City Quay National School visits TTMI! April 11th 2018



Trinity Translational Medicine Institute (TTMI) has a very active outreach committee whose main aim is to promote science in the community. With this in mind, TTMI are now involved with the Trinity Access Programme (TAP) which helps support people from areas with low progression rates to higher education to reach their full educational potential.

"They cannot be what they cannot see"

Many children in Dublin do not come from families where third level education is the norm. Many don't know a scientist, let alone meet one and see what we do. Twice a year, we run science workshops for primary school children to introduce them to science and what we do here at TTMI. All captured on camera by Anthony Edwards of St. James's Hospital Clinical Photography Dept. We hope our workshops encourage children to chase their dreams and believe they can achieve anything they put their mind to!

In April we met Ms. O'Connor-Maguire's wonderful 5th class from City Quay National School. We ran a 2hour workshop onsite with 6 different activities for the students to try. Before the workshop we asked if anyone in the group wanted to be a scientist when they were older....no hands were raised! We had our work cut out for us to get them interested in what we do!



TTMI TAP Science Workshop

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Students first learnt what DNA is, why it is important and made a DNA structure using sweets to colour code for base pairs with Gemma Cannon. It then got a little messy as the students got busy extracting DNA from strawberries with guidance from Stephen Maher and Ashanty Maggvie Melo Rodriguez.







Following on from that, Daniela Tropea and Stephen Shovlin taught the students about how genetics influence taste. Students tasted brussels sprouts and then PTC test strips to demonstrate how the same item can taste totally different to different people all based on their genetics! A few of the students definitely tested positive for the PTC gene TAS2R38 based on their facial expressions alone!



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Students then moved on to meet Aisling Heeran to learn about the pH scale. They got to test various liquids using pH strips and found some interesting results when they started mixing acids and bases!

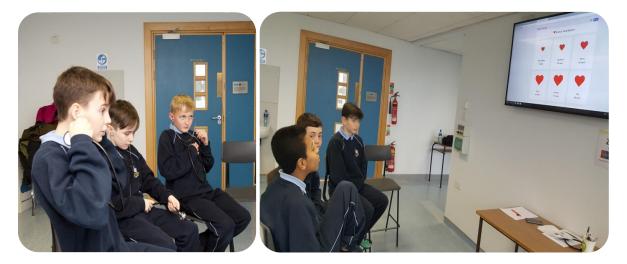
> "Science is actually pretty interesting!"





There was great interest in the microscopes again this year with this class group. Niamh Lynam-Lennon and Croí Buckley explained to students why we use microscopes and how to use them correctly. They really enjoyed seeing things up close such as leaves, hairs and even human body parts!

The final activity was one to get the students moving. Using stethoscopes, Aoife Cannon showed the students how to measure their resting heart rate. They then ran on the spot for 60 seconds and measured their heart rates again. They compared their heart rates to other animals such as the blue whale 6bpm and a hamster 450bpm! Hearing their own heart beats was a first for many of the students. This activity was voted No.1 by the class group upon feedback!



TTMI TAP Science Workshop

Before we knew it 2 hours had passed with lots of laughter and lots of great questions from the students. When asked again after the workshop if anyone would now like to study science when they were older, we saw 6 hands raised! Good work team!!

To the teachers and students at City Quay National School we hope you enjoyed your visit to TTMI and continue to grow your interest in science.

Thanks to all staff involved in making this TAP Science workshop at TTMI another thoroughly enjoyable day! If anyone would like to be involved in future outreach activities please email Niamh Clarke, Dept. Surgery at <u>clarken1@tcd.ie</u> or contact the TTMI Outreach Committee!