

An Institute of Ageing and Chronic Disease Outreach Event

Organised by Richard Barrett-Jolley June 2013.

Sponsored by Aphrodite Vasilaki

Held at Liverpool

World Museum

Visitors: 1600

Staff helpers: 80

Meet the
Scientists



Introduction:

We aimed to inform local people, including **children** about what we do in the University, what **research** means and the importance of **biochemical**, physiological and pharmacological **research**. We aimed to **demystify** research science and encourage children to think about making science for a living when they are older. We invited people from all types of schools and were keen to show ourselves as “normal” and “**approachable**”. It is not sufficient to simply educate children in **STEM**, they also need to know that science is a **widely available and fun career**. We demonstrated live experiments, presented simple talks suitable for children and a keynote talk in the evening. Participants looked at effects of osmolarity on **cells**, extracted **DNA**, centrifuged fake (very realistic) **blood** etc. The **experiments** were designed so that participation was possible.





Success: The event was a huge overall success and we discuss caveats below. To evidence this success we present below the results of our online and paper survey that was filled out anonymously by about 100 of our visitors (total 1600 visitors). The most obvious bias would be age group. After day one, we realised that the teachers and parents were filling out the survey and kids were not, we therefore quickly put up an additional survey for day 2 which was targeted at children. This means that we feel our survey over estimates the adult to children ratio.

Analysis:

We hoped for both adults and child visitors, we therefore asked participants age:

Result:

<12yr 52%, over 17 yr = 48%.

A few people did not answer this question, but note there were no respondents admitting to being between 12 and 17. There were definitely some there because we saw them(!), but they seemed to have either refused to answer, or dodged the questionnaire altogether.



Gender?: 52% female, 48% male.

A very clear objective was to demystify biochemistry and educate people that science is a normal profession and the people making science are normal, engaging and can be just as much fun as non-scientists.

To this end, we asked the younger visitors:

“Were the scientists fun?” Result: “Yes”=91%, “no”=0%

Older visitors responded to:

“Were staff enthusiastic and welcoming?” “yes”=96%, “no” = 0%.

Younger visitors: It is difficult to establish whether visitors learned much biochemistry without pre and post “tests”, so we asked our younger visitors simply:

“Did you have fun?” Result: “yes”=91%, “no” = 0%

“Would you like to come again?” Result: “yes”=83%, “no” = 0%.

This is a clear indication of success, but we note that the “would you like to come again” figure is a little below the others. Perhaps they felt they had done it and we would have to have fresh material if we repeated it (for repeat visitors).

We asked adults more direct questions:

Were exhibits clear, exciting and stimulating?

Result: “yes”=96%, “no” = 0%

Was the event informative?

Result: “yes”=93%, “no” = 0%

Was the event interesting?

Result: “yes”=95%, “no” = 0%



We feel this is a strong indication that we met our objectives.



Things to Improve:

This is an honest (raw) report. Mostly the event was a fantastic success, but there were three areas for improvement; (a) advertising (b) the small daytime talks (c) The budget. I am not sure if it usual to put caveats in a final report, but I felt that they may prove useful for anyone else who reads it, who is considering a similar event.

(a) The **advertising** was criticised by some participants including our own staff. We did not advertise our event widely enough to the general public and instead focussed on schools and museum visitors. We still had over 1,600 visitors and to be honest, it was as much as we could cope with! So successful advertising next time will have to be matched with a preparedness to deal with the additional numbers. The arrival of visitors was in bunches too. Schools all arrived first thing in the morning, whereas ordinary people arrived much later. We did not expect that.

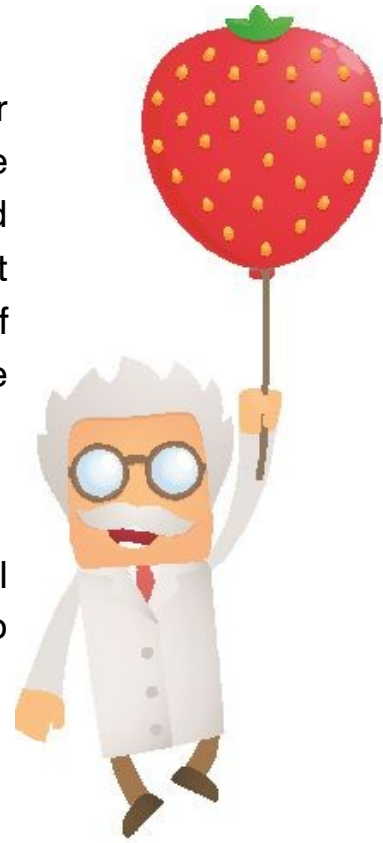
(b) Whilst the **excellent keynote evening talk by Sir Ian Gilmore** was filled, attendance of the rolling mini-talks was quite low and in total contrast to the action in the main exhibit hall! It was a hot sunny day and the museum said our numbers were “normal”. **Next time** we would need to change this radically. Firstly, may be they are not necessary (do what works... the experiments!), secondly, the lecture theatre was too far from the main hall, so possibly little talks could be run at one end of the main hall in future?

(c) We overshot our budget. We probably spent about double our initial estimates. The external funding (including the Biochemical Society Outreach grant) hugely increases the possibility that we can do it again. We had signs saying “**Biochemical Society**” all over the place so hopefully children took home the message “**Biochemistry**”.

Promotion of Biochemistry:

The main thing here, is that children in particular were finding that certain aspects of science were quite fun, they seem to not really have expected that. We were able to explain to them that what they were doing was “**Biochemistry**”. Of course, many of the kids had never heard the word before.

I would like to add my thanks to the Biochemical Society for sponsoring this event and helping to make it such a massive success!



Contacts:

The organising team included: [Dr Richard Barrett-Jolley](#), Dr Victoria Kerns, Dr Chris Ford, Dr Nick Bryan, Carolyn O’Leary, Ben, McDermott, Dr Karl Bates, Dr Sandra Cachinho and many others.

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