

Kartini Kochar and the Holy Grail



Kartini at EnGenelC where she feels her JIS background is very helpful in the lab's hard-working multi-cultural environment.

A radical new therapy for cancer is only months away from human trials at the EnGenelC labs in Australia and working hard in support of the research behind the possible breakthrough is JIS graduate, Kartini Kochar ('02). EnGenelC is also featured in an Australian television program, Australian Story, which was aired on ABC last year, in which we learn of the company's progress toward the holy grail of medicine. The program brought strong support for EnGenelC's findings from doctors and patients. In this email interview, we ask the very busy Kartini about her experience at EnGenelC and her life after leaving JIS.

What is your role at EnGenelC?

I am a research assistant, doing mostly molecular biology and cell culture work.

Why did you decide to work there?

I did my honors year here last year and found the work environment really unique and welcoming as a student. We're a small company, about 25 scientists, who all work very closely and in an extremely supportive environment. Each person contributes strongly, in different ways. It's also very multicultural and after a JIS-upbringing, I feel completely at home!

Please describe EnGenelC's therapy process and how it is hoped it can promote a cure for cancer?

EnGenelC's therapy allows for the targeted delivery of drugs directly to the tumor cells. In contrast to conventional chemo, where the drug floods the system and kills all cells indiscriminately, EnGenelC's bacterially derived 400 nanometer mini-cells selectively kill the cancer cells only and leave other healthy cells unharmed. This way, there are minimal side-effects during treatment, and also, a much lower dose of drug (1000-fold less) is needed to achieve a significant response. With standard chemo treatments, many patients must stop the medication because the side effects are too severe and quality of life diminishes severely. We're hoping that the mini-cell will be a cheaper and more effective alternative for cancer patients.

What are the general plans for EnGenelC's findings? When are human trials expected?

We'd like to get this therapy out of the labs and into the hospitals as soon as possible. We've started a trial, treating dogs with cancer in vet clinics around the country. Human safety trials are planned for early 2008, if all goes well.

Where did you graduate from university?

After my getting my IB diploma (higher biology, math and English) at JIS, I spent a semester at Lehigh University, in the USA, before going to Sydney University (Bachelor of Science) and getting my honors in biotechnology at the University of New South Wales, Sydney.

How did JIS prepare you for university and your subsequent career?

Very well. A lot of what I did at university was identical to the IB syllabus, so it allowed me to take advanced courses in biology, but also gave me credit in arts and humanities, and freed up my schedule to take other electives such as art history, and philosophy.

What do you remember most about JIS?

Inspiring teachers with unique personalities...teachers and other students at JIS make learning an experience of personal growth...amazing friendships and exposure to such a wide range of beliefs and personalities...interesting field trips to the Thousand Islands catching sea urchins for biology...being given a lot of freedom and responsibility in the final years of school.

For more information on EnGenelC and Australian Story, visit <http://www.abc.net.au/austory/specials/holygrail/default.htm>. Kartini is the daughter of JIS teacher, Rimi Kochar.



Kartini while visiting the High School on UNDay in 2005

Mindy Weimer Nominated Agent for Change

One of the Essential Qualities of a JIS learner is to be a responsible world citizen. For all her work helping those in need access fresh water through the Emmanuel Foundation Water Program, her leadership in getting emergency supplies to Jakarta flood victims and as an inspiration to JIS students that follow in her footsteps, Mindy Weimer ('96) certainly meets that EQ and several others.

Mindy has touched so many lives in her young, very active, career that she is now getting recognition from those who have had the pleasure of working with her on any number of projects. One such person is Sheila Gardner, a health activist from the USA, who nominated Mindy as an agent for change on a website for international social improvement, Changents (<http://www.changents.com/node/925>).

In her nomination, Sheila wrote: After getting her Masters in Environmental Engineering at UNH, Mindy considered her options for work. She could easily have taken a job in the consulting industry in the US, but Mindy had something greater in mind. Mindy's dream came true when she hooked up with Yayasan Emmanuel, (founded by JIS graduate Emmanuel Laumonier, '97), and created a new program that fills a dire need for education and technical help acquiring safe drinking water in impoverished communities in Jakarta.

She began the program in 2004 and has been the chief organizer, teacher, and engineer for many programs that have helped communities to solve basic problems related to environmental and health issues that otherwise might have gone ignored.

She is an inspiration to many and has exceeded even her own hopes for this project. Her efforts have touched and improved the lives of countless individuals. Not only does she have integrity and persistence but she has more kindness than just about anyone I know.



Mindy at work during one of the clean water projects of fellow alum Emmanuel Lammornier's YE Water Program.

For more information on Mindy and Yayasan Emmanuel's activities please visit: <http://www.yewaterprogram.org/>