

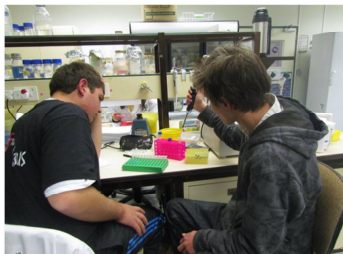
FUN WITH FUNGI and FUN WITH KIDS

Prepared by Tracy Hall

This year the UPwithScience project conducted at FABI was again a great success. The general aim was to introduce the world of Fungi to Grade11 learners through studying the diversity of mushrooms in the National Botanical Gardens. At the end, several species of beautiful mushrooms were identified in the gardens, and strong interest was sparked in the Grade 11 students for biology as a career.



Two students, Christina Panayotakis and Nadia Gordon transferring fungal isolates to new plates containing growth media in the sterile cabinet called a laminar flow.



Marnus Ferreira and Marko Svcevic prepare for a DNA extracion.



Marko Svcevic and Nadia Gordon assist each other with pipetting for a PCR reaction



Nadia Gordon, Gina Wilkins and Christina Panayotakis adding the reagents for a PCR reaction

The 2011 project started with a captivating presentation by Markus Wilken. The six enthusiastic and energetic Grade 11 learners then joined Tracy Hall and Melissa Simpson, both CTHB postgraduates, at the Gardens. Bernice Porter, FABI's in-house mushroom expert provided the learners with a whirlwind “fungal field training” session, after which they set out at a fast pace to collect a variety of fungal samples. The young fungal detectives then headed back to the lab to process their samples. Over the course of six Saturdays, each of the learners gained experience in isolating DNA from their samples. The DNA was then subjected to molecular techniques to identify the collected samples. Despite a few pipetting

mishaps, contamination hiccups and reagent mix-ups, they were able to identify all of the mushrooms they collected. Finally, during the first week of the winter holidays, the learners presented their projects, which were received well by their peers.

Overall, this project again highlighted the importance of interactions with the youth, to ensure that interest in Biology remains strong. Some of the fun thoughts shared by the group included their amazement at the “smallness” of DNA and the clever methods with which it is possible to access and utilize it. Valuable understanding of the scientific method and the significance of “RE” in RE-SEARCH was also strongly noted by the students. However, this was also an interesting challenge and valuable learning experience for the postgraduate students, although the joy of seeing “Ah-ha” moments and the enthusiasm for Biology made it worthwhile.