

## Soapbox Science Hull 2016 - 3<sup>rd</sup> of September 2016

### Evaluation report for the Biochemical Society



Soapbox Science is a novel public outreach and science communication platform for promoting female scientists and the science they do. The events transform public areas into an arena for public learning and scientific debate. Soapbox Science is an annual event, which has been running since 2011. In 2016 there were 12 events all over the UK and Ireland, as well as one in Australia, running throughout the summer.

#### Aims of Soapbox Science Hull 2016

1. Increase the visibility of women in science
2. Promote science communication
3. Boost the visibility of science undertaken at the local Universities (in this case, the University of Hull)
4. Engage the general public and young people with different scientific disciplines, including the biosciences.

#### On the day...

Yorkshire's first Soapbox Science event, **Soapbox Science Hull 2016**, was held the 3<sup>rd</sup> of September. It featured 12 leading female scientists from the University of Hull and East Yorkshire Hospitals NHS, ranging

from PhD students to professors, engaging passers-by in scientific discussion. Topics included the location of galaxies, lab-on-a-chip, cancer biology, invasive species, biofuels, and medical engineering. See our dedicated site for more details. <http://soapboxscience.org/soapbox-science-2016-hull/>



Our amazing speakers in action at the event, even in the pouring rain! Clockwise from top left: Jenny Marsden, Prof Nicole Pamme, Dr Lori Lawson-Handley, Dr Vicky Skoulou, Dr Domino Joyce, Dr Monica Arman, Dr Michelle Farrell, Rhiannon Lee, Dr Catherine Dobson, Dr Natalie Vanicek, Brittany Wingham, Dr Sheona Urquhart. All photos by Helena Gomes.

Speakers were supported by volunteers and student ambassadors. Volunteers/ambassadors also participated in evaluation data collection, as well as crowd gathering and engagement.

Soapbox Science Hull 2016 was run alongside the University of Hull Freedom Festival 2016 activities, and was setup outside the science tent.



Location of boxes setup just before the event. Photo by Isabel Pires



Although the day started off clear of clouds, by the time the event started at 12.30, there was a heavy drizzle. Rainfall became stronger as the event progressed, and did not stop for the whole event. Even in these wet conditions, we had a constant stream of visitors, and everyone, from speakers to volunteers and student ambassadors, as well as the organisers, had a good time, and enjoyed themselves.



Dr Isabel Pires (main organizer) with one of the props, Prof Brian Coccyx, when it was still sunny just before the Festival opened. Photo by Helena Gomes.



Jenny Marsden talking all things radiotherapy. Photo by Helena Gomes.





**Dr Domino Joyce explaining how light availability can drive evolution in deep sea fish. Photo by Helena Gomes.**



**Prof Nicole Pamme talking to a group of young visitors about lab on a chip. Photo by Helena Gomes.**





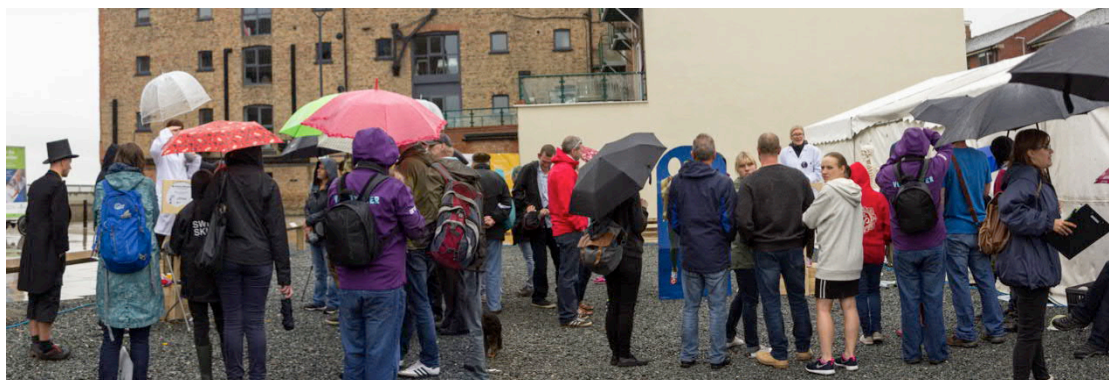
**Rhiannon Lee braving the rain to talk about different types of radiation. Photo by Helena Gomes.**



**Brittany Wingham chatting about DNA and cancer biology, supported by one of our wonderful volunteers. Photo by Helena Gomes.**

The event was funded by the Biochemical Society and by the University of Hull access fund, with support from Science and Technology Facilities Council (STFC). Our Soapboxes were made by the amazing people at the Humber Wood Recycling Project.

## Evaluation process and data



Panoramic shot halfway through the event, showing the visitors, speakers and volunteers collecting data (with clipboard, on the right).  
Photo by Helena Gomes.

The evaluation process consisted of four different aspects:

### 1. *Footfall*

Data was collected by volunteers/ambassadors placed at entry/exit points to determine the total number of people that enter the event area. We had a total of **794** over the 3 hours. There were significantly more visitors in 1<sup>st</sup> hour (445) compared to last hour (134), with 215 in the 2<sup>nd</sup> hour. This might be due to the increase in rainfall as the event progressed, associated with timings with other Festival events.

### 2. *Audience composition*

Data was collected on whether visitors are alone or in groups, and what type of groups. These data consists of selected visitors that engaged with the speakers (see point 3), and was collected by a dedicated volunteer. Out of the 35 visitors that were evaluated, the majority were in groups, either as a family/adults with children (46%), or as a group of adults (46%). Only 8% attended alone.

### 3. *Level of engagement*

The dwelling time of the specific individuals or groups (n=35) was noted by the same volunteer as for 2. They also recorded how many of the scientists stands that were visited by each individual being observed.

The overall average dwell time (median of 35 observations) was 2 minutes



and 24 seconds. Adults or adult groups median dwell time was higher (8minutes and 18 seconds) than families or adults with children median dwell time (2 minutes and 26 seconds).

7 out of the 35 individuals or groups were described to have extensively 'interacted' or 'engaged' with the speaker. The majority of this interaction happened earlier on the event and decreased as the rain got heavier.



**Dr Lori Lawson-Handley was one of our 12 fantastic speakers, and she talked about eDNA and invasive species. Photo by Helena Gomes.**

#### **4. Awareness & enjoyment**

The levels of enjoyment and awareness allowed us to determine whether two of our key aims, *Increase the visibility of women in science* and *Engage the general public and young people with different scientific disciplines*, were achieved. Relevant data as recorded using a standardised questionnaire (provided by the central organisers) handed out by volunteers/ambassadors and completed on the day.

Detailed breakdowns and key demographic data shown at the end of the report, but some of the key data is discussed in this section.

25 visitors completed the questionnaire. The majority of the respondents visited the event as they happened to walk by it on the day (48%), but many had looked online or had a recommendation (40%). For the majority of the respondents, this was their 1<sup>st</sup> Soapbox Science event. 96% watched at least one of the speakers, with 20% listening to 4 speakers or more.

#### *4.1 Overall enjoyment and motivation to attend*

The vast majority of respondents noted that they found the event very enjoyable (76%) or quite enjoyable (16%).

When asked about their motivation to attend, the majority replied that it was due to interest in science (40%), or were drawn to it as they walked past (26%).

#### *4.2 Women in Science*

Only a small number of respondents noted that they were drawn to the event as they like to hear about women in science, and the majority (52%) was not aware that the event was focused on women in science. However, when asked, most of respondents were very positive this was a focus of the event, using expressions such as “good”, “great”, “important”, and “do it”.



Dr Sheona Urquhart talked about different galaxies and the way they interact.



Photo by Helena Gomes.

#### 4.3 Public engagement with science

The majority of respondents seemed to engage well with the scientific content of the event, and were likely or quite likely to find out more about a topic covered (71%), or to talk to a friend about a topic covered (80%). Importantly, 84% of respondents said there were likely or quite likely to attend similar events in the future. When asked regarding highlights of the event, respondents noted the use of props, the fact that learning was made fun, the fact that they got to learn something new and that science was made accessible (especially to children).



Dr Natalie Vanicek explaining how our joint move with some of our young visitors. Photo by Dulce Farrow.

#### So, what next?

We are currently preparing the 2017 Soapbox Science Hull event, and have taken feedback received from our visitors into consideration when deciding on a date and location.

One of the biggest complaints was about the weather (67% of respondents). In order to avoid getting rained on again, we will be moving the 2017 to early July. Furthermore, will be hosted by St Stephens shopping centre. This will allow us to have the option of moving the event inside the building, even though we are still planning on having our speakers outside if possible. Also, the area in front of St Stephens is one of the busiest thoroughfares in the city centre, which will increase the number of individuals we are likely to engage. It should also help to resolve the other issue noted by our visitors

in 2016 (13% of respondents), which was competing sound from the rest of the festival.

Importantly, moving away from the Festival will allow us to target an audience that are less likely to already be engaged with science, which aligns better with our aims.

Another area of improvement is promotion and advertisement. Although we did receive some attention from the press (the main organiser, Dr Isabel Pires, was interviewed for BBC Radio Humberside the day before the event), unfortunately the person in Marcooms that was going to support us left early in the summer of 2016, so we did not produce as many press releases as we would have liked to.

We also did not have a dedicated twitter account, which now exists (@SoapboxHull) and is already active.

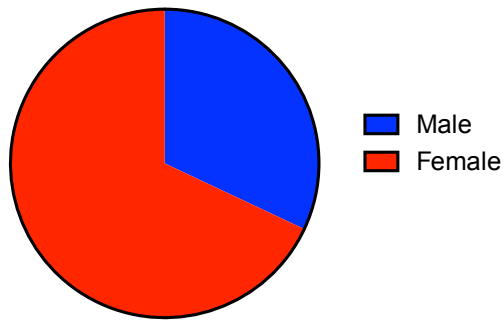
Finally, hosting our event during one of the culturally busiest years in Hull's history, City of Culture 2017, should significantly increase our visibility.

In summary, the 2016 Soapbox Science Hull event was a highly successful, really exciting event, even in the rain, and we cannot wait to do it again in 2017. We would like to thank the Biochemical Society for your support through their generous Outreach Grant.

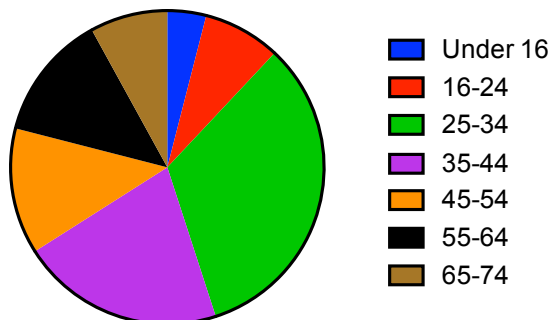


**Dr Domino Joyce and her fabulous props, funded by the Biochemical Society Outreach Grant. Photo by Helena Gomes.**

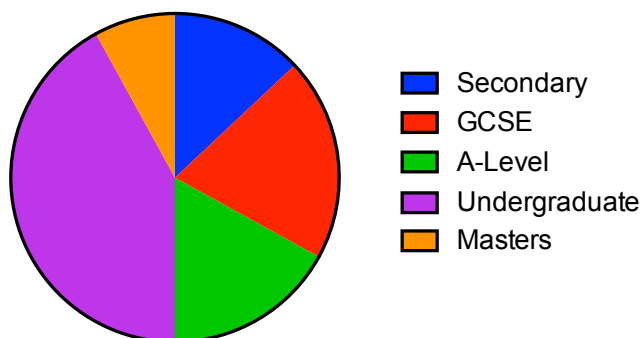




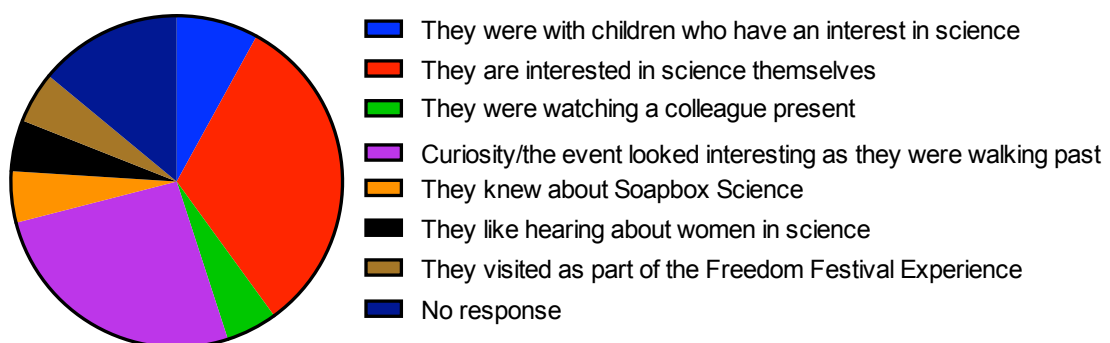
Breakdown of gender of questionnaire respondents. N=25



Breakdown of age of questionnaire respondents. N=24



Breakdown of highest education attained by questionnaire respondents. N=24



Breakdown of motivation for attending the event from questionnaire respondents. N=25