

Communicating microbiology: The Promega Prize competition University of Exeter, 13 September 2000

Competition was fierce during the final round of this year's Promega Prize Competition. Eight enthusiastic young members each gave a 10-minute talk followed by 5 minutes of questions. All entrants gave fluent presentations using excellent visual aids and dealt with some tough questions. Afterwards, Tracey Duncombe met up with the contestants to find out more about the importance of their research and why they had entered the competition.

● Tracey Duncombe, SGM Public Affairs Administrator, is to be the new correspondent for Gradline. Please let her have your stories or news for possible publication. Articles on any topic of interest to younger scientists are welcome (email pa@sgm.ac.uk).

■ Karen Mattick, PHL, University of Exeter
Filament formation by Salmonella spp. under adverse conditions

Karen let it slip that it was her supervisor who had actually entered her for the competition. 'I was giving a talk at an SGM meeting anyway, so really I didn't mind, I had nothing to lose.' Karen is a second year PhD student investigating the on-going growth of *Salmonella* under stress conditions where growth was not previously thought possible. 'This research has public health implications as well as giving us an insight into the stress response for the organism.'

■ Suzanne Strauss, PHLS, Addenbrooke's Hospital, Cambridge
A single-tube real-time nested PCR for detecting the genomes of human papillomaviruses

Suzanne was employed as a clinical scientist to perform epidemiological studies at the HPV reference library until she started her PhD this year, which is focusing on carcinogenic HPV strains. 'I'm developing type-specific, quantitative PCR to see what effect virus load has on disease progression and clearance. I didn't really know anything about the competition. I'd produced a poster for a meeting in Paris and decided to display it at an SGM meeting. The judges asked me some questions about my work and that was how I made the pre-selection group finalists.'

■ Ashraful Haque, Imperial College, London
*Intracellular activation of the *spv* and *dps* promoters in *Salmonella typhimurium**

(Unavailable for interview.)

■ Gina Manning, Veterinary Laboratories Agency, Weybridge
*Evidence for a genetically stable clone of *Campylobacter jejuni**

Gina is a bit of an old hand when it comes to the Promega Prize Competition. She was one of last year's winners after giving a presentation on a different aspect of her work on *C. jejuni*. 'I presented a poster at the SGM meeting in Warwick and decided to enter again.' After she gained her PhD from Leicester University in 1998 working on *Pneumococcus*, Gina moved to VLA to take up a permanent postdoctoral research position studying *Campylobacter*. '*C. jejuni* is an important human pathogen both socially and economically. It's important to understand the epidemiology of the disease so that we can put control measures in place to control the pathogen in the food chain.'

■ Amanda Smith, Institute for Animal Health, Compton
*The identification of genes required for growth of *Streptococcus uberis* in milk*

Amanda is in an auspicious position; she is a third year PhD student, has almost completed writing her thesis and has a postdoctoral position lined up to work on *Escherichia coli* O157. 'I'm looking forward to my

new post, as I've always wanted to do human-related research.' Amanda saw a poster for the competition at a previous SGM meeting and decided to present the results of her work. 'We hope to find a vaccine against *S. uberis* by identifying genes involved in important pathways. *S. uberis* is a major cause of bovine mastitis. Affected milk is not marketable and therefore has huge economic implications.'

■ Martha Simpson-Holley, University of Cambridge
A functional link between the actin cytoskeleton and lipid raft domains during influenza virus budding

After giving a talk at the Warwick meeting, Martha was automatically entered for the contest. 'I've really enjoyed the experience, it's been good for building confidence.' Martha is going into the third year of her PhD looking at the morphology of the influenza virus that is associated with clinical disease: 'this may be the form of the virus that grows in your nose when you have flu.'

■ Chris Smith, University of Cambridge
HSV-1 latency in the central nervous system

Chris was one of two students selected by the Virology Group judges at the Warwick meeting. '90% of the population are latently infected with HSV-1, but there are no drugs that target the latent virus; we can treat a cold sore but we can't stop it re-occurring. In order to develop novel anti-viral therapeutic strategies we need to gather knowledge of the virus during latency. Research in this area may also, in the future, lead to a vector for gene therapy. Latent HSV-1 does not affect neurones and is capable of long-term gene expression.' Having finished writing his PhD thesis within 3 years, Chris, who is also a medic, is looking forward to the day in 9 months time when he'll become a 'doctor, doctor'. 'I'd love to carry on in research as well as staying in medicine.'

■ Justine Fitzmaurice, National University of Ireland, Galway
*Detection of verocytotoxigenic *Escherichia coli* using a PCR/DNA probe membrane based colorimetric detection assay*

Justine started her PhD last October and has made a flying start in the communication of her research. Justine qualified for the Promega Competition after giving a talk at the Irish Branch meeting in Galway earlier this year. 'Food poisoning caused by O157 is a serious disease, which is increasing in Ireland. However, tests are not carried out routinely and it may take up to 6 days for a positive result. We have developed new probes as part of a PCR-based technique to speed up the detection of the O157 serotype to within 48 hours.'

The names of the winners were announced at the Society Dinner that evening. Both the winners showed enthusiasm for their research work and led the audience into the background and methodology before embarking on the detailed implications of their results. The winning talks were of a very high standard that more senior microbiologists might hope to aspire to! After careful deliberation, the panel of judges, chaired by Pat Goodwin, decided to award both **Gina Manning** and **Chris Smith** with the Promega cheques for £200. The other finalists will all receive £25 from SGM and a year's free membership of the SGM. Gina and Chris will now go through to represent the society in the Promega *Young Life Scientist of the Year Award*, which will be held next year. There they will be competing against other Promega Prize winners from the Biochemical Society, the Genetical Society and the British Society for Immunology for the chance to win a trophy and £2,000 prize money.

If you are a postgrad or in the first two years of a postdoc, then it couldn't be easier to enter next year's competition. Just present a poster or an oral offered paper at a Society meeting and let the Meetings Office know that you wish to be considered. Further details of the Promega Prize competition are available on the SGM website www.sgm.ac.uk

● **Tracey Duncombe**,
*SGM Public Affairs
Administrator*

Student Membership

Student Membership of the Society is available to postgraduate students worldwide who have no taxable income. For an annual subscription of only UK£20 (US\$33) Student Members can take advantage of the many benefits that this category of membership provides, such as free registration at SGM meetings and the purchase of Society publications at greatly discounted prices. In addition Student Members who are resident and registered for a higher degree in any European Union country may apply for awards from the President's Fund and Postgraduate Conference grants (see p. 192 for details) which provide financial assistance for attendance at scientific meetings.

Undergraduate Membership

Undergraduate Membership is open to students resident and registered for a first degree in the UK and Republic of Ireland. For the bargain subscription of only £10 Undergraduate Members will receive *Microbiology Today* and may attend Society meetings without payment of a registration fee. Careers events will also be held for them at different venues around the country. However Undergraduate Members will not be eligible for travel or conference grants. Information about this category of membership is being circulated to all relevant UK university departments.

Student Societies

SGM Sponsored Lecture Scheme

Grants are available to support TWO lectures on microbiological topics per academic year at Student Society meetings.

A Student Society is eligible for support if:

- It is run mainly by and for students of life sciences, either postgraduates and/or undergraduates.
- It is based in the UK or Republic of Ireland

The invited speakers will be reimbursed directly for reasonable costs of travel and accommodation. However, please note:

- The maximum claim for each lecture is £150.
- One speaker may be invited from abroad or from Ireland, but there can be no increase in the maximum claim for the lecture.
- The Society will be reimbursed for the costs of entertaining the speaker to dinner, including the expenses of ONE member of the committee.

Application forms are available from The Grants Office at SGM HQ (Tel. 0118 988 1821; Fax 0118 988 5656; email: grants@sgm.ac.uk).