

United Kingdom Biology Competitions

Registered charity №1191037

Also known as UKBC



Annual report

1st September 2023 - 31st August 2024

Trustees

Dr Matthew Johnston

Dr Andrew Treharne MBE

Prof Kevin Moffat

Dr Joshua Hodgson

Neil Richards

Katherine Lister

Kim Ngan Luu Hoang

Jiaqi Chen

Dr Robert Starley

Structure & governance

Governing document

→ Constitution, 25th August 2020

Trustee selection

→ Election by existing trustees

Constitution

→ Charitable incorporated organisation
(CIO)

Objectives & activities

Objects

The objects of the CIO are to advance education for the public benefit of young people in the subject of Biology by:

1. Promoting the study of biology and encouraging and enhancing biology education, particularly in schools
2. Encouraging excellence in biology by organising annual biology competitions for school students

3. Selecting, training and organising teams of biology students and leaders to represent the UK at the International Biology Olympiad and at such other international Biology competitions as may be considered appropriate
4. Maintaining membership of International Biology Olympiad e.V. and to contribute to and participate in the affairs of that organisation
5. Providing residential training for post-16 school students.

Activities

Trustees reviewed the Charity Commission [guidance on public benefit](#) upon appointment and also at their annual general meeting. All activities were planned in line with guidance, UKBC's charitable objects and the business plan submitted to the Charity Commission upon incorporation.

Academic olympiads are increasingly prominent as the most rigorous and reputable academic competitions. United Kingdom Biology Competitions (UKBC) runs the British Biology Olympiad (BBO), and takes responsibility for the UK's presence at the International Biology Olympiad (IBO). The IBO is one of the big four Olympiads with >70 participating countries. For younger children, UKBC runs Biology Challenge (BC) and the Intermediate Biology Olympiad (iBO).

The BBO, iBO and BC are three rigorous online competitions which schools arrange for their students to participate in. Students took part within their school (or at home due to coronavirus regulations) under examination conditions. Students were allocated medals based on their performance, and e-certificates were sent to schools. For the BBO, medal badges were also posted to schools for each medalling student.

This year, UKBC introduced a *team selection* paper for any gold medalists who wanted a chance to be selected for the IBO. This involved pre-reading a published scientific paper we circulated to students, with an opportunity to read around the topics it covered, followed by online technical questions based on this paper. UKBC hoped this would increase access by giving students who surprised themselves (and/or their teachers) with good results in the BBO to study and revise.

UKBC organised training and assessment of practical biology skills for the top performers of the BBO and team selection paper in collaboration with the University of Warwick. This year,

UKBC limited places to a maximum of 2 per school, and a minimum of 6 girls, to increase diversity. Practical training and assessment was carried out by several academic staff, plus support staff, from the School of Life Science. This was to select a team of four students to participate in the IBO.

The IBO team undertook further practical training at Reading School immediately prior to the IBO. UKBC organised for the team to attend the IBO in Astana, Kazakhstan. UKBC organised for a jury of three volunteers to accompany the team throughout IBO and act on behalf of the UK at the IBO.

UKBC comprises solely of volunteers. The most active are members of the UKBC committee, who are trustees. The competitions were written and assessed entirely by volunteers. There are approximately half-a-dozen volunteers who help write the competitions, or assist with team selection, training or at the IBO.

The Royal Society of Biology administered the competitions via a continuation of an existing services contract for the early part of the year. They were then replaced with an independent contractor whom trustees deemed offered better value for money. Outsourced administration tasks included managing school registration, organising travel and accommodation, processing payments, advertising, and providing general administration support to UKBC (e.g. arranging annual general meetings).

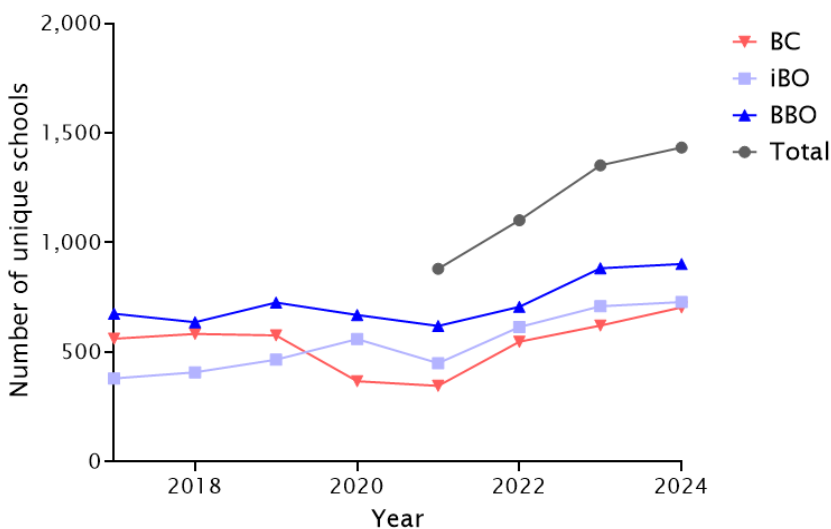
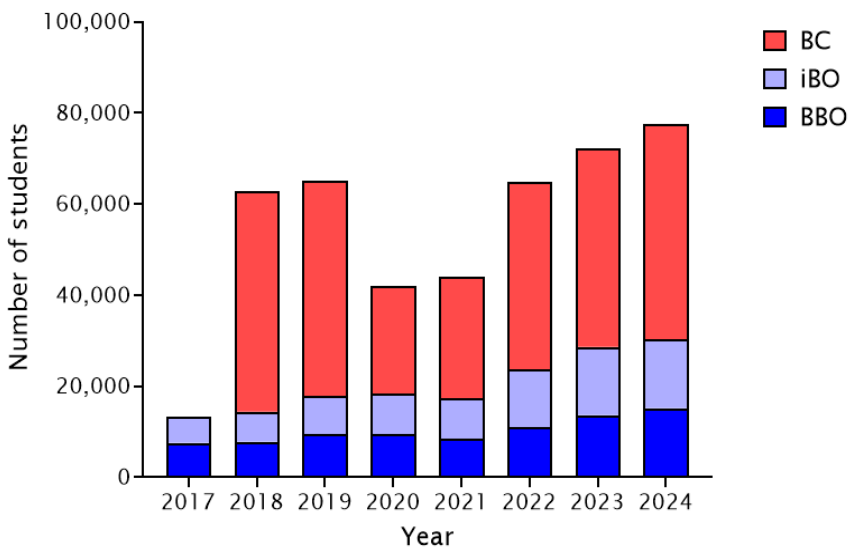
UKBC provided a mirror of its examination website to the British Physics Olympiad (BPhO, charity number 1146064) for a small fee (outstanding). UKBC has an agreement to provide the BBO, iBO and BC to ASDAN China which translates and runs the competitions in China. UKBC holds the UK's membership of IBO e.V, the governing body of the IBO. National members, such as UKBC, have joint sovereignty over IBO e.V.



Achievements & performance

Participation

The number of individual students and schools participating in each competition are shown in the tables below. These tables do not include students or schools participating via ASDAN China. Underlined figures indicate competitions which were disrupted by the pandemic.





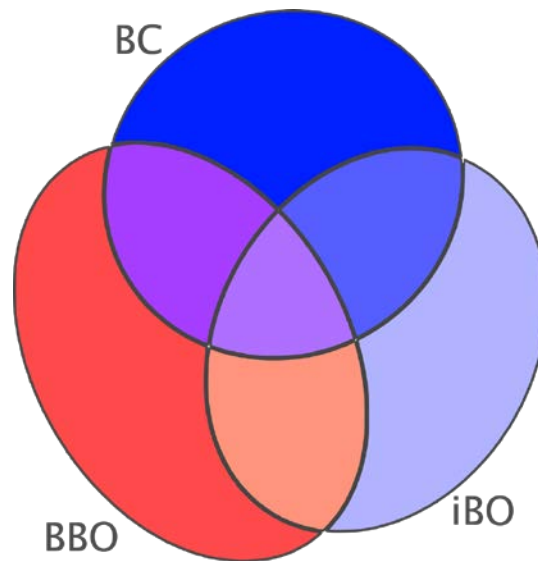
Year (number of students participating)

	2017	2018	2019	2020	2021	2022	2023	2024
BC	40000	48449	47336	<u>23695</u>	<u>26793</u>	41360	43641	47350
iBO	5667	6580	8282	<u>8757</u>	<u>8873</u>	12701	14961	15083
BBO	7500	7818	9465	9520	<u>8462</u>	<u>10897</u>	13659	15191
Total	53167	62847	65083	41972	44128	64958	72261	77624

Year (number of schools)

	2017	2018	2019	2020	2021	2022	2023	2024
BC	561	583	576	<u>367</u>	<u>346</u>	547	621	704
iBO	380	408	465	<u>559</u>	<u>449</u>	614	709	729
BBO	675	636	726	669	<u>619</u>	<u>707</u>	883	902
Total unique	NA	NA	NA	NA	880	1102	1353	1434

Most schools took part in two competitions, suggesting scope to recruit the same schools to take part in all three. Standalone sixth forms cannot participate in BC, whereas schools without sixth forms cannot participate in iBO or BBO, but any schools participating in the BBO could be recruited to the iBO and vice versa.

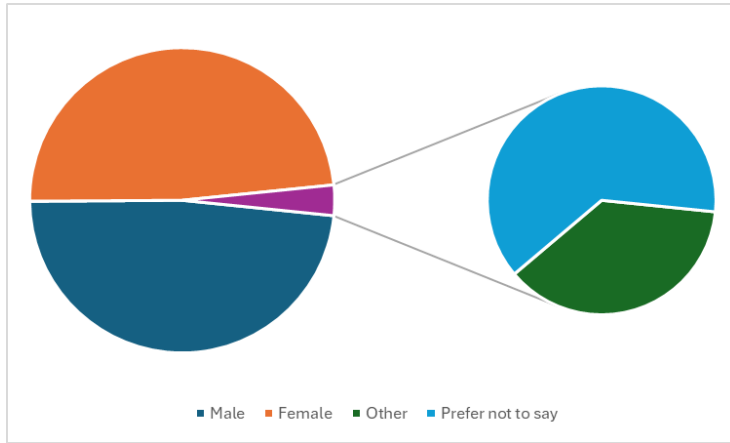


Area proportional euler diagram (number of unique schools, 2024).

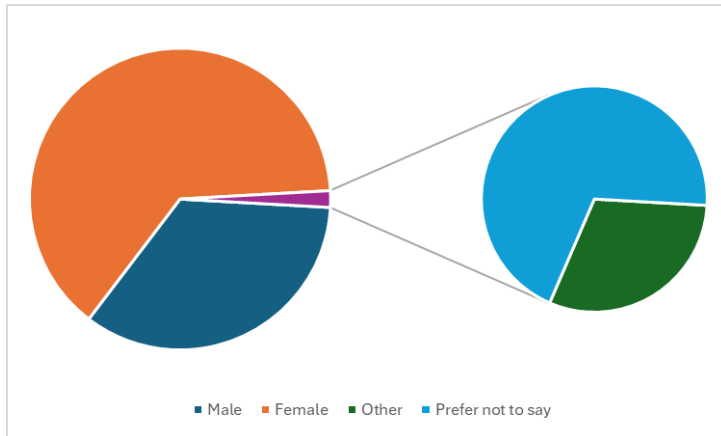
Participation grew strongly to record levels. The fee structure was reduced compared to 2022/3; the BBO was maintained completely free to all UK schools and BC, and the iBO were made free to all UK schools from a £30 flat-fee for unlimited places. A £30 flat-fee for unlimited places was charged for all international schools participating in the BBO, iBO and BC.

Overall, ~19% of participating schools (~12% of students) were overseas. Trustees will examine ways to grow overseas participation and continue to review the fees charged for this.

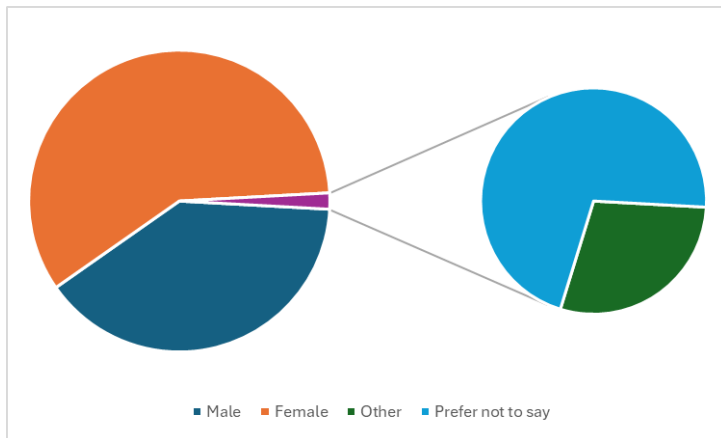
UKBC collects information on the gender of participating students for monitoring and outreach purposes. The gender breakdown of participants mirrors the gender breakdown of students studying biology in each age group in the UK, with a higher proportion of females at A Level.



Biology Challenge



Intermediate Biology Olympiad (Y12)



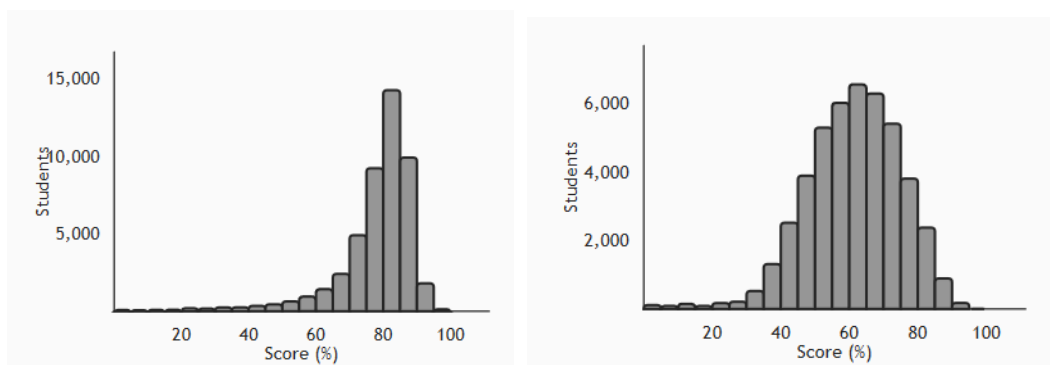
British Biology Olympiad (Y12 and Y13)



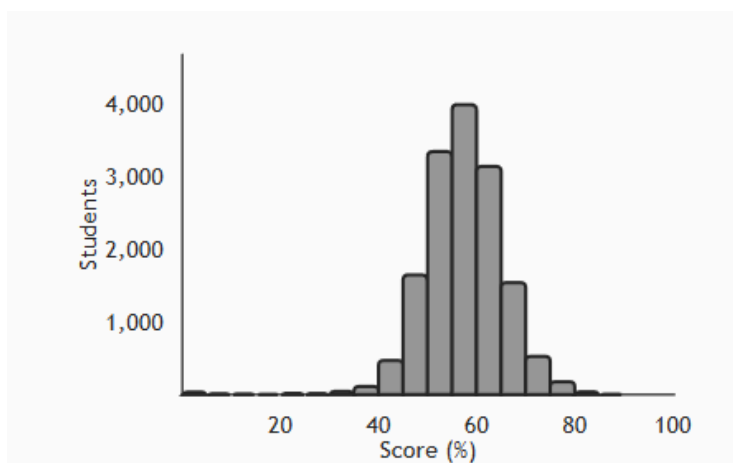
Academic rigour

Grade distributions for each competition had desirable characteristics. Paper 1 of Biology Challenge is designed to be a straightforward test of school biology, with Paper 2 having an emphasis on problem-solving. Distributions for iBO and BBO were similar overall, with the second BBO paper being slightly more difficult.

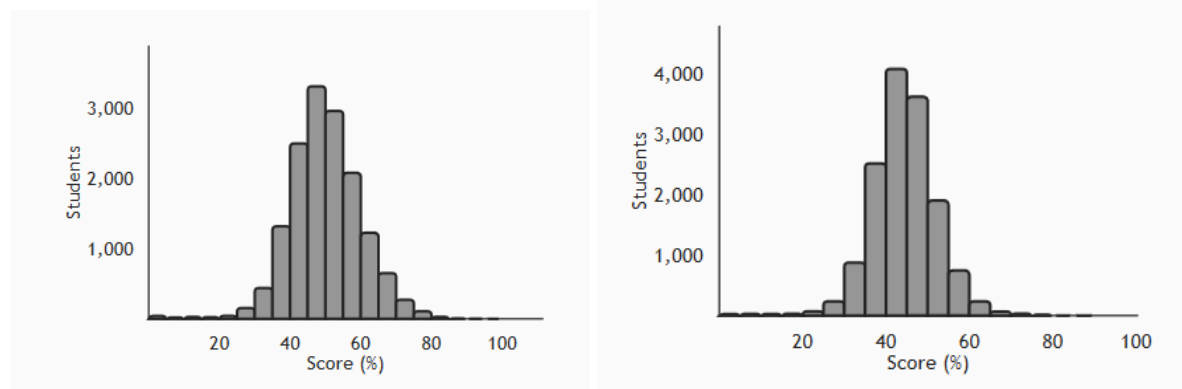
Biology Challenge (papers 1 & 2)



Intermediate Biology Olympiad



British Biology Olympiad (papers 1 & 2)



The UK team won three silver and a bronze medal at the Astana IBO 2024. UKBC will look to improve and expand training for the team selected to attend the next IBO. The assessments run by the University of Warwick for the winners of the BBO were outstanding. The attending students underwent a day of intensive training before being examined on the material the following day. Similarly, the practical training at Reading School was extremely useful for the team. Next year, UKBC will gather the students at Warwick a day or two early to teach basic skills so all students are primed to get the most out of the practicals undertaken with Warwick staff.

The winners of the iBO will attend a residential trip run by the Field Studies Council. The 2023 trip for winners of the preceding iBO was excellent. UKBC has decided to work with the Field Studies Council to offer more days, and a week-long course for winners of the iBO in future. Top students will be chosen by ballots, and also holistic measures of their access to similar opportunities.

Website

UKBC made a significant investment in a new online examination system in 2021. This year, more minor upgrades were carried out to add new functionalities. There is some evidence of improved participation by allowing better leverage of school data. UKBC has decided to invest more in advertising via the Association for Science Education next year.

UKBC phased out the option for schools to pay via invoice (transfer) by making everything free for UK schools and insisting on card payments for international schools. Our website is able to automatically process and account all such payments, greatly simplifying financial administration, eliminating payment delinquency and reducing the number of incorrect payments we receive.

ASDAN China

UKBC provided the BC, iBO and BBO competitions to ASDAN China. Participation rates in all three competitions grew strongly. In 2023, ASDAN began translating the competitions into Chinese to aid Chinese competitors.

Volunteers

Volunteers new to 2023/24 have been recruited based on contacts, ex-team members and their teachers. UKBC invited them to planning meetings and the AGM for next year. UKBC will attempt to recruit more current or retired school teachers, including by advertising for this with the ASE and on invites to FSC trips.

Policies

Data protection and safeguarding

Trustees reviewed and updated UKBC's data protection and safeguarding policies.

Sustainability

UKBC undertook a review of its environmental footprint and attempted to quantify its carbon emissions. At the AGM, trustees discussed these findings and undertook to

reduce its emissions where possible without reducing the beneficial impact of its activities, and to offset some of its carbon emissions. A copy of this review and undertakings are available on the UKBC website.

Financial review

Summary accounts are provided in a separate document.

Reserves policy

The trustees set a target reserve level of 1.5 years expenditure (approximately £100,000). The reserves grew to £243,776, from £213,475 at the start of the year. This was due to large savings on a new administration contract and steadily growing participation, outweighing increased expenditure on most activities and strongly reduced income due to making all the competitions free to UK schools.

At the end of the accounting period, trustees carefully reviewed the reserves policy and strategies to reduce them to the target level. UKBC intends to continue to markedly increase expenditure on charitable activities, including by expanding team selection and offering more FSC trips. UKBC also intends to invest in advertising and growing its volunteer base. UKBC continues to explore the appetite for a new international competition with overseas partners, for which our reserves would be a useful investment deposit.

Major expenditure

The largest single part of UKBC expenditure (£14,000) is the cost of a services agreement with to provide an administrator for the competitions. Trustees streamlined UKBC operations to reduce administrative workload, and trustees decided to terminate an older and more expensive agreement.

Expenses paid to trustees

The table below details all money transferred from UKBC to its trustees.

Trustee	Sub total	Total	Description
Joshua Hodgson	£258.34	£1,582.28	IBO e.v. membership
	£1,323.94		Expenses & equipment for team selection in Warwick
	£1,837.11	£8,114.04	Website hosting ⁽¹⁾
Matthew Johnston	£648.10		Expenses for team selection in Warwick
	£885.06		AGM & awards dinner hotels, food, accommodation
	£4,743.77		IBO participation fee
Robert Starley	£47.30	£315.25	AGM attendance
	£267.95		Expenses from IBO
Kim Ngan Luu Hoang	£1.69	£462.77	AGM attendance
	£53.05		Expenses from team selection in Warwick
	£408.03		Expenses from IBO
Andrew Treharne	£140.69	£15,715.70	AGM attendance
	£136.59		Attendance at in person meeting with ASDAN
	£396.00		PO box fee
	£498.65		Expenses for team selection in Warwick
	£846.69		Medal postage & packaging
	£192.00		Volunteer safeguarding training
	£125.04		Email hosting
	£6,580.04		Flights, accommodation & expenses for the IBO
	£6,800.00		Administration contract ⁽²⁾
Neil Richards	£65.00	£65.00	Expenses for team selection in Warwick
Grand total		£26,190.04	

(1) Includes third party costs for servers etc and a £50 per quarter retainer for continued support, upgrading, bug-fixing.

(2) UKBC signed a services agreement with Andrew for him to provide administrative services as a self-employed contractor, £13,600 P.A.*

*Charity commission guidance on paying trustees, including determining value for money, monitoring performance, and making the decision independently of Andrew was followed.

Declaration

The trustees declare that they have approved the trustees' report above at a vote held on the
8th of April 2025



Dr Andrew Treharne, MBE

Trustee

5th May 2025



Mr Neil Richards

Trustee

9th May 2025



Dr Robert Starley

Trustee

9th May 2025

United Kingdom Biology Competitions

Registered charity N° 1191037



Annual accounts

1st September 2023 - 31st August 2024

Receipts

	2023/24			
	Unrestricted funds	Notes	2022/23	2021/22
Item				
Biology Challenge participation fees	£3,750	Made free to UK schools	£18,012	£16,335
Intermediate Biology Olympiad participation fees	£4,680	Made free to UK schools	£20,300	£17,979
British Biology Olympiad participation fees	£5,820		£6,690	£4,679
Selling papers to other charities	£67,850	To ASDAN China	£53,432	£40,136
Selling examination system to other charities	£1,000	To British Physics Olympiad	£0	£1,000
Interest	£1,390		£0	£0
Misc. inc. collection of arrears & mistaken payments	£795		£4,443	£0
Total receipts	£85,285		£102,877	£80,129

Payments

Administration	£14,196		£42,000	£42,000
Participation in the IBO	£12,372	All inclusive	£12,379	£8,558
University residential course	£9,535	At University of Warwick	£6,931	£6,674
Ecology site courses	£2,659	At Field Studies Council	£0	£0
Certificates / medals	£6,336		£3,065	£0
Advertising	£3,167		£720	£720
Awards ceremony /dinner	£1,112		£225	£0
Committee/volunteer expenses	£1,306	Including insurance, DBS checks	£1,038	£790
Professional fees	£400		£400	£400
Website maintenance	£1,962		£1,802	£1,399
Payment processing fees	£460	To Stripe	£723	£421
Account fees	£78	To CAF bank	£84	£159
Return of mistaken payments	£131	To sender / correct recipient, incl. some	£3,041	£137
Sub total	£53,713		£72,407	£61,260

Asset purchases

	£1,272	Pipettes	£0	£0
Total payments	£54,985		£72,407	£61,260

Net

Receipts less payments	£30,301		£30,471	£18,869
-------------------------------	----------------	--	----------------	----------------

Assets at year end

	2023/24			
	Unrestricted funds	Notes	2022/23	2021/22
Item				
Cash at end last year	£213,475			
Cash at end this year	£243,776		£213,475	£183,004
Outstanding invoices	£0	From the latest year only	£8,730	£7,440
Total assets	£243,776			

Liabilities at year end

Deferred income (2020-21)	£270	£270	£330
Deferred income (2021-22)	£2,118	£2,118	£2,388
Deferred income (2022-23)	£3,120	£3,120	£0
Deferred income (2023-24)	£454	£0	£0
Outstanding invoices	£0	£0	£0
Total liabilities	£5,962		

Declaration

The trustees declare that they have approved the accounts above.



Mr Neil Richards

Trustee

9th May 2025



Dr Andrew Treharne

Trustee

5th May 2025



Dr Robert Starley

Trustee

9th May 2025





CHARITY COMMISSION
FOR ENGLAND AND WALES

Independent examiner's report on the accounts

Section A

Independent Examiner's Report

Report to the trustees

Charity Name
UNITED KINGDOM BIOLOGY COMPETITIONS

On accounts for the year ended

31/08/2024

Charity no (if any)	1191037
------------------------	---------

Set out on pages

14 of the ANNUAL ACCOUNTS & FAR

I report to the trustees on my examination of the accounts of the above charity ("the Trust") for the year ended 31/08/2024.

Responsibilities and basis of report

As the charity's trustees, 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

~~The charity's gross income exceeded £250,000 and I am qualified to undertake the examination by being a qualified member of [insert name of applicable listed body]]. Delete [] if not applicable.~~

I have completed my examination. I confirm that no material matters have come to my attention in connection with the examination (other than that disclosed below *) which gives me cause to believe that in, any material respect:

- the accounting records were not kept in accordance with section 130 of the Charities Act; or
- the accounts did not accord with the accounting records; or
- the accounts did not comply with the applicable requirements concerning the form and content of accounts set out in the Charities (Accounts and Reports) Regulations 2008 other than any requirement that the accounts give a 'true and fair' view which is not a matter considered as part of an independent examination.

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.

* Please delete the words in the brackets if they do not apply.

Signed:

Date:

20/05/2025

Name:

SAM CLARKE

Relevant professional
qualification(s) or body

ACA (ICAEW)

(if any):

--

Address:

17 HORNBEAM CLOSE

DURHAM

DT 1 IEN

Section B

Disclosure

Only complete if the examiner needs to highlight material matters of concern (see CC32, Independent examination of charity accounts: directions and guidance for examiners).

Give here brief details of any items that the examiner wishes to disclose.

--