

# **Zombie Attack Quenched: Manchester Bugs to Drugs Community Open Day Proves to be a Success!**

It's 11am on Saturday the 29<sup>th</sup> November 2014 and zombies are attacking University Place at The University of Manchester. The zombies carry a new, antibiotic resistant strain of bacteria, *Bacillus zombieits* which turns victims into zombies when infected. Our mission was to use our collective pharmacy skills to identify the nature of the disease, target site for attack and a lead molecule, optimize and test the resultant medicine before finally looking at an effective formulation and packaging prior to product release. That was the scene that was presented to visitors to the Biochemical Society sponsored Manchester Pharmacy School Bugs to Drugs Community Open Day as they followed a storyline based around the Drug Development Process.

The classroom is not always a welcome environment to learn about science, especially for those who are more disadvantaged from formal learning. It is important therefore to provide opportunities to engage with science outside of formal education that are as accessible and engaging for disadvantaged groups as they are for non-disadvantaged families. Hence, the intention at the outset was to raise the profile of science, and pharmacy, in an exciting, non-formal manner. During the course of the 4h event visitors were able to experience numerous fun yet informative hands-on activities, many of which had a strong biochemical theme including antibiotic design and mode of action, splat the bug, antibiotic resistant skittles, molecular building & modelling, rapid testing methods and DNA extraction. For the young, and young at heart, there was a wacky children's entertainer, an excellent pharmacy art corner where some wonderful and ingenious play-dough models of microorganisms were made and the opportunity to beat pupils from a local High School at their own Target to Market drug development process board game. A significant feature of this Open Day which set it apart from other similar university events was direct engagement with the local community. Engaging in events and activities which benefit the community will build relationships with local people and can help promote the welfare of the local community. As such, contributions of artwork and theatre from local and neighbouring communities and schools helped to make this a public engagement event for the community, by the community.

In addition to the above, University staff and students and senior staff from Gilead Sciences were present to assist with activities and answer queries about either the drug development process or careers and innovations in research. Information about higher education and pharmacy as a career was also available.

The venue for the event (University Place) was in easy access to the neighbourhood and the event free of charge, accessibility and cost often seen as prohibitive barriers to many young people and families from disadvantaged backgrounds. Approximately 350 people attended the event. Questionnaire feedback was overwhelmingly positive, giving the event an average Likert scale rating of 3.7 out of a possible 4, with 98% stating "I liked it a lot" (74%) or "I liked it" (24%). The vast majority of respondents said the event was "fun", "interesting", "educational" and "inspiring". Many even asked if we would be repeating the event or whether we could present it in a school setting. No negative comments were received. Significantly, since 81% of those that completed a questionnaire were not associated with the University, this event fulfilled its main aim of being a public engagement activity for the local community.

## **Acknowledgements**

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Fig 1: Molecular modelling



Fig 2: DNA Extraction



Fig 3: Rapid testing for 'infection'.