

BIG Event

26-28 July 2023

Thinktank
Birmingham science museum

#BIGEvent23



The skills-sharing event for people involved in the communication
of science, technology, engineering and maths

Welcome from BIG's Chair

Welcome to the BIG Event 2023

A warm welcome to the BIG Event 2023, kindly hosted by Thinktank in Birmingham this year. A big thank you to Thinktank and their team for sharing their spaces with us. If you'd like to learn a little bit more about our host venue and ask them all your questions, we have a few opportunities in the programme to do so, so keep an eye out for those.

Take a good look through the programme and see what looks most intriguing to you. (I've got my fingers crossed that your favourites don't clash.) There are a number focused on accessibility and working with different audiences. Some fun hands-on sessions playing with various activities, as well as advice on your presenting skills and those all important admin hacks, just to name a few. We've also tried to make sure that there is ample time for you to network, meet new people and carry on the conversations. We've got a wide range of sessions this year, so I hope you will find many that are useful for you.

The BIG Event is made by the members for the members – and that includes YOU. Thank you to all our speakers for gathering your ideas, learnings and sharing something that has helped you with us all (or proposing a discussion on something they would like to talk about!). But don't forget that you too have skills and experience to share, questions and ideas to contribute, no matter whether this is your 1st time at BIG or your 15th!



And finally, well done to you for making it here to join us. We appreciate it's not always easy, so thank you for all of the effort and planning. Whether you will be joining us for one day or the full conference, I hope you enjoy the Event. Maybe learn something new, have an opportunity to think a little bit more about a topic, and find some time to recharge those sci-comm batteries.

Kirsty Hayward, BIG Chair 2022/2023

A BIG Thank You to our hosts

It's great for BIG to be in Birmingham at Thinktank. Taking pride of place in the city's innovative Millennium Point, there are four floors of fun to explore, bursting with more than 200 hands-on high-tech displays alongside historical collections and natural science specimens to amaze and inspire. BIG will definitely be taking advantage of their Planetarium as well as the outdoor Science Garden – and we suggest you do the same!

The Thinktank team are also showcasing some of their content and offerings, so look out for them on pages 6, 11 and 14.

Special thanks go to Laurence Butler, Katherine Bosworth and Gill Allen who have been our amazing go-to people. And many thanks to Sara Wajid and Zak Mensah, joint CEOs of Birmingham Museums Trust, and their team for hosting the BIG Event 2023 at Thinktank.

About BIG

BIG is a not-for-profit membership organisation – its ideas and activities are driven, developed and usually delivered by its 350 members. 300 people also belong to BIG-Chat, BIG's e-mail list – an active line of communication to exchange examples of good practice, air views, publicise events and news items and circulate job adverts in the field of STEM engagement.

The organisation's administration is carried out by a small band of tireless, dedicated and fabulous members who have volunteered to set up and run regional events. Finally, BIG charges two paid contractors to look after the members, organise larger events, support volunteers and promote BIG.

Look out for them around the Event – ask them what the Executive Committee does and how this work could benefit you.



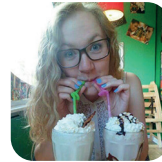
Kirsty Hayward
Chair



Claudia Antolini
Vice Chair



Helen Obee Reardon
Treasurer



Emily Fisk
Secretary



Claire Price
General Officer



Sam Ridgeway
General Officer



Ellie Horner
General Officer



Helen Nightingale
Membership Services Manager



Ashley Kent
Event Organiser

Your BIG Membership

Now you are a Member of BIG, you'll enjoy lots of benefits, which include:

- Inclusion in our online directory of Sci-commers, freelancers, science centres, members along with their details and specialisms.
- The opportunity to stand for our Executive Committee, who help to shape the future of BIG.
- A quarterly e-newsletter by BIG members, for BIG members, which you can contribute articles and updates to.
- Regular UK-wide events and training courses.
- Access to extra information and resources in the Members' Area of our website.



FAQ

Q: What's happening Wednesday evening?

A: Nothing formal has been arranged for Wednesday night. However, may we suggest checking out the Slack group for recommendations on great place to meet, eat and drink with fellow BIG Delegates.

Q: Thursday evening dinner – where is it and do I need a ticket?

A: You don't need a ticket, but you do need to be on the guest list. You can find this on the notice board at the Reception Desk. If you can't see your name on the list and think it should be, please come chat to Ashley or Helen. The dinner takes place at Thinktank and begins with a complimentary drinks reception from 6:45pm. For more details, see page 11.

Q: Best Demo Competition – where is it? Can I compete?

A: The Best Demo Competition will take place following afternoon refreshments on Thursday 27th July, beginning at 5pm in the Thinktank Theatre. Competitors are lined up in advance, but if there is availability, there will be a notice at the Registration Desk and on Slack. You will be required to provide a Risk Assessment for your demo.

Q: Would you like me to share my photos?

A: Yes, please share them on Instagram, Twitter or Facebook, using the hashtag **#BIGEvent23**.

Q: Membership card – where do I get mine? How do I find out about my membership benefits?

A: Everyone attending the Event is now a member of BIG and your card is in your delegate folder. If you have any questions about membership, please see Helen at the Registration Desk.

Q: Delegate list – why am I not on it?

A: At Registration you were asked to confirm if you wanted to be on the Delegate List. If you ticked "No, don't add me to the Delegate List," we didn't add you. However, all members of BIG are able to access the Members' Area on www.big.uk.com and search the BIG Membership Directory. If you want people to be able to find and contact you, make sure your BIG profile is up-to-date.

Q: How accessible are the BIG Event venues?

A: BIG makes every effort to choose venues that are accessible for everyone, but sometime this is not always possible. See page 16 for specific venue accessibility details.

Q: What is Slack and how do I get it?

A: Slack is an instant messaging program and we're using the [scicommchat](#) group to share information during the Event. See page 16 for all the details.



BMT Guest WiFi



BIG STEM Network



**@bigchats
#BIGEvent23**



BIG_STEM_Communicators_Network



**scicommchat
#big**

Please visit the Registration Desk so you don't miss any impromptu activities or changes.

At any time during the conference, you can call Ashley Kent with your questions on 07 929 789 727.

Wednesday 26 July

	Theatre (180)	Planetarium (69)	Currie & Darwin (60)	Lab (30)	Lego Studio (30)	The Den (30)
10.00 - 12.00	Thinktank open - all welcome					
12.15 - 1.00	REGISTRATION and COFFEE in Event Suite					
1.00 - 1.45	Welcome (Theatre)					
1.45 - 2.00	followed by... The BIG Event Mingle					
2.00 - 2.30						
2.30 - 3.00						
3.00 - 3.30	COFFEE in Event Suite					
3.30 - 4.00	Automatic for the people	Audio Universe Tour of the Solar System	Unique approaches to community engagement	Targeting Projects to the Right Audience	What do you want to know and see at Thinktank?	#IAmRemarkable Workshop
4.00 - 4.30			Make Your Science A Blockbuster			
4.30 - 5.00						
5.00 - 5.30						
6.30 onwards	Informal Social - check the scicommchat Slack group #big					

Automatic for the people (who HATE or struggle with admin)

Thinktank Theatre • 3.30pm - 5.00pm

A sharing session on useful automation hacks, apps and anything to help with back-office processes and admin. With the right tools, your workflows improve. This is especially important for sole-traders and freelancers who juggle contracts, keep track of bookings, clients, deadlines and where they need to be each day. Whether you have Zapped your way into e-contracting, have chatbots doing your heavy lifting or remain a defiant spreadsheet guru, join us to share your admin hacks. We'll attempt to curate a list of recommended hacks/apps/services/ideas from the session, but this may need its own admin hack.

Matthew Tosh, Presenter & Safety Advisor
Dr Matt Pritchard, Science Magician; Freelance
Duncan Yellowlees, Presentation Trainer and Coach

Audio Universe Tour of the Solar System: A Blind-Accessible Planetarium Show

Planetarium • 3.30pm - 4.30pm

Experience the Solar System like never before – by traveling on a spacecraft that can turn the objects in space into sound! Unlike traditional planetarium shows, the soundtrack takes the lead role here. The show was created in collaboration with blind and low vision children and their teachers and is designed to be accessible for this audience. However, it's an immersive experience to be enjoyed for people of all ages and levels of vision! Enjoy the show, followed by a free-form discussion on how lessons learnt could be taken forward into making more accessible audio-visual content.

Chris Harrison, Newcastle University

Unique approaches to community engagement

Curie Classroom • 3.30pm - 4.30pm

The landscape of engagement has shifted dramatically over the past decade, and a growing number of innovative projects have emerged. While each of these projects are unique, they often share a common theme of community driven engagement at the grassroots level. In this session, we will explore three unique engagement projects: the Castlebrae Superlab; Sherwood Observatory; and Me, Human. We will share our experiences, successes and failures and host a panel discussion with a twist!

Dom Cairns-Gibson, University of Edinburgh

Steve Wallace, Sherwood Observatory

Gillian Forrester, University of Sussex

Targeting Projects to the Right Audience

Attenborough Lab • 3.30pm - 4.30pm

In this session we'll explore how to identify and target specific audiences. What are people already doing? Can we do it better? What are the barriers and considerations? We'll share ideas and workshop the best criteria to meet your specific objectives while also working towards more equitable access to engagement opportunities. Together, we'll develop a framework to take home which will help you identify specific audiences that are the most appropriate for your project.

Fergus Powell, First Create the Media

What do you want to know and see at Thinktank?

Lego Studio • 3.30pm - 5.00pm

Meet the Visitor Services Team and the Learning and Engagement Manager for a tour of Thinktank. It will be a bespoke tour, just for you! Let us know what you would like to see at Thinktank and we will go exploring! It could be wanting to know more about one of our galleries or seeing how we engage with our visitors.

Katherine Bosworth, Thinktank, Birmingham Museums Trust

#IAmRemarkable Workshop

The Den • 3.30pm - 5.00pm

Do you suffer from Imposter Syndrome? Do you find it difficult (even awkward) to talk about yourself?

#IAmRemarkable is a Google initiative empowering women and underrepresented groups to speak openly about their accomplishments in the workplace and beyond, thereby breaking modesty norms and glass ceilings.

This workshop will also help "people of majority" become more aware of the gender and cultural norms that keep certain kinds of people from progressing and having their voices heard.

Come to this workshop to feel more confident in yourself and learn how to better advocate for others.

Ashley Kent, #IAmRemarkable Facilitator

How To Make Your Science A Blockbuster – Creative Lessons from TV

Curie Classroom • 4.30pm - 5.30pm

Get a behind the scenes guide of the TV industry from an insider who will reveal how creative lessons from TV can enhance our SciComm. From how the same thinking used to develop a hit TV show can help design an exhibition, to which Netflix secret can give academic papers a second life, this is an interactive session of case studies and activities.

Sam Ridgeway, TV Assistant Producer

Thursday 27 July

Theatre (180)	Planetarium (69)	Currie (30)	Lab (30)	Darwin (30)	Lego Studio (30)	Reception Desk
9.00 - 9.30	COFFEE in Event Suite					
9.30 - 10.00	Making science engaging	Designing inclusive experiences	So you want something made	Social Value, CSR, ESV, WTF?		
10.00 - 10.30						
10.30 - 11.30	Welcome Session and Keynote (Theatre)					
11.30 - 12.00	COFFEE in Event Suite					
12.00 - 12.30	I can find the STEM in anything!	Is it all about the bangs?	Engineering a great workshop!	Multi-sensory, accessible astronomy		
12.30 - 1.00						
1.00 - 1.30	BIG AGM 1.30pm	LUNCH in Event Suite & Is that Laser Legal?				
1.30 - 2.00						
2.00 - 2.30						
2.30 - 3.00	Best Demo Comp Set-up (closed session)	Are you game to talk about research?	The STEM Response Team super share session	UKRI Public Engagement strategy	In/Outgoing Exec	Museum Collection Centre tour
3.00 - 3.30						
3.30 - 4.00						
4.00 - 4.30	COFFEE and snacks (in Event Suite) to tide you over to dinner					
5.00 - 5.30	BEST DEMO COMPETITION					
5.30 - 6.00						
6.00 - 6.30						
6.45 - 10th	Dinner, drinks and voting					

Making science engaging to people with learning and physical disabilities

Thinktank Theatre • 9.30am - 10.30am

The session spotlights techniques and best practice used in making science engaging to an audience with learning or physical disabilities. Evidence shows that students found experiments with a tactile element more engaging e.g. including something to feel, smell or taste. We'll discuss an experiment, identifying specific strategies to be used when catering for this audience. We'll also discuss how these techniques could be applied to other outreach activities.

Dr Claire Malone, Lightyear Foundation

Designing and delivering inclusive experiences

Curie Classroom • 9.30am - 10.30am

The approaches we tend to use in our everyday work can favour those who are already engaged and exclude people who face inequalities in wider society. So how can you design experiences that will help everyone feel welcome and included? In this participatory and sharing ideas workshop we will be diving into how you can design programmes so that a broader range of people can engage with and participate in science. Join us and try out tools that are underpinned by science capital research, to help you critically reflect on different aspects of your work through an equity lens.

Karen Davies, Science Museum Group

Beth Hawkins, Science Museum Group

So you want something made?

Attenborough Lab • 9.30am - 10.30am

One of the joys of this industry is the weird and wonderful stuff it often involves, but if you can't buy that stuff off the shelf, you have to have it made. Getting custom kit built can be daunting, but there are ways of making the process easier (and thus cheaper) for both sides.

Join us to find out more and discuss the process.

Dave Ansell, Sciansell

Dan Bird, Whitefire

Social Value, CSR, ESV, WTF?

Darwin Classroom • 9.30am - 10.30am

Businesses get involved in STEM engagement for a variety of reasons: they want to support the community, offer opportunities for their employees to volunteer, increase awareness of their organisation or because it's a requirement! Businesses often link up with STEM engagement organisations to draw on their expertise and experience to help them work with local schools, communities or events. Join us to look at different types of projects and partnerships and explore some of the positives and pitfalls each bring.

Chris Snowden-Smith, Transpennine STEM

Ambassador Hub

Rachel Mason, Science Made Simple

Debbie Syrop, Cardiff University

Em Haydon, Wellcome Genome Campus

Zak Mensah, co-CEO Birmingham Museums Trust

Thinktank Theatre • 10.45am - 11.30am

Birmingham Museums Trust is a charitable trust of museums (of which Thinktank is just one!) and Zak Mensah is Co-CEO. He's been a freelancer, staff development officer, Head of Digital, and Head of Transformation. In addition to helping his own organisation, Zak shares his skills and expertise as a regular public speaker and trustee of the Association for Cultural Enterprises and Culture 24.

Zak Mensah, Birmingham Museums Trust

I can find the STEM in anything!

Thinktank Theatre • 12.00pm - 1.00pm

Join our panel of experts (/victims) for a fun exploration of how everything in the world around us has science and maths hiding somewhere in it.

Watch them draw a random concept from a bag – or throw in your own suggestions – and panic while they try to think of a maths or science connection.

We'll also discuss how this can be useful in developing STEM content and the possible ways in which this approach falls down.

Katie Steckles, Maths Communicator

Matthew Tosh, Presenter & Safety Advisor

Hana Ayoub, Science Communicator and Illustrator

Sarah Cosgriff, Science Communicator and Trainer

Is it all about the bangs? Theatre practice for STEM engagement

Curie Classroom • 12.00pm - 1.00pm

Have you got a table top demo that you always thought would make a great part of a show? What about a small demo show that you always wanted to put on the big stage? In this interactive, fast-paced session we'll focus on aspects of the design and delivery of STEM outreach used in larger theatre productions and consider how to apply these practical and technical performance aspects to take your show from pathetic pop to a massive bang! *Martin Khechara, University of Wolverhampton*
Heather Angell, University of Wolverhampton

Engineering a great workshop!

Attenborough Lab • 12.00pm - 1.00pm

Eggs on parachutes, marshmallow-and-spaghetti towers, paper bridges, Rube-Goldberg machines... even rafts.

For school groups, youth groups, families or corporate away days, there are endless variants on the 'engineering challenge' allowing people young and old to use their brains and their hands to find out more about science, engineering, themselves, and each other. Become a security engineer and a burglar in one of our very favourite engineering challenges, and come ready to chat about your favourite challenges, tips and pitfalls you've encountered in setting rules, what participants (and we) can learn, and how we can frame the best experience.

Rosy Ansell, Sciansell Limited

Multi-sensory, accessible astronomy: from the classroom to a museum exhibition

Darwin Classroom • 12.00pm - 1.00pm

We are working with teachers of vision impaired (VI) children, their pupils and VI community groups to create multi-sensory, accessible astronomy educational resources. We'll present the lessons learnt from our co-creation with the target audience; using sonification (turning data into sound) and tactile resources. We'll share how we are working with a museum to incorporate our approaches into a multi-sensory and accessible exhibition.

Join us to draw upon the experiences of BIG Event delegates to share ideas, build-in best practices, and work towards a broader goal of fully accessible exhibitions.

Chris Harrison, Newcastle University

Aish Girdhar, Newcastle University

Vicky Fawcett, Newcastle University

Is that Laser Legal?

Event Suite • 1.00pm (during lunch)

It is cheaper to make dangerously powerful laser pointers than safe ones, so a fair proportion of those sold as safe are dangerously overpowered (often as invisible IR). Last time we ran this session, we found about 10% were illegal and found a couple 10 times as powerful as advertised.

We have a power meter to check your lasers are what they claim to be.

Don't forget to pack your laser pointers.

Dave Ansell, Sciansell

BIG AGM

Thinktank Theatre • 1.30pm - 2.30pm

BIG STEM Communicators Network operates as a not-for-profit organisation of members – a club, effectively; everything it does is to support the development of its members and the science communication profession in the UK and beyond.

BIG's Annual General Meeting is held annually and gives members the opportunity to contribute; to understand what the Executive Committee has done for the membership over the last year; to help shape the future of BIG.

This is also when the Executive Committee election results are announced.

All BIG Members (that's you!) are welcome

Best Demo Prep

Thinktank Theatre • 2.30pm - 4.00pm

This is a closed session, just for Best Demo competitors to set up and for helpers to help. Strictly no peeping in here, please. If you're competing, you need to drop in, even if you don't need any set up time.

Sarah Cosgriff, Science Communicator and Trainer

Are you game to talk about research?

Curie Classroom • 2.30pm - 4.00pm

Try out our new board game where you run a research centre! We'll share how we collaboratively developed games to connect researchers, artists, patients, and the public by using games to discuss difficult and abstract questions about priorities in healthcare systems and research institutions.

This game is a result of the collaboration between a UCL Engineering researcher and game developer as part of the "In Theatre" public engagement through art project.

Phil Wiles, Wellcome EPSRC Centre Interventional Surgical Sciences

Dr Richard Colchester, UCL WEISS

The STEM Response Team super share session

Attenborough Lab • 2.30pm - 4.00pm

The STEM response team is the University of Wolverhampton's award-winning STEM engagement team. We engage thousands of young learners in schools and people in the community annually and

we develop and deliver interactive workshops and science theatre shows, mostly in areas of underprivilege across the West Midlands. In this sharing session, we'll share our most popular workshops and resources with you. Together, we'll discuss how you can develop new activities and we'll share our best advice for working with participants from underserved communities.

Martin Khechra, University of Wolverhampton

Heather Angell, University of Wolverhampton

Harry Johnson, University of Wolverhampton

What does the UKRI Public Engagement strategy mean for you?

Darwin Classroom • 2.30pm - 4.00pm

UK Research Innovation (UKRI) have issued their first Public Engagement strategy. It outlines 3 main goals: 'shared endeavour,' 'collaboration,' and 'long term engagement' with innovators and publics.

What does this mean to engagement practitioners? Do you need to reframe your work or start again? How does this translate in our work with researchers?

This interactive session will explore the new strategy and how BIG members can help towards the goals. We will hear from UKRI on their aims, how engagement might be assessed and supported, and explore the 'culture change' they hope to realise with the new strategy.

Lucy Moorcraft, Northumbria University

James Piercy, John Innes Centre

Claudia Antolini, University of Cambridge

Steve Scott, UK Research and Innovation



Meeting for the Incoming and Outgoing Executive Committee

Lego Studio • 2.30pm - 3.30pm

This is a session for the newly elected Executive Committee and the outgoing Exec. It's a mini-handover and only required for the Exec members.

A tour of the Museum Collection Centre

Meet at Reception Desk • 2.30pm - 4.00pm

Birmingham Museums has 9 sites but one is very different and located only a 15minute walk from

Thinktank. The Museum Collection Centre is the main store for Birmingham Museums, holding around a million items. With only a small percentage of collections on display at Birmingham Museums, or on loan to other organisations, it is the only place to see collection items not normally on display. Join Thinktank staff for a private tour to see behind the scenes at what a museum store looks like on a grand scale.

birminghammuseums.org.uk/museum-collection-centre

Laurence Butler, Thinktank, Birmingham Museums Trust

Thursday evening festivities

The Best Demo Competition

Thinktank Theatre • 5.00pm - 6.30pm

BIG members line up to compete for one of the least valuable and yet most highly prized honours in UK science communication.

The Best Demo Competition presents a light-hearted look at some of the demos you think are worth sharing with your peers. There's no money to win, it's not an Oscar, it's not a Nobel Prize. But within BIG we think it's worth winning.

Each competitor has no more than three minutes (and a warm and welcoming audience) to demonstrate the maths, science, engineering and so on that really lights their fire and they just can't help showing off to their peers. The audience decides. If you're in the audience, don't take it too seriously. If you're competing, take it seriously, but not too seriously.

Previous Best Demo winners...

1997	Wendy Sadler
1998	Derek Fish
1999	Chris Norton
2000	Gillian Pearson
2001	Gillian Pearson
2002	James Piercy
2003	Suse Brumpton
2004	Rob Copeland & Izi Mohammed
2005	Ben Craven
2006	Marcus Weber
2007	Ben Craven
2008	Diane Gray
2009	Ian Simmons
2010	Farrah Nazir
2011	Brian Macken
2012	Karl Byrne
2013	Marcin Chydzinski & Błażej Dawidson
2014	Stephen Williams
2015	Matt Pritchard
2016	Tobias Happe
2017	Brian Mackenwells
2018	Matthias Salewski
2019	Jemma Nauman
2020	
2021	Phil Bell-Young
2022	Sarah Cosgriff

Best Demo Voting and Drinks Reception

• 6.45pm - 7.30pm

A chance to enjoy a drink in the Exhibition. Skip it to freshen up before dinner if you like, but make sure you are back at Thinktank before 7.30pm so you can cast your vote for the Best Demo winner.

Dinner (and the Best Demo winner announcement!)

Event Suite • 7.30 - 11.00pm

Enjoy dinner, chat and a drink before the Best Demo winner for 2023 is announced. Do you have a ticket to dinner? See page 4.

Friday 28 July

Theatre (180)	Planetarium (69)	Currie (30)	Lab (30)	Darwin (30)	Science Garden Area				
Registration									
9.00 - 9.30									
9.30 - 10.00		Because you're worth it!	Sharing the low hanging fruit	Why should you be running youth educator programs	Engaging Outdoors				
10.00 - 10.30									
10.30 - 11.30	Welcome Session and Beestestone Award (Theatre)								
11.30 - 12.00	COFFEE/TEA/BISCUITS in Event Suite								
12.00 - 12.30	DIY: Demo It Yourself	Instagram: Experimenting Online	Puzzles in maths	Creating content at Thinktank					
12.30 - 1.00									
1.00 - 1.30	LUNCH in Event Suite								
1.30 - 2.00									
2.00 - 2.30									
2.30 - 3.00									
3.00 - 3.30	Careers: How did we end up here?	Social Media: People, Planning, Posting	Accessible evaluation	Research-based approaches to science engagement	Bigbubbleman Blitzes Birmingham				
3.30 - 4.00									
4.00 - 4.30	COFFEE/TEA/BISCUITS in Event Suite								
4.30 - 5.00	ISTATOY & Plenary								
5pm onwards	The designated pub for lingerers is posted at the Registration Desk & Slack								

Because you're worth it!

Curie Classroom • 9.30am - 10.30am

Are you squeamish about money? Do you always feel like you are overcharging? Have you ever said, "I love what I do and would do it for free if I could."? Then this session is required reading for you.

Hear from freelancers and business owners about why you need to be charging a fair rate for yourself as well as for the industry. We'll talk a bit about how to get set up as a freelance and we'll remind you that you are worth it. Join us to start feeling better about discussing money and getting paid.

Ashley Kent, BIG

Sarah Bearchell, Children's Science Writer and Presenter; Freelance

Leonie Briggs, Amazelab

Matt Williamson, Tayside Planetarium

Sharing the low hanging fruit

Attenborough Lab • 9.30am - 10.30am

Every method of communication comes with a bunch of tips and tricks that seem obvious in hindsight and allow us to achieve better results with minimal effort. This session will bring together expertise from attendees to share those little game-changers that make everything better. From hidden features in PowerPoint to working with stage equipment or posting on social media, there are tonnes of simple things that could take years to figure out on your own but which could be explained to you in just a few minutes. Our goal is to do the latter!

Robin Hayward, University of Leeds

Em Truman, National Space Centre

Sarah Cosgriff, Science Communicator and Trainer

Why should you be running youth educator programs?

Darwin Classroom • 9.30am - 10.30am

Because, among other things, visitors report greater interest and learn more after interacting with a youth educator! Thinktank, Centre of the Cell, and the University of Exeter all have well-established youth educator programs which provide teens with opportunities to learn STEM skills, develop soft skills, and gain experience interfacing with and educating the public. We'll introduce ongoing collaborative research and share best practices from our programs (and from the US, too). We'll also share research findings from our study which include 1) benefits that teens have on visitor experiences and learning and 2) benefits that programs have on the youth participants.

Sarah Wickson, Birmingham Museums Trust

Mengya Zhao, University of Exeter

Myfanwy-Cerys Williams, Centre of the Cell

Fidelia Law, University of Exeter

Engaging Outdoors

Science Garden Arena • 9.30am - 10.30am

Connecting with nature and outdoor learning are known to be good for us; join us to discuss why and how to convince other people too. Get practical tips on taking your engagement outdoors: what to take, what info to send out, what to include on the risk assessment and which unexpected things should always be expected. Walk away with some ideas for activities that work just about anywhere outside.

Naomi Foster, North Pennines AONB Partnership

Beetlestone Award

Thinktank Theatre • 11.00am

Professor John Beetlestone (1932-2017) was the founding director of Techniquest, the UK's first purpose-built science discovery centre. Set up in his honour, the Beetlestone Award* recognises "leadership and legacy in the field of informal science learning" and carries a personal cash prize of £500; an additional bursary to facilitate dissemination of the holder's vision and legacy and free registration for the next BIG conference.

The 2023 winner of this prestigious award is Lewis Hou from Science Ceilidh.

*This Award has been made possible through the generosity of The Beetlestone family and John's former colleagues and friends. Keep an eye on the BIG website and your inboxes to find out how to apply in 2024.



Photo: Max Lautenschlaeger

DIY: Demo It Yourself

Thinktank Theatre • 12.00pm - 1.00pm

Join our panel of presenters as they each show their own distinctive take on a classic demonstration. We'll then have a look at each approach, some of the decisions made and the subtleties. You'll then have chance to have a go yourself, borrowing (or stealing) what you liked from the presenters to create your own unique version of a demonstration.

Chris Snowden-Smith, Transpennine STEM

Ambassador Hub

Ian Snell, Science Oxford

James Piercy, Thepiercy

Sarah Cosgriff, Science Communicator and Trainer

Extending beyond space in a sphere

Planetarium • 12.00pm - 1.00pm

A planetarium is a fab way of engaging an audience with space – exciting, enticing, wondrous. But can we extend the experience, by thinking outside the box (well, dome)?

Have you tried space yoga? Meteorite handling?

Making a scale model solar system?

Join us to share your ideas and experiences of adapting planetarium shows to make them more toddler-friendly, more active, more interactive! Can you use a planetarium to explore topics other than space?

Emily Fisk, Science Oxford

Matt Williamson, Tayside Planetarium

Instagram: Experimenting Online

Curie Classroom • 12.00pm - 1.00pm

Join us as intrepid SciComms share their journeys navigating Instagram – a platform emblematic of the changing online landscape and pressures of the algorithm.

In the rivers of Reels, how can video diaries bring people into labs and make science more open? In the deserts of the DMs, what's the best way to foster collaboration? Wandering the landscape, is social media a brain drainer or a brain retainer for scientists and audiences?

Sam Ridgeway, TV Assistant Producer

Puzzles in maths (and wider STEM) communication

Attenborough Lab • 12.00pm - 1.00pm

Many people enjoy solving puzzles, and they're often a great inspirational hook to engage people with science and maths content. We'll share some ways in which puzzles have been used to hook people into maths and science, and discuss the potential benefits (and possible pitfalls) of using them in your work.

Katie Steckles, Maths Communicator

Alison Kiddle, Maths Communicator

Creating content at Thinktank

Darwin Classroom • 12.00pm - 1.00pm

Thinktank is launching its new exhibition looking at the world of computer coding. This display uses the museums collections, stories from the local area and has been created with local experts, universities and focus groups. Join us as we talk about the different process and ways of working Thinktank has used to make sure that the displays and exhibitions we produce, are not only suitable for visitors but created and consulted on, by them as well. The session will focus on coproduction methods, consultation with groups and how best to work with academics and individuals who have specialist knowledge.

Laurence Butler, Thinktank, Birmingham Museums Trust

Felicity McWilliams, Thinktank, Birmingham Museums Trust

Lukas Large, Thinktank, Birmingham Museums Trust

Careers: How did we end up here?

Thinktank Theatre • 2.00pm - 3.30pm

A friend in sci-comm once said that "careers are things that happen in retrospect". Come along to this session to find out how a bunch of BIG folk got to where they are now and what on earth it is they actually do. Our panel will share stories, skills and maybe even secrets and answer your questions on careers in STEM communication and public engagement.

Naomi Foster, North Pennines AONB Partnership

Lucy Moorcraft, Northumbria University

Social Media: People, Planning, Posting

Curie Classroom • 2.00pm - 3.30pm

Want to create engaging social media posts? Join this interactive workshop to learn tips and tricks for planning social media posts. Focusing on Twitter and LinkedIn, we will discuss how to make social posts accessible so that everyone can experience the science we communicate. We'll share the method she uses to plan social media content for a scientific institution (if you like spreadsheets, you'll love this!), and how you can use this method for your social media goals.

Sophia Constantinou, The Faraday Institution

Accessible evaluation

Attenborough Lab • 2.00pm - 3.00pm

Do you ever feel you are just doing evaluation for the sake of it? In this session, we'll discuss why you should spend time thinking about what evaluation you want to do, and sometimes the right decision is not to do it at all. We'll talk about how ensuring your evaluation doesn't interfere with your audience is paramount, which sometimes means using reflective evaluation methods, or thinking outside the box.

We'll look at examples of evaluation techniques that may not be accessible to everyone (think dexterity, colour-blindness...) and share techniques honed with children in SEND schools.

Dr Rowena Fletcher-Wood, Freelance/Greene's Tutorial College

Dr Sarah Bearchell, Science Writer and Presenter; Primary Science Specialist

Research-based approaches to science engagement

Darwin Classroom • 2.00pm - 3.30pm

You've probably heard of important concepts like 'science capital' and evidence-based science learning approaches like 'Thinking, Doing, Talking Science'. Both of which have a positive impact on young people's interest, attitudes and even attainment in science. But what do these terms really mean? And how might a practice based on these concepts and approaches support more effective science engagement and informal science learning? Join us as we explore what the research says and illustrate how it might apply to the work of science communicators.

Jen DeWitt, Independent/UCL

Bridget Holligan, Science Oxford

Bigbubbleman Blitzes Birmingham

Science Garden Arena • 2.00pm - 3.00pm

This is an outdoor bubble show with a practical demonstration of equipment and techniques.

Ian Russell, producer of interactive science exhibits and a BIG old-timer of many years, introduces his alternative iridescent persona. 'Bigbubbleman' (www.bigbubbleman.com) is increasingly well known for providing crowd-pulling entertainment at big outdoor events. It's not difficult to please a bunch of children by knocking out some bubbles if you have some basic gear and a working recipe for the liquid. But Bigbubbleman has been practising for over ten years and can fill more space with bubbles and excited children than you might believe possible.

Ian Russell, Interactive Science Ltd

I Saw This and Thought of You

Thinktank Theatre • 4.00pm - 5.00pm

Back for the 11th year running, the session to end all sessions (because it's the last session): I Saw This And Thought Of You.

BIG's equivalent of an open mic slot, this is where all the little things can be raised. Found a Thing you think everyone should know? Tell us here. Want to share your love of all things plier-related? You could do that. Have a pithy insight? Want to raise a question? Newcomer or old hand, there's an up-to-2-minute slot with your name on it. Sign up throughout the Event.

Sam James, Freelance

BIG Code of conduct

We want the BIG Event to be a welcoming environment for everyone, regardless of gender identity and expression, age, sexual orientation, disability, physical appearance, body size, ethnicity or religion. BIG does not tolerate harassment of any form (e.g. violent behaviour, display of inappropriate content, discrimination, unwelcome physical contact and so forth).

Everyone involved with BIG's activities is subject to the Code of Conduct. Failing to comply with this Code of Conduct could result in the immediate exclusion from any of the programmed events without a refund.

We do not intend formal procedures to replace the discussion between BIG members. If you would prefer to discuss someone's behaviour aimed at you or someone else directly with them, please do. Alternatively, please approach a member of the Executive Committee to discuss your concerns or report an incident.

Please take a minute to read the full version of the Code of Conduct and reporting procedures, which can be found here: www.big.uk.com/Code-of-Conduct. Physical copies are available at the Reception Desk.

Accessibility

Thinktank, Birmingham Science Museum, Millennium Point, Birmingham, B4 7XG

Thinktank is accessible to wheelchair users and can cater for any other access requirements. There are central lifts to all floors within Thinktank and Millennium Point. You can book wheelchairs for your visit in advance (0121 348 8000). The floor surface of the museum is smooth, plastic coated and non-slip, in some places there are carpet tiles. All staff have disability awareness training. Many areas of Thinktank have fixed hearing loops installed including the Thinktank Theatre and the Planetarium. The noise levels and number of visitors can vary depending upon the time of your visit. A quiet room is available on Level 2 in the galleries. If you have any questions, <https://www.birminghammuseums.org.uk/think-tank/visit/accessibility> or email hello@birminghammuseums.org.uk

Scicommchat Slack, #big

scicommchat is a Slack for people who work in STEM communication and like to have a chat. There is a huge crossover of people from the industry here chatting and sharing ideas and resources. There is a

channel for almost everything (including #demo-chat, #code, #cpdandprofevents) and BIG's channel is #big. This is where lots of chat about the programme and social events will take place. It's not essential to join, but it will be very useful.

Scan the QR code to join scicommchat Slack and join #big. Visit the Registration Desk if you need help.



Did you know that BIG programmes Skills Days and Online Socials throughout the year?

The BIG Event is our biggest event of the year, but it's only one of a handful we organise for BIG members. There is also the Little Event, an online training session for people who are new to STEM communication, which is usually held in January. But we also programme Skills Days throughout the year. These sessions vary in topic and location, so there is something for everyone. BIG is always looking for new speakers, ideas and venues. See more at <https://www.big.uk.com/whatwedo> or get in touch with Ashley Kent event@big.uk.com if you have an idea for a Skills Day or BIG Event venue.

The Josh Award 2024

The Josh Award is a national prize for early-career science communicators who are passionate about continuing to work in this field in the future, including students, volunteers, researchers or creatives. The award is inspired by and named in memory of Josh Phillips, who was the first Science Communication Officer at the Science and Industry Museum and proposed the first Manchester Science Festival.

Winners will be provided with up to £2,500 to develop an activity for Manchester Science Festival, which can be anything from an installation, to a hands-on workshop or a live performance, with support from the festival team. They will then deliver their activity at the festival.

To apply, complete the online form on the Science and Industry Museum website.