

Report for 'Magnificent Microbes' at the Dundee Science Centre in 2012

The weekend of March 9th and 10th 2012 saw the Division of Molecular Microbiology at the University of Dundee hold "Magnificent Microbes 2" at the Dundee Science Centre. As indicated by the name this was a sequel to our previous successful outreach event that was held in May of 2010. There were of course several differences between the two; a change in some of the PhD students and postdoctoral scientists participating, a change in the month (to try to avoid the blazing hot sun that can be found in Dundee (honest!)) and finally some new and improved activities for school children and members of the public to try out. Magnificent Microbes 2 was funded by several sources including the College of Life Sciences, BBSRC, the Society for General Microbiology, the Biochemical Society and the British Mycology Society. The main objectives of the day remained the same and were: to use fun and interesting activities to make children and adults alike aware of how fascinating microbes, such as bacteria and fungi, really are; to train, PhD students and postdoctoral scientists in the art of communicating science to members of the general public; and to refine and develop our bank of resources for future events.



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In total ten activity stands were presented by the team. The stands encompassed the following: microbial diversity in the form of microscopy and Play-Doh™ modelling; glow in the dark bacteria and a very messy game called “Blast a Biofilm” to highlight bacterial communication; a hands on activity discussing the origins of antibiotics requiring lab coats and the isolation of microbes from soil; the classic and ever popular agar hand print activity; one that seemed like magic to members of the public that

highlighted the role that microbes play in cleaning up polluted soils; one which explored the ways in which microbes help in food preparation; a rather noisy activity involving balloons to show why a cell wall is needed and how antibiotics work; an activity designed to highlight how microbes can be used to understand how processes go wrong in eukaryotes; a futuristic stand with hydrogen powered cars where the hydrogen was generated from a fermentor containing *E. coli*; and last but not least a stand with a squishy cucumber, biological washing powder and an enzyme assay developed by visitors to demonstrate how plants can be infected by microbes.

The first day of our event was for approximately 180 primary school pupils and their teachers from years six and seven from Barnhill, Lochee, St Josephs, Woodlands and Bramblebrae Primary schools. Thanks to a development day, held at Dundee Science in February 2012, the actual event ran very smoothly as all “first night nerves” had been successfully overcome. At this point, we would like to thank the children



from Balcurvie Primary School who were our “guinea pigs”! The feedback we received from both teachers and children indicated that fun was had by all: “cool”, “yuck” and “wow” were heard from many of the children (and adults) around the room! The following day was open to members of the general public. This time we ensured that there was FREE access to Dundee Science Centre and we received around 600 members of the public including both family and adult only groups. As with the school event day people who attended both thoroughly enjoyed themselves and learnt a lot. It was a very busy but pleasant day. All of the scientists were delighted to talk to such a large number of people and to see that their hard work had paid off. On to Magnificent Microbes 3 in 2014.....!