

Working with UK Science and Discovery Centres and Museums

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2. Summary sentence

Across the UK there are over 50 science and discovery centres that work every day to offer inspiring ways to engage and involve people with the sciences and the natural world.

3. Introduction

Across the UK there are over 50 science and discovery centres and science museums that collectively intrigue, inspire and involve over 20 million children and adults with the sciences every year. These centres are established within their communities, already work with local researchers and have a ready-made public and schools audience.

These centres bring together people of all ages and all backgrounds to discover the creativity of science in an interactive and hands-on way. Their goal is to help people to explore, test, experiment, and discover the wonders of the world around them.

All of these centres work with local scientists from both universities and industry. By partnering with a science and discovery centre, you can provide the scientific expertise and the opportunity for the public to talk to you about your work, while they provide a ready-made audience, a great venue and a wealth of expertise in how to engage the general public.

4. Guidelines and approach

Together, the UK science and discovery centres (see map on last page) make up the largest publically accessible network dedicated to both hands-on science learning and family science learning. They employ an army of over 5,000 professional science engagement specialists with backgrounds as wide-ranging as performance artists, scientists, ecologists, teachers, designers and film-makers. All skills which are needed to bring science alive with people from all parts of society.

These centres are keen to partner with researchers from the broadest range of science-related specialities; for example biologists, psychologists, environmental scientists, social scientists, bio-



ethicists and chemists. Their goal is to get people of all ages and backgrounds delving into the latest areas of science and having the opportunity to meet and discuss their thoughts with real scientists.

Before making your approach you will need to understand the position of the centre you approach. In general they are charitable organisations who attract funding for specific projects to cover staff time. Don't be fooled, no UK centre covers the cost of their education activities from ticket revenue! With the exception of the National Museums, they don't receive Government subsidies, although some have contracts with local councils to provide enlivening science experiences for schools.

This factor is KEY. While staff in centres might absolutely love to embark on projects with you, they must operate within this constraint. This means they will often try to tie in your event within an existing funded project.

What sorts of activities might you do with a science centre?

Science centres run a huge variety of different types of activities, each one targeted at a different audience. Which you choose will depend on the guidance of the science centre you work with, which format you feel most comfortable with and the type and age of participants you want to work with. Some examples are included below and all would need to be developed with staff at the science centre.

Meet-the-expert events

These are popular events and a great place to start. You (and a colleague or staff member) spend a day or two at the science centre, showcasing what you do and talking with school students, families and other visitors. You generally have a table with intriguing and attractive items to illustrate and enliven what you are talking about. Some items will be fairly generic and easy for children and adults to play with (for example, a model brain if you're a neuroscientist), with other items more directly relevant to your work for more in-depth discussions.

Safety issues will be paramount, especially if people might will be exploring the items alone, while you are busy talking to other visitors. The science centres will advise on this, and what their visitors will enjoy.

Large-scale experiments

If you have an idea for a great public experiment, you could ask a science centre if they would like to partner. For example if you are a cognitive psychologist, you could involve people with science by getting them to be the participants (such as are you right or left-eyed? How good is your memory for smells?), or if you are an ecologist you could get students at centres to go out and collect data on species at school or home. These are a great way to encourage people to share the experience of science.

Lectures, talks and debates

These can come in a variety of forms and might involve evening or weekend events, daytime talks for schools or families, or perhaps panel debates, or discussions with the audience on the same table. The audience for these are generally very keen to hear about your research and you would be expected to have props and demos to make it very lively. You might also want to investigate your



local Cafe Scientifique¹ to get involved in these types of events. Often these are run as one hour evening events with cosy audiences of 20 – 50 adults. Many are run by science centres.

New exhibitions and special projects

These would need additional funding and most centres would have suggestions if it was something they wanted to pursue and they felt the ideas were good enough to secure sufficient funds. This might be co-developing individual hands on exhibits, creating films, animations and planetarium shows (such as of the inside of a cell or of outer space), web resources or touch-screen exhibits.

Schools programmes and outreach

Across the UK many millions of school students and their teachers take part in curriculum-targeted programmes, shows and events. These happen both at the science centre and via outreach to schools, youth clubs and community venues. While the programmes are usually run by centres, they often highly value the addition of an accompanying scientist who can talk informally with students (and teachers) over the activities, sharing details of what it is like to be a scientist, what you do every day, and other questions they are keen to ask about a career in science and your own research.

Making the first approach

Often just by approaching the science centre and discussing ideas with them you will discover a whole world of great possibilities. We would encourage you to speak with them at the earliest point. Look at the map over the page, choose your centre and get their email or phone number. Then simply:

- 1. Telephone the switchboard and ask to speak to the Learning Manager, or someone in the Education team
- 2. Email the 'info@...' address on their website, and ask for it to be sent to the Learning or Education Manager
- 3. Telephone or email The UK Association for Science and Discovery Centres (ASDC) and we will put you in touch with the right centre:
 - Telephone: 0117 915 0181
 - Email: info@sciencecentres.org.uk

What to say initially

Introduce yourself and say the area that you work in. Say you have some exciting research/ activities that you think the public might be interested in finding out about, and you wondered who would be the best person to talk to.

¹ http://www.cafescientifique.org/



5. Practical tips

1. Timing for your activities

Science and discovery centres are full of families and peer groups during the weekends, holidays and half terms, and full of school students every weekday. School visits of course vary across the year with most visits being made in June and July, and fewest right at the start of each term. Choose your time depending on the audience you want to work with.

2. Get public engagement training

We would encourage all researchers to go on a specific public engagement training course as this will help you (and the public!) enjoy your event. These are often run by your university, the Research Councils, your professional body or learned society, and in some cases by ASDC.

3. Talk to your university press and outreach departments

It is likely that people at your university will have worked with the science centre before, and these groups can advise. In addition they will be keen to hear your plans and might be able to help. Once you and the science centre have discussed an activity, most centres would be delighted if your press office wanted to promote what you are doing.

4. Consider if your event should be part of a celebration, festival or special week

For example, breast cancer awareness month, Harbour festival, Brain Awareness Week (March), National Science and Engineering Week (March) or perhaps International Year of Chemistry 2011.

5. Think about financial support

When proposing your involvement to the centre, consider if there is a small amount of funding you might apply for to pay for your expenses and the staff time at the centre. Try your research council, learned society and university department – visit ASDC's web pages on fundraising for STEM Clubs² for some ideas

6. Find out what others have done in your area

Google 'hands on', 'experiment' or 'interactive' plus the name of your subject (for example, solar energy), or look at the website for your professional body (for example, Royal Academy of Engineering, Physiological Society), and use their public engagement ideas to inspire you, or embellish on these to animate your event.

7. Be guided by the expertise and needs of the science centre

They will always be thinking about what is in the best interests of the visitor or school student, who might just be taking their very first steps in their adventure with science

² http://sciencecentres.org.uk/resources/stemclubs/



6. Other resources

- 1. The UK's science and discovery centre network: http://sciencecentres.org.uk/centres
- 2. Guidelines for finding funding to support your event: http://sciencecentres.org.uk/resources/stemclubs/
- 3. Examples of 'meet the scientist' events:
 - http://www.gsc.org.uk/meetthescientist.aspx
 - http://www.nhm.ac.uk/education/school-activities/talks-and-debates/meet-the-scientist/index.html
 - http://www.life.org.uk/whats-on/events/national-pathology-week-meet-thescientist-event
- 4. Examples of cafe scientifique:
 - http://www.cafesciencedundee.co.uk/
 - http://www.thinktank.ac/cafe_sci
 - http://www.sciencecafe.co.uk/
 - http://www.cafesci.org/oxford/
 - http://www.camtriplehelix.com/cafe_sci



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