

THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES

England & Wales · Charity number 290729

Details

Other names	THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA BIOLOGICAL STATION
Status	Registered
Legal form	Trust
Registered	1985-01-11
Register	View on the Charity Commission register

Contact

Address	28 Sandelswood End Beaconsfield HP9 2AE
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Activities

Objects: 1. FOR THE ADVANCEMENT OF EDUCATION BY THE ESTABLISHMENT AND MAINTENANCE OF SCHOLARSHIPS AND GRANTS TO BE AWARDED TO SCIENTISTS AND OTHER PERSONS RESIDENT IN THE UNITED KINGDOM WHOM THE TRUSTEES MAY IN THEIR ABSOLUTE DISCRETION SELECT TO ENABLE THEM TO STUDY AND CARRY OUT RESEARCH AT THE BERMUDA BIOLOGICAL STATION FOR RESEARCH.2. THE PROMOTION AND ENCOURAGEMENT OF RESEARCH INTO AND THE STUDY OF MARINE, OCEANOGRAPHIC AND ENVIRONMENTAL SCIENCES INCLUDING WITHOUT PREJUDICE TO THE GENERALITY OF THE FOREGOING RESEARCH INTO AND THE STUDY AQUACULTURE MARINE ECOLOGY AND ZOOLOGY AND MARINE AND ENVIRONMENTAL POLLUTION.

Activities: BIOS UK Associates raises funds to support the research and education programmes at the Bermuda Institute of Ocean Sciences. The research encompasses all areas of oceanography, from macro climate studies to microscopic genetic studies. The UK Associates make grants to exceptional UK students who wish to study at BIOS in Bermuda, in a range of different academic programme options.

Classification

- **How:** Makes Grants To Individuals, Makes Grants To Organisations
- **What:** Education/training, Environment/conservation/heritage, Other Charitable Purposes
- **Who:** Children/young People, Other Charities Or Voluntary Bodies, The General Public/mankind

Geography

- Bermuda

Finances

Period end	Income	Expenditure	Assets	Employees
2025-12-31	£30,261	£30,316	-	-
2024-12-31	£31,990	£32,560	-	-
2023-12-31	£36,184	£35,027	-	-
2022-12-31	£70,290	£70,381	-	-
2021-12-31	£30,753	£32,346	-	-

Trustees

Name	Role	Appointed
CHRISTOPHER DAY	Chair	2011-09-30
Amy Jackson		2025-01-22
Christopher Cunliffe		2018-06-12
Dr SAMANTHA DE PUTRON		2025-01-22
Ian Philip Howard Arnold		2024-01-31
LADY JUDY VEREKER		2014-11-27
MAGGIE MILLS		2025-01-22
NICK PEWTER		2018-06-12
PROFESSOR RICHARD STEPHEN LAMPITT		2011-09-29
Suzanne Ferlic		2020-05-22

THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES

England & Wales - Charity number 290729

Accounts



UK ASSOCIATES OF BIOS

Extending Frontiers for Early Career
Marine Scientists in the UK

**THE UNITED KINGDOM ASSOCIATES OF THE
BERMUDA INSTITUTE OF OCEAN SCIENCES**

Charity Registered with the Charities Commission

Reg No 290729

ANNUAL REPORT AND ACCOUNTS
FOR THE YEAR ENDED 31 DECEMBER 2025

**Supporting Students from UK Universities
To Extend their Studies at**



CHAIRMAN'S STATEMENT

I am delighted to report that the UK Associates of BIOS 2025 Student Programme progressed very satisfactorily, achieving outstanding feedback from our participating students and ASU BIOS Academic Staff.

With the generous support of our sponsors, notably The Fishmongers' Company's Fisheries Charitable Trust, Convex Insurance Group and members of our Trustee Board, we were able to support participation in specialist summer courses and internships for five students, one of whom will undertake her internship in March 2026. Our students came from across the UK attending the following UK Universities:

- Cardiff
- Exeter
- Liverpool
- Stirling
- Oxford

Our 2025 Convex Intern, who also took part in the Research Diving Methods Course, proved to be an outstanding student in both the RDM and his three month research internship, where, under the guidance of ASU BIOS Senior Scientist and leading Reef Ecologist Dr Eric Hochberg, he explored links between optical diversity and biological diversity of coral reefs.

We are indebted to The Fishmongers' Company's Fisheries Charitable Trust and Convex Insurance Group and our Trustees for their financial support of our 2025 student programme and look forward to their continued support in 2026.

ASU BIOS

The Bermuda Institute of Ocean Sciences (ASU BIOS), a unit of the Julie Ann Wrigley Global Futures Laboratory at Arizona State University and the School of Ocean Futures, is committed to advancing the frontiers of ocean science while educating the next generation of international specialists in all fields of marine science, monitoring and conservation. Since 1903, BIOS has provided unique access to oceanographic and atmospheric research in Bermuda, leveraging its location in the North Atlantic Ocean to deliver training and research experiences with global impact.

ASU BIOS education programs are designed to bridge academic knowledge with real-world research. Through 3-month internships, intensive summer courses, and a semester-long fall program, undergraduates, postgraduates, and PhD students from around the world are given the opportunity to work and study alongside leading scientists. These offerings combine innovative instruction with field-based inquiry, equipping students with the skills to tackle pressing environmental challenges across diverse marine and atmospheric disciplines.

By integrating education and active research, ASU BIOS creates opportunities for students to explore scientific questions in a professional research environment. Students gain practical experience in the field, develop advanced technical skills, and build a strong foundation for future scientific careers. ASU BIOS programs not only strengthen academic ability but also foster critical thinking, problem solving, and global collaboration, qualities essential for impactful research in an era of rapid environmental change.

2025 SPECIALIST SUMMER COURSES

Thanks to the generous support of our Sponsors, **four students** from the U.K. in 2025 were able to participate in hands-on learning opportunities. Each of the four students participated in a novel summer course, with one of the scholars remaining on campus to undertake a 12-week internship. The ASU BIOS training programs provided the cohort with skills and experience that will enhance both their academic and professional trajectory.

Research Diving Methods_(RDM) Summer Course 30th June – 18th July 2025

The RDM is an intensive three-week training program and in 2025 the course welcomed 16 participants from Austria, Canada, China, Italy, Spain, the U.K., and the U.S., representing 12 universities around the world. The course provided foundational instruction in scientific diving, combining classroom-based learning with extensive open-water practice, enabling students to develop both technical diving proficiency and an understanding of how SCUBA is applied in modern marine research. In addition, they had the opportunity to qualify for a scientific diving qualification recognized by the American Academy of Underwater Sciences (AAUS), a recognized standard of training that supports future research opportunities worldwide.

Scholarship support from the U.K. Associates of BIOS enabled two students from UK universities to participate in this novel training program. We were delighted to welcome back our 2024 Exeter University CRE student, now a graduate in biological sciences, who commented:

“The RDM course was intensive but incredibly rewarding. I achieved 3 new diving qualifications, completed 18 training and science dives; attended lectures from expert academics in various fields of marine research; and contributed to real data collection via the Global Coral Reef Monitoring Network, which will inform policy such as the Bermuda Ocean Prosperity Plan.

The course expanded my future career horizons and I am excited to put the skills learned to good use as I continue to research marine environments.”

Our Cardiff University RDM participant, a marine geography undergraduate, has a solid foundation in topics such as marine environmental systems, geographical data analysis, and marine geomatics and by attending the RDM course, she gained formal training in advanced scientific diving techniques and built upon her existing marine fieldwork and technical skills, achieving her aim to become a confident, competent diver able to safely and effectively conduct underwater research and contribute to marine science and conservation projects. She commented:

“I learned so much about the research going on at ASU BIOS. This intensive course allowed me to learn so much new information, The UK Associates of BIOS bursary allowed me to do something I never thought I would be able to afford and I’m incredibly grateful for this opportunity.”

**Coral Reef Ecology (CRE) Summer Course
21st July – 8th August 2025**

This year's CRE course brought together 19 students from China, Colombia, Germany, Spain, the U.K., and the U.S., representing 13 universities worldwide, for an immersive three-week program at ASU BIOS between July and August. The course examined the biology and ecology of tropical corals, with emphasis on their response to environmental change, including projected climate scenarios. Participants explored the biological, physical, biogeochemical, and evolutionary processes that underpin reef growth, function, and resilience, gaining a strong conceptual understanding of these ecosystems from the cellular to the community level.

The UK Associates of BIOS supported two CRE students from the universities of Stirling (Applied Biological Sciences BSc) and Liverpool (Master of Research, Advanced Biological Sciences), each being challenged in a new academic environment and gaining a deeper understanding of coral reef ecosystems and practical field skills. Our students commented:

“The course provided hands-on experience in a way you simply can't get in the classroom alone. I came away with new technical skills, greater confidence in the field, and a fresh perspective on potential future career paths. The Coral Reef Ecology course far exceeded my expectations.

What impressed me most during my time at ASU BIOS was the incredible passion and dedication of the team. Many of the staff started out as students or interns themselves, which really shows in the supportive and inspiring environment they've created. I was also amazed by the balance between scientific learning and hands-on, practical experiences like diving, which made the course truly unforgettable.

I'm especially grateful to have received a scholarship, which made it possible for me to attend. Without that financial support, I simply wouldn't have been able to take part, and I'm incredibly thankful for the opportunity. The friendships, collaborations, and professional relationships I formed at BIOS will continue to shape my academic path for years to come.”

RESEARCH INTERNSHIPS

The opportunity to apply academic training to real-world challenges is valuable to students as they seek to expand their technical capabilities and develop skills that will serve them well in their future careers. Through practical experience, interdisciplinary collaboration, and mentorship, ASU BIOS interns gain a deeper understanding of their fields and the confidence to take on increasingly complex projects. Their growth over the course of their time on campus reflects the lasting value of immersive learning experiences that connect classroom knowledge to meaningful challenges.

Convex Group Fully Funded Intern - Optical and Biological Diversity of Coral Reefs

Our 2025 Research Intern was supported thanks to generous funding from Convex Group and our student, a graduate from Exeter University, undertook his 12-week research project following participation in the RDM course. Under the guidance of leading Senior Scientist, Dr Eric Hochberg, he explored the link between optical diversity and biological diversity of coral

reefs, a project aimed at accurately assessing coral ecosystem health, resilience and responses to environmental change. This project formed part of a larger programme led by Dr Hochberg designed to build a framework for combining remote sensing with detailed in-water observations.

Following his internship our Convex Intern student noted:

“The experience has undoubtedly expanded my technical and practical skill set. Through the internship, I combined my knowledge of coral reef ecology with physics and maths. This multi-disciplinary approach was incredibly satisfying, and one I am eager to use in future research.

My findings have indicated a trend between optical diversity and coral biodiversity, laying the foundations to measure reef biodiversity at scale. As a result, I have submitted an abstract for consideration for the **Ocean Sciences Meeting in Glasgow in 2026**, and I am currently preparing a paper for publication. Both the conference and the paper will aid in sharing my findings with the scientific community, boost my science communication skills, and provide further networking opportunities as I look to take the next step in my career.

I am incredibly grateful to have been selected for this internship, supported by the U.K. Associates. I would like to thank the Trustees and funders (Convex and The Fishmongers’ Company) who have so generously donated their time and money – your contribution has and continues to shape my career as an aspiring scientist.”

Both Dr Hochberg and his intern were able to welcome Convex Bermuda Senior Staff to visit the Lab, share ideas of the project and learn more about ASU BIOS. Due to their enthusiasm, Convex returned to witness the intern’s final presentation. This illustrates the strong partnership between our sponsors and the early career scientists that they support. This enables us to foster future close relationships with current and new sponsors for our valuable programme.

UK Associates of BIOS Partially Funded Internship
Chlorophyta dynamics in the Sargasso Sea Spring Plankton Bloom
12 Weeks from 1st March 2026

Our student, currently studying for a Bioscience PhD at Oxford University will undertake this research which will fit neatly with her PhD research programme on phytoplankton; a form of microscopic algae that are essential to maintaining the balance of our marine ecosystem.

This project, under the mentorship of specialist researcher Rachel Parsons, aims to isolate Chloropicophyceae from Sargasso Sea water samples in order to improve our understanding of this important group of microalgae and apply the data to contribute to improving climate change analysis. Our student is a very capable early career scientist with remarkable fieldwork experience in the open ocean, both in the North and South Atlantic and her project will be keenly watched by the faculty science team at ASU BIOS.

* * * * *

I would like to thank the Trustees and Advisors for all their support and wise counsel during 2025. We have been hugely fortunate to be able to welcome three new Trustees in 2025, Maggie Mills, former partner at EY, Amy Jackson, Convex Intern 2022 and now an environmental consultant and Samantha de Putron, a longstanding member of the ASU BIOS faculty as Assistant Scientist, now resident in the UK. Thank you to all for agreeing to join our Board.

After a busy 2025 we now look forward to an even busier 2026. The Specialist Summer Course Programme at ASU BIOS will shortly be announced and we expect strong interest from students at UK universities. We are also planning to add a second fully funded internship in 2026.

Finally, may I reiterate, on behalf of our Trustee Board, our thanks to our sponsors especially The Fishmongers' Company's Fisheries Charitable Trust and Convex Group for their exceptional support for our scholarship programme. Many of our students go on to make major contributions to environmental and climate science and the funding via the UK Associates of BIOS makes a significant difference to the future careers of our very talented young scientists.



Chris Day
Chairman of the Board of Trustees
21 January 2026



TRUSTEES' ANNUAL REPORT

The Trustees have pleasure in presenting their report together with the accounts and the independent examiner's report for the year ended 31 December 2025.

Reference and administrative information

Charity Name	The United Kingdom Associates of the Bermuda Institute of Ocean Sciences ("UK Associates of BIOS")
Charity Number	290729
Address	Fishmongers' Hall, London Bridge, London EC4R 9EL
Trustees	Christopher Day - Chairman Lady Vereker – Vice Chair ** Ian Arnold – Hon Treasurer Christopher Cunliffe Dr Samantha de Putron – <i>appointed 22 January 2025</i> Amy Jackson – <i>appointed 22 January 2025</i> Suzanne Ferlic Johnson Professor Richard Lampitt Maggie Mills – <i>appointed 22 January 2025</i> Nick Pewter

*** Lady Vereker also sits on the ASU BIOS Advisory Board*

Structure, Governance and Management

Constitution

The Charity is an unincorporated association. It is governed by a Trust, which was established by deed on 27 November 1984 and last amended on 28 September 2015. The Association was granted charitable status by the Charity Commission on 11 January 1985.

Trustees

The Trustees, the majority of whom must be UK resident, normally meet once a quarter and they form the management committee. The Board of Trustees appoints new trustees and decisions can be made by a majority vote with a minimum of three trustees present. There is no requirement for Trustees to be reappointed on a rotational or any other basis. The Trustees are aware of the Charity Commission's public benefit guidance and take this into account when making decisions to which the guidance is relevant.

TRUSTEES' ANNUAL REPORT continued

Management

The Trustees are responsible for the strategic direction and governance of the Charity. There are no staff and those Trustees with relevant knowledge and experience undertake day-to-day operational and administrative matters without remuneration. The Charity's Trustees consider that an audit is not required for this year under section 144 of the Charities Act 2011 (the "2011 Act") and that an independent examination is needed.

Advisors

The Trustees are further supported and assisted by the Advisors who, as unpaid volunteers, provide insightful and multi-disciplinary guidance and expertise on all aspects of the Charity's operations and activities. During the year the following persons served in these roles:

Advisors: Professor Michael Depledge CBE
 Professor Christopher Carbone
 Christopher Leftwich

Trustee Emeritus: Diana Viscountess Dunrossil

These persons are invited to attend the Trustees Meetings but are not entitled to, and do not, vote at these meetings.

Objectives and Activities

Charitable purposes

The UK Associates of BIOS provides a valuable donation to the Bermuda Institute of Ocean Sciences ("BIOS") education programme for partial and full scholarships to UK university students to participate in courses and internships in Bermuda. BIOS, now partnered with Arizona State University's Julie Ann Wrigley Global Futures Lab ("ASU"), has an international reputation extending over one century for research and education in marine and atmospheric science. Full details can be found on <https://bios.asu.edu/education/uk-associates-bios/>

Activities

Bermuda is located in the middle of the North Atlantic Gyre and on the most northerly Atlantic coral reef system. This makes it an ideal location for studying the Open Ocean and sub-tropical near shore environments. BIOS is home to Hydrostation S, established in 1954, the longest running year-round data collection programme for any single location in the open ocean, and the Bermuda Atlantic Time-series Study (BATS). These studies are improving mankind's understanding of global ocean circulation, ocean chemistry and biology, and how the oceans and atmosphere interact and respond to a changing climate.

The Mid-Atlantic Glider Initiative and Collaboration (MAGIC) was launched at BIOS in 2014 to enhance and leverage BIOS's long-standing ocean measurement programmes southeast of Bermuda through the use of autonomous underwater vehicles. The overarching goal of MAGIC is to acquire new high-resolution measurements from underwater gliders to assess the contribution of small-scale processes that sustain the ocean's biological productivity, and

TRUSTEES' ANNUAL REPORT continued

to make those assessments over several years to build a statistically meaningful understanding of them.

BIOS expertise also lies in marine microbiology, risk prediction, coral reef ecology and resilience, and fish ecology. Recent highlights of research activities include the use of Baited Remote Underwater Video Stations (BRUVS) and eDNA coding to further our understanding of native reef fish and invasive Lionfish populations.

BIOS believes that ocean science for human good involves not only research with tangible benefits for communities and the environment, but also education programmes that highlight the many ways our lives are connected with the ocean. BIOS views education as a crucial part of global ocean science research, helping to translate the work of its faculty into meaningful experiences for students to better understand the importance of oceanography in the study of fish stock management, climate change and risk prediction, pollution and human health.

The mission of the UK Associates of BIOS is for the advancement of experiential education through scholarship and grant funding for both undergraduate and post-graduate UK university scientists, to enable them to study and carry out research at the Bermuda Institute of Ocean Sciences in an international student and faculty community. Without scholarships of this nature they would not have access to summer courses or longer internships, which provide hands-on educational opportunities to study Bermuda's unique marine ecosystems and geology, as they explore coastal and open ocean environments. Under the supervision of, and in collaboration with, BIOS scientists they gain field methods and unparalleled insight into the logistics required to plan and execute research activities. This experience affords a unique opportunity not readily available to UK students and is often one that could support their career decisions as future scientists and educators.

The latest chapter in the history of BIOS has been the partnering in 2021 with the Julie Ann Wrigley Global Futures Lab at Arizona State University (ASU); and the recent launch of the ASU Global Futures Lab's 4th School of Ocean Futures of which BIOS is now its major component. The goal of the union is to marry programmes and scientific study within both organisations, strengthen them with experts in various fields who can learn from each other and share research ideas and results.

BIOS and ASU will now be able to look more holistically at the health of the ocean and atmosphere. UK Associates of BIOS will have a more valuable role to contribute to an international student body working on global collaborative research projects as the planet faces adapting to a warming planet.

Achievements and Performance

With the generosity of our donors, £29,975 (2024- £32,475) of funding was provided for BIOS internships and summer courses. The funding provided students with four summer courses, one fully funded internship and one partially funded internship that has been deferred to Spring 2026.

Many of our alumni have found the experience invaluable to support career decisions in marine science. Some come full circle back to BIOS as researchers, teaching assistants,

TRUSTEES' ANNUAL REPORT continued

diving trainers and even professors as they further their skills in collaborating, educating, communicating and analysing scientific problems; making them strong candidates for future academic endeavours.

Long-term success will be measured by leveraging shared knowledge gained by a better understanding of our oceans and the impact of climate change and how that relates to the health of our oceans, fisheries, marine environment, risk prediction and ultimately human health. This demands the survival of oceanographic research and educational institutes to equip new generations of scientists with life-skills and technology to achieve academically as future scientists at the cutting-edge of discovery.

Financial Review

The main source of funding continues to be from donations received.

Receipts from donations and associated gift-aid were £30,250 (2024 - £31,975). Payments were £30,316 (2024 - £32,560), of which £29,975 (2024 - £32,475) was spent towards our charitable causes. This represents 98.9% (2024 – 99.7%) of total payments, the balance in 2025 being incurred on fundraising costs and bank charges. The deficit for the year was £55 (2024 – deficit of £570).

The Trustees' policy is to maintain cash reserves above £1,000 in order to meet commitments and cover any unexpected expenditure. Cash at bank and in hand at the end of the year was £1,614 (2024 - £1,669), which is within the target range.

The Trustees are responsible for safeguarding the assets of the Charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Plans for Future periods

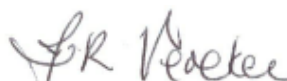
The Trustees intend to continue and develop the education programme for the benefit of UK university students.

Approved by the Trustees on 21 January 2026 and signed on their behalf by:



.....

Christopher Day
Chairman



.....

Lady Vereker
Vice Chair

INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES FOR THE YEAR ENDED 31 DECEMBER 2025

I report to the Trustees on my examination of the accounts of the United Kingdom Associates of the Bermuda Institute of Ocean Sciences ('The Trust') for the year ended 31 December 2025, which are set out on pages 11 to 12.

Responsibilities and basis of report

As the Charity Trustees of The Trust you are responsible for the preparation of the accounts in accordance with the requirements of the Charities Act 2011 ('the Act').

I report in respect of my examination of The Trust's accounts carried out under section 145 of the 2011 Act and in carrying out my examination I have followed all the applicable Directions given by the Charity Commission under section 145(5)(b) of the Act.

Independent Examiner's Statement

I have completed my examination. I confirm that no material matters have come to my attention in connection with the examination giving me cause to believe that in any material respect:

1. accounting records were not kept in respect of The Trust as required by section 130 of the Act; or
2. the accounts do not accord with those records.

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.



**Richard Beckett FCA
6 Foundry House
Walton Well Road
Oxford
OX2 6AQ**

21 January 2026

**STATEMENT OF RECEIPTS AND PAYMENTS
FOR THE YEAR ENDED 31 DECEMBER 2025**

	Notes	2025		2024	
		£	£	£	£
Receipts	1				
Voluntary receipts					
<i>Donations and Gift Aid</i>	3	30,250		31,975	
<i>Legacies</i>		-		-	
			30,250		31,975
Unrestricted bank interest			11		15
			30,261		31,990
Payments	1				
Charitable activities	3	(29,975)		(32,475)	
Fundraising costs		(256)		-	
Governance costs		-		-	
Bank charges		(85)		(85)	
			(30,316)		(32,560)
Net payment			(55)		(570)

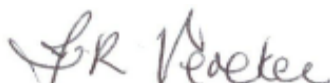
**STATEMENT OF ASSETS, LIABILITIES AND FUND BALANCES
AS AT 31 DECEMBER 2025**

	Unrestricted funds		Unrestricted funds	
	2025		2024	
	£	£	£	£
<u>Bank and cash balances</u>				
Bank deposit account	-		-	
Bank current account	1,614		1,669	
	1,614		1,669	
<u>Funds reconciliation</u>				
Cash at bank and in hand – Dec 2024	1,669		2,239	
Net payment for the year	(55)		(570)	
Cash at bank and in hand – Dec 2025	1,614		1,669	

Approved by the Trustees on 21 January 2026 and signed on their behalf by:



Christopher Day - Chairman



Lady Vereker – Vice Chair



Ian Arnold – Hon Treasurer

NOTES TO THE ACCOUNTS

1. Basis of Accounting

These accounts have been prepared on the Receipts & Payments basis in accordance with Section 133 of the Charities Act 2011.

2. Nature and purpose of funds

Unrestricted funds are those that may be used at the discretion of the Trustees in furtherance of the objects of the Charity. The Trustees maintain a single unrestricted fund for the day-to-day running of the Charity.

Restricted funds are those funds that the Trustees are obliged to spend only on particular purposes set out by the donor or in an appeal document and these particular purposes are narrower than the Charity's objectives.

Endowment funds are funds that the Charity is prohibited by the governing document from spending as income. Normally these will be investments but may also be property held as endowment for use by the Charity. The investment receipts must be spent for the purposes indicated by the governing document.

Designated funds are part of unrestricted funds, which the Trustees have set aside or earmarked to be used for a particular purpose. They are not legally distinct funds and Trustees can at any time re-designate them for other purposes.

There were no un-disbursed or un-allocated restricted, endowment or designated funds at the beginning or the end of the year.

3. Donations and Charitable activities

	2025	2024
Donations and gift aid	£	£
Unrestricted funds - General	2,250	3,375
- Designated	10,000	10,000
- Total	12,250	13,375
Restricted funds	18,000	18,600
	30,250	31,975
Charitable activity	£	£
Unrestricted funds - General	1,975	3,875
- Designated	10,000	10,000
- Total	11,975	13,875
Restricted funds	18,000	18,600
	29,975	32,475

THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES

England & Wales - Charity number 290729

Accounts



UK ASSOCIATES OF BIOS

Extending Frontiers for Early Career
Marine Scientists in the UK

THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES

**Charity Registered with the Charities Commission
Reg No 290729**

**ANNUAL REPORT AND ACCOUNTS
FOR THE YEAR ENDED 31 DECEMBER 2024**

**Supporting Students from UK Universities
To Extend their Studies at**



CHAIRMAN'S STATEMENT

The UK Associates of the Bermuda Institute of Ocean Sciences is a UK registered charity, working closely with The Bermuda Institute of Ocean Sciences (ASU BIOS), which since 2021 has been the headquarters of Arizona State University's School of Ocean Futures.



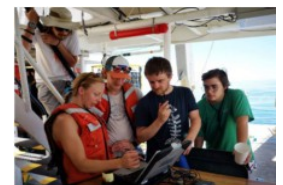
ASU BIOS is an institution with more than 120 years of excellence in ocean science education and research. The campus, in St George's, Bermuda, houses world class teaching facilities, laboratories and research vessels, providing a unique base for oceanic study of the surrounding Sargasso Sea and beyond into the Atlantic Ocean. Bermuda is located within one of the world's most diverse open-ocean ecosystems and ASU BIOS is renowned for the longest-running time-series on seawater chemistry, biology and physics (the Bermuda Atlantic Time-series Study), as well as the longest record of ocean sediment-trap studies in the world, the Oceanic Flux Program.



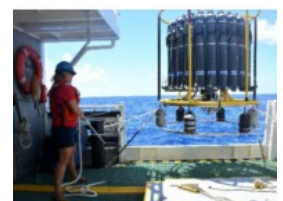
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I am delighted to report, on behalf of The Trustees of The UK Associates of the Bermuda Institute of Ocean Sciences, that 2024 was another outstanding year for our student programme, now in its 40th year. Over 200 early career scientists have benefited from our scholarship grants since we were founded in 1984 and we remain hugely grateful for the continued generosity of our donors and sponsors, notably, The Fishmongers' Company Fisheries Charitable Trust, Convex Insurance Group, Maggie Mills and members of our Trustees Board, who enabled us this year to support seven talented undergraduate and graduate students from UK universities to participate in specialist summer courses at ASU BIOS.



We were especially delighted to award an internship grant, funded by Convex Insurance Group, to one of our 2024 summer course students to continue his studies at ASU BIOS through a three-month intensive research internship exploring the application of Artificial Intelligence techniques in analysing satellite coral reef photographic data - an exciting and advanced approach to hyperspectral analysis, being spearheaded at ASU BIOS under Dr Eric Hochberg, which shows much promise in revealing new perspectives on the current health of coral reefs and the impacts of climate variation to predict its future status.



CHAIRMAN'S STATEMENT continued

In addition to the seven exceptional students from our 2024 programme, we are pleased to report that five of our intern students from previous years returned to ASU BIOS in 2024 to continue their marine science and teaching careers and contribute to the body of global techniques and methodology.

- **Dr Stuart Robertson** - BIOS 2015 Research Internship (*MSc in Marine Environmental Management, University of York; PhD 2020 from the University of Salford in Conservation Biology*) joined the ASU BIOS Faculty in August 2024 as Assistant Teaching Professor and Assistant Director of Education for University Programs.
- **Nicole Burt** – BIOS 2021 CRE Course; BIOS 2022 RDM Course and 2022 Axis Capital Intern; (*Integrated MSci Marine Biology graduate at the University of Southampton*); returned to ASU BIOS 2024 as a Teaching Assistant for the CRE Course before undertaking a PhD candidacy until 2029 in Marine Science at KAUST in Saudi Arabia.
- **Charlotte Gerrish** - BIOS 2023 Convex Intern in ASU BIOS Specialist Researcher Rachel Parsons' Microbial Ecology Lab (*Master's in Medical Microbiology at the London School of Hygiene and Tropical Medicine*) returned in 2024 as a Lab Technician for nine months to work with Professor Nick Bates and Microbial Scientist, Rachel Parsons.
- **Dr Carys Johnson** - BIOS 2017 Internship in Rachel Parsons' Microbial Ecology Lab (*University of Cardiff, Bachelor's in Molecular Biology; 2022 University of Cambridge, PhD in Stem Cell Research and Post-Doctoral Researcher; 2023-2024 worked as stem cell specialist Orchard Therapeutics London*) is currently ASU BIOS Post-Doctoral Research Associate in Rachel Parsons' Microbial Lab.
- **Jonny Chapman** - currently ASU BIOS Research Specialist who began his BIOS career under our sponsorship programme as a University of Liverpool BSc graduate 2019 in Ocean Science, taking the 2019 BIOS Modern Observational Oceanography Course (MOO) In 2020; he was awarded an Internship in the Glider Lab and was asked to join the BIOS permanent team as a Glider Technician in 2021.



All are outstanding scientists and are members of an UK Associates of BIOS Alumni group of over 200 ocean and environmental specialists who have benefitted from the exceptional and unique experience of learning and working at ASU BIOS. Many of our Alumni have gone on to become notable scientists and we are optimistic that students from 2024 will also make their mark in the world of ocean and environmental science.

CHAIRMAN'S STATEMENT continued

Our 2024 sponsorship programme provided seven UK University students to take part in the ASU BIOS Coral Reef Ecology (CRE) and Research Diving Methods (RDM) courses in June, July and August; and our Convex fully-funded Intern transitioned from the CRE course in August to a research internship which ran until mid-October.

The ASU BIOS summer courses were again well represented by exceptional UK undergraduates and graduates.

The Research Diving Methods Course, an intensive and demanding three-week programme which began late June, was designed to equip students with essential scientific diving skills, both theoretical and practical. This course, now in its third year, proved to be extremely popular with an international group of 18, four of whom came from the UK.

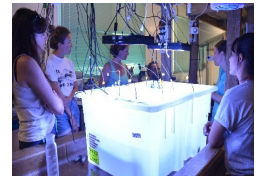
Important skills were learned in underwater photographic surveys, monitoring of coral bleaching and disease, performing seagrass surveys, and counting reef fish. In addition to the open-water sessions, the course included science lectures that detailed the importance of various research methods, enhancing students' understanding of marine science and the challenges of underwater research.

The Coral Reef Ecology Course in July and August is now well-established as a leading programme in ocean science development. The CRE course provides students with knowledge and research skills needed to understand environmental factors influencing coral reef ecosystems and reef health.

The course attracted 17 international students of which three came from the UK. All received a comprehensive foundation in reef functional ecology, which we hope will equip them to take part in future research projects on the ecological impacts of climate change of coral reefs.

Following participation in the CRE course, our 2024 Convex Intern began working alongside faculty member and CRE course instructor, Dr Eric Hochberg. The 12-week project was designed to build upon our intern's PhD research at the University of Cambridge, focussing on understanding and predicting present and future coral reef distribution via multimodal machine learning, a topic which is highly complementary to Dr Hochberg's research. This involved developing benthic class maps from high-resolution and hyperspectral aerial imagery, which broke new ground in computational analysis and further contributed to Dr Hochberg's long-term research programme. A paper is expected to be published in due course.

We are confident that our student programme makes a real difference to the scientific careers of the students we support, and we hope others will share our optimism that many of our recent Alumni will, like those over the past 40 years, make a genuine and important impact on environmental science.



CHAIRMAN’S STATEMENT continued

I should like to thank all who have helped us in the past year, notably my very able Vice Chair Lady Judy Vereker and all our fellow Trustees and advisors. Our board is entirely voluntary and the skills and wise counsel they bring is invaluable to the work of our charity.

Someone we will miss very much in the future is Lorraine Andrews who, in September 2024, retired as our Honorary Secretary (a position she has held for some 22 years). Lorraine served our charity faithfully and diligently and was a key member of our team not only in her formal capacity, but also in supporting the board at events bringing together our students’ supporters and scientists. Lorraine joined us from the Fishmongers’ Company and was formerly Secretary to the Shellfish Association of Great Britain. We wish her much happiness in her well-earned retirement.



Christopher Day



22 January 2025

Chairman of the Board of Trustees of

The UK Associates of the Bermuda Institute of Ocean Sciences



TRUSTEES' ANNUAL REPORT

The Trustees have pleasure in presenting their report together with the accounts and the independent examiner's report for the year ended 31 December 2024.

Reference and administrative information

Charity Name The United Kingdom Associates of the Bermuda Institute of Ocean Sciences ("UK Associates of BIOS")

Charity Number 290729

Address Fishmongers' Hall, London Bridge, London EC4R 9EL

Trustees Christopher Day - Chairman
Lady Vereker – Vice Chair **
Ian Arnold – Treasurer (*appointed to Trustee Board 31 January 2024*)
Christopher Cunliffe
Suzanne Ferlic Johnson
Professor Richard Lampitt
Nick Pewter

*** Lady Vereker also sits on the Advisory Board of the Bermuda Institute of Ocean Sciences (BIOS)*

Hon Secretary Lorraine Andrews (*resigned 18 September 2024*)

Structure, Governance and Management

Constitution

The Charity is an unincorporated association. It is governed by a Trust, which was established by deed on 27 November 1984 and last amended on 28 September 2015. The Association was granted charitable status by the Charity Commission on 11 January 1985.

Trustees

The Trustees, the majority of whom must be UK resident, normally meet once a quarter and they form the management committee. The Board of Trustees appoints new trustees and decisions can be made by a majority vote with a minimum of three trustees present. There is no requirement for Trustees to be reappointed on a rotational or any other basis. The Trustees are aware of the Charity Commission's public benefit guidance and take this into account when making decisions to which the guidance is relevant.

TRUSTEES' ANNUAL REPORT continued

Management

The Trustees are responsible for the strategic direction and governance of the Charity. The Charity's Trustees consider that an audit is not required for this year under section 144 of the Charities Act 2011 (the "2011 Act") and that an independent examination is needed.

Advisors

The Trustees are further supported and assisted by the Advisors who provide insightful and multi-disciplinary guidance and expertise on all aspects of the Charity's operations and activities. During the year the following persons served in these roles:

Advisors: Professor Michael Depledge CBE
 Professor Christopher Carbone
 Christopher Leftwich

Trustee Emeritus: Diana Viscountess Dunrossil

These persons are invited to attend the Trustees Meetings but are not entitled to, and do not, vote at these meetings.

Objectives and Activities

Charitable purposes

The UK Associates of BIOS provides a valuable donation to the Bermuda Institute of Ocean Sciences ("BIOS") education programme for partial and full scholarships to UK university students to participate in courses and internships in Bermuda. BIOS, now partnered with Arizona State University's Julie Ann Wrigley Global Futures Lab ("ASU"), has an international reputation extending over one century for research and education in marine and atmospheric science. Full details can be found on <https://bios.asu.edu/education/uk-associates-of-bios/>

Activities

Bermuda is located in the middle of the North Atlantic Gyre and on the most northerly Atlantic coral reef system. This makes it an ideal location for studying the Open Ocean and sub-tropical near shore environments. BIOS is home to Hydrostation S, established in 1954, the longest running year-round data collection programme for any single location in the open ocean, and the Bermuda Atlantic Time-series Study (BATS). These studies are improving mankind's understanding of global ocean circulation, ocean chemistry and biology, and how the oceans and atmosphere interact and respond to a changing climate.

The Mid-Atlantic Glider Initiative and Collaboration (MAGIC) was launched at BIOS in 2014 to enhance and leverage BIOS's long-standing ocean measurement programmes southeast of Bermuda through the use of autonomous underwater vehicles. The overarching goal of MAGIC is to acquire new high-resolution measurements from underwater gliders to assess the contribution of small-scale processes that sustain the ocean's biological productivity, and

TRUSTEES' ANNUAL REPORT continued

to make those assessments over several years to build a statistically meaningful understanding of them.

BIOS expertise also lies in marine microbiology, risk prediction, coral reef ecology and resilience, and fish ecology. Recent highlights of research activities include the use of Baited Remote Underwater Video Stations (BRUVS) and eDNA coding to further our understanding of native reef fish and invasive Lionfish populations.

BIOS believes that ocean science for human good involves not only research with tangible benefits for communities and the environment, but also education programmes that highlight the many ways our lives are connected with the ocean. BIOS views education as a crucial part of global ocean science research, helping to translate the work of its faculty into meaningful experiences for students to better understand the importance of oceanography in the study of fish stock management, climate change and risk prediction, pollution and human health.

The mission of the UK Associates of BIOS is for the advancement of experiential education through scholarship and grant funding for both undergraduate and post-graduate UK university scientists, to enable them to study and carry out research at the Bermuda Institute of Ocean Sciences in an international student and faculty community. Without scholarships of this nature they would not have access to summer courses or longer internships, which provide hands-on educational opportunities to study Bermuda's unique marine ecosystems and geology, as they explore coastal and open ocean environments. Under the supervision of, and in collaboration with, BIOS scientists they gain field methods and unparalleled insight into the logistics required to plan and execute research activities. This experience affords a unique opportunity not readily available to UK students, and is often one that could support their career decisions as future scientists and educators.

The latest chapter in the history of BIOS has been the partnering in 2021 with the Julie Ann Wrigley Global Futures Lab at Arizona State University (ASU); and the recent launch of the ASU Global Futures Lab's 4th School of Ocean Futures of which BIOS is now its major component. The goal of the union is to marry programmes and scientific study within both organisations, strengthen them with experts in various fields who can learn from each other and share research ideas and results.

BIOS and ASU will now be able to look more holistically at the health of the ocean and atmosphere. UK Associates of BIOS will have a more valuable role to contribute to an international student body working on global collaborative research projects as the planet faces adapting to a warming planet.

Achievements and Performance

With the generosity of our donors, £32,475 (2023- £34,875) of funding was provided for BIOS internships and summer courses.

Many BIOS alumni have found the experience invaluable to support career decisions in marine science. Some return to BIOS at a more senior level to further their skills in collaborating, communicating and analysing scientific problems; making them strong candidates for future academic endeavours.

TRUSTEES' ANNUAL REPORT continued

Long-term success will be measured by leveraging shared knowledge gained by a better understanding of our oceans and the impact of climate change and how that relates to the health of our oceans, fisheries, marine environment, risk prediction and ultimately human health. This demands the survival of oceanographic research and educational institutes to equip new generations of scientists with life-skills and technology to achieve academically as future scientists at the cutting-edge of discovery.

Financial Review

The main source of funding continues to be from donations received.

Receipts from donations and associated gift-aid were £31,975 (2023 - £36,162). Payments were £32,560 (2023 - £35,027), of which £32,475 (2023 - £34,875) was spent towards our charitable causes. This represents 99.7% (2023 – 99.6%) of total payments, the balance in 2024 being incurred on bank charges. The deficit for the year was £570 (2023 – surplus of £1,157).

The Trustees' policy is to maintain cash reserves above £1,000 in order to meet commitments and cover any unexpected expenditure. Cash at bank and in hand at the end of the year was £1,669 (2023 - £2,239), which is within the target range.

The Trustees are responsible for safeguarding the assets of the Charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

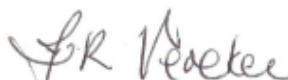
Plans for Future periods

The Trustees intend to continue and develop the education programme for the benefit of UK university students.

Approved by the Trustees on 22 January 2025 and signed on their behalf by:



.....
Christopher Day
Chairman



.....
Lady Vereker
Vice Chair

**INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF THE UNITED
KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES FOR
THE YEAR ENDED 31 DECEMBER 2024**

I report to the Trustees on my examination of the accounts of the United Kingdom Associates of the Bermuda Institute of Ocean Sciences ('The Trust') for the year ended 31 December 2024, which are set out on pages 10 to 11.

Responsibilities and basis of report

As the Charity Trustees of The Trust you are responsible for the preparation of the accounts in accordance with the requirements of the Charities Act 2011 ('the Act').

I report in respect of my examination of The Trust's accounts carried out under section 145 of the 2011 Act and in carrying out my examination I have followed all the applicable Directions given by the Charity Commission under section 145(5)(b) of the Act.

Independent Examiner's Statement

I have completed my examination. I confirm that no material matters have come to my attention in connection with the examination giving me cause to believe that in any material respect:

1. accounting records were not kept in respect of The Trust as required by section 130 of the Act; or
2. the accounts do not accord with those records.

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

**Richard Beckett FCA
6 Foundry House
Walton Well Road
Oxford
OX2 6AQ**



22 January 2025

**STATEMENT OF RECEIPTS AND PAYMENTS
FOR THE YEAR ENDED 31 DECEMBER 2024**

	Notes	2024		2023	
		£	£	£	£
Receipts	1				
Voluntary receipts					
<i>Donations and Gift Aid</i>	3	31,975		36,162	
<i>Legacies</i>		-		-	
			31,975		36,162
Unrestricted bank interest			15		22
			31,990		36,184
Payments	1				
Charitable activities	3	(32,475)		(34,875)	
Fundraising costs		-		(67)	
Governance costs		-		-	
Bank charges		(85)		(85)	
			(32,560)		(35,027)
Net (payment)/receipt			(570)		1,157

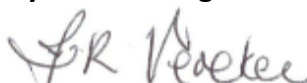
**STATEMENT OF ASSETS & LIABILITIES AND BALANCES
AS AT 31 DECEMBER 2024**

	Unrestricted funds		Unrestricted funds	
	2024		2023	
	£	£	£	£
Bank and cash balances				
Bank deposit account	-		-	
Bank current account	1,669		2,239	
	1,669		2,239	
Funds reconciliation		£		£
Cash at bank and in hand – Dec 2023		2,239		1,082
Net (payment)/receipt for the year		(570)		1,157
Cash at bank and in hand – Dec 2024		1,669		2,239

Approved by the Trustees on 22 January 2025 and signed on their behalf by:



.....
Christopher Day - Chairman



.....
Lady Vereker – Vice Chair



.....
Ian Arnold – Treasurer

NOTES TO THE ACCOUNTS

1. Basis of Accounting

These accounts have been prepared on the Receipts & Payments basis in accordance with Section 133 of the Charities Act 2011.

2. Nature and purpose of funds

Unrestricted funds are those that may be used at the discretion of the Trustees in furtherance of the objects of the Charity. The Trustees maintain a single unrestricted fund for the day-to-day running of the Charity.

Restricted funds are those funds that the Trustees are obliged to spend only on particular purposes set out by the donor or in an appeal document and these particular purposes are narrower than the Charity's objectives.

Endowment funds are funds that the Charity is prohibited by the governing document from spending as income. Normally these will be investments but may also be property held as endowment for use by the Charity. The investment receipts must be spent for the purposes indicated by the governing document.

Designated funds are part of unrestricted funds, which the Trustees have set aside or earmarked to be used for a particular purpose. They are not legally distinct funds and Trustees can at any time re-designate them for other purposes.

There were no restricted, endowment or designated funds at the beginning or the end of the year.

3. Donations and Charitable activities

	2024	2023
Donations and gift aid	£	£
Unrestricted funds - General	3,375	2,562
- Designated	10,000	14,500
- Total	13,375	17,062
Restricted funds	18,600	19,100
	31,975	36,162
Charitable activity	£	£
Unrestricted funds - General	3,875	1,275
- Designated	10,000	14,500
- Total	13,875	15,775
Restricted funds	18,600	19,100
	32,475	34,875

THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES

England & Wales - Charity number 290729

Accounts



UK ASSOCIATES OF BIOS

Extending Frontiers for Early Career
Marine Scientists in the UK

THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES

Charity Registered with the Charities Commission
Reg No 290729

**ANNUAL REPORT AND ACCOUNTS
FOR THE YEAR ENDED 31 DECEMBER 2023**

**Supporting Students from UK Universities
To Extend their Studies at**

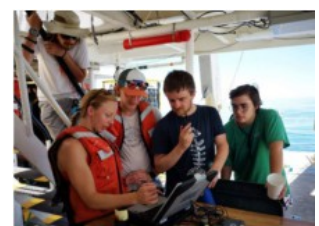


CHAIR'S STATEMENT

I am delighted to report that 2023 was another outstanding year for The UK Associates of the Bermuda Institute of Ocean Sciences. The generosity of our donors and sponsors in 2023, notably The Fishmongers' Company Fisheries Charitable Trust, Convex Insurance, Julian & Fiona Cusack and Maggie Mills and our Trustees Board, enabled us to support 10 early career scientists from UK universities to participate in specialist summer courses, and intensive research internships at The Bermuda Institute of Ocean Sciences, now affiliated with Arizona State University's Global Futures Lab.

ASU BIOS is committed to sharing fundamental knowledge of the oceans through state-of-the-art scientific research and education, and its internships and summer courses provide our sponsored students with unrivalled insights into the longest-running oceanographic and atmospheric observations concerning climate change biodiversity and pollution necessary to understand how to keep our planet healthy.

The advanced ocean science research technology available at ASU BIOS provides opportunities for students to investigate scientific questions across a host of fields, while simultaneously working with the rigour of traditional research methods which have underpinned the advancement of scientific understanding for decades. This combination of exposure to both long-established techniques and cutting-edge technology is incredibly valuable to students as they learn first-hand how to conduct quality scientific research. ASU BIOS also benefits from the high calibre of our sponsored students, several of whom have gone on to publish peer reviewed research papers.



2023 Scholarly Cohort

Thanks to the generous support provided by the UK Associates of BIOS sponsors and donors in 2023, it was possible for ASU BIOS scientists to work side-by-side 10 UK undergraduates and graduates as they extended their scientific education and expanded their scientific networks. Our students included two post graduate research interns supported by grants from Convex Insurance in 2022 and 2023, both joining ASU BIOS Research Specialist Rachel Parsons in her Microbial Lab, to work on projects examining marine virus and bacteria activity. In addition, our impactful support extended to eight students on three different novel summer courses studying coral reef and tropical marine ecology and research diving methods.



Coral Reef Ecology: Functional Ecology of Coral Reefs (CRE) Summer Course 17 July – 4 August 2023

Coral reefs and how they are acclimating to changes in their environment provide major indicators of climate change. In July three students supported by the UK Associates of BIOS joined 15 international students to study advanced research techniques. They learned about reef ecology, scientific measurement and interpretation of reef processes and environmental parameters. Students explored the environmental impacts on reef benthic communities and learned about the fundamental processes of reef metabolism. Through extensive laboratory and field work, participants gained hands-on experience with state-of-the-art instrumentation and techniques for collecting and analysing reef community and environmental data.



Partial funding was provided by the UK Associates of BIOS for three students from three UK universities to join a diverse international student group on the 2023 CRE course, which both advanced their knowledge of reef ecosystems and bolstered academic credentials.

- A recent geography graduate from The University of Birmingham,
- A marine science undergraduate from the University of the Highlands and Islands, and
- A master's student studying marine biology with oceanography from the University of Southampton.

Testimonials from our students continue to stress the importance of field experience, working closely with senior scientists, gaining confidence in their research and presentational skills and solidifying their career paths:

- *"I am now more committed to working in the marine science field and am hoping to build a long-term career as an oceanographer."*
- *"I really enjoyed the whole experience to learn about coral reef ecosystems, gain hands-on-experience of research techniques and to understand how these methods can help in current research."*
- *"I was able to put the theory I learned during lectures into practice. I feel more confident now in my data analysis and presentation skills. This course has exceeded my expectations."*

Research Diving Methods (RDM) Summer Course 26 June- 14 July 2023

The ability to SCUBA dive is a valuable tool for marine scientists as they seek to answer questions about the underwater environment. Given the usefulness and increasingly common employment of SCUBA as a research tool for marine science, students possessing underwater research training will enjoy a competitive advantage as they progress in their career. For three weeks starting at the end of June, ASU BIOS welcomed 16 students, including three supported by the UK Associates of BIOS, one with a full scholarship.



A series of introductory science lectures provided another cross-section of students from a range of research fields and geographical areas within the UK with an understanding of why, and how, researchers study marine communities using SCUBA. These lectures were integrated with field work which allowed students to practice hands-on data acquisition using a range of methods and equipment. The RDM course familiarised participants with the fundamentals of scientific diving, both theoretical and practical, and allowed students to learn first-hand about essential research techniques such as navigation, search and recovery procedures, and rescue diving.



- An undergraduate in ocean exploration and surveying from the University of Plymouth,
- A recent Master's Biology graduate from the University of Oxford, and
- An undergraduate student of marine science at the University of Exeter

Notable comments from our RDM students:

- *"My long-term career plan is to become a sonic navigator working with remotely operated vehicles to study and survey the ocean, and therefore I would like to learn scientific dive research methods to achieve this goal."*
- *"I loved the feeling of diving with a purpose rather than recreationally, and enjoyed collecting data underwater that will be used by scientists at BIOS. My diving has progressed immensely, and I was able to gain valuable insight into career paths in marine biology as well as broaden my knowledge about coral reef ecology."*
- *"Without question, my personal confidence as a scientific diver has increased, both in and out of the water. My experience at BIOS has certainly confirmed my professional intention to work within the tropical marine environment...it has made me a better marine scientist."*

Tropical Marine Ecology (TME) Summer Course 26 June – 14 July

The Bermuda platform acts as a natural laboratory and offers scientists easy access to a number of marine habitats. This makes it an ideal location for students to learn about the ecology, physiology, and behaviour of a wide variety of marine organisms found in tropical habitats.



At the end of June two UK undergraduates through our scholarship programme joined the TME course along with 10 international students to participate in a three-week experiential course focused on ecology in tropical marine habitats.



- An undergraduate studying marine biology and zoology at Bangor University received a partial scholarship support, and
- An undergraduate studying marine biology at the University of Southampton was a recipient of a full UK Associates of BIOS scholarship.

The TME course delivered an introduction to the tropical marine environment and life in the open ocean, and focused on the diverse coral reef, seagrass and mangrove habitats, as well as

marine ponds and tropical rocky shores. Participants were offered the opportunity to examine the biology and ecology of the dominant inhabitants found in each habitat, as well as their interactions, trophic levels and energy transfer within and between the varying habitats.

Our students commented:

- *"The course was both challenging and enjoyable, making me even more passionate about marine life. I have made lots of connections and life-long friends which has opened up multiple opportunities for me in the future. I hope to stay in contact with many of the people I have met on the trip, and I would love to return to BIOS in the future. We learned multiple surveying techniques such as using quadrates and transect lines, which were challenging but very rewarding. I have gained more boat experience and feel more confident collecting data both in and out of the water."*
- *"It was a privilege to be embraced by the real-world scientific community at BIOS. The small and focused class size really enhanced the overall experience and my personal understanding of the content. The staff were excellent and made me feel respected, valued and safe. I feel I took away more applicable knowledge in these three weeks than previous university modules that lasted a whole semester. I believe the community, ecosystem and opportunities available at BIOS are entirely unique and I hope to be able to contribute to it myself someday soon."*



Research Internships 2023: February-April, September - December

Generous funding from Convex Insurance from 2022 and 2023 allowed us to support two research interns in 2023 with full scholarship awards, giving them the opportunity to work alongside ASU BIOS world-class scientists for three months and present their work.

ASU BIOS experiential internships support the active participation of students in wide-ranging research, providing interns with the opportunity to dive into a contemporary problem and see first-hand how research is conducted. Since marine science is a truly interdisciplinary and international field, interns often could interact with a wide range of scientists who visit our campus from all over the world.

For 12 weeks between February and April we supported with Convex funding, an Oxford University Earth Sciences master's graduate, to take part in a project investigating the processes of nitrogen loss at Devil's Hole in Bermuda. Our student noted:

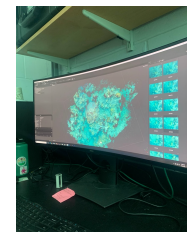
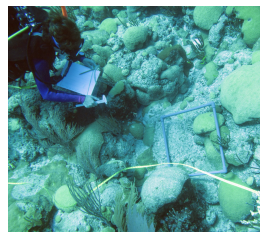
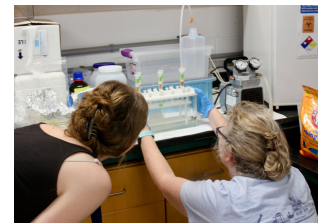
- *"I cannot believe how many different lab techniques I have learned over the past couple of months and am proud to be able to design and run experiments on my own. I have really enjoyed learning microbiology theory alongside the research methods and hope to be able to apply my new knowledge of marine microbiology to my future work/studies."*
- *"I chose BIOS because it gave the impression of being a close-knit, welcoming community of staff and scientists conducting high-end research and it did not disappoint. I would absolutely recommend a BIOS internship, it is amazing to me how much I've learned and developed in*

just 12 weeks, and I believe that, regardless of background and interest, any student could gain a lot from BIOS.”

Based on these acquired abilities to investigate, design and run projects and experiments our student was offered and accepted a prestigious position in an international engineering consultancy focusing on sustainability and carbon distribution.

Our second intern, a master’s student in medical microbiology at the London School of Hygiene and Tropical Medicine, spent 12 weeks between September and December undertaking a microbial research internship. Our student gained an extensive range of skills in marine orientated biology/microbiology and noted:

- *“I am hoping to diversify my skill set and ensure that my knowledge is comprehensive and encompasses new techniques and a greater understanding of marine microbes, working with new lab protocols and equipment to further my scientific career. It will provide me with lifelong connections and skills that will benefit me for future projects. This opportunity will be life-changing and will nurture my career in a direction that I could not have imagined.”*



On behalf of our Board of Trustees I want to thank our donors for entrusting us with their funds to support our scholarship programme, especially Convex Insurance who joined us in 2022 and The Fishmongers’ Company Fisheries Charitable Trust for their continued long-term support. I hope we have demonstrated to them and to our many previous corporate funders including AXA XL, AXIS Capital and WTW that our combined efforts make a tangible impact on the development of environmental champions, many of whom will play critical roles in our understanding of key climate issues in years to come.

My sincere thanks to all Trustees, Advisors and Honorary Officers for their support and hard work in our efforts in 2023 and a special thank you to Viscountess Diana Dunrossil who retired from our Board in 2023. We are indebted to Diana for her 33 years of service and delighted that she has agreed to continue to give us the benefit of her advice as Trustee Emeritus.

Diana has strong connections with Bermuda and was resident there from 1983 to 1988 when her late husband, John Morrison, 2nd Viscount Dunrossil was Governor. She joined our board in 1990 at the invitation of our founding trustee and leading environmentalist Max Bruce and her extensive experience in marine environmental matters and longstanding trusteeship with the UK Associates of BIOS provided us with an invaluable link to our alumni. We look forward to continuing to draw upon her extensive experience and wise counsel.



Christopher Day

31 January 2024

Chair of the Board of Trustees

UK Associates of the Bermuda Institute of Ocean Sciences



TRUSTEES' ANNUAL REPORT

The Trustees have pleasure in presenting their report together with the accounts and the independent examiner's report for the year ended 31 December 2023.

Reference and administrative information

Charity Name The United Kingdom Associates of the Bermuda Institute of Ocean Sciences ("UK Associates of BIOS")

Charity Number 290729

Address Fishmongers' Hall, London Bridge, London EC4R 9EL

Trustees Christopher Day - Chair
Lady Vereker – Vice Chair **
Christopher Cunliffe
Diana Viscountess Dunrossil (retired 26 June 2023)
Suzanne Ferlic Johnson
Professor Richard Lampitt
Nick Pewter

*** Lady Vereker also sits on the Advisory Board of the Bermuda Institute of Ocean Sciences (BIOS)*

Hon Secretary Lorraine Andrews

Hon Treasurer Ian Arnold

Structure, Governance and Management

Constitution

The Charity is an unincorporated association. It is governed by a Trust, which was established by deed on 27 November 1984 and last amended on 28 September 2015. The Association was granted charitable status by the Charity Commission on 11 January 1985.

Trustees

The Trustees, the majority of whom must be UK resident, normally meet once a quarter and they form the management committee. The Board of Trustees appoints new trustees and decisions can be made by a majority vote with a minimum of three trustees present. There is no requirement for Trustees to be reappointed on a rotational or any other basis. The Trustees are aware of the Charity Commission's public benefit guidance and take this into account when making decisions to which the guidance is relevant.

TRUSTEES' ANNUAL REPORT continued

Management

The Trustees are responsible for the strategic direction and governance of the Charity, whilst some day-to-day running is delegated to the Hon Secretary and Hon Treasurer. There are no staff and volunteers do all work. The Hon Secretary and Hon Treasurer attend the Trustee meetings to discuss progress and development. The Charity's Trustees consider that an audit is not required for this year under section 144 of the Charities Act 2011 (the "2011 Act") and that an independent examination is needed.

Advisors

The Trustees are further supported and assisted by the Advisors who provide insightful and multi-disciplinary guidance and expertise on all aspects of the Charity's operations and activities. During the year the following persons served in these roles:

Advisors: Professor Michael Depledge CBE
 Professor Christopher Carbone
 Christopher Leftwich

Trustee Emeritus: Diana Viscountess Dunrossil (from 26 June 2023)

These persons are invited to attend the Trustees Meetings but are not entitled to, and do not, vote at these meetings.

Objectives and Activities

Charitable purposes

The UK Associates of BIOS provides a valuable donation to the Bermuda Institute of Ocean Sciences ("BIOS") education programme for partial and full scholarships to UK university students to participate in courses and internships in Bermuda. BIOS, now partnered with Arizona State University's Julie Ann Wrigley Global Futures Lab ("ASU"), has an international reputation extending over one century for research and education in marine and atmospheric science. Full details can be found on <https://bios.asu.edu/education/uk-associates-of-bios/>

Activities

Bermuda is located in the middle of the North Atlantic Gyre and on the most northerly Atlantic coral reef system. This makes it an ideal location for studying the Open Ocean and sub-tropical near shore environments. BIOS is home to Hydrostation S, established in 1954, the longest running year-round data collection programme for any single location in the open ocean, and the Bermuda Atlantic Time-series Study (BATS). These studies are improving mankind's understanding of global ocean circulation, ocean chemistry and biology, and how the oceans and atmosphere interact and respond to a changing climate.

The Mid-Atlantic Glider Initiative and Collaboration (MAGIC) was launched at BIOS in 2014 to enhance and leverage BIOS's long-standing ocean measurement programmes southeast of Bermuda through the use of autonomous underwater vehicles. The overarching goal of MAGIC is to acquire new high-resolution measurements from underwater gliders to assess the contribution of small-scale processes that sustain the ocean's biological productivity, and

TRUSTEES' ANNUAL REPORT continued

to make those assessments over several years to build a statistically meaningful understanding of them.

BIOS expertise also lies in marine microbiology, risk prediction, coral reef ecology and resilience, and fish ecology. Recent highlights of research activities include the use of Baited Remote Underwater Video Stations (BRUVS) and eDNA coding to further our understanding of native reef fish and invasive Lionfish populations.

BIOS believes that ocean science for human good involves not only research with tangible benefits for communities and the environment, but also education programmes that highlight the many ways our lives are connected with the ocean. BIOS views education as a crucial part of global ocean science research, helping to translate the work of its faculty into meaningful experiences for students to better understand the importance of oceanography in the study of fish stock management, climate change and risk prediction, pollution and human health.

The mission of the UK Associates of BIOS is for the advancement of experiential education through scholarship and grant funding for both undergraduate and post-graduate UK university scientists, to enable them to study and carry out research at the Bermuda Institute of Ocean Sciences in an international student and faculty community. Without scholarships of this nature they would not have access to summer courses or longer internships, which provide hands-on educational opportunities to study Bermuda's unique marine ecosystems and geology, as they explore coastal and open ocean environments. Under the supervision of, and in collaboration with, BIOS scientists they gain field methods and unparalleled insight into the logistics required to plan and execute research activities. This experience affords a unique opportunity not readily available to UK students, and is often one that could support their career decisions as future scientists and educators.

The latest chapter in the history of BIOS has been the partnering in 2021 with the Julie Ann Wrigley Global Futures Lab at Arizona State University (ASU); and the recent launch of the ASU Global Futures Lab's 4th School of Ocean Futures of which BIOS is now its major component. The goal of the union is to marry programmes and scientific study within both organisations, strengthen them with experts in various fields who can learn from each other and share research ideas and results.

BIOS and ASU will now be able to look more holistically at the health of the ocean and atmosphere. UK Associates of BIOS will have a more valuable role to contribute to an international student body working on global collaborative research projects as the planet faces adapting to a warming planet.

Achievements and Performance

With the generosity of our donors, £34,875 (2022- £70,050) of funding was provided for BIOS internships and summer courses.

Many BIOS alumni have found the experience invaluable to support career decisions in marine science. Some return to BIOS at a more senior level to further their skills in collaborating, communicating and analysing scientific problems; making them strong candidates for future academic endeavours.

TRUSTEES' ANNUAL REPORT continued

Long-term success will be measured by leveraging shared knowledge gained by a better understanding of our oceans and the impact of climate change and how that relates to the health of our oceans, fisheries, marine environment, risk prediction and ultimately human health. This demands the survival of oceanographic research and educational institutes to equip new generations of scientists with life-skills and technology to achieve academically as future scientists at the cutting-edge of discovery.

Financial Review

The main source of funding continues to be from donations received.

Receipts from donations and associated gift-aid were £36,162 (2022 - £70,263). Payments were £35,027 (2022 - £70,381), of which £34,875 (2022 - £70,050) was spent towards our charitable causes. This represents 99.6% (2022 – 99.5%) of total payments, the balance in 2023 being incurred on bank charges and fundraising costs. The surplus for the year was £1,157 (2022 – deficit of £91).

The Trustees' policy is to maintain cash reserves above £1,000 in order to meet commitments and cover any unexpected expenditure. Cash at bank and in hand at the end of the year was £2,239 (2022 - £1,082), which is within the target range.

The Trustees are responsible for safeguarding the assets of the Charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

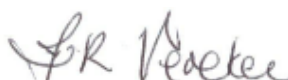
Plans for Future periods

The Trustees intend to continue and develop the education programme for the benefit of UK university students.

Approved by the Trustees on 31 January 2024 and signed on their behalf by:



.....
Christopher Day
Chair



.....
Lady Vereker
Vice Chair



.....
Lorraine Andrews
Hon Secretary

INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES FOR THE YEAR ENDED 31 DECEMBER 2023

I report to the Trustees on my examination of the accounts of the United Kingdom Associates of the Bermuda Institute of Ocean Sciences ('The Trust') for the year ended 31 December 2023, which are set out on pages 12 to 13.

Responsibilities and basis of report

As the Charity Trustees of The Trust you are responsible for the preparation of the accounts in accordance with the requirements of the Charities Act 2011 ('the Act').

I report in respect of my examination of The Trust's accounts carried out under section 145 of the 2011 Act and in carrying out my examination I have followed all the applicable Directions given by the Charity Commission under section 145(5)(b) of the Act.

Independent Examiner's Statement

I have completed my examination. I confirm that no material matters have come to my attention in connection with the examination giving me cause to believe that in any material respect:

1. accounting records were not kept in respect of The Trust as required by section 130 of the Act; or
2. the accounts do not accord with those records.

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

**Richard Beckett FCA
6 Foundry House
Walton Well Road
Oxford
OX2 6AQ**



31 January 2024

**STATEMENT OF RECEIPTS AND PAYMENTS
FOR THE YEAR ENDED 31 DECEMBER 2023**

	Notes	2023		2022	
		£	£	£	£
Receipts	1				
Voluntary receipts					
<i>Donations and Gift Aid</i>	3	36,162		70,263	
<i>Legacies</i>		-		-	
			36,162		70,263
Unrestricted bank interest			22		27
			36,184		70,290
Payments	1				
Charitable activities	3	(34,875)		(70,050)	
Fundraising costs		(67)		(200)	
Governance costs		-		-	
Bank charges		(85)		(131)	
			(35,027)		(70,381)
Net receipt/(payment)			1,157		(91)

**STATEMENT OF ASSETS & LIABILITIES AND BALANCES
AS AT 31 DECEMBER 2023**

	Unrestricted funds		Unrestricted funds	
	2023		2022	
	£	£	£	£
Bank and cash balances				
Bank deposit account	-		-	
Bank current account	2,239		1,082	
	2,239		1,082	

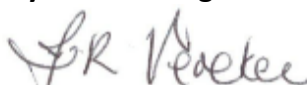
In addition £250 of gift aid is due from HMRC as at 31 December 2023 (December 2022 - £nil), relating to a December 2023 donation. There are no liabilities as at 31 December 2023 or 31 December 2022.

	£		£	
Funds reconciliation				
Cash at bank and in hand – Dec 2022	1,082		1,173	
Net receipt/(payment) for the year	1,157		(91)	
Cash at bank and in hand – Dec 2023	2,239		1,082	

Approved by the Trustees on 31 January 2024 and signed on their behalf by:



.....
Christopher Day - Chair



.....
Lady Vereker – Vice Chair



.....
Ian Arnold – Hon Treasurer

NOTES TO THE ACCOUNTS

1. Basis of Accounting

These accounts have been prepared on the Receipts & Payments basis in accordance with Section 133 of the Charities Act 2011.

2. Nature and purpose of funds

Unrestricted funds are those that may be used at the discretion of the Trustees in furtherance of the objects of the Charity. The Trustees maintain a single unrestricted fund for the day-to-day running of the Charity.

Restricted funds are those funds that the Trustees are obliged to spend only on particular purposes set out by the donor or in an appeal document and these particular purposes are narrower than the Charity's objectives.

Endowment funds are funds that the Charity is prohibited by the governing document from spending as income. Normally these will be investments but may also be property held as endowment for use by the Charity. The investment receipts must be spent for the purposes indicated by the governing document.

Designated funds are part of unrestricted funds, which the Trustees have set aside or earmarked to be used for a particular purpose. They are not legally distinct funds and Trustees can at any time re-designate them for other purposes.

There were no restricted, endowment or designated funds at the beginning or the end of the year.

3. Donations and Charitable activities

	2023	2022
Donations and gift aid	£	£
Unrestricted funds - General	2,562	1,563
- Designated	14,500	14,500
- Total	17,062	16,063
Restricted funds	19,100	54,200
	36,162	70,263
Charitable activity	£	£
Unrestricted funds - General	1,275	1,350
- Designated	14,500	14,500
- Total	15,775	15,850
Restricted funds	19,100	54,200
	34,875	70,050

THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES

England & Wales - Charity number 290729

Accounts



UK ASSOCIATES OF BIOS

Extending Frontiers for Early Career
Marine Scientists in the UK

**THE UNITED KINGDOM ASSOCIATES OF THE
BERMUDA INSTITUTE OF OCEAN SCIENCES**

Reg No 290729

**ANNUAL REPORT AND ACCOUNTS
FOR THE YEAR ENDED 31 DECEMBER 2022**

CHAIRMAN'S STATEMENT

I am delighted to report that 2022 was a record year for The UK Associates of the Bermuda Institute of Ocean Sciences with our funding of summer course and internship scholarships reaching some \$85,000 including \$7,000 carried over funds from 2021. This was achieved with the longstanding support of The Fishmongers' Company Fisheries Charitable Trust, AXA XL, Julian & Fiona Cusack and Maggie Mills in addition to new funding from leading insurance groups Convex Insurance and AXIS Capital, and WTW (formerly known as Willis Towers Watson) advisory, broking and solutions group.

The generosity of our donors and sponsors enabled us to support 11 ocean, atmospheric and earth science undergraduate and postgraduate students from 9 UK universities, each enjoying exceptional opportunities to enhance and extend their education and scientific skills at the Bermuda Institute of Ocean Sciences. Our additional funding this year enabled 9 students to participate in intensive courses over the summer, while 3 of our scholarship cohort were awarded funding for research and teaching internships of between 3 and 4 months. Inspirational reviews of their time at BIOS illustrate the value of these experiences to our students and the exceptional marine science knowledge and skills they gain at BIOS.

Bermuda Institute of Ocean Sciences summer courses and internships provide essential and unique opportunities for young environmental scientists to boost their skills across a spectrum of disciplines and practise techniques outside the scope of traditional university courses. The world class facilities at BIOS give students unrivalled hands-on access to advanced technology in the laboratory, underwater and on the open ocean and provide opportunities to network and foster lifelong connections with fellow scientists.

BIOS educational programmes are led by scientists who are leaders in their field and alongside them students learn how to approach scientific questions, work with cutting-edge methods, collect data, analyse results, and communicate findings to a broad audience, all within BIOS's modern facilities.

The advanced ocean science research technology available at BIOS provides opportunities for students to investigate scientific questions across a host of fields, while simultaneously working with the rigour of traditional research methods which have underpinned the advancement of scientific understanding for decades. This combination of exposure to both long-established techniques and cutting-edge technology is incredibly valuable to students as they learn first-hand how to conduct quality scientific research.

With grateful thanks to our Leading Corporate and Trust Donors



CHAIRMAN'S STATEMENT continued

Summer Courses 2022

In June, July and August 9 UK Associates of BIOS supported students, among a total of 53 from around the world, joined 3 summer courses: Research Diving Methods (June) and Coral Reef Ecology (two courses in July & August).

Coral Reef Ecology: Functional Ecology of Coral Reefs (CRE)

A vitally important question facing coral reef researchers today is how reef animals and plants are influenced by their environment. In July and August, BIOS welcomed a total of 36 students to campus to gain first-hand experience of this pressing research topic through the delivery of two separate CRE courses. Each course focused on how the environment influences the baseline of reef function and the fundamental processes of photosynthesis, respiration, and calcification.

Both three-week CRE courses provided participants with a solid understanding of coral reef ecology and reef functional processes. In addition, students gained hands-on experience with state-of-the-art instrumentation and learned techniques for collecting and analysing reef community and environmental data.

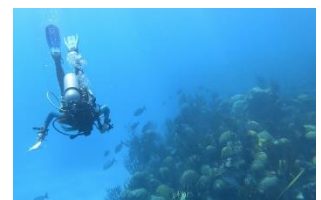
The two CRE courses brought together 36 students from Canada, France, Italy, Japan, Ireland, Spain, Brazil, Cuba, Denmark, Dominican Republic, the USA and included 7 UK Associates of BIOS supported students.

Each student learned about environmental parameters such as water chemistry, hydrodynamics, temperature, and light availability, an experience which provided them with a solid knowledge base of reef functional ecology. Further, the cohort utilised both traditional and advanced approaches to investigate the impact of global climate change on reef benthic communities.

Research Diving Methods (RDM)

SCUBA diving is a powerful research tool, but conducting research underwater presents a unique set of challenges to scientists. This summer BIOS offered an inaugural summer course designed to equip students with the skill set required to tackle the challenges of underwater research, while acquiring a scientific diving qualification recognised by the American Academy of Underwater Sciences.

The hands-on course welcomed 17 students from Bermuda, Canada, Denmark, Germany, Italy, Japan, the UK, and the US, to learn about the fundamentals of scientific diving, both theoretical and practical. The intensive 3 week offering held in mid-June provided students with an academic advantage as they learned first-hand how to acquire data using underwater research techniques. Lectures and field work were combined to provide understanding of why, and how, marine scientists work underwater utilising SCUBA diving.



CHAIRMAN'S STATEMENT continued

The UK Associates of BIOS provided scholarship support for 2 students to attend the novel RDM course, during which they practised data acquisition while underwater using a range of methods and equipment and learned how to collect reliable data from the underwater environment. They also utilised underwater video and photographic surveys to study coral communities, monitor coral bleaching and disease, undertake reef fish counts, and to survey marine communities such as seagrass. The course successfully expanded the skill set and qualifications of each student, while immersing them in marine science research.



Corporate Sponsored Research Internships

Generous funding from AXIS Capital, Convex Insurance and AXA XL allowed us to award 3 fully funded post graduate internship scholarships, 2 taking place in 2022 and 1 due to commence in February 2023.



BIOS internships give graduate students the opportunity to conduct research in a truly interdisciplinary and collaborative manner. Working alongside researchers and faculty members, interns delve into scientific questions that cover a broad range of topics including atmospheric sciences, marine biology and genomics, microbial ecology, natural hazard and risk prediction, and oceanographic sciences.



Our fully funded interns actively collaborated with peers and leading BIOS scientific staff in research projects lasting between 3 and 4 months on critical oceanic and atmospheric issues. They learnt how to process information systematically, collaborate with peers, and understand the societal impacts of universally pressing oceanic and atmospheric issues.



Our AXA XL supported intern worked on the chemical controls of ozone uptake to the ocean as a part of a PhD thesis project and will return to Bermuda soon to complete the study. A particular focus in this project is an investigation of air chemistry in the marine atmosphere by exploring



the impacts of halogens over the open ocean as part of BIOS's Bermuda boundary Layer Experiment on the Atmospheric Chemistry of Halogens (BLEACH) project.

Another of our postgraduate interns first attended the 2022 Research Diving Methods course and then went on to a 16-week teaching internship between August and December funded by AXIS Capital. This Teaching Assistant role operated with BIOS's prestigious Research Experiences for Undergraduates (REU) educational program which sees promising novice researchers from the US undertake hands-on research training at BIOS.



Our third intern, funded by Convex Insurance, is currently completing a Masters degree at Oxford University which may lead on to a PhD programme. The BIOS internship will run over 12 weeks between February and April 2023, researching the response of phytoplankton to oxygen limitation and other climate factors.



CHAIRMAN’S STATEMENT continued

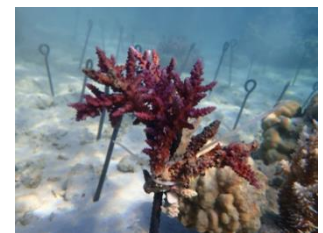
Our student has noted that “while my master’s research project has allowed me to look at phytoplankton communities over large spatial and temporal scales, I would really enjoy the opportunity to get to know phytoplankton on a more practical level. I have a keen interest to understand the ecology of these cells at both the organism and community level, along with how the environment shapes their growth and diversity. Having studied the Ocean from a physical, chemical, and biological perspective, I would be excited to apply my findings to the wider context.”



Adding “I aspire for a career which allows me to contribute towards a more sustainable future. As an aspiring oceanographer, I strongly believe that the Ocean could and will play a very important role in modulating the course of climate change. Despite their size, phytoplankton are so abundant and resilient that they will continue to play a key role in the exchange of carbon dioxide between the atmosphere and the ocean, making a better understanding of them vital for climate and ocean models.”



Over the past 38 years nearly 200 students have taken part in experiential learning opportunities at BIOS with scholarship support from the UK Associates of BIOS. Students have learned progressive techniques from scientists at the forefront of their field, investigated pressing research questions, and utilised novel methods to gather data for innovative studies. Many are now in senior roles in science and educational establishments around the world and we are delighted to have played a modest role in helping them along their scientific career paths.



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My sincere thanks to all Trustees, Advisors and Honorary Officers for their support and hard work in our efforts in 2022. I particularly want to thank the donors who joined us in 2022, AXIS Capital, Convex Insurance and WTW who entrusted us with their funds to support our scholarship programme for the first time in 2022. I hope we have demonstrated to them and our longstanding donors that our combined efforts make a tangible impact on the development of environmental champions, many of whom will play critical roles in our understanding of key climate issues in years to come.

Christopher Day

8th February 2023

Chairman of the Board of Trustees



TRUSTEES' ANNUAL REPORT

The Trustees have pleasure in presenting their report together with the accounts and the independent examiner's report for the year ended 31 December 2022.

Reference and administrative information

Charity Name	The United Kingdom Associates of the Bermuda Institute of Ocean Sciences ("UK Associates of BIOS")
Charity Number	290729
Address	Fishmongers' Hall, London Bridge, London EC4R 9EL
Trustees	Christopher Day - Chairman Lady Vereker – Vice Chair Christopher Cunliffe Diana Viscountess Dunrossil Suzanne Ferlic Johnson Professor Richard Lampitt Nick Pewter
Hon Secretary	Lorraine Andrews
Hon Treasurer	Ian Arnold

Structure, Governance and Management

Constitution

The Charity is an unincorporated association. It is governed by a Trust, which was established by deed on 27 November 1984 and last amended on 28 September 2015. The Association was granted charitable status by the Charity Commission on 11 January 1985.

Trustees

The Trustees, the majority of whom must be UK resident, normally meet once a quarter and they form the management committee. The Board of Trustees appoints new trustees and decisions can be made by a majority vote with a minimum of three trustees present. There is no requirement for Trustees to be reappointed on a rotational or any other basis. The Trustees are aware of the Charity Commission's public benefit guidance and take this into account when making decisions to which the guidance is relevant.

TRUSTEES' ANNUAL REPORT continued

Management

The Trustees are responsible for the strategic direction and governance of the Charity, whilst some day to day running is delegated to the Hon Secretary and Hon Treasurer. There are no staff and volunteers do all work. The Hon Secretary and Hon Treasurer attend the Trustee meetings to discuss progress and development. The Charity's Trustees consider that an audit is not required for this year under section 144 of the Charities Act 2011 (the "2011 Act") and that an independent examination is needed.

Advisors

The Trustees are further supported and assisted by the Advisors who provide insightful and multi-disciplinary guidance and expertise on all aspects of the Charity's operations and activities. During the year the following persons served in these roles:

Advisors: Professor Michael Depledge CBE
 Dr Christopher Carbone
 Christopher Leftwich

These persons are invited to attend the Trustees Meetings but are not entitled to, and do not vote at these meetings.

Objectives and Activities

Charitable purposes

The UK Associates of BIOS provides a valuable donation to the Bermuda Institute of Ocean Sciences ("BIOS") education program for partial and full scholarships to UK university students to participate in courses and internships in Bermuda. BIOS has an international reputation for research and education in marine and atmospheric science. Full details can be found on www.bios.edu/education/uk-associates-of-bios/.

Activities

Bermuda is located in the middle of the North Atlantic Gyre and on the most northerly Atlantic coral reef system. This makes it an ideal location for studying the Open Ocean and sub-tropical near shore environments. BIOS is home to Hydrostation S, established in 1954, the longest running year-round data collection program for any single location in the open ocean, and the Bermuda Atlantic Time-series Study (BATS). These studies are improving mankind's understanding of global ocean circulation, ocean chemistry and biology, and how the oceans and atmosphere interact and respond to a changing climate.

The Mid-Atlantic Glider Initiative and Collaboration (MAGIC) was launched at BIOS in 2014 to enhance and leverage BIOS's long-standing ocean measurement programs southeast of Bermuda through the use of autonomous underwater vehicles. The overarching goal of MAGIC is to acquire new high-resolution measurements from underwater gliders to assess the contribution of small-scale processes that sustain the ocean's biological productivity, and to make those assessments over several years to build a statistically meaningful understanding of them.

TRUSTEES' ANNUAL REPORT continued

BIOS expertise also lies in marine microbiology, risk prediction, coral reef ecology and resilience, and fish ecology. Recent highlights of research activities include the use of Baited Remote Underwater Video Stations (BRUVS) and eDNA coding to further our understanding of native reef fish and invasive Lionfish populations.

BIOS believes that ocean science for human good involves not only research with tangible benefits for communities and the environment, but also education programs that highlight the many ways our lives are connected with the ocean. BIOS views education as a crucial part of global ocean science research, helping to translate the work of its faculty into meaningful experiences for students to better understand the importance of oceanography in the study of fish stock management, climate change and risk prediction, pollution and human health.

The mission of the UK Associates of BIOS is for the advancement of experiential education through scholarship and grant funding for both undergraduate and post-graduate UK university scientists, to enable them to study and carry out research at the Bermuda Institute of Ocean Sciences in an international student and faculty community. Without scholarships of this nature they would not have access to summer courses or longer internships, which provide hands-on educational opportunities to study Bermuda's unique marine ecosystems and geology, as they explore coastal and open ocean environments. Under the supervision of, and in collaboration with BIOS scientists, they gain field methods and unparalleled insight into the logistics required to plan and execute research activities. This experience affords a unique opportunity not readily available to UK students, and is often one that could support their career decisions as future scientists and educators.

The latest chapter in the history of BIOS has been the official merger of Arizona State University (ASU) and BIOS; and the recent launch of the ASU Global Futures Lab's 4th School of Ocean Futures of which BIOS is its major component. BIOS will now be able to look more holistically at the health of the oceans and atmosphere. And with a larger Faculty offering more opportunities for undergraduates and graduates, this should make our role even more valuable to the international student body working on collaborative research projects with experts in their fields of marine and atmospheric sciences.

Achievements and Performance

With the generosity of our donors, £70,050 (2021- £32,225) of funding was provided for BIOS internships and summer courses.

Many BIOS alumni have found the experience invaluable to support career decisions in marine science. Some return to BIOS at a more senior level to further their skills in collaborating, communicating and analysing scientific problems; making them strong candidates for future academic endeavours.

Long-term success will be measured by leveraging shared knowledge gained by a better understanding of our oceans and the impact of climate change and how that relates to the health of our oceans, fisheries, marine environment, risk prediction and ultimately human health. This demands the survival of oceanographic research and educational institutes to equip new generations of scientists with life-skills and technology to achieve academically as future scientists at the cutting-edge of discovery.

TRUSTEES' ANNUAL REPORT continued

Financial Review

The main source of funding continues to be from donations received.

Receipts from donations and associated gift-aid were £70,263 (2021 - £30,753), more than double the previous year. Payments were £70,381 (2021 - £32,346), of which £70,050 (2021 - £32,225) was spent towards our charitable causes. This represents 99.5% (2021 – 99.6%) of total payments, the balance in 2022 being incurred on bank charges and fundraising costs. The deficit for the year was £91 (2021 – deficit of £1,593).

The Trustees' policy is to maintain cash reserves above £1,000 in order to meet commitments and cover any unexpected expenditure. Cash at bank and in hand at the end of the year was £1,082 (2021 - £1,173), which is within the target range.

The Trustees are responsible for safeguarding the assets of the Charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

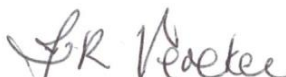
Plans for Future periods

The Trustees intend to continue and develop the education program for the benefit of UK university students.

Approved by the Trustees on 8th February 2023 and signed on their behalf by:



.....
Christopher Day
Chairman



.....
Lady Vereker
Vice Chair



.....
Lorraine Andrews
Hon Secretary

**INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF THE UNITED
KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES FOR
THE YEAR ENDED 31 DECEMBER 2022**

I report to the Trustees on my examination of the accounts of the United Kingdom Associates of the Bermuda Institute of Ocean Sciences ('The Trust') for the year ended 31 December 2022, which are set out on pages 10 to 11.

Responsibilities and basis of report

As the Charity Trustees of The Trust you are responsible for the preparation of the accounts in accordance with the requirements of the Charities Act 2011 ('the Act').

I report in respect of my examination of The Trust's accounts carried out under section 145 of the 2011 Act and in carrying out my examination I have followed all the applicable Directions given by the Charity Commission under section 145(5)(b) of the Act.

Independent Examiner's Statement

I have completed my examination. I confirm that no material matters have come to my attention in connection with the examination giving me cause to believe that in any material respect:

1. accounting records were not kept in respect of The Trust as required by section 130 of the Act; or
2. the accounts do not accord with those records.

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

**Richard Beckett FCA
6 Foundry House
Walton Well Road
Oxford
OX2 6AQ**

Richard A. Beckett

8th February 2023

**STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED
31 DECEMBER 2022**

	Notes	2022		2021	
		£	£	£	£
Receipts	1				
Voluntary receipts					
<i>Donations and Gift Aid</i>	3	70,263		30,753	
<i>Legacies</i>		-		-	
			70,263		30,753
Unrestricted bank interest			27		-
			70,290		30,753
Payments	1				
Charitable activities	3	(70,050)		(32,225)	
Fundraising costs		(200)		-	
Governance costs		-		-	
Bank charges		(131)		(121)	
			(70,381)		(32,346)
Net (payment)/receipt			(91)		(1,593)

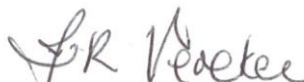
**STATEMENT OF ASSETS & LIABILITIES AND BALANCES AS AT 31 DECEMBER
2022**

	Unrestricted funds		Unrestricted funds	
	2022		2021	
	£	£	£	£
<u>Bank and cash balances</u>				
Bank deposit account	-		500	
Bank current account	1,082		673	
	1,082		1,173	
There are no liabilities as at 31 December 2022 or 31 December 2021				
<u>Funds reconciliation</u>		£		£
Cash at bank and in hand – Dec 2021		1,173		2,766
Net receipt/(payment) for the year		(91)		(1,593)
Cash at bank and in hand – Dec 2022		1,082		1,173

Approved by the Trustees on 8th February 2023 and signed on their behalf by:



.....
Christopher Day - Chair



.....
Lady Vereker – Vice Chair



.....
Ian Arnold – Hon Treasurer

NOTES TO THE ACCOUNTS

1. Basis of Accounting

These accounts have been prepared on the Receipts & Payments basis in accordance with Section 133 of the Charities Act 2011.

2. Nature and purpose of funds

Unrestricted funds are those that may be used at the discretion of the Trustees in furtherance of the objects of the Charity. The Trustees maintain a single unrestricted fund for the day-to-day running of the Charity.

Restricted funds are those funds that the Trustees are obliged to spend only on particular purposes set out by the donor or in an appeal document and these particular purposes are narrower than the Charity's objectives.

Endowment funds are funds that the Charity is prohibited by the governing document from spending as income. Normally these will be investments but may also be property held as endowment for use by the Charity. The investment receipts must be spent for the purposes indicated by the governing document.

Designated funds are part of unrestricted funds, which the Trustees have set aside or earmarked to be used for a particular purpose. They are not legally distinct funds and Trustees can at any time re-designate them for other purposes.

There were no restricted, endowment or designated funds at the beginning or the end of the year.

3. Donations and Charitable activities

	2022	2021
Donations and gift aid	£	£
Unrestricted funds - General	1,563	1,542
- Designated	14,500	14,711
- Total	16,063	16,253
Restricted funds	54,200	14,500
	70,263	30,753
Charitable activity	£	£
Unrestricted funds - General	1,350	3,014
- Designated	14,500	14,711
- Total	15,850	17,725
Restricted funds	54,200	14,500
	70,050	32,225

THE UNITED KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES

England & Wales - Charity number 290729

Accounts



UK ASSOCIATES OF BIOS

Extending Frontiers for Early Career
Marine Scientists in the UK

**THE UNITED KINGDOM ASSOCIATES OF THE
BERMUDA INSTITUTE OF OCEAN SCIENCES**

Reg No 290729

**ANNUAL REPORT AND ACCOUNTS
FOR THE YEAR ENDED 31 DECEMBER 2021**

CHAIRMAN'S STATEMENT

Despite the challenges that 2021 threw at our charity, we were delighted and proud to have given scholarship support to eleven outstanding UK University students, enabling them to extend their marine science studies at the Bermuda Institute of Ocean Sciences and continue to work towards careers in environmental science. It was also a year when two of our recent alumni had peer review papers published, both highly relevant to the better understanding of Climate Change. Furthermore, two recent alumni moved into professional roles in the environmental sector, one of whom is now a technical assistant at BIOS working on the oceanographic glider research program.

My fellow Trustees and I are convinced that all are testament to the value of our scholarship programmes, which make enormous differences to the careers of the undergraduate and graduate students we support. As COP26 showed, the need for new and enthusiastic, highly trained scientists has never been greater and we take great pleasure, with the generous support of our donors, in making this modest contribution to expanding our knowledge of the oceans and our marine environments.

On behalf of the Board of Trustees I wish to thank our donors for their continued support, notably AXA XL, The Fishmongers' Company Charitable Trust, Julian and Fiona Cusack, Maggie Mills and others. All their contributions allow us to open BIOS's world class training facilities to a broad cross-section of students, increasing both innovation and diversity in scientific study.

Operationally, the year was extremely challenging for our students and the staff at BIOS. Bermuda entry and vaccination requirements did not become clear until the late Spring of 2021, flights were very limited and extensive on-campus Covid safe procedures had to be developed. However, Dr Andrew Peters and his Universities Program colleagues rose to the challenges and our students managed to clear the travel hurdles. We are enormously grateful to all involved in successfully contributing to our 2021 BIOS Student Program.

Courses and internships

We were delighted to be able to support four internships this year, three fully funded and one partially funded, providing our students the opportunity to work side-by-side with leading marine scientists investigating contemporary scientific questions.

We are enormously grateful to The Fishmongers' Company Charitable Trust and AXA XL who fully funded two of our internships and which were awarded to two Masters Degree students from the University of Southampton. They both focused on the ecology of coral reef systems



CHAIRMAN'S STATEMENT continued

with the use of in-water and remote sensing techniques. Our third fully funded internship took the form of a novel 8-week distance-learning internship for a student from the University of the Highlands and Islands on differential gene expression in sea urchins. Completing our internship programme, we were delighted to contribute to a scholarship awarded to an outstanding Bermudian marine biology undergraduate from Bangor University who undertook a 12-week research internship to assess the fish biodiversity of Bermuda's deep seas. This was part of a project funded by the Bermuda and UK Government's strategic biodiversity conservation priorities and BIOS's Darwin Plus award from the UK Government, which offers training opportunities for nationals of UK overseas territories.

In addition to funding internships, we were also delighted to support seven leading students take part in BIOS's three-week 'Coral Reef Ecology: Reef Response to environmental Change (CRE)' Summer Courses. Coral reefs are critical to the health of the oceans and their sensitivity to environmental changes make them an ideal natural laboratory for researchers to further understand how a changing climate impacts the sustainability of ocean life. Our students from across the UK joined students from Belgium, Brazil, Chile, Germany, Italy and the US. Through lectures, laboratory exercises and complementary field components, our students learned about how the natural environment impacts reef benthic communities and the fundamental processes of photosynthesis and calcification.

Alumni news

We take considerable pride in keeping in touch with our alumni and following their careers. 2021 was a tough year for young scientists, as Covid severely curtailed access to laboratories and marine environment field study. As such we were delighted when PhD candidates Samantha Hallam, University of Southampton (2019) and Naomi Villiot, Herriot-Watt University (2020) published their first peer reviewed papers. We were also pleased to congratulate Graduate Maisie Smith, University of Exeter (2020) who took up her first professional role with Adler & Allan environmental consultants and Graduate Jonathan Chapman, University of Liverpool (2019) who joined the staff at BIOS in 2020 as technical assistant on the Mid-Atlantic Glider initiative Collaboration Programme. Bristol University's Jonathan Teague (2019) completed his hyperspectral coral reef researcher PhD programme in 2021, a subject on which he will continue to work, on a Post-Doctoral programme at Bristol, with potential to return to Bermuda in 2023.

Merger announcement – October 2021

The major organisational news for 2021 came in October with the announced partnership between The Bermuda Institute of Ocean Sciences and Arizona State University and its Global Futures Lab, within which BIOS will become the critical marine component focusing upon ocean health and sustainability. The merger is expected to significantly expand marine science research and education of both organisations, with activities in both Atlantic and Pacific Oceans.

This partnership offers a rare opportunity for the combined organisation to undertake expanded and holistic studies of our

Dr Bill Curry,
President and
CEO Bermuda
Institute of
Ocean
Sciences

Peter Schlosser,
ASU Vice President
& Vice Provost
Julie Ann Wrigley
Global Futures
Laboratory



CHAIRMAN’S STATEMENT continued

planet’s oceans and atmosphere. BIOS will extend its major time-series studies of the Atlantic, unique in global ocean observation in the Western Hemisphere, and ASU will advance its expertise in engineering and sensor research required for robotic exploration and investigation of deep ocean environments. BIOS and ASU will be working to ensure that the merger enriches both natural science and engineering faculties and encourages and expands the combined international student body.

The merger is very positive news for the UK Associates of BIOS and the students we support. We expect much wider opportunities for study, research and skill development and we are looking forward to exploring these new opportunities in 2022. The UK Associates of BIOS will continue to be an independent UK registered charity and we look forward to working with the much larger combined BIOS and ASU.

Sir Crispin Tickell GCMG, KCVO – Trustee Emeritus

The Trustees of the UK Associates of BIOS were enormously saddened to learn of the death of our Trustee Emeritus, Sir Crispin Tickell, who passed away on 25 January 2022. Sir Crispin was a career diplomat and prominent longstanding advocate for international governmental agreement on climate change and the environment.

He had an extraordinary life, spanning diplomatic roles around the world from the British Antarctic Territory to the United Nations, to which he added environmental advisory roles with Prime Ministers Margaret Thatcher, John Major and Tony Blair.

In 1977 his seminal work, Climatic Change and World Affairs, set out immensely influential scientific arguments and ideas that continue to be as relevant today as they were ground-breaking in 1977.



**Sir Crispin Tickell
GCMG, KCVO
25 August 1930 – 25 January 2022**

Sir Crispin served as UK Associates of BIOS Trustee and subsequently Trustee Emeritus for over 30 years and we are hugely honoured to have enjoyed his service and wise counsel. His environmental legacy will be very much continued through the marine science students supported by the UK Associates of BIOS.

After a rather daunting start to 2021 the final outcome for our students very much exceeded our expectations. Our eleven outstanding 2021 students are continuing their scientific careers, our alumni are expanding their professional standing and BIOS enters 2022 with an immensely strong partner that will help it maintain its position as a globally renowned centre of excellence in marine science research and teaching.

My thanks go out to my Board of Trustees and our Advisors who continued their support throughout 2021, our students who worked so hard on courses and projects and the staff at BIOS who found solutions to Covid challenges and made the 2021 teaching and research programme such a success.

**Christopher Day
Chairman of the Board of Trustees**


.....

26 January 2022

TRUSTEES' ANNUAL REPORT

The Trustees have pleasure in presenting their report together with the accounts and the independent examiner's report for the year ended 31 December 2021.

Reference and administrative information

Charity Name	The United Kingdom Associates of the Bermuda Institute of Ocean Sciences ("UK Associates of BIOS")
Charity Number	290729
Address	Fishmongers' Hall, London Bridge, London EC4R 9EL
Trustees	Christopher Day - Chairman Lady Vereker – Vice Chair Christopher Cunliffe Diana Viscountess Dunrossil Suzanne Ferlic Johnson Professor Richard Lampitt Nick Pewter
Hon Secretary	Lorraine Andrews
Hon Treasurer	Ian Arnold

Structure, Governance and Management

Constitution

The Charity is an unincorporated association. It is governed by a Trust, which was established by deed on 27 November 1984 and last amended on 28 September 2015. The Association was granted charitable status by the Charity Commission on 11 January 1985.

Trustees

The Trustees, the majority of whom must be UK resident, normally meet once a quarter and they form the management committee. The Board of Trustees appoints new trustees and decisions can be made by a majority vote with a minimum of three trustees present. There is no requirement for Trustees to be reappointed on a rotational or any other basis. The Trustees are aware of the Charity Commission's public benefit guidance and take this into account when making decisions to which the guidance is relevant.

TRUSTEES' ANNUAL REPORT continued

Management

The Trustees are responsible for the strategic direction and governance of the Charity, whilst some day to day running is delegated to the Hon Secretary and Hon Treasurer. There are no staff and volunteers do all work. The Hon Secretary and Hon Treasurer attend the Trustee meetings to discuss progress and development. The Charity's Trustees consider that an audit is not required for this year under section 144 of the Charities Act 2011 (the "2011 Act") and that an independent examination is needed.

Advisors and Trustee Emeritus

The Trustees are further supported and assisted by the Advisors and Trustee Emeritus who provide insightful and multi-disciplinary guidance and expertise on all aspects of the Charity's operations and activities. During the year the following persons served in these roles:

Advisors: Professor Michael Depledge CBE
 Dr Christopher Carbone
 Christopher Leftwich

Trustee Emeritus: Sir Crispin Tickell GCMG, KCVO (deceased 25 January 2022)

These persons are invited to attend the Trustees Meetings but are not entitled to, and do not vote at these meetings.

Objectives and Activities

Charitable purposes

The UK Associates of BIOS provides a valuable donation to the Bermuda Institute of Ocean Sciences ("BIOS") education program for partial and full scholarships to UK university students to participate in courses and internships in Bermuda. BIOS has an international reputation for research and education in marine and atmospheric science. Full details can be found on www.bios.edu/education/uk-associates-of-bios/.

Activities

Bermuda is located in the middle of the North Atlantic Gyre and on the most northerly Atlantic coral reef system. This makes it an ideal location for studying the Open Ocean and sub-tropical near shore environments. BIOS is home to Hydrostation S, established in 1954, the longest running year-round data collection program for any single location in the open ocean, and the Bermuda Atlantic Time-series Study (BATS). These studies are improving mankind's understanding of global ocean circulation, ocean chemistry and biology, and how the oceans and atmosphere interact and respond to a changing climate.

The Mid-Atlantic Glider Initiative and Collaboration (MAGIC) was launched at BIOS in 2014 to enhance and leverage BIOS's long-standing ocean measurement programs southeast of Bermuda through the use of autonomous underwater vehicles. The overarching goal of MAGIC is to acquire new high-resolution measurements from underwater gliders to assess the contribution of small-scale processes that sustain the ocean's biological productivity, and to make those assessments over several years to build a statistically meaningful understanding of them.

TRUSTEES' ANNUAL REPORT continued

BIOS expertise also lies in marine microbiology, risk prediction, coral reef ecology and resilience, and fish ecology. Recent highlights of research activities include the use of Baited Remote Underwater Video Stations (BRUVS) and eDNA coding to further our understanding of native reef fish and invasive Lionfish populations.

BIOS believes that ocean science for human good involves not only research with tangible benefits for communities and the environment, but also education programs that highlight the many ways our lives are connected with the ocean. BIOS views education as a crucial part of global ocean science research, helping to translate the work of its faculty into meaningful experiences for students to better understand the importance of oceanography in the study of fish stock management, climate change and risk prediction, pollution and human health.

The mission of the UK Associates of BIOS is for the advancement of experiential education through scholarship and grant funding for both undergraduate and post-graduate UK university scientists, to enable them to study and carry out research at the Bermuda Institute of Ocean Sciences in an international student and faculty community. Without scholarships of this nature they would not have access to summer courses or longer internships, which provide hands-on educational opportunities to study Bermuda's unique marine ecosystems and geology, as they explore coastal and open ocean environments. Under the supervision of, and in collaboration with BIOS scientists, they gain field methods and unparalleled insight into the logistics required to plan and execute research activities. This experience affords a unique opportunity not readily available to UK students, and is often one that could support their career decisions as future scientists and educators.

Achievements and Performance

With the generosity of our donors, £32,225 (2020- £29,980) of funding was provided for BIOS internships and summer courses.

Many BIOS alumni have found the experience invaluable to support career decisions in marine science. Some return to BIOS at a more senior level to further their skills in collaborating, communicating and analysing scientific problems; making them strong candidates for future academic endeavours.

Long-term success will be measured by leveraging shared knowledge gained by a better understanding of our oceans and the impact of climate change and how that relates to the health of our oceans, fisheries, marine environment, risk prediction and ultimately human health. This demands the survival of oceanographic research and educational institutes to equip new generations of scientists with life-skills and technology to achieve academically as future scientists at the cutting-edge of discovery.

TRUSTEES' ANNUAL REPORT continued

Financial Review

The main source of funding continues to be from donations received.

Receipts from donations and associated gift-aid were £30,753 (2020 - £28,705), a small increase on the previous year. Payments were £32,346 (2020 - £31,040), of which £32,225 (2020 - £29,980) was spent towards our charitable causes. This represents 99.6% (2020 – 96.6%) of total payments, the balance in 2021 being incurred on bank charges. Due to the Covid pandemic throughout the year, there was no annual reception for students and alumni to meet and, as meetings were held via Zoom throughout the year, there were no Governance costs. The deficit for the year was £1,593 (2020 – deficit of £2,329).

The Trustees' policy is to maintain cash reserves above £1,000 in order to meet commitments and cover any unexpected expenditure. Cash at bank and in hand at the end of the year was £1,173 (2020 - £2,766), which is within the target range.

The Trustees are responsible for safeguarding the assets of the Charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

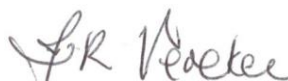
Plans for Future periods

The Trustees intend to continue and develop the education program for the benefit of UK university students.

Approved by the Trustees on 26 January 2022 and signed on their behalf by:



.....
Christopher Day
Chairman



.....
Lady Vereker
Vice Chair



.....
Lorraine Andrews
Hon Secretary

**INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF THE UNITED
KINGDOM ASSOCIATES OF THE BERMUDA INSTITUTE OF OCEAN SCIENCES FOR
THE YEAR ENDED 31 DECEMBER 2021**

I report to the Trustees on my examination of the accounts of the United Kingdom Associates of the Bermuda Institute of Ocean Sciences ('The Trust') for the year ended 31 December 2021, which are set out on pages 9 to 10.

Responsibilities and basis of report

As the Charity Trustees of the Trust you are responsible for the preparation of the accounts in accordance with the requirements of the Charities Act 2011 ('the Act').

I report in respect of my examination of the Trust's accounts carried out under section 145 of the 2011 Act and in carrying out my examination I have followed all the applicable Directions given by the Charity Commission under section 145(5)(b) of the Act.

Independent Examiner's Statement

I have completed my examination. I confirm that no material matters have come to my attention in connection with the examination giving me cause to believe that in any material respect:

1. accounting records were not kept in respect of the Trust as required by section 130 of the Act; or
2. the accounts do not accord with those records.

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

**Richard Beckett FCA
6 Foundry House
Walton Well Road
Oxford
OX2 6AQ**


.....

26 January 2022

**STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED
31 DECEMBER 2021**

		2021		2020	
	Notes	£	£	£	£
Receipts	1				
Voluntary receipts					
<i>Donations and Gift Aid</i>	3	30,753		28,705	
<i>Legacies</i>		-		-	
			30,753		28,705
Unrestricted bank interest			-		6
			30,753		28,711
Payments	1				
Charitable activities	3	(32,225)		(29,980)	
Fundraising costs		-		(880)	
Governance costs		-		(100)	
Bank charges		(121)		(80)	
			(32,346)		(31,040)
Net (payment)/receipt			(1,593)		(2,329)

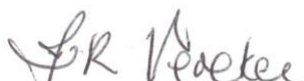
**STATEMENT OF ASSETS & LIABILITIES AND BALANCES AS AT 31 DECEMBER
2021**

	Unrestricted funds		Unrestricted funds	
	2021	2020	2021	2020
	£	£	£	£
<u>Bank and cash balances</u>				
Bank deposit account	500			1,355
Bank current account	673			1,411
		1,173		2,766
There are no liabilities as at 31 December 2021 or 31 December 2020				
<u>Funds reconciliation</u>				
Cash at bank and in hand – Dec 2020		2,766		5,095
Net receipt/(payment) for the year		(1,593)		(2,329)
Cash at bank and in hand – Dec 2021		1,173		2,766

Approved by the Trustees on 26 January 2022 and signed on their behalf by:



.....
Christopher Day - Chair



.....
Lady Vereker – Vice Chair



.....
Ian Arnold – Hon Treasurer

NOTES TO THE ACCOUNTS

1. Basis of Accounting

These accounts have been prepared on the Receipts & Payments basis in accordance with Section 133 of the Charities Act 2011.

2. Nature and purpose of funds

Unrestricted funds are those that may be used at the discretion of the Trustees in furtherance of the objects of the Charity. The Trustees maintain a single unrestricted fund for the day-to-day running of the Charity.

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Designated funds are part of unrestricted funds, which the Trustees have set aside or earmarked to be used for a particular purpose. They are not legally distinct funds and Trustees can at any time re-designate them for other purposes.

There were no restricted, endowment or designated funds at the beginning or the end of the year.

3. Donations and Charitable activities

	2021	2020
Donations and gift aid	£	£
Unrestricted funds - General	1,542	12,705
- Designated	14,711	16,000
- Total	<u>16,253</u>	<u>28,705</u>
Restricted funds	14,500	-
	<u>30,753</u>	<u>28,705</u>
Charitable activity	£	£
Unrestricted funds - General	3,014	13,980
- Designated	14,711	16,000
- Total	<u>17,725</u>	<u>29,980</u>
Restricted funds	14,500	-
	<u>32,225</u>	<u>29,980</u>