## **Report for Bioscience Olympiad Northern Ireland, 2011**



At present, biological education in secondary schools makes biology a collection of facts and answering a question is usually limited to finding the right page in a textbook. The goal of the Bioscience Olympiad is to develop bioscience-oriented "academic thinking" and a creative approach to problem solving in school children. Unlike many similar contests we aim to make the event not a factual knowledge-testing contest, but rather to focus on the provision of alternative ways for understanding biomolecular

sciences and intuitive and creative thinking. Another main goal is career-guidance for talented and capable school children and improvement of the quality of their education. Our event also let children from schools with different social and religious backgrounds interact and work together. Thus, it will help counteract adverse effects of the current state of largely segregated education in Northern Ireland.

In 2011 the Olympiad was carried out in two rounds. We contacted 87 secondary and grammar schools from Northern Ireland and each school was advised to form a team (4-5 members 14-17 years old) which, if successful, would represent the school in the second round. The list of questions for the first round was distributed via e-mail and on the internet at the Queen's University webpage. It was opened to the public on 12<sup>th</sup> September 2011. Teams were given at least two weeks to compile written answers and upload their response to organisers. Results as well as model answers were published online two weeks after the submission date in order to provide feedback to all participants.

The ten best teams were invited to compete at the second round of the Olympiad held at the Medical Biology Building, School of Biological Sciences, Queen's University on 4<sup>th</sup> November 2011. The second round consisted of a practical section requiring hands-on experimentation (separation of plant pigments by paper chromatography) and a theoretical question requiring creative thinking based on previously held knowledge of the subject. The winning team from St Mary's Grammar School (Magherafelt) took home the Champions' cup for their school to display until next year's competition. Prizes also included £75 book vouchers for the five members of the winning team as well as two for outstanding individuals and one for leadership.

The details of the event and examples of theoretical and practical questions are available here:

## http://qub.ac.uk/Olympiad

The event was covered by the QUB media office and during the problem solving task teachers were given a talk from the QUB Careers Adviser. Participation in the Olympiad is free for all Northern Ireland schools.

Our Olympiad was a great success and participants engaged in practical and theoretical activities as well as showing a very high level of knowledge and ability to think creatively. As organisers we would like to thank the Biochemical Society for helping to fund this event.