

Once again, Kensington Town Hall was the venue for the Schools Science Conference, which provided students and teachers with a combination of formal presentations, hands-on activities and educational and careers information. Here, Sue Alexander reports on behalf of the Working Group.

# Going back to school

**The third Schools Science Conference was held in March. It was bigger than ever and benefited from the feedback and experiences of the previous two events. This year the volunteers presented almost 400 school students plus teachers with a variety of formal talks, workshops, a theatre-style educational scenario, hands-on activities and careers and education information.**

Once again, the Kensington Town Hall Conference Centre proved to be an excellent venue, spread over three floors and provided a conference hall, break-out rooms, a small hall and plenty of space for stalls and demonstration stands. Plenty of drinks points and snacks were available for the students, not forgetting caffeine top ups for the volunteers and teachers. Lunch was provided for all students, volunteers and teachers, and the caterers did a superb job in keeping up with demand.

The Working Group which plans and raises funds for the conference is composed mainly of healthcare scientists, but volunteers came from as many healthcare science, allied health profession and closely related groups as could be mustered. This provided a real insight into the diversity of HCS/AHP roles available in the NHS and strong emphasis was placed on this and the training routes available.

The emphasis of the conference remained fully on science and science as a career. Teachers were well briefed in advance about the programme and activities and the Working Group visited schools to discuss useful topics to include and to take advice from teachers about how to structure the day. In many cases the schools represented were specialist science centres, which made for the most focused group yet attending such an event. Most students were at the GCSE or A-level stage (years 10–12) of their education.

Much preparation was required prior to the event (eg CRB checks, permission to take photographs, catering arrangements, liaising with sponsors, volunteers and speakers etc), which was made possible by funds from the North West London Strategic Health Authority



The section on sexually transmitted diseases proved very popular.

and the support of individuals, organisations and bodies too numerous to mention. The event would have been impossible to stage without their input and commitment.

## The big day

The event was officially opened by Chief Scientific Officer Professor Sue Hill, who talked about the future delivery of healthcare in the NHS and the need for healthcare scientist staff. Ms Danya Cohen, divisional microbiology manager at the Chelsea and Westminster Hospital then talked about the variety of careers and routes of progression using modified world maps to illustrate her comments. Finally, writer and broadcaster Dr Simon Singh gave an amusing and thought-provoking talk designed to make

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the students think, to be critical and to understand the value of scepticism.

The remainder of the day saw the students divided into groups, each with a schedule of activities. Students had the opportunity to visit all the stands and take part in practical activities. These included careers and further education stands, information from professional bodies, hands-on opportunities to examine simulated resin agar plates demonstrating bacterial growth, and the very popular section on sexually transmitted diseases.

The groups had set times to attend workshops. A highlight of the programme was the theatrical presentation ‘Sex, Drugs and Rock’n’Roll’, which followed a mythical fast living, smoking, drug taking, drinking and fornicating rock star, and how he would be treated by different staff groups following a collapse. This sent very serious messages in a vivid and memorable format about the health implications of smoking, the effects of alcohol and drug abuse, and some very graphic illustrations of the potential outcomes of ill-advised sexual encounters.

As a finale, Olympic rower Pete Gardner gave a talk on how healthcare scientists helped him prepare for competition and recover from accidents and injuries. He



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Clearly, a keen supply of new workers is out there so it's up to us to inspire them.

showed a breathtaking video clip of how he and his team pulled back from nowhere in a major competition to win by a hair's breadth. Pete then presented prizes to the students and posed for photographs.

### Feedback

As part of the event, students completed a form on which they were asked to state three things they had learned during the day, and to comment on and evaluate the event. Teachers and volunteers were also asked for feedback. Students' evaluation forms were put in a draw for personal prizes and school prizes of digital cameras donated by Olympus.

Feedback is crucial for future planning. Students were asked about their perceptions of scientists, science-orientated careers and about the day, all of which were scored numerically. On a scale of 1–10 for excitement, biomedical scientists scored 8–10 – of course, we all knew we were incredibly exciting!

Furthermore, 84% said they would consider a career in the NHS after the event; 64% said it would be a career other than medicine or nursing; and 98% would recommend the event to a friend. Free comment ranged from "Biomedical scientists are uber-cool people who deserve more credit than they are given" to "Can you give my dad more pictures to look at so he knows what smoking is doing to him?"

Teachers are keen for the event to be run on an annual basis and are very satisfied with the content and the practical activities.

### Being a Science Ambassador

Personally, I am very keen to get the message over to schoolchildren that science is interesting, that it is part of life and not just isolated within a lesson that they attend every so often. Most importantly, I stress that scientists are interesting people – if you choose to be a scientist you will have a life and have fun!

I joined the SETNET Science and Engineering Ambassador Scheme and undertook two courses on delivering science training to schoolchildren/students. Since then I have spoken mainly at secondary schools about science as a career and about the options involved, and took part in a practical afternoon session at a school as part

of Healthcare Science Week last November.

All comparatively straightforward so far, but recently I was asked to speak at a primary school. This was a whole new ball game for me and, given that there were 200 youngsters to enthral, it was quite a challenge. They do not want to know about careers at age of nine or 10 but it is important to be able to understand how they perceive science, and then begin from there.

I started by asking if they thought I looked like a scientist. Apparently I didn't because I wasn't wearing glasses or a white coat. When I put on a white coat they all agreed that I looked like a scientist, apart from one boy who said I looked like a dentist! I took along some everyday materials to demonstrate how science is all around us, and a mystery liquid for them to identify using information gained from known liquids.

Balloons flying around the hall demonstrated the principle of jet propulsion, party poppers were explosives, food packaging told them about nutrition, as did a picture of my cat and a tin of cat food, and bubbles introduced the principles of molecules in thin films. I was overwhelmed with volunteers to take part in the experiments once they had their plastic pinnies on and they identified the mystery liquid correctly as normal lemonade (non-diet) using information from dipping Uristix into various other liquids.

As a health message I included the popular old chestnut of putting a penny in Coca-Cola to clean it up and then pointed out that this happens to their teeth if they drink similar fizzy drinks. I also included some general points about health, hospitals and people who work there.

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### WORKING GROUP

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| Dr Don Henderson<br><i>Hammersmith Hospitals NHS Trust, Chair</i> |
| Sue Alexander<br><i>Royal Marsden NHS Foundation Trust</i>        |
| Danya Cohen<br><i>Hammersmith Hospitals NHS Trust</i>             |
| Manfred Almeida<br><i>Hammersmith Hospitals NHS Trust</i>         |
| Chrystalla Ferrier<br><i>Royal Brompton NHS Trust</i>             |
| Mike Carter<br><i>Health Protection Agency</i>                    |
| Georgina Lavender<br><i>Harefield Hospital</i>                    |
| Maria Murray<br><i>St Mary's NHS Trust</i>                        |
| Moira Wilson<br><i>NWL SHA</i>                                    |
| Catherine Martin<br><i>NWL SHA</i>                                |
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| Sharon Gage<br><i>SRG Project Management</i>                      |

### Where now?

The next Schools Science Conference is being planned already and the Working Group will be calling for volunteers to take part. However, with the SHA reorganisation, funding for a conference in 2007 is uncertain and the Working Group is exploring sponsorship options. So, if you have any ideas, please let us know.

I'm booked for two more school presentations in the summer and remain keen to be involved in bringing science to the younger generations. The main barrier to children seeing science as something for them is the perception of science as standing apart from everything else. Older students see science as a difficult subject that requires a lot of study, and many shy away from it for this reason.

I would like readers to think about why they found science, especially biomedical science, so interesting in the first place and then enthuse about this when the opportunity arises. Science progresses all the time and automation advances constantly, but we still need people to interpret tests and make decisions. Clearly, a keen supply of new workers is out there so it's up to us to inspire them. Enrol now by emailing [sharon.gage@srgprojectmanagement.co.uk](mailto:sharon.gage@srgprojectmanagement.co.uk) with 'School Science volunteer' in the header.

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To register as a Science Ambassador contact [susanna.wisborg@btinternet.com](mailto:susanna.wisborg@btinternet.com)