membership. A similar approach could also be used in fostering individual memberships. By creating an appealing "one-pager" for DSOs to provide scientific divers and divers-in-training, AAUS could again highlight the many benefits it offers members in the way of employability, funding, and professional networking. By retaining a more engaged audience, AAUS could increase both its membership numbers and resulting membership income across the board.

Following the theme of engagement, I also see AAUS as a leader in the promotion of scientific diving-based research endeavors and an obvious choice for engaging in broader outreach initiatives. For example, while the AAUS Scientific Diver Certification program is conducted through International Training, the Academy could also work in collaboration with other training agencies in less formal ways. Whether requesting AAUS information be added to a resources page, writing a guest blog post, or encouraging social media posts, there are numerous ways that the Academy could get the AAUS brand out beyond its typical audience. While this would undoubtedly help disseminate the good work of the Academy and that of its OMs, it might also inspire the next generation of scientific divers! For a more professional-level example, AAUS could also generate brand recognition by sponsoring paper sessions at conferences across many disciplines. While the expense of setting up and staffing a table at conference exhibit halls can be prohibitive, AAUS should encourage its scientific divers and researchers to chair sessions related specifically to the challenges, successes, and/or procedures of scientific diving within their respective disciplines. As many of our OM researchers attend conferences on an annual basis, this could be a relatively cost-effective way of sparking more interest in AAUS's critical function to scientific endeavors as a whole.

Persistent, engaging, and creative presence is critical for non-profit organizations seeking growth. As this has been a long-time goal of AAUS and one whose targets continually evolve, I believe the Academy should continue to carry this mission into the future. With the commendable recent improvements to its digital outreach platforms, I am convinced that the organization has laid the basis for making great strides in membership growth, professional recognition, and public appreciation for science diving. As prospective member of the AAUS Board of Directors, I would place significant priority on broad engagement and would thoroughly enjoy the opportunity to bring my professional experience to the table.

## *2. Describe your scientific diving experience and indicate its relevance to AAUS governance.*

Although I have been involved with scientific diving for slightly less than a decade, I seek every opportunity to further my involvement, experience, and leadership in the scientific diving community. Majority of my scientific diving has been as a Registered Professional Archaeologist and Research Associate with the Florida Public Archaeology Network (a program of the University of West Florida). On archaeological projects, my scientific diving spans the spectrum of experiences: from field technician, to dive leader, to on-site dive safety officer. Many of these projects are conducted in partnership with other AAUS OMs, primarily those with the federal government and other universities/colleges across the Americas.

Over the last three years, I served as Dive Safety Officer for the non-profit Junior Scientists in the Sea program, another AAUS OM. I recently resigned from that position to pursue a submerged cultural resource management-focused Ph.D. with the University of Birmingham. I continue, however, to act as Assistant Dive Safety Officer and Dive Control Board member for the University of West Florida Scientific Diving Program. In tandem with my full-time position as Research Associate, my responsibilities as Assistant Dive Safety Officer include data management and collection, ensuring scientific diving standards compliance across our diving program, and participating in cross-disciplinary scientific diver training. Additionally, I also played a significant role in preparing the University of West Florida's recent application to become an OM. As a student diver that lamented our lack of membership and the limits it presented to opportunities for outside partnerships and internships, I made sure to make membership a renewed priority for our university upon my full-time employment there in 2012. Toward these ends, I started participating in the AAUS Annual Symposium by 2013 and have missed only one since then. In 2018, to much personal satisfaction, the University of West Florida was officially welcomed as a new AAUS OM.

The applicability of my scientific diving experience to being a well-informed and enthusiastic member of the AAUS Board of Directors is thus primarily in its breadth and scope! Seeking participation in a variety of projects at all levels, I have become thoroughly familiar with the frameworks within which federal, state, educational, and non-profit organizations must run their scientific diving programs. With this understanding, I am sensitive to the needs of many AAUS OMs and issues they face both in the field and administratively. Additionally, my active participation in AAUS symposia since 2013 has provided me with a long-term perspective of the Academy's history, mission, and future trajectory.

*3. What relationships/networks/professional contacts/nonprofit board experiences do you have that will benefit AAUS by electing you to the AAUS BOD?*

Outside of the many contacts I have made during collaborative projects with governmental, educational, and non-/not-for-profit organizations across the world, I have also regularly sought opportunities to stay engaged, diversify my skills, and establish my credentials as a researcher.

As a graduate student, I served two terms a student representative to the Advisory Council on Underwater Archaeology (ACUA; <https://acuaonline.org/>). The ACUA is an international advisory body on issues relating to underwater archaeology, conservation, and submerged cultural resources management; many of its members are leading underwater archaeologists and scientific divers who are shaping the future of the field. Apart from taking advantage of networking opportunities with prominent underwater archaeologists across the world, I strove to establish an internationally distributed student newsletter to increase student networking across institutions. My first ACUA student newsletter was published in 2013 and, since the end of my second term in 2016, subsequent student representatives have taken up this worthy initiative.

Currently, I serve on the Board of Directors for three organizations. In my local community, I am Board member and Public Outreach Committee Chair for historic St. Michael's Cemetery in Pensacola, Florida (our state's second oldest cemetery; <https://www.stmichaelscemetery.org/>). At the state level, I serve as Board member and Membership Secretary for the Florida Archaeological Council, a non-profit professional organization that advocates for and promotes interest in Florida archaeology (<http://www.flarchcouncil.org/>). Finally, in the international sphere, I was recently elected to the Board of Directors for the Society for Historical Archaeology (<https://sha.org/>). The Society for Historical Archaeology is a scholarly organization dedicated to the archaeology of the modern world (A.D. 1400-present) and holds annual conferences in tandem with the Advisory Council on Underwater Archaeology (ACUA).

As I end my terms with two of these organizations in the next year, I am excited about the prospect of focusing my energy on and bringing a variety of practical skills to the governance of AAUS! In addition, with established talents in graphic design, social media engagement, organizational branding, and writing for public

audiences, I know that I can create memorable impacts on the Academy and assist it with its ongoing mission of advocating for safe and effective scientific diving.



Laurie M. Penland  
ASDO, Smithsonian Institution

Laurie Penland has more than 26 years of scientific diving experience, first as a professional underwater photographer, then as the Smithsonian Assistant Scientific Diving Officer. In addition to the administrative and oversight responsibilities of the Smithsonian Scientific Diving Program (SDP), Penland has acquired extensive experience in managing Scientific Diving training and research diving operations worldwide. During her time as the ASDO, Penland contributed significantly to improving the efficiency, safety, and compliance of the SDP. One of her more notable contributions is the creation and management of DecoStop, the SDP Dive Program Management System. In her spare time you will find Laurie swimming, biking, running, reading, writing, cooking, and hanging out with family and friends, but mostly biking.

*1. In what direction should the AAUS be heading in the next decade?*

The AAUS is the guardian of the Scientific Diving Exemption. Granted from OSHA, this exemption was based on the safety record of Scientific Diving, a record which was credited to self-regulation. This regulation is codified in the AAUS Standards for Scientific Diving. AAUS goals should always circle back to these roots and what setting standards means to the safety of Scientific Diving—but it shouldn't stop there.

Becoming a member should result in a tangible value beyond DSO support and diver reciprocity, Organizational Membership should include access to organizational or institutional expertise. The need to access such expertise is evident in the frequency of questions posed in the Google Group discussions.

Annual meetings should have a greater focus on Dive Program issues. The DSO meeting should be allotted more time to support a robust agenda. The attendance of experts would provide the guidance needed for an educated discussion on relevant issues. By providing opportunities to participate in facilitated discussions with expert panelists, OM leadership would better understand why AAUS meetings are a must-attend event for DSOs. These expert panels could remain as a resource to address ongoing discussions of unresolved significant issues (e.g. google group) throughout the year.

One way to determine topics for the meeting is to heavily monitor the Google Group discussions. These discussions are not only a resource for what current issues DSOs are facing; they bring to light what is working for other programs and potential solutions. Focused attention to the discussion group would enhance participation, resulting in increased awareness of the issues we have in common.

While I recognize there are differences in each Scientific Diving Program, safety is universal. Setting standards with safety in mind is the primary responsibility of this organization. The above changes will result in a more unified approach to managing dive safety issues within the AAUS community.

*2. Describe your scientific diving experience and indicate its relevance to AAUS governance.*

I have been a Smithsonian Scientific Diver for 26 years and the ASDO for the Smithsonian Scientific Diving Program for 14 of those years. My extensive scientific diving and program management experience developed

in me a diverse set of diving and managerial skills. Through the years, I have acquired a thorough understanding of the difficulties involved in running a safe diving program. We often struggle against administrative, financial, and scientific priorities. Even with so much at stake, DSOs are not always adequately supported within their own institutions. I believe it is the responsibility of the AAUS BOD to develop and make readily accessible the tools and resources to assist DSOs with minimizing these challenges and as a Director, would work toward this mission.

*3. What relationships/networks/professional contacts/nonprofit board experiences do you have that will benefit AAUS by electing you to the AAUS BOD?*

Successfully meeting the challenges faced through the years as ASDO required me to develop long-term relationships with DSO's, Scientists, and industry vendors. I have been attending AAUS meetings (missing only two) for 14 years and am well versed in how this organization works. In addition, I have been a Smithsonian DCB member for 13 years and served as a Director on two other non-profit boards as well. In both non-profit Director positions, I received awards for my dedication to those organizations. Not only will I be a productive member of the BOD—focusing on resolving the challenges DSOs face when establishing safe diving practices—I will enjoy working closely with the other AAUS Directors while serving the AAUS and Scientific Diving community at large.



Adeline “Addie” Waters

Assistant Director of University of New England’s Arthur P. Girard Marine Science Center

Addie has her B.S. in Organismal Biology, participated in Northeastern University’s Three Seas Marine Biology Program and has her Master of Business Administration. She is also a certified underwater welder/commercial diver, scientific diver, Emergency Medical

Technician, and boat captain. Her scientific diving career has spanned two decades and included many amazing opportunities around the world.

Prior to her position at UNE, Addie worked for the United States Antarctic Program for over 12 years. During those years, she worked as a science diver and certified ACDE Commercial Diver in Antarctica under the tutelage of Rob Robbins for four seasons. Her final position with the USAP was in Washington D.C. working as a science planner and project manager supporting federally funded Marine and Terrestrial Science research and operations on US Icebreakers and on US stations in Antarctica. Along the way she saturated in Aquarius – the undersea laboratory owned by NOAA and operated by the National Undersea Research Center at UNCW in the Florida Keys and was a volunteer at Scripps Institution of Oceanography as a science diver with their kelp forest monitoring program off the Southern California Coast. She is currently building a boating and scientific diving program at the University of New England (UNE) in Maine as the Assistant Director for their Marine Science Center.

*1. In what direction should the AAUS be heading in the next decade?*

In the approximately 40 years that AAUS has been an organization, its mission to facilitate the development of safe scientific diving practices has been invaluable. This accomplishment has been done through individual commitment and devotion to the organization and many unpaid labor hours from these individuals. As AAUS continues to grow and support so many amazing educational resources, scholarships, and internships (amongst other things) it is imperative that the business model be adapted to a larger, more long term sustainable business objective. Without knowing the organization’s financial details, I assume that the goal would be for the board

members to ensure that it has sufficient financial resources to fulfill its mission in the present and in the future. As a member of the BOD, I'd like to work with the team to evolve the business plan and work on how best we financially support present day needs and an the mission's future needs. It may be useful to work with an organization that could provide us and potential donors with information on AAUS's financial status. With 145 organizational members and growing, AAUS is in a position to be a viable organization for many years.

*2. Describe your scientific diving experience and indicate its relevance to AAUS governance.*

In 1999 I participated in Northeastern University's Marine Sciences Program – The Three Seas Program. I had gotten my open water SCUBA years before my college career but had only dove a few times on vacation. My first semester included becoming an AAUS recognized Scientific Diver and this catalyzed my diving career which has now spanned over the last two decades and included many amazing opportunities across the country and globe. From the Three Seas Program, an academic diving environment; I worked at and saturated in Aquarius – the undersea laboratory owned by NOAA and operated by the National Undersea Research Center at UNCW in the Florida Keys. I then moved on to work as a science diver and certified ACDE Commercial Diver in Antarctica under the tutelage of Rob Robbins for four seasons. In between these major accomplishments, I volunteered at Scripps as a science diver with their monitoring program in the kelp forest off the Southern California Coast, became an EMT (and past dive medic) and am currently building a boating and scientific diving program at the University of New England (UNE) in Maine as the Assistant Director for their Marine Science Center. Because of my dedication to diving and the advantages AAUS gave me, I traveled to many places as a research diver with Principal Investigators supporting amazing research projects that advance the knowledge of the underwater world. These experiences have given me the opportunity to build friendships, mentorships, and professional relationships that will definitely be useful when representing AAUS over the next few years.

*3. What relationships/networks/professional contacts/nonprofit board experiences do you have that will benefit AAUS by electing you to the AAUS BOD?*

In my role at the University of New England I am actively involved with AAUS affiliated universities trying to build a scientific diving program. I am still acquainted with many of the United States Antarctic Program diving support staff. Also, I work closely with the Scientific Boating Safety Association which is currently a West Coast organization but has hopes of expanding east. As I build UNE's science diving program, being part of the AAUS BOD will prove an invaluable resource for me and I am very excited to meet new science diving community members and expand my support network.