“Introduction to DNA, fun activity for all”

Dr Sharon Williams - Recipient of an outreach grant from the Biochemical Society and lecturer at Coventry University.

On the 7th and 8th of July, six staff and ambassadors from Coventry University ran a fun and interactive DNA activity for children age 7-11 and their families. The activity took place at the Coventry FabLab in the Coventry city centre.

The idea behind the DNA workshop is to give the community an opportunity to have free family science activities. The event has allowed 7-11 years old to do hands-on activities related to Molecular Biosciences, with the support of families as well. It has been shown recently that students lose an interest in Science at an early age, to promote the positive side of Molecular Biosciences as well as getting the support from the family will create a buzz for the future.

This was the first time that this local outreach was funded by the Biochemical Society, and took place in Coventry. The event ran Friday evening 4pm until 7pm and Saturday 11am to 5pm. The hour-long workshops covered; What is DNA, and where can we find it? The introduction to the session discussed what people knew about DNA and gave some basic background information and how DNA is found in all living things. Children and families then drew pictures of DNA, at different levels of knowledge.
It is important to mention that parents signed an agreement to allow us to take pictures, and were happy for us to use it on twitter as well as the Biochemical Society blog.

The next activity was extracting DNA from strawberries, bananas and kiwis. Children taking part in the practical were given an introduction to basic safety precautions including wearing safety glasses. DNA was extracted from different fruits as mentioned before using household items such as salt, washing up liquid and rubbing alcohol. The consumables were supplied from the Biochemical Society outreach funds.

There was genuine excitement as the children saw the white threads forming in their test tubes. The gloop of DNA then was picked up with a plastic pipette and sealed in a small Eppendorf tube to take home. The children could choose more than one fruit to extract DNA from.

During the day refreshments were provided as well as sandwich lunches for the volunteers from Coventry University, ambassadors and Biochemical Society members.

The last part of the workshop was to build DNA models, the kits were supplied by the outreach grant. Children and parents enjoyed building the models very much, the children that completed the model received a prize (sweets) for their challenging work. The children were very proud of their work and some were willing to take a picture with the model.
The following set of pictures shows the DNA models and the students that won prizes.

During the day, a twitter account was used @Sharon_sharon22 to post all the pictures during the day and all tweets have been used with @BiochemSoc an example is shown below.
The event went extremely well overall. We had amazing interest in the workshop and a total of 50-60 children and parents attended the workshop over the 2 days.

The feedback that we received from the children and their families was very positive, and they would really like to see more local outreach workshops.