

## Participant Testimony from SMART Marine Institute Research Vessel Surveys

Bursary participants are asked to articulate the highlights of the surveys they joined. These are presented here in descending order from 2022 to 2020 and comprehensively demonstrate the advantages of taking part. Find out about the 2023 programme here: [Call Open: SMART Marine Institute Research Bursaries 2023 | SMART \(smartseaschool.com\)](#)

### 2022 Testimony

Survey	<b>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,</b>
Mackerel Egg 2022	The highlights of the survey for me were 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.
Mackerel Egg 2022	<ul style="list-style-type: none"> <li>- The opportunity to network with Marine institute staff and learn about how things work in the institute. Chatting to MI staff you learn about hiring processes, what makes an attractive employee, things they look for in an interview. I found this to be invaluable.</li> <li>- Opportunity to develop niche skills. Skills such as ichthyoplankton identification and operation of plankton sampler are not commonly taught at undergraduate, making it difficult to learn and hone skills in these areas. As they are highly employable skills, the chance to develop them is brilliant.</li> <li>- Opportunity to talk to career scientists at different levels. The marine institute staff have a wealth of knowledge of marine science, but also in building a career in this area. Things to learn, mistakes to avoid etc were all great feedback from the staff on the boat.</li> </ul>
UWTV 2022	I couldn't 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.
WESPAS 2022	I gained experience on acoustics that is extremely beneficial for developing the scientific ship in my home country (if I have the ability to join again, I would like to be part of the acoustic group to learn more). In addition, I learned how to extract the zooplankton and which data should be registered. Moreover, I have been taught the sample strategy for stock assessment and management. Overall, it was a wonderful chance to be a part of that survey.
WESPAS 2022	<p>Due to the number of skills and knowledge acquired throughout the survey it is difficult for me to find the main highlights as participating on WESPAS was a milestone and an enormous highlight of my PhD. All my personal objectives were fulfilled and this can be appreciated from my survey report. In addition, all these objectives will and are benefiting my career. For instance:</p> <ul style="list-style-type: none"> <li>- Acquire offshore experience: Thanks to participating on this survey, I can now confidently apply to become a survey contractor in order to participate in other offshore research vessels.</li> <li>- Fish acoustic survey: With the knowledge I have acquired during the survey, I am planning to apply for research funding to use similar methodology on a Postdoc. Without this experience, it would be very difficult to apply for it.</li> <li>- Understand ICES data acquisition and the role and contribution of this offshore survey to marine policy and stock assessment: I have a great interest in fisheries science and this survey has been incredibly useful to understand the role of ICES and how they base their assessments which I believe it will be incredibly beneficial in my future as a marine scientist.</li> </ul>

## 2022 Testimony

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 were 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>
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> <p>The food on board was surprisingly good, I never went hungry thanks to chef Gavin!</p>
CSHAS 2022	<p>I thoroughly enjoyed learning from experts in the field in the wet lab 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>The highlights for me were being able to learn species identification methods first-hand and in a very interactive way that strictly academic learning can't replicate, as well as getting the experience of a full fortnight of working at sea, which gave me the knowledge and confidence that I can do such a feat. This will benefit my future career as I now have the experience of not only working at sea but also of having given me greater experience of working with and identifying marine life.</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 set-up 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>

## 2022 Testimony

<p>IGFS 2022</p>	<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>
<p>IGFS 2022</p>	<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>
<p>IGFS 2022</p>	<p>I experienced numerous highlights during my time on the Celtic Explorer. I really enjoyed the opportunity to see first-hand so many species present in the Celtic Sea that I otherwise would never have seen. I felt I really improved on my ability to sex various species and also to remove otoliths with much more confidence. I can comfortably say I have come out the other end of this survey feeling much more experienced, and I owe that to the people who worked on the survey with me and gave me every opportunity to learn and grow. For that I am grateful. Prior to the survey I accepted a position as an Ecologist in Cork, so for the immediate future these skills I have learned may not be required in my position. However, I do believe this survey has further confirmed my interest in working in marine science and I will most definitely be looking into joining this field in the coming years now that I have had such a positive experience.</p>
<p>IGFS 2022</p>	<p>The highlights for me were working with experienced fisheries scientists, learning about the fishery and the processes and procedures involved in collecting scientific data and how it is applied. Also getting the view of experienced crew most of whom are/were fishermen and getting to hear their thoughts on the current state of stocks and the fishery. This has been directly applicable to my new position working in Fishery Improvement Projects as the collection and understanding of stock status data is vital to improving the fishing industry. Species identification was another big highlight for me as I feel I gained an excellent understanding on species differentiation and feel confident in my ID and sex determination skills as a result of this survey</p>
<p>IGFS 2022</p>	<p>I enjoyed seeing the different species of fish and invertebrates captured. All of my work so far has been in the Gulf of Mexico, so a majority of the catch was new to me. The experience helped me learn what to expect when I begin sampling for my PhD.</p> <p>I think having an idea of local fish species in the area is good baseline knowledge as a scientist. I think the Groundfish survey was the best way to introduce those species to me.</p>
<p>IGFS 2022</p>	<p>Sorting and ID of different species before biometric sampling. Specific techniques between species for otolith collection and attention to detail throughout sampling was very interesting. I think this experience will help benefit future marine career prospects as identification was a crucial part of the survey which once slightly experienced made the running a lot more efficient. Very difficult to get this sort of experience on a learned course as cannot be effectively taught. Learning while doing was evident when comparing the first few days sampling during survey to the remainder of the leg.</p>

## 2022 Testimony

IGFS 2022	I think the survey was very beneficial to me and my career. The hands on work is something I have always enjoyed and was the highlight of the trip. being able to see and hold a variety of fish species I had not seen before was wonderful. The experienced scientists onboard were extremely helpful and patient in the first few days when we were learning how the operations are done. All the equipment on board was looked after very well and cleaned thoroughly at the end of each day.
IGFS 2022	<p>There were so many highlights! Firstly it was an amazing, immersive way to learn about fish - I couldn't believe how quickly we learnt so much and in such a practical way. All of the more senior scientists were so patient and helpful too.</p> <p>Also, it was an amazing way to learn about the marine institute (who I had not had much to do with before) and the work that is being done, as well as all the other surveys that are going on. I learnt so much about different opportunities and career paths in marine science.</p> <p>It was a great way to meet and get to know other scientists too, as well as the crew members who taught us some of their own skills like net mending.</p> <p>Compared to the others, I had relatively low experience in fisheries/ marine science having studied an arts undergraduate and then doing a geography masters in Coastal and marine environments. So for me, this cruise was amazing as I learnt so much and everyone I spoke to was an absolute wealth of knowledge!</p>
IGFS 2022	Gaining at-sea experience, getting the opportunity to apply the skills learned as part of my course was invaluable, and has opened up opportunities applying for similar fisheries science and foreign observer roles. I now feel confident in identifying key demersal fish species, identifying sex and maturity, and extracting otoliths and properly recording measurements and storing samples. I really enjoyed the experience of working on a research vessel and becoming part of a friendly team of fisheries scientists.

## 2021 Testimony

Survey	<b>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,</b>
CSHAS 2021	I loved working with the team!!! I really tried to make use of time by engaging with each aspect of the survey and making myself competent and knowledgeable in the subject, from birds and mammals to fish and acoustics, as well as plankton and other duties. The CTD deployment was good but I would like to at some point experience a more in-depth chemical analysis of the water with use of CTD systems. This gave me a good insight into the management process when gathering the data then writing a report based in what I saw and what measures were out in place previously on the back of the data being gathered. I can use the experience in my overall knowledge and experience going into offshore renewable energies, as fisheries management and all the other aspects are part of the daily survey requirements for offshore renewables.
IGFS 2021	I loved getting more hands-on experience. I also thought it was great that we got to learn from others with a lot of experience and also to speak with them and gain insight into their career path and how they got to where they are today.
IGFS 2021	All aspects of the survey. From handling and sorting of fish to data input and general on-board work ethic. Furthermore, populating the data and finalizing report has given great insight into pressures that apply on fish stocks in Ireland as well as relative abundance of key species. I feel this bursary has added invaluable experience in offshore surveying that will help immensely in pursuing a PhD and career in Marine Science.
IGFS 2021	The hands-on/practical experience on a seagoing vessel was hugely beneficial. I learnt an enormous amount in a short space of time about marine surveying (especially bottom trawling), international monitoring programmes, species identification and other work of the Marine Institute. I also really enjoyed meeting colleagues from the Marine Institute and learning from them. In previous work, especially my PhD, I have focused on the development of statistical expertise, so the time on the vessel contributed significantly towards my development as a well-rounded marine scientist with both practical and analytical skills.
IGFS 2021	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.
IGFS 2021	The highlights of the survey for me were getting hands-on and practical experience on a survey at sea and learning from the other scientists onboard. I really appreciate the chance to greatly improve my understanding of how a marine survey is carried out, from operations in the wet lab to how the Chief Scientist co-ordinates with the captain and crew. It was especially useful to improve my fish ID and handling skills i.e., removing otoliths and identifying sex and maturity. This experience will greatly benefit my future career in marine science by providing me with valuable ship time onboard a research vessel and has expanded my skillset as a marine scientist. Participating in this survey has helped me gain confidence in my own skills and abilities as a marine scientist and has encouraged me to seek more opportunities onboard a research vessel in the future.
CSHAS 2021	I loved working with the team!!! I really tried to make use of time by engaging with each aspect of the survey and making myself competent and knowledgeable in the subject, from birds and mammals to fish and acoustics, as well as plankton and other duties. The CTD deployment was good but I would like to at some point experience a more in-depth chemical analysis of the water with use of CTD systems. This gave me a good insight into the management process when gathering the data then writing a report based in what I saw and what measures were out in place previously on the back of the data being gathered. I can use the experience in my overall knowledge and experience going into offshore renewable energies, as fisheries management and all the other aspects are part of the daily survey requirements for offshore renewables.

## 2020 Testimony

Survey	<b>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,</b>
IAMS 2020	Taking part in this survey gave me the opportunity to develop my skills in the wet lab. I became more confident in my identification abilities of the various fish species caught and how to quickly sort into categories. Working in a small team allowed me to take on more responsibilities and perfect necessary techniques like ageing, sexing and removal of otoliths. I also learned how to log nephrops samples which is a very useful skill to have. I gained a lot of knowledge from this survey from each person on board and will most definitely use every piece of information in the future going forward in my career.
IAMS 2020	<p>One of the highlights of the survey was to see the variety of species that were hauled up with each trawl. This was especially true at the deeper stations as the diversity of fish, crustaceans and cephalopods all increased at these points. The experience of witnessing and processing the samples gave me an insight into how future technology could be adapted and designed to be more target specific. In an age where discard is such a risk to the global stock levels of commercial, endangered and slow maturing populations I believe I'm better placed now to consider these issues more carefully in my career going forward.</p> <p>The most stand out experience of being involved on this survey was the wealth of experience within in the scientific team I was able to draw form. The team members were on hand to help with species identification, methodology reasoning and all technical aspect of our work. The ability to ask questions in real time about specifics aspects of the work from multiple team members will be hugely beneficial for me moving forward as it allowed me to build up a wealth of knowledge beyond that which I could have gleaned from self study.</p>
IAMS 2020	The highlight of the trip for me was the catch from the trawl at 800 meters. Unlike the usual trawls that were between 100 and 200 meters, this trawl brought up some very interesting species that I had never seen before. I also enjoyed the general experience of identifying fish species and recording their maturity levels. This will greatly benefit my aspirations of becoming a fisheries scientist and/or fisheries observer.
CSHAS 2020	Highlights were definitely getting my hands on the samples as well as learning about the technical side of the survey. All this gives me the confidence for my future career as I feel I can go to other organisations and perform tasks with little instruction.
IGFS 2020	I think the highlight was the level of fish ID I learned in such a short space of time. My previous knowledge was mainly focused on benthic inverts therefore gaining this level of knowledge of fish ecology will be truly invaluable to me in my career.
IGFS 2020	<p>Getting to experience the overall way in which the ground fish survey operates Experience of sorting the numerous and different fish, elasmobranch and benthos species Knowledge sharing from the experienced scientists and getting the opportunity to measure and weight different species and to be shown how to collect otoliths and samples to get the age, sex and maturity of the various fish species</p> <p>Getting the hands on experience to sample fish and to get an understanding of how these important surveys operate was invaluable and has increased my knowledge immensely to allow me better identify certain species. Thank you for the opportunity.</p>
IGFS 2020	The whole survey was amazing! I really enjoyed spending time at sea with so many knowledgeable scientists and crew. I loved chatting to the crew and hearing about their different roles and life experiences. I loved talking to the scientists on board and hearing about their careers in marine science and the paths they have taken. Fisheries Science was already my biggest passion, but it has grown even greater after this survey. I enjoyed all the time in the lab, sorting the fish, and sampling them. I am itching to get back out to sea!