

Participant evaluation of SMART Marine Institute Research Vessel Bursaries 2021-2024

Highlights

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The most frequently cited highlight was the hands-on or firsthand experience. There are many more including training and mentoring by expert scientists, the friendliness and camaraderie of scientific and vessel crews, the sense of a contribution being made and valued, the critical insight gained into survey operations and its outputs, and the sense of achievement and stimulation from adapting to and performing on a research vessel. Taken together this testimony unambiguously endorses the immense value of the experience to the bursars and demonstrates the success of RV Bursaries in building capacity. Highlights are presented in order of newest to oldest.

RV Bursary highlights 2022-2024

Survey	6. What were the highlights of the survey for you? We are especially interested to hear how you think the experience will benefit your studies or future career in marine science,
WESPAS 2024	<p>The more experienced members of our team were very open and welcoming in regard to teaching us about the various sampling and research techniques and methods. Questions were encouraged and we always got detailed answers or practical demonstrations.</p> <p>I am very lucky to have had the opportunity to meet these people and learn from them directly. I observed and understood how the acoustic equipment was set up, calibrated and operated, how records were logged and sampling points were decided. Most hands-on was the sampling of caught fish, I observed and participated in collecting data regarding the size, weight, age, sex, and maturity of several fish species.</p> <p>Additionally, by interacting with the crew and examining the data available on board, I acquired a better understanding of how vessels operate at sea, especially fishing and research vessels.</p> <p>This experience gave me the practical knowledge to continue in the same or similar field of practice, as well as helped me better understand and analyse collected data of this type.</p>
WESPAS 2024	<p>The main highlight of the survey was learning how life is organised on a research vessel. That is, have insight on how the crew and the scientific team interacts, how the shifts are organised, etc... Participating in such a survey also highlights the human component of research. I believe the SMART sea school will benefit my future career by providing an opportunity to gain experience at sea and learning new practical skills on board from experienced scientists.</p>
IAMS 2024	<p>Data collection: Sampling fish, measuring weight, maturity, sex, and in some cases, otoliths, provided me with a valuable experience. There was a variety of fish and methods available for sampling each species.</p>
IAMS 2024	<p>Learning from everyone else onboard (crew and scientists) was definitely a highlight, as they all had so much experience. I especially enjoyed learning how to sample otoliths from a wide range of species and knowing how to identify the different fish species, which I strongly believe will be beneficial for my future career.</p>
IAMS 2024	<p>This survey was an incredible experience. I use data from the IAMS & IGFS for my PhD and I really appreciated being a part of that data collection. It was great to see the fish species in real life to have a better idea in my mind of what fish I'm discussing when I use their data. My PhD is very computer-based so this was a great experience to expand more hands-on skills.</p>
IAMS 2024	<p>As I had very little previous experience of learning about and working with fisheries this entire survey was a new and exciting learning experience. I really enjoyed the work associated with fisheries data collection, from the species sorting to using EFDAQ software to measure the parameters of different fish and shark species. This experience has greatly increased my interest in fisheries research within Ireland EEZ and has been a great chance to work with and learn from experienced marine biologists.</p>
IGFS 2023	<p>I have a background in Marine Biology, so joining this survey really helped me learn more about fish identification in Irish waters. In my studies, I learned a lot of theory but did not get many chances to have hands-on experience with many of the species that I observed during the survey. Working with experienced marine scientists who were super helpful was truly great. I gained valuable knowledge, not just about identifying fish but also about how offshore surveys work and how data collection takes place. In addition, the views were stunning! Overall, it was the best experience for learning marine biology firsthand.</p>

<p>IGFS 2023</p>	<p>The survey has been an absolutely great experience. The overall number of different species, I only have read about before, has been fascinating. I have been especially impressed by smooth workflow and high level of professionalism the survey was conducted at.</p> <p>During my work onboard I did improve my ID skills a lot, as well as my ability to process large amounts of biological samples in a short time.</p> <p>Living onboard a Research vessel for two weeks in a row, working as a part of an international Team in a highly professional environment is an invaluable experience.</p> <p>The overall experience of this survey generates an invaluable set of skills that may prove its worth in any future scientific career. I would definitely recommend anyone to join such a survey in order to get some real hands-on-experience in fishery science.</p>
<p>IGFS 2023</p>	<p>The highlight for me was getting to work with an amazingly encouraging, patient, and dedicated group of scientists. They all assisted in teaching me and giving me insights into the work we were doing and tricks for identifying different species and their different maturity levels, and how to take the otolith samples.</p> <p>I believe the experience will greatly benefit me in my future career, from this experience I've gained valuable skills in fish identification, data collection, otolith sampling, and working at sea.</p>
<p>IGFS 2023</p>	<p>I really enjoyed working on the benthos identification with Helen McCormick. She was a brilliant teacher and I was thrilled to get the opportunity to learn from her in the field.</p> <p>I also enjoyed getting to know the other researchers and make connections with them, they were all inspiring to me and always happy to answer any questions.</p> <p>It was also great to experience my first time working offshore on a survey, I think this will stand me in good stead.</p>
<p>IGFS 2023</p>	<p>Getting to expand my knowledge of Fish identification and data input, while working alongside scientists with experience in working at sea. I was able to freely ask about fish that were similar in appearance for example poor cod and Norway pout which I struggled with correctly identifying.</p> <p>The pairing of someone that was more experienced was a help not just in the lab environment but also outside as it allowed me to settle in easier amongst the research crew and make connections.</p> <p>Another highlight was being able to see areas like the Hebrides Islands and the Scottish coast from a point where not many other people will ever get the chance to.</p>
<p>IGFS 2023</p>	<p>I really enjoyed taking part of the survey and find out how it is like to spend a couple of weeks onboard a RV. Getting a first experience on a RV can be difficult so I hope this experience will enhance my future candidatures.</p>
<p>CSHAS 2023</p>	<p>"I loved the hands on experience you get surrounded by experienced scientists. Being able to process fish and gain confidence in species ID.</p> <p>Also getting the opportunity to go to the MMO station and gain experience with them, spotting marine mammals and Identifying seabirds with the SBO.</p> <p>To be honest I enjoyed the whole thing. Being immersed into a scientific team and getting sea going experience was amazing.</p> <p>This experience will really help my future applications as an MMO/ fisheries analyst. It really cemented that I enjoy fieldwork the most and the heavier the better for me."</p>
<p>CSHAS 2023</p>	<p>One the main highlights was getting hands on experience in the wet lab. Being given the opportunity to learn skills in which I can use in the future was extremely beneficial.</p> <p>I loved learning to remove and age otoliths in particular and this showed me what kind of work I'm interested in pursuing in the future.</p>
<p>IAMS 2023</p>	<p>The survey was a great opportunity for me to get firsthand experience upon a research vessel. It gave me my first experience working at sea for a prolonged period and gave a really good insight into the work involved in fisheries stock assessments.</p>
<p>IAMS 2023</p>	<p>For me, the highlights of the training were to be able to get insights into the survey data collection. It was a great opportunity to see how in practice the survey takes place, biometric data is collected, and possible problems that may arise.</p>

IAMS 2023	<p>The highlight of the survey was the fish biometric data collection as a whole. During the training, I was able to distinguish the different fish species, even the ones which are very similar. Recognize the species with a commercial interest and have a close look at the differences in the sexual apparatus and the different maturity stages. Also, I learned to extract otoliths from several group species. Additionally, the occasional talk with the Chief Scientist (Eoghan Kelly) made me understand the further steps from data collection to the individual fish species stock assessment.</p> <p>This hands-on experience allowed me to have a holistic overview of the fish stock assessment process and ultimately experience a great onboard working environment.</p> <p>This experience will certainly open the doors for future jobs related to marine sciences due to the high credibility of the marine institute of Ireland. I could also perceive that I would enjoy working on fish data collection.</p>
IAMS 2023	<p>The survey was a tremendous learning experience in terms of fisheries data collection (fish length, weight, count), including biological samples (i.e., otoliths) from a variety of fish from different taxonomic families. I also learned the technical details of demersal trawl operation. This knowledge was greatly beneficial for my research project. I attended the survey to gather survey experience and technical knowledge of demersal trawl operation which is why I primarily focused on these learning opportunities. In general, however, I think the survey is a unique and great opportunity for any student of marine science. The survey allows to work with the fish and to experience the species diversity of the Celtic Seas ecoregion (within Irelands' EEZ) first-hand - a rare opportunity for many marine scientists.</p> <p>My second highlight was the overall experience with the scientific team and crew. The analysts and chief scientists were very helpful and open to spend time with me to explain survey operation (i.e., invitation to the bridge) whereas the analysts were very friendly and trained me in data collection. The crew was very welcoming and open to explain aspects of their work.</p>
UWTV 2023	<p>The survey was packed full of highlights. I very much enjoyed encountering such a diverse range of demersal species. The experience has left me with a much-updated skillset in wet lab procedures. I got the opportunity to build on my scientific network and work with industry professionals, who were always full of knowledge. I gained hands-on experience with the process of fisheries data collection. I drastically improved my fish identification and sexing skills.</p>
WESPAS 2023	<p>Getting more experience with data collection and fish dissection. I'm not sure what I want to do in the future, but I want to do more work on research vessels.</p>
CSHAS 2022	<p>I thoroughly enjoyed learning from experts in the field in the wetlab carrying out biological sampling and getting the opportunity to speak with scientists about how the acoustic technology works. It was also a privilege to be on the brand-new RV Tom Crean and get to see the new state of the art technology. Learning from the MMO and seabird observer about their roles was a great experience.</p>
IGFS 2022	<p>As a data scientist, it has been really beneficial to experience how the ground fish survey is conducted. We were involved in many different aspects of data collection, including fish morphometrics/ maturation/ sorting/ and data entry. Being part of a well organised and efficient team of scientists helped me to appreciate the work that goes on to provide the data work with for my PhD.</p> <p>In the future I would like to get a position in fisheries research, and being able to join the survey helped provide me with important experience in the field. I think even beyond ticking the obvious boxes, the experience opened my eyes generally and was very fulfilling. It was a pleasure to be a part of it, something that not everyone gets to do.</p>
IGFS 2022	<p>As someone that is interested in working in fisheries, particularly on commercial and research vessels in the first years of my career, I believe this experience has been invaluable. Indeed, positions aboard vessels, particularly for the whole leg of a survey, tend to be restricted to scientists with multiple years of experience and a number of cruises under their belt. I am therefore very grateful to have been able to participate in this survey, as I believe it will now allow me to strengthen my application to similar opportunities.</p> <p>I found it particularly enjoyable to be able to learn from other scientists and to be considered seriously and as part of the team. I felt particularly at ease during the last few days, where I could sort through biometric sampling efficiently and without relying on any assistance.</p> <p>I do therefore believe that the RV Bursary program is an excellent one and should continue, allowing young scientists to get a foot in the sometimes impenetrable world of research cruises.</p>

IGFS 2022	<p>The participation in the IGFS brought me several benefits for my future career. I was able to get hands on experience in fishery science data set up, and survey procedures on a large research vessel. This will be attractive for potential future employers, such as the Marine Institute. The survey helped me to broaden my professional network, which will also be beneficial when seeking future jobs. Regarding my studies, I have a better understanding of the origin of fishery data, which I will later on include in models of my PhD research.</p> <p>Besides the overall experience, I trained my fish ID and dissection skills, gathered more offshore sea time and I was able to understand the setup of such a survey with sampling stations etc. I have also now a realistic impression of the nature of such fishery surveys, being dependent on several factors such as weather.</p>
Mackerel Egg 2022	<p>The highlights of the survey for me was getting the rare opportunity to gain sea time and get hands on experience in the field. I believe the SMART survey provided invaluable experience that will serve useful to me throughout my career.</p>
UWTV 2022	<p>I could not recommend the marine institute bursary program enough. Being integrated closely with the scientific team and exposed to all aspects of the survey work gave a really well-rounded understanding of what is involved with offshore biological surveying. I found it especially useful to see what skills were important for a career in fisheries science. My key takeaway was the importance of data analytics and competency with software such as RStudio and GIS. I found the experience and understanding gained by participating in the bursary program to be a great advantage and talking point when speaking to potential employers, and certainly believe it helped me get my current job with the British Antarctic Survey.</p>
WESPAS 2022	<p>The survey was a great grounding in offshore research operations, which allowed opportunities to partake in multiple aspects of hands-on research beyond your specified role on board.</p> <p>The scientists on board were performing research in a wide variety of topics which kept things interesting. Overall spending 3 weeks at sea on the Celtic Explorer is an experience that will stay with me for life and will stand to benefit my career in Marine science.</p>
WESPAS 2022	<p>This survey I very much consider to be the "first step" in further pursuing a career in a marine or similar scientific field. It gave me invaluable insight into an actual working environment - which may sound trivial, but this is something I know a very small percentage of my fellow graduates in marine science simply do not have. Not only do I now have actual time at sea under my belt, I also have a working knowledge of the surveying techniques employed for this particular survey, and the experience to replicate these techniques moving forward. My own personal highlights for this survey was the experience of being fully integrated within the scientific personnel on board. I was not given a "student" or "trainee" experience, I was trusted and expected to deliver on any work that was given. While the "working" aspect of the survey was valuable, there was also the "networking" aspect. Students will be happy to find that (if) they show interest, enthusiasm, and above all else - work, the senior members of scientific personnel will be more than happy to provide references, recommendations etc. In addition, varying scientific disciplines converge on a research vessel and this provides an excellent opportunity for students to learn about other areas of research that may be different to what they are currently working. e.g., Learning the role of the Chemistry department while working in Biology and vice versa. Being a student or recent graduate looking for work, it is invaluable to have one of these surveys for your CV, going forward, I'm certain this survey has or will open doors for me in my career.</p>
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IGFS 2021	<p>Highlights include doing a little bit of benthos during the fisheries survey. Getting my fish ID skills way up, I can't believe what I didn't know, truly shocking. This experience was certainly beneficial in adding to my marine sciences repertoire. I went from not knowing how to filet a fish properly to sufficient. Have a fantastic appreciation for the fisheries people that go out every year. Was great learning about the data collection tools we have and am thankful we weren't pencil and paper recording all those biometrics. The gang I got to work with were so helpful, I am thankful they didn't throw me out having asked if the Norway pout was a poor cod about 50 times. The experience made me feel like a real marine biologist and I'll be able to apply for ship time with more confidence knowing I have participated in the groundfish survey.</p>