



SUMMER SCIENCE

EXHIBITION

6 – 12 JULY 2020

WELCOME PACK



THE
ROYAL
SOCIETY

 @royalsociety #summerscience

Welcome to the Summer Science Exhibition 2020

Thank you for accepting our invitation to exhibit at the Summer Science Exhibition in July next year. We are delighted to welcome you to Planning Day.

This pack and our accompanying website is designed to help you get the most out of the day and begin to organise your thoughts, team and exhibit.

Though we understand that Planning Day can be overwhelming, please note that the team are here to help throughout the year, and that plenty of information can be found on our website, including a copy of the slides used in today's presentation.

We look forward to working closely with you over the coming year. Please don't hesitate to chat to us today, or get in touch at any point after the day if you have any questions.

Amy Fry
Senior Public Engagement Officer

Telephone: 0207 451 2582

Email: exhibition@royalsociety.org

Website: royalsociety.org/exhibitors

Planning Day Programme

Monday 25 November 2019, The Royal Society, Wolfson suite

10.15am – 10.40am	Arrival and refreshments	
10.40am – 10.45am	Welcome <i>Julie Maxton, Executive Director</i>	
10.45am – 11am	Introductions <i>Amy Fry, Senior Public Engagement Officer</i>	
11am – 11.15am	Summer Science Exhibition Overview <i>Amy Fry</i>	
11.15am – 11.25am	Timelines, obligations and tools <i>Amy Fry</i>	
11.25am – 11.35am	Break	
11.35am – 12.05pm	Tour of the Exhibition space <i>Public Engagement team</i>	
12.05pm – 12.20pm	Planning first steps <i>Amy Fry</i>	
12.20pm – 12.45pm	Developing your exhibit <i>Kenneth Boyd, Technical Design Consultant</i>	
12.45pm – 1.25pm	Lunch	
1.25pm – 1.35pm	Health and Safety when planning your exhibit <i>Amy Fry and Amanda Meader, Head of Facilities</i>	
1.35pm – 1.40pm	Overview of the next sessions <i>Amy Fry</i>	
1.40pm – 3.20pm	Feedback on your applications <i>Public Engagement team, Wolfson 2 and Marble Staircase</i> (See separate timetable)	Exhibit design <i>Kenneth Boyd, Technical Design Consultant, Wolfson 1</i> Working with the press <i>Press team, Wolfson 1</i> Engaging with school groups <i>Schools Engagement team, Wolfson 3</i> Website, social media and promotion <i>Digital team, Wolfson 3</i>
3.20pm – 3.30pm	Working with your institution <i>Katie Weeks, Public Engagement Manager</i>	

3.30pm – 3.40pm	Break
3.40pm – 3.55pm	Exhibition week logistics <i>Amy Fry</i>
3.55pm – 4.40pm	Been there, done that! The views of 2019 exhibitors <i>Peter Sadler, In your element</i> <i>Annique Van der Boon, Magnetic to the core</i> <i>Aftab Jalia, Timber towers of tomorrow</i>
4.40pm – 5pm	Staff and previous exhibitors Q&A <i>All speakers</i>
5pm – 5.15pm	Important next steps <i>Amy Fry</i>
5.15pm – 6.15pm	Drinks reception

Planning Day: Exhibitor Attendees

Exhibit Title	Institution(s)	Planning day attendees		
A breath of fresh air	University of Manchester	Gemma Smith	Han Xue	
Beware: Flooding ahead!	University of Reading	Hannah Cloke	Caroline Cross	
Blue Carbon and Changing Seas: Responding to the Global Climate Emergency	University of St Andrews, Queen Mary University	William Austin	Clementine Chirol	
Connecting to the human brain: Next generation technology	Imperial College London	Timothy Constandinou	Francesca Troiani	
Disease Detectives	The Pirbright Institute	Teresa Maughan	Kim Stirk	
Energy Critical Elements: the mineral cost of a sustainable future	Natural History Museum, iCrag	Richard Herrington	Elsbeth Wallace	
Exploring the Landscape of Cancer	Cancer Research UK Manchester Institute	Steve Bagley	Joanna Kelly	
From open, to keyhole, to robotic surgery. Would you trust a robot surgeon?	Imperial College London	George Mylonas	Steve McAteer	Alexandros Kogkas
Growing New Body Parts!	King's College London	Jessica Sells	Claire Mooney	
Happy Birthday Hubble	University of Sussex, University College London	Stephen Wilkins	Jo Barstow	
Last Day of the Dinosaurs	University of Manchester	Phillip Manning	Victoria Egerton	
Our breathing Earth new views of carbon from satellites	University College London, University of Edinburgh	Mat Disney	Doug Finch	
Owls and eagles inspire aeronautical advances	Royal Veterinary College, University of Bristol	Richard Bomphrey	Shane Windsor	
Personalised Printing for Pills!	University of Nottingham	Ricky Wildman	Harinee Selvadurai	Richard Hague
Sensing Danger	University of Manchester	Liam Marsh	James Anderson	Anthony Peyton
The bee trail: Where have you been?	Earlham Institute, University of Cambridge	Peter Bickerton	Lucy Spokes	

The ExoMars Rover and its Experimental Tools in the Search for Life on Mars	Natural History Museum, University of Leicester	Joel Davis	Melissa Meltugh	Hannah Lerman
The good, the bad and the methanogenic: understanding the microbes that manage our waste for us	Biovale, University of York, Thyme	Elspeth Bartlet	Penny Cunningham	
The Science Behind Body Odour	University of Oxford, University of York	Simon Newstead	Gavin Thomas	
The Third Thumb: How can our brains and bodies adapt to augmentation?	Plasticity Lab, UCL Institute of Cognitive Neuroscience	Danielle Clode	Mathew Kollamkulam	
Your place in the Universe	Durham University	Difu Shi	Shufei Rowe	

Royal Society staff attendees

Public Engagement team

Amy Fry	Senior Public Engagement Officer
Tracey Hughes	Head of Marketing and Public Engagement
Katie Weeks	Public Engagement Manager
David Chapman	Assistant Public Engagement Manager
Daniella Afeltra	Public Engagement Officer
Emma Watson	Public Engagement Officer
Naomi Fuller	Public Engagement Officer

Press team

Bronwyn Friedlander	Head of Media Relations
Alex Matthews-King	Senior Press Officer
Jesse Hawley	Assistant Press Officer

Digital team

Rob Rutter	Digital Marketing Manager
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Schools Engagement team

Jo Cox	Schools Engagement Manager
Elizabeth Chambers	Schools Engagement Officer

Facilities team

Amanda Meader	Head of Facilities
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Speakers

Previous exhibitors

Peter Sadler	University of Warwick, <i>In your element</i> , exhibitor 2019
Annie Van der Boon	University of Liverpool, <i>Magnetic to the core</i> , exhibitor 2019
Aftab Jalia	University of Cambridge, <i>Timber towers of tomorrow</i> , exhibitor 2019

Other

Kenneth Boyd	Technical Design Consultant
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Summer Science Exhibition 2020: Opening Times

Please note that the timings listed below are the public opening hours for the exhibition.

During the exhibition, exhibitors are allowed to be on site one hour before the exhibition opens and remain behind for no more than 30 minutes after the exhibition closes to the public.

Exhibitors must be at their exhibits at least 5 minutes before the exhibition opens.

SET UP

Date	Time	Details
Friday 3 July	2pm – 4pm	Exhibitor deliveries ONLY
Saturday 4 July	10am – 6pm	Exhibitor delivery and set-up (<i>Last delivery 5pm</i>)
Sunday 5 July	10am – 6pm	Exhibitor delivery and set-up (<i>Last delivery 4pm</i>)

EXHIBITION WEEK

Date	Time	Details
Monday 6 July	9.30am – 11am	Press preview of exhibition
	11am – 6pm	Exhibition is open to the public and registered school groups
Tuesday 7 July	10am – 4pm	Exhibition is open to the public and registered school groups
	6pm – 10pm	Summer Science Lates evening (adult audience)
Wednesday 8 July	10am – 4.30pm	Exhibition is open to the public and registered school groups
	7pm – 10pm	Soiree 1
Thursday 9 July	10am – 4.30pm	Exhibition is open to the public and registered school groups
	7pm – 10pm	Soiree 2
Friday 10 July	10am – 6pm	Exhibition is open to the public and registered school groups
Saturday 11 July	10am – 6pm	Exhibition is open to the public

Sunday 12 July	10am – 6pm	Exhibition is open to the public
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BREAK DOWN

Date	Time	Details
Sunday 12 July	6pm – 8pm	Exhibitors can begin to pack down their exhibits
Monday 13 July	8am – 12pm	Exhibitors dismantle and collect their exhibits

Please note all exhibit materials must be off site by 12pm on Monday 13 July. We will be unable to store items in the building beyond this.

Summer Science Exhibition 2020: Key Dates

For more information, please see royalsociety.org/exhibitors. It is essential that these deadlines are met.

JANUARY

- 13 - 31** Initial call with Royal Society and university (exhibit team, press and public engagement contacts on both sides) - to be booked in via eventbrite
- 24** Deadline **Form A** (exhibit overview, promotion, contact details, funding and availability for audience engagement training)

FEBRUARY

- 7** Confirmation of allocated exhibit dimensions
- 14** Deadline for applications to Exhibitor Support Fund
- 28** Exhibitors informed of Exhibitor Support Fund application outcome

MARCH

- 10** Audience Engagement and Communication Training 1 at the Royal Society
- 13** Deadline **Form B** (website, soiree invites, partnerships, digital and exhibit space)
- 16** Audience Engagement and Communication Training 2 at the Royal Society

APRIL

- 1 - 7** Exhibition website and supporting events programme launched
- 3** Exhibitors informed of their allocated exhibit space

MAY

- 1** Deadline **Risk assessment, final exhibit plan** and **public liability insurance**
- 4 - 22** Progress call with Royal Society - to be booked in via eventbrite

JUNE

- 5** Deadline **Form C** (operations, deliveries and arrivals, staffing)
- 19** Exhibition briefing packs to be sent to exhibitors

If you have any questions about the deadlines or content within them, please contact exhibition@royalsociety.org or 0207 451 2582.

Exhibitor chat timetable

	Amy Fry <i>(Wolfson 2)</i>	Katie Weeks <i>(Wolfson 2)</i>	David Chapman & Naomi Fuller <i>(Wolfson 2)</i>	Daniella Afeltra & Emma Watson <i>(Marble Staircase)</i>	Tracey Hughes <i>(Marble Staircase)</i>
1.40pm	Connecting to the human brain: Next generation technology	Disease Detectives	Blue Carbon and Changing Seas: Responding to the Global Climate Emergency	A breath of fresh air	Beware: Flooding ahead!
2pm	Exploring the Landscape of Cancer	Energy Critical Elements: the mineral cost of a sustainable future	Sensing Danger	Last Day of the Dinosaurs	From open, to keyhole, to robotic surgery. Would you trust a robot surgeon?
2.20pm	The Science Behind Body Odour	Our breathing Earth new views of carbon from satellites	The bee trail: Where have you been?	Personalised Printing for Pills!	Owls and eagles inspire aeronautical advances
2.40pm	The ExoMars Rover and its Experimental Tools in the Search for Life on Mars	The good, the bad and the methanogenic: understanding the microbes that manage our waste for us	Growing New Body Parts!	Your place in the Universe	
3pm	The Third Thumb: How can our brains and bodies adapt to augmentation?	Happy Birthday Hubble			

At the same time as the exhibitor chats, there will also be drop-in discussions taking place with the Royal Society Digital, Press and Schools Engagement teams, as well as a surgery on Exhibit design. This is a great opportunity to find out more about the different teams you will be working with leading up to the exhibition, so do try and visit all the groups in between your chat with the Public Engagement team.

Drop in discussions:

☐

Exhibit design *(Wolfson 1)*

☐

Working with the press *(Wolfson 1)*

☐

Engaging with school groups *(Wolfson 3)*

☐

Website, social media and promotion *(Wolfson 3)*

Map

Basement



● Exhibits

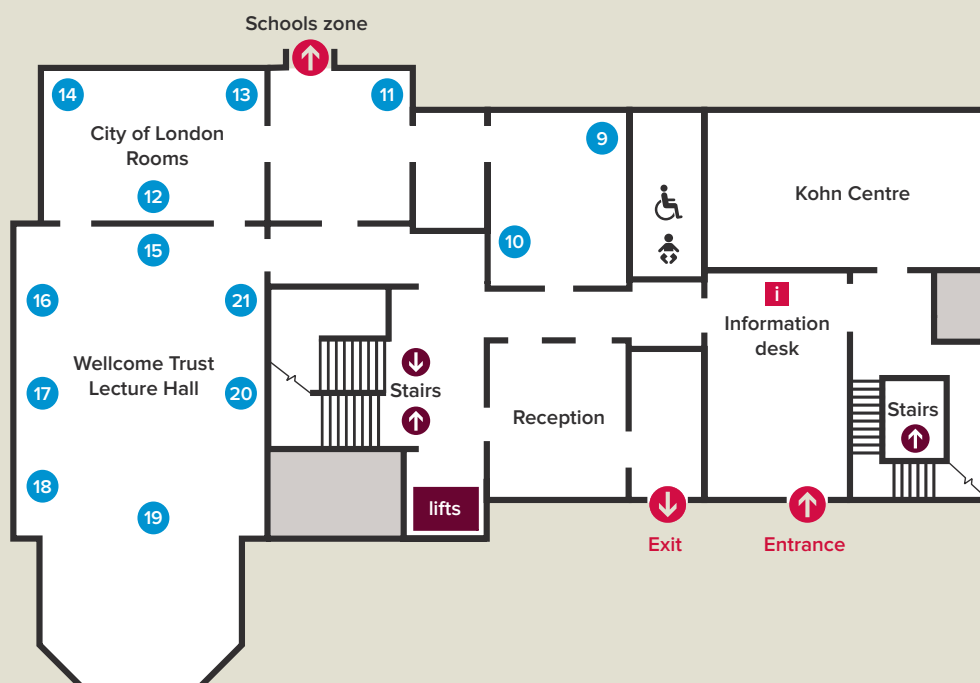
General information

● Baby changing facilities

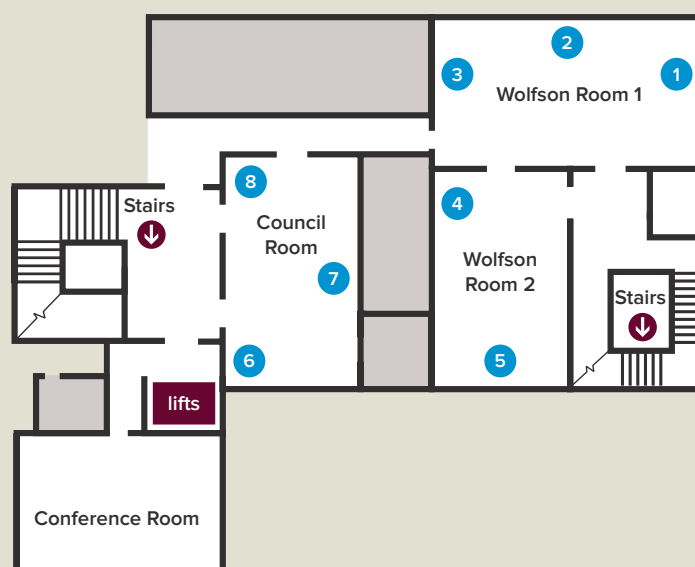
● Water fountain

● Cloakroom

Ground floor



First floor



Social Media at the Summer Science Exhibition

Social media is an excellent way to promote your exhibit in the build up to the exhibition and throughout the week, to prospective attendees and those who are following it online across the globe.

There are lots of different ways to get involved on social media. You might want to:

- Set up new accounts for your exhibit/project
- Use your existing social media accounts
- Get your department or main university account involved

Key information

Follow the Royal Society on social media:

- Twitter - @royalsociety
- Facebook - @theroyalsociety
- Instagram - @theroyalsociety

The exhibition hashtag is **#summerscience**

- Hashtags help people, the Royal Society included, find your content and share it with their audience.

Before the Exhibit

- Decide if you are going to create new accounts for your exhibit/project.
 - Some of our past exhibitors have chosen to do this, as it allows you to post as often as you need to and gives you control of the message. Running the social media activity for the exhibition could be a great development opportunity for a member of the project team.
 - However, building up a new social media account can take a lot of time and dedication. It may be more beneficial to identify existing personal or partner accounts that will post for you.
 - You may also choose to just get involved using your own social accounts.
- Share your account handles with the Royal Society and any partner organisations including your main university social media team.
- Chat to your university social media team and share any plans and ideas you have with them (as well as the hashtag and any account handles you'll be using).
 - They may be able to support you with content on the main university channels or provide some social media training.
- Share regular updates.
 - Who is your audience? Plan content that will appeal to them.

- Tailor the content to the platform, e.g. strong images for Instagram, short videos on Twitter.
 - Instagram Stories last for 24 hours and are a great way to share 'behind the scenes' content. Don't be afraid to get in front of the camera and talk to you audience.
 - Think visually; posts with videos tend to do better than just images, and images tend to perform better than plain text.
- Be social; it's not enough to post your content, talk to your audience when they talk to you.
 - Ask your audience questions.
 - Reply to their comments.
 - Find accounts similar to you and talk to them.
 - Like and share posts from other Summer Science exhibits.
- Use the tag #summerscience.
 - This helps people, the Royal Society included, find your content and share it with their audience.
 - Check #summerscience (or follow it on Instagram) for opportunities to like, post or share.
- Have fun, explain the science.

During the exhibition

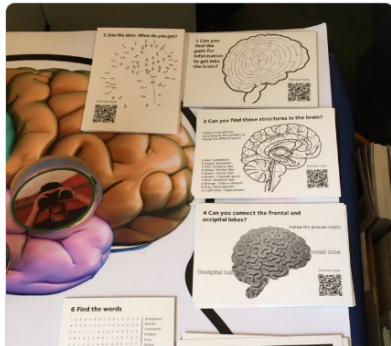
- Make sure you tag your posts on Twitter and Instagram (including Instagram Stories) with #summerscience.
- We want to share your posts with our audience, but we cannot share everything.
 - Tag us in your best content or send us a message to let us know about a great post.
 - If you tag us in your Instagram Stories, we'll add a selection to the Royal Society Instagram Story.
- Be social; reach out to other exhibits to learn about them; like their posts; reply to comments, let us know how it's going. This gives you a reason to post more frequently and encourages people to interact with you.
- Think visually; share photos and short videos that explain the science behind the fun.
- We will have a Twitter wall on a large TV display featuring all tweets on the hashtag #summerscience making your posts more easily discoverable to a wider audience.
- Tag any relevant partner institutions from the list you've created, either in the image or post.
- Post something new each day which explains the science behind your exhibit.
 - research papers (if public-facing)

- website
 - key facts
 - interactives
 - multimedia
- During the week, the Society will be creating video content around the Exhibition that we can use for the rest of the week. Tell us about the best shots and videos we could create around your exhibits.
- Avoid photos of any school pupils who have no photography stickers. Make sure you understand how consent for images and video works.
- We'll be coming round on the Monday for 30-second pieces to camera with each exhibitor team for a quick-fire science pitch about the team and their research. How would you explain your exhibit? What do you want people to take away?

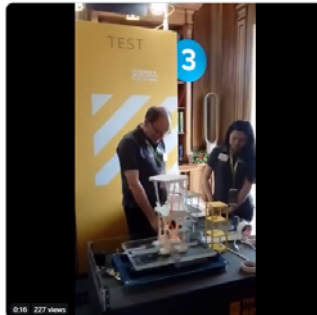
The more material, the better. Let's spread the word as far and wide as possible online and show the great science on display at the exhibition.



Have you been trying out some of our puzzle postcards this week at @royalsociety #SummerScience? Need a sneaky peak at the answers? medsci.ox.ac.uk/breathing-with...



Last day today, thank you for having us @royalsociety we've had a blast at the #SummerScience Exhibition with our stand The Great Bristol Shake Off 🥳 Shakes, fails, fun and not a #soggybottom in sight 🍷
#shakeitoff #shakennottstirred #shakeitlikeapolaroidpicture #allthepuns



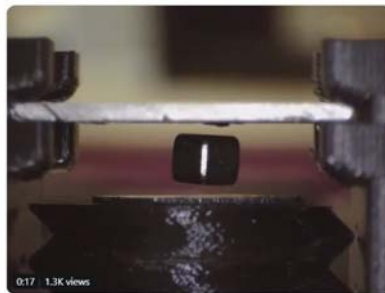
It's been a fantastic week running our Trusted Autonomous Vehicles stand at the @royalsociety Summer Science Exhibition. Lots of visitors (2,500 only today!). Thanks to organisers, sponsors and visitors! We hope to be back soon! #driverleics #SummerScience



A huge thank you to everyone who visited us at @royalsociety #SummerScience last week to find out about @ORCA_Hub and play with our robots! Thank you and well done to the team who worked so hard all week. We hope you enjoyed #ORCAsummerScience! @EPSRC @UKRI_News #Robotics



Lancaster University @LancasterUni · Jul 5
It's not magic – it's physics! 🤖 Watch the demo of a cube floating in mid-air describing the incredible properties of ultra-low temperatures. This is just one of the amazing experiments at the @LJL_IsoLab exhibit The Art of Isolation @royalsociety #SummerScience



A typical BBQ releases more greenhouse gas emissions than an 80-mile car journey - but choosing vegan or chicken could reduce its impact.

Our scientists are showing how diet contributes to #ClimateBreakdown with a @royalsociety #SummerScience exhibit: shef.ac/2NsJ4UM



Wow wow wow. Our @royalsociety #SummerScience stand #LivingOnTheMoon is looking fabulous today. Now, we just need to transport it to London where we hope to see many of you next week. Good work Moon team! Check out our webpage for more details: livingonthemoon.info

Thomas Barrett @ThomasJ_Barrett · Jun 24
The stall is almost perfect! Final checks are going well. One week to go for #SummerScience @royalsociety #LivingOnTheMoon. Look forward to seeing everyone there 🙌 @OU_SPS @OU_SpaceRA



If you want even more breathing & neuroscience content plus excitement from #SummerScience, look out for our Twitter takeover!

Medical Sciences @OxfordMedSci · Jun 17
Ever wondered what role your brain plays in your breathing? Find out from @BreatheOxford scientists @royalsociety #summerscience exhibition 1-7 July, or from their #TwitterTakeover, Mon 1 July medsci.ox.ac.uk/breathing-with...



3:04 PM · Jun 17, 2019 · Twitter for iPhone

Eight tips for creating your exhibit webpage

1. Take a look at some examples from last year's exhibits for inspiration

Find some inspiration from last year's exhibits at <https://royalsociety.org/science-events-and-lectures/2019/summer-science-exhibition/exhibits/>

The examples below worked particularly well:

<https://www3.mrc-lmb.cam.ac.uk/sites/recipe4life/>

<http://livingonthemoon.info/>

<https://spark.adobe.com/page/22fuT91OTtBjV/>

<https://www.takeabite.info/>

2. Give someone in your team responsibility for the project and enlist in-house help

Teams last year mentioned that they would have found it beneficial to give someone in the team responsibility for the project. This could be a great project for people looking to enhance their digital and communication skills. It can be helpful to reach out to your university's web development / IT teams to see if they can help you build pages to add to your university's research team section, or as a new site.

3. Write the content and design any videos, diagrams and content with a public, non-specialist audience in mind

Visitors coming to your webpages are likely to find your content through our Summer Science Exhibition website area, which is written for a broad public audience (we try to write for an imagined persona of an interested 12 year old to keep language clear and avoid jargon). Try to make explanations about your exhibit easily understandable for people unfamiliar with your research and try not to assume knowledge. If making videos or diagrams, try to tell a story with your content. Take people on a journey with the issue you are tackling and what your research is looking to find out.

4. Simple is good. Try to keep your pages to a minimum and go for simplicity and clarity

Don't feel the need to create lots of pages and linked sections of content. Just one well-constructed page can be enough and provide all the information people need and want to find.

5. If you can, build pages that you can use again to promote your research

If you focus on the story of your research and how to tell it to a general public audience you can hopefully create some great legacy content that you can use in the future when talking to the public at other exhibitions or events.

6. SquareSpace and WordPress can be good services to use to build your pages

If you can't get internal development support for your pages and you'd like to create something yourself, SquareSpace (www.squarespace.com) and WordPress (www.wordpress.com) can be easy to use services to build pages from templates.

7. Plan to have your webpages ready for launch 1st week April 2020

We plan to go live with our Summer Science website section from the 1st week April 2020, and it'd be great to have your pages ready alongside this to help visitors find out more and explore in advance of the exhibition.

8. Promote your pages!

Talk to your university marketing and communications teams about your exhibit pages to enlist their help in promotion. If you have social media accounts, share the link and include it in your email signature.

Advice from previous exhibitors

Planning

- Don't panic, but start planning in advance. It may sound obvious, but there is no such thing as too early.
- Refer to the deadlines and forms on the exhibitors' room website in advance. These help you to know what you need to have ready at each stage (royalsociety.org/exhibitors).
- Make the most of institutional support – press office, public engagement team, design team etc - they can help you with everything from press, website development and funding.
- Produce a full logistics plan in advance as this will ensure there are no issues especially around accommodation.
- Create a web and, especially, a dedicated social media presence early. The earlier the better and populate with content prior to the exhibition.
- **Ask the Royal Society team for help. They know the exhibition inside and out.**

Funding

- Start thinking about funding early, as it takes longer than expected and will ensure you know how much you have to spend.
- If you aren't based in London plan how many people you will need to support your stand carefully. Travel expenses take up a bigger fraction of the budget than you expect.
- By sorting early, you can book accommodation and travel at the best prices and it removes worry from the later stages when you need to focus on the event itself.

Your stand

- Keep it simple.
- Stick to your three key messages and make sure that everything revolves around them - design, activities, give aways etc. That way your stand will be cohesive and people will leave knowing the overall message of your stand.
- The exhibit is all about the story, visitors want to be taken on a journey - it is your job to guide them.
- Don't have a stand that is packed with posters of words, it's not a conference.
- Have a contingency plan for your activities. Something will go wrong.
- You can *overdo* it with freebies. Think about what reinforces your key messages, and what is novel, useful or particularly interesting and conversation worthy. You don't have to give them to everyone, think about competitions or one in a few.
- Creating workbooks for teachers around your research can create a big impact, and provides opportunity to link to the exhibition back in the classroom.
- Be prepared for the exhibit to evolve over the next few months.
- Think carefully about stand design, how interactive is it? How many people can you interact with at a given moment?
- You don't need to have flashy equipment to make a big impact, sometimes being able to get closer to real science is the biggest draw.
- Create something that you can use again. A lot of time and money goes into the exhibition; make sure you are getting something long lasting out of it.

Your exhibit team

- Decide who is going to lead on the project and ensure a close working team. Good project management is essential so that the project is completed on time and you get as much out of it as possible.

- Delegate tasks to your project team - it will prevent you from burning out and also provides excellent learning and development opportunities for your team.
- Trust your team, you don't need to micromanage them all the time.
- Think about appropriate staffing levels for your stand and give each team member a 'role' whilst on the stand. Too many exhibitors can appear intimidating but make sure you have plenty of people to rotate for regular breaks.
- Do not underestimate how many volunteers you will need.
- Be rigorous about taking breaks; there are so many interested visitors that it is tempting to stay there the whole time.
- Set up a volunteer communication system i.e Slack, so you can share lessons-learnt or day-to-day tips. Alternatively, have a post-mortem of the day's events over a drink with your team to share techniques that proved effective in attracting or inspiring visitors.
- Have fun! The visitors engage much better with you when you have a smile on your face and look like you are enjoying yourself. Give yourself breaks, and you will find it more fun!

Interactions with the public

- Send people to the audience engagement and communication training day who are able to run a similar workshop with volunteers back at your institution.
- Good Public Engagement is a dialogue, make sure you are listening to your visitor and incorporating their thoughts and suggestions into your conversation.
- Know your key messages and how your interactives relate to them.
- Try to gauge a visitor's prior knowledge or interest in the exhibit before launching into the science. **This is very important.**
- Think about the story behind your exhibit and try to present a problem or driving question first, before explaining the solution. Your audience needs to understand what the point is of what you're doing.
- 'Cheat sheets' for activities with anticipated Q/As or opening scripts can help the team have confidence demonstrating the exhibit, especially if the activities are not their expertise. However don't stick to it too rigidly. Be ready to tailor your explanation to individual visitors' areas of interest.
- On average, a visitor will spend 6-8 minutes at the exhibit, but some will want to chat for a long time, and others will want to quickly move on.
- Consider appropriate responses to typical areas of misunderstanding/controversy or particular public interest.
- Use examples or analogies that relate your research to everyday life
- Practice interactives/bits of your exhibit with the different exhibition audiences, for example, take your exhibit into a school or test on campus.
- The exhibition is a great opportunity to offer advice to young people about careers in science and give detailed information about what your job involves – they may be surprised scientists are 'real people'!
- Focus on younger children too, have something specifically to engage them. The visit is led by the youngest child. If they are bored, the group will move on.
- Establish clear rules on talking to media: who may talk about what and who should others refer journalists to talk to.

Ultimately, be prepared for lots of work - but the reward of being at the SSE is worth it!

How to make a good video

We will not require you to make an exhibitor video for the Summer Science Exhibition, however in case you wish to create digital content around your research, we've compiled some useful guidance below.

A good video will tell your story and make people excited about your science. This is a challenge in the competitive marketplace of YouTube which has around 100 hours of video uploaded every minute and where over 6 billion hours of video are watched every month. However, YouTube has more than 1 billion visitors each month, which makes it an ideal place to achieve views and reach a bigger public audience.

A good video about your science can appeal to popular science editors, raise awareness about your work in the mainstream and online media, and enhance engagement with the general public and early-career/next-generation scientists who have grown up as digital natives. But – you must tell a good story.

1. The brief: telling your story

Before you write a brief consider what makes a good story:

- Why is your science important to people?
- What would people find surprising, mysterious or awesome about your work?
- Is the content relatable to the lives of everyday people as well as to scientists?
- What is the emotional value or reward for watching your video?

Try to remember that 'why' often has more impact than 'who' or 'what' in your story. Focus on 'why' to highlight the big ideas behind the science, such as 'Why does it matter?', 'Why is it interesting?' and 'What don't we know about this and why?'

Your story needs to appeal to different audiences. This might sound tricky but try to remember that most people are drawn to the pleasure of finding things out.

Scientists are naturally curious people and curiosity is universally relatable and engaging whether the viewer is a Royal Society Fellow, fellow researcher, science-interested layperson or school pupil.

2. Format and length

Think about the format for your video story. Watching a talking head for five minutes is a lot to ask. In fact, watching any video for a full five minutes is a lot to ask of anyone on YouTube. Think about the average time it takes to watch a television advert and how the advertisers convey an overall concept in 30 seconds. The ideal length for a promotional video is three minutes. Remember, we might like to share these on Facebook where the average video may be viewed for only one minute!

Also, include action shots, attractive motion graphics and exciting research images with a voiceover in the video to make your story interesting to watch.

3. Producing your video

People have become accustomed to seeing premium video content on YouTube and the internet whether from school and college students or world-leading brands. Videos that are poorly produced and edited don't invite confidence in the message being conveyed. You could commission a professional videographer to film, produce and edit your video, but if you are making it yourself then remember these things:

- **Camera:** Buy, borrow or rent a camera that can record 1080p HD with unlimited recording time; other useful features include a remote control and a mic in socket. Use a tripod to ensure the camera is steady, the subject is in focus, and any movement is intentional and smooth. Keep camera movements (panning and zooming) to a minimum.
- **Audio:** If your video is difficult to hear then the viewer will give up. All speech should be clearly audible. Reduce background noise and interference as much as possible. Audio should be free from a hum or buzz – make sure you place the microphone close to the speaker.
- **Lighting:** Videos should be properly lit, make sure that your subject isn't in shadow or overexposed. Avoid light sources behind the subject, such as a large window or sunlit backgrounds. If you can't use additional lighting and your subject is too dark, change the shot.
- **Environment:** Try to film interviews in clean and not distracting locations, avoiding ugly/cluttered walls or shelves. Alternatively, throw the background out of focus by setting the interviewee several feet in front of it.
- **For interview-style videos, be mindful of the following advice:**
 - The composition of the shot is important. The subject should be in the left or right-hand third of the frame, looking across the frame to the farthest edge.
 - Your interviewee should face slightly away from the camera (but not so much as to distract the viewer), speaking to the interviewer who should be sitting immediately beside the camera.
 - The speaker should always address the interviewer rather than the camera.
 - Prepare the questions that will be asked in advance. Make sure 'open' questions are asked and not 'closed' ones which require only a yes-no response. Direct your interviewee to answer questions with complete thoughts, so "how long have you worked in the lab?" is answered with "I have worked in the lab for four years" rather than "four years".
 - Don't be afraid to use close-ups. Filling the frame with the speaker can often look more energetic and interesting than wide-angle shots where the speaker is only a small part of the composition. Be sensitive to the movements of your subject however; if they move around a lot and go out of shot, a close-up may not be appropriate.

- Both interviewer and interviewee should talk conversationally and avoid jargon – “make everything as simple as possible, but no simpler”. People relate better to conversational language that is easy to understand.
- Editing: Do invest in professional video editing software such as Final Cut Pro or Adobe Premiere. Films shouldn't be longer than they need to be, ideally just a few minutes long. Don't forget that presentation is important: use a title card to introduce the video and credits card to close the video, and include subtitles when relevant to introduce interviewees or a location.

4. Promoting your video

A high-quality thumbnail image for your video is vital to its success. The thumbnail image is a huge signal to the potential viewer about the content and value of the video, try to use compelling images from your research combined with some text.

After your video has been uploaded to YouTube, spread the word on social media (Twitter, Facebook, Google+, LinkedIn etc). Ask family, friends and colleagues (including your institution) to do the same.

5. Useful examples of popular science videos

These YouTube channels are among the most popularly watched science videos online.

TED-ed https://www.youtube.com/channel/UCsooa4yRKGN_zEE8iknqhZA

In a Nutshell <https://www.youtube.com/user/Kurzgesagt>

Vsauce <https://www.youtube.com/channel/UC6nSFpj9HTCZ5t-N3Rm3-HA>

Veritasium <https://www.youtube.com/channel/UCHnyfMqiRRG1u-2MsSQLbXA>

Numberphile <https://www.youtube.com/channel/UCoxcjq-8xIDTYp3uz647V5A>

Scott Manley <https://www.youtube.com/channel/UCxzC4EnglsMrPmbm6Nxvb-A>

Backyard Scientist <https://www.youtube.com/user/TheBackyardScientist>

ASAPScience https://www.youtube.com/channel/UCC552Sd-3nyi_tk2BudLUzA

Oxford Sparks <https://www.youtube.com/user/OxfordSparks>

Minute Physics <https://www.youtube.com/channel/UCUHW94eEFW7hkUMVaZz4eDg>

Periodic Videos <https://www.youtube.com/user/periodicvideos>

Introduction to Press Work

Journalists play an essential role in promoting the Royal Society Summer Science Exhibition and making it an unmissable date in London's busy summer cultural calendar.

There is no single winning formula that guarantees press, but at the heart of successful media coverage is the ability to talk like a human and tell a compelling story about your research and your exhibit that can be understood by anyone.

Who we are

The Royal Society's press team – Jesse Hawley, Alex Matthews-King and Bronwyn Friedlander – manage all media relations relating to the promotion of the Exhibition. We retain full editorial control over the PR strategy for the Exhibition and the way your exhibit is promoted in the media as part of this. We do this by working with you, and your in-house PR team colleagues, in the run-up to the Exhibition launch to find and develop your exhibit's news hooks so that we can make maximum impact in highlighting your research and promoting the Exhibition as a whole.

What we do

The Royal Society's wider communications strategy combines media relations, advertising and social media to drive visitors to the Summer Science Exhibition. The press office works closely with TV camera crews, radio producers, print journalists and online reporters from every type of publication to ensure that the research you are presenting goes beyond the confines of our building in central London. Whether it's a newspaper, tabloid or magazine, we work with everyone to ensure we reach out to as wide an audience as possible.

We will be in touch over the next few months to find out how you fit into the wider promotion plan. The underlying news hook for all journalists is that the Royal Society's Summer Science Exhibition opens on 6 July 2020. Reporting it any later would make it old news, so expect the biggest media activity a couple of days before and on the first day of the Exhibition.

What makes the news

Grand opening. The first day of the Exhibition is news enough for TV & radio. Both BBC Breakfast and the Today programme (7m+ audience figures each) have previously reported live from the Exhibition floor, interviewing exhibitors at their stands while Royal Society spokespeople talk about the history of the Exhibition and why visitors should attend.

Meanwhile, ITV News London (2m+ viewers) has previously filmed prerecord interviews with exhibitors jointly with our Professor for Public Engagement Brian Cox, edit the news package back in the studio and air it later that evening.

For other journalists, particularly those covering science, tech and health on the national newspapers, your presence at the Summer Science Exhibition isn't a strong enough news hook, which is why we help you develop this from the start. We have included a few more examples below. This is not an exhaustive list that guarantees success – it is just meant to get you thinking about creative ways of making the news.

New research. Timing the publication of a study or report directly relevant to the research presented at the Exhibition bolsters your newsworthiness and makes it feel much more novel and cutting-edge. This tactic only works if it comes out on the week of the Exhibition (6-12 July 2020). Publishing in a Royal Society journal is desirable as we can help with timing, but not essential by any means.

“Unveiling” or “revealing” technology. This tactic lets journalists use a bit of creative licence to whet the appetites of potential visitors. For example, one exhibit unveiled the prototype of an “intelligent toilet” that can immediately tell your doctor/parents whether you're at risk of depression or using recreational drugs. Their research was about technology that can recognise traces of molecules in urine. The breakthroughs allowed real-time health monitoring or drug testing in hospitals, and the exhibitors used the “intelligent toilet”, which doesn't really exist, as a creative way of opening an important public debate on the ethical implications of their work. Another example is exhibitors announcing a patent for one of their quantum computing technologies at the Exhibition, showing that you don't need the technology to be physically present to make the news. And one year an exhibitor got engaged with a synthetic diamond ring that they had fabricated in their own laboratory – and the tech, aimed at addressing the issue of ‘blood diamonds’, was being exhibited at Summer Science.

Unusual access. If you bring something to the Exhibition that the public rarely, if ever, gets to interact with, let us know. One time an exhibit brought a ‘perfume’ that smells like a comet. This landed them a slot on the BBC's popular One Show and newspapers reported it as a “heavenly scent to be handed out in London”. If you can't bring it to the Exhibition but can give journalists early access, we could always send a TV crew to pre-record with you in your lab. An example of this is when we put an opera singer and rapper into an MRI machine to study the differences in the ways their larynx moves for BBC Breakfast.

Strong visuals. Sometimes, a picture of your exhibit can tell a story itself. News agencies send photographers that then sell the pictures to national picture desks, which can appear in a print newspaper the next day or as part of a picture gallery on a news website. If your stand is going to be visually interesting we need to know.

Star power. Having a widely-known public figure to join you at your exhibit is a great way of making the news. For example, previous exhibitors invited football legend Sir Bobby Charlton to attend as his charity funded their work. An exhibit about the science of laughter secured up and coming comedians to do a short set. Another group asked a spoken word artist to do a poem about soil weathering.

Public surveys. One group launched a project investigating the prevalence of dry eye disease in UK children at the Summer Science Exhibition, something which had never been done to

this scale before. At the heart of this story was that scientists highlighted a problem (the unknown prevalence of dry eyes) that was also relatable. Another group used their time at the Exhibition to carry out the largest survey of the public and their sentiment towards contact with extra-terrestrials, which received wide spread media attention.

What you can do now

This handout is intended to get you thinking about how to work with us to ensure your research has wide impact. Start discussing with your team about the ambitions for your exhibit and think about what's newsworthy about your work and the creative ways you can bring it to life. We also recommend getting in touch with your institutional press officer to get the dates of the Summer Science Exhibition in their diaries. Find out how much support they can provide you at this stage and in the run up to the Exhibition, and let us know about it.

Frequently Asked Questions

Are exhibitors expected to talk to journalists?

Yes. Journalists can disseminate your work to millions around the world, creating new opportunities for people to learn about your work and raise the profile of your research team and institution. As the UK's national academy of science, it is also our responsibility to inspire people with advances in technology and the positive impact that science can have in all of our lives – ideally by enthusing them enough to come visit us in person after reading about your research in the news.

Can you guarantee our exhibit will generate media interest?

No. Breaking news can emerge at any time and more often than not science is lower down the pecking order when competing with, for example, political developments. Luckily, the UK has specialist science and technology correspondents at most news desks, meaning there will be a minimum amount of coverage we can expect from the Exhibition as a whole. We will ensure we develop your news hooks as much as possible to give you the best fighting chance in a competitive news environment.

How does the Royal Society pick which exhibits to promote?

We normally choose **three to five exhibits** to promote widely via press releases, but this number varies year to year. In general, the exhibits picked will cover a wide breadth of science and have news hooks that appeal to the widest number of people and a variety of media outlets.

A further **eight to ten exhibits** are chosen for strategic, targeted pitching. This is when we reach out to one or two journalists directly, giving them early or exclusive access to the story. We cannot write press releases for all exhibits to avoid spamming journalists' inbox, which is a counterproductive strategy and makes it less likely that they will cover the Exhibition as a whole.

It may also be that your exhibit lends itself more to an in-depth feature in a Sunday newspaper because it requires more nuance than we can provide in a press release. Another reason is

the research at the exhibit was covered too recently, making it old news for a press release but providing new opportunities for TV & radio broadcasters from the Exhibition floor.

Not writing a press release does not mean your exhibit won't be promoted, as we often find that coverage begets coverage. For example, a bespoke pitch we made to the Mail on Sunday last year subsequently made it into The Times and the Daily Star the next morning, and was later picked up by the BBC World Service.

What if my exhibit isn't picked at all?

Please note that the news making process is fickle and this **does not** reflect on the strength of your research, people or institution. Your work will still be promoted regularly in all our general mailings to journalists about the Exhibition as a whole, and they may be in touch directly if your exhibit description catches their eye. We will also be in touch with you separately to provide materials and encourage your institution to promote your presence at the Exhibition. In this situation, working with your institutional press officer is the best way of maximising your chances of coverage (see below).

When does the Royal Society start promoting the Exhibition?

We start reaching out to journalists as early as December 2019 to ensure the date is in their diary. Some publications, e.g. consumer or in-flight magazines or event listings like Time Out, require advanced notice to feature in their print editions. With some exceptions (see below), there will be limited press coverage in the run-up to the Exhibition, with the highest flurry of press coverage coming through on the first few days of the Exhibition.

What happens on the first day of the Exhibition?

We officially open to members of the public at 11AM on Monday 6 July, but all exhibits are ready and staffed a few hours earlier for an exclusive **press preview**. This is a small window of opportunity for journalists to come talk to exhibitors and film/take photographs before the crowds come in. There is also a chance that BBC Breakfast or ITV's Good Morning Britain will run a live early morning segment from the Exhibition on their shows. We will be in touch separately if this happens as it will affect some exhibits, depending on where they are located in the building, and may require a very early morning start.

Are we allowed to promote our work before the Exhibition?

Unless the Royal Society press office instructs otherwise, **all exhibit content is embargoed until 11.00 Monday 6 July 2019**, which is when the Exhibition officially opens to the public. There are exceptions, for example if we place an interview in a Sunday paper ahead of the Exhibition to trail the event. We will be in touch with you directly if we plan to do this with your work.

What happens during the rest of the week?

Journalists attend the Exhibition throughout the entire week. Those with imminent deadlines like print news reporters and TV crews visit on Monday, while those with longer deadlines like BBC Radio 4's Inside Science, New Scientist or the Economist visit at other times. Sometimes journalists examine the Exhibition programme beforehand and will let us know who they want

to talk to. In these cases, we will text you in advance to ensure you are around to meet and talk to them.

Anything else I should know?

Agility and speed are essential in the world of news, and journalists must be able to talk to exhibitors directly. There will be no time to build consensus by email with your wider research group to find a common position on something – preparation in advance is key and we will help you to do this. Please bear this in mind in the weeks running up to the Exhibition and especially on Sunday 5 July and Monday 6 July 2019.

We do not expect to hoard all your announcements, so please give us advance notice on any news coming out of your exhibitor group before the Exhibition opens – the earlier, the better. If you are chosen as one of the lead exhibits for promotion but make national news in June because of a newly published paper, it has important knock-on effects on the entire press plan. Finally, if you are not picked for bespoke promotion, please work with your institutional press office to make your presence felt at the Summer Science Exhibition. Your research will have news value at a regional level and in trade magazines, and depending on what's on at the time, it could still be successful more widely.

If you have follow up questions please contact us on press@royalsociety.org/ 0207 451 2508

What should I do now?

Below outlines some suggested next steps for everyone involved after Planning Day.

What should exhibitors do before mid-January?

- Not panic – we know it is overwhelming at the beginning, especially after Planning Day. We are here to help, talk to us.
- Report back the information to your exhibit teams, especially if the lead exhibitor was unable to join Planning day.
- **Read the exhibitors' room website: royalsociety.org/exhibitors/.**
- Decide who will be project managing the exhibit development and meet with your group to discuss ideas and feedback.
- Review the deadlines and draft forms, and add all the dates in your diary as they give you an idea of what needs to be done first.
- Secure buy in from your institution – shout about your achievements.
- Secure your funding and consider if you will need to apply for the Royal Society's support fund.
- Book in your January conversation with us. Please invite your press and public engagement teams to this conversation – it is invaluable.
- Start planning your soiree guests, this always takes longer than you expect.
- Book accommodation if you will need it – it books up fast.
- Book in key researcher time, they will need to be at the exhibition.
- Think about impact. How are you going to get the most out of this for you, your team and your institution? Work with your Public Engagement Team and Comms/Press/PR teams.
- Celebrate, tell people, it's a fantastic achievement!

What will the Royal Society do?

- Contact your Vice Chancellors (or equivalent) to inform them that you are exhibiting.
- Contact your Press team so that they are aware of this (please also do the same).
- Contact your Public Engagement team to make sure they are aware of this and encourage them to become involved (please also do the same).
- Send booking link for January chats with our exhibition team, press and digital teams.

If at **any** stage, you need help, have questions or want to run an idea past us, please don't hesitate to get in touch.

exhibition@royalsociety.org

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