

Spreading the Seeds of Knowledge



By the time **Ines Atmosukarto** had finished high school, she had lived across the globe. Born in Romania, Ines lived as a child with her family in Algeria until the age of 13, when she moved to Jakarta, Indonesia, and finished high school there before leaving for the University of Adelaide in Australia. There she earned her undergraduate degree with first class honors and her Ph.D. in biochemistry and genetics. She returned to Indonesia in 2001 to try to stimulate research and development in the local biotechnology sector. Having been exposed to so many cultures, Ines had become passionate about sharing what she had learned and trying to expand scientific ties between Indonesia and other countries. “Research in Indonesia has been challenging, and I realized that the best approach would be to strengthen my international network with the aim of eventually fostering and facilitating strong links with Indonesia,” she says.

Novel Compounds

In Indonesia, Ines worked on screening libraries of natural chemicals extracted from Indonesian plants that hosted a specific type of microorganism known as endophytic microbes. Her aim was to identify potentially

novel compounds for the pharmaceutical and agricultural industry while at the same time showing that the biological diversity of Indonesia could hold potentially exciting molecules and therefore should be better protected from deforestation. In 2004, Ines received the UNESCO-L’Oréal Fellowship which enabled her to conduct research at Montana State University in the United States for several months, with Gary A. Strobel, an acclaimed expert in the methods of harvesting novel compounds from microbes living symbiotically within plants.

Ines returned to Indonesia to apply her new-found skills and to pass those skills on to other scientists. While there, Ines also helped establish an Indonesian Women in Science fellowship program with L’Oréal Indonesia and UNESCO, and a science mentoring program for young girls.

Moving On by Starting Up

The research experience gained in the United States led Ines to the establishment of a small, startup biotechnology company with the assistance of the Indonesian Institute of Sciences and funds from local and international investors. Her success with this company landed Ines a position as chief scientific officer at another startup,

called Lipotek, based at the Australian National University in Canberra, where she currently oversees the development and testing of novel and innovative approaches to vaccine development. The first product, which could act as a preventative agent and therapy for an aggressive form of skin cancer, is expected to be tested for the first time on humans in early 2009.

Strength and Support

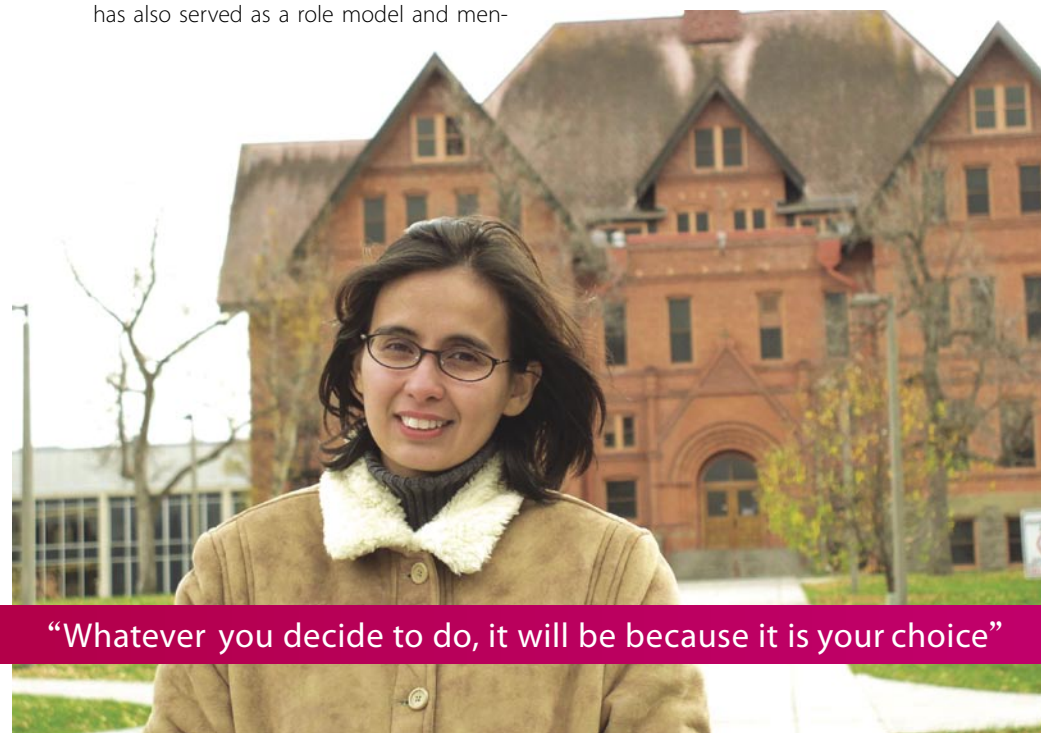
Ines credits her family, especially her Romanian mother Ionica, as being a great source of strength. “My mother has been relentless in helping me deal with the extremely difficult task of balancing my family and professional life,” helping to care for her now 10-year-old daughter living in Jakarta. “Ines has turned into a tree with two deep roots, stemming from two different cultures from which she gains wisdom and strength,” says Ionica about the oldest of her three daughters.

Inez Loedin of the Indonesian Institute of Sciences (currently at the International Rice Research Institute in the Philippines) has also served as a role model and men-

tor for Ines. “Ines has a passion for science and her work,” her mentor says. “She always tried to make the best of the available facilities, overcoming limitations, such as faulty equipment, and finding alternatives when necessary. She also networked with scientists in more developed countries to help support her work, and was very good at motivating and encouraging the young undergraduate students that entered her lab.”

No Limits

Ines’s advice to young women—“which I received from my mother and will pass on to my daughter”—is that there is no limit to what you can achieve as long as you set your mind to it. According to Ines, there may be times when one will feel disadvantaged by gender, age, race, or other factors, “but these should act as a further incentive to disprove all of the skeptics. The road will not be easy, but whatever you decide to do, it will be because it is your choice and not something that has been imposed on you by others.”



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