

The ripple effect

IIASA's Annual Fund

is benefiting not only young scientists,
but also populations in developing
and low-resource areas.

In years gone by, **Prestige Makanga** probably wouldn't have made it to IIASA's Young Scientists Summer Program (YSSP). A young Zimbabwean, working as a Researcher at the African Centre for Cities at the University of Cape Town, Prestige wouldn't have received regular YSSP funding, and he would have missed out on what he calls a "rewarding" and "intellectually stimulating" YSSP experience.

Thanks to IIASA's Annual Fund, however, and the generous contribution made to it by numerous individuals, including former YSSPs themselves, Prestige was able to benefit from interacting with experienced researchers and young scientists from many diverse backgrounds as he pursued research on the use of volunteered geographic information to understand injury in low and middle income countries. The experienced IIASA researchers who mentored him, says Prestige, gave an enormous boost to his thinking on what research pathways to follow in the future, especially for his PhD, while the friendships and contacts he made with his peers gave him a much better insight into the cultural diversity that exists in the world. "The important realization is that we are all trying to solve similar global problems and all of us have much to offer," he remarks.

International friendships with other young scientists is a YSSP benefit stressed by another Annual Fund recipient, **Shahriar Rahman** from Bangladesh. He credits IIASA highly for providing the space and time for work and personal contacts with the 55 or so talented young scientists who came to IIASA in summer 2011. Shahriar was particularly impressed with the interdisciplinary background and the opportunities he had to see his own work on drinking water demand and availability in southwestern Bangladesh from several different scientific perspectives, as afforded by both his experienced scientific mentors and the other participating students.

Anastasia Emelyanova probably would have made it, being a talented student from Russia and thus a potential YSSP candidate. However, the award to Anastasia of the Petr Aven Fellowship, which offers an advanced graduate student from Russia or a developing non-IIASA member country the opportunity to participate in the Young Scientists Summer Program, made it an experience to remember. "The personal and professional growth I experienced here," she says "is beyond any estimation. Personally, I think that being at IIASA pushes you to learn how to communicate with people effectively. This is great, not just for being able to spend time with people who share your interests, but also for building contacts for future work. There are so many possibilities for young researchers to collaborate with each other to work for the benefit of their homeland."

Every year, there are many applicants for YSSP places, and the Annual Fund provides an opportunity to increase the scope and vision of the YSSP. There will be a Petr Aven fellowship for the next nine years, but how many other places there will be depends very much on the generosity of donors like Petr Aven who, many years after his YSSP experience, is still aware of the influence his participation in the program had on his life.



Prestige Makanga



Anastasia Emelyanova



Shahriar Rahman

Other YSSPers have had a similar experience. One anonymous YSSP donor remarked: "My reason for giving is very simple. The YSSP provided me with a platform for my research, as well as my doctorate dissertation. This was my first experience with international scientists, and I had many fruitful discussions, particularly in the area of energy and systems analysis."

As Anastasia hints, the Annual Fund offers much more than extending expertise and useful contacts to young scientists from non-IIASA countries. **Prestige Makanga** has been in touch with his home country embassy in Vienna to tell them about IIASA and the YSSP program and how such a program can benefit the country. "I will also be teaching an undergraduate course and I am planning to use some of the IIASA models and tools for lectures. This will greatly benefit the students."

Prestige's work on deaths that occur in the world as a result of injury is also vital for the future of low and middle income countries like his own. Some 90 percent of all accidental deaths in the world occur in these nations, outnumbering all deaths from HIV/AIDS, malaria, and tuberculosis deaths put together. In countries trying to cross the development threshold, collecting statistical information must have seemed like a luxury when many were scraping a living. However, Prestige believes that using the Volunteered Geographic Information (VGI) phenomenon, which thrives on user-generated content, is an efficient and viable way of quickly generating useful data when research resources are low. "I believe that there will be a ripple effect, and as my research outputs aim to address pressing societal challenges, my experience at IIASA will later have social benefits."

In Bangladesh, the experiences at IIASA of **Shariah Rahman** will contribute greatly to the use of systems analysis for problem solving. The outcome of his YSSP research will be an integrated drinking water security model considering all important factors (hydrological, environmental) with their associated uncertainties. "The coastal area of Bangladesh is very vulnerable," he says. "Salt water from the sea often seeps into the drinking water supplies used by coastal households, especially in the southwest of the country. The rural livelihoods strongly depend on water and there has never been a proper assessment of water supply and demand."

These experiences of research gaps in the "South" are mirrored by the research carried out by **Anastasia Emelyanova** into aging in the Arctic population of the Russian Federation, where conditions are generally quite different from the rest of Russia. Anastasia collected data before coming to IIASA and was able to spend her time modeling "aging" indicators comparing chronological age with "prospective" age. This work, which was pioneered at IIASA, views age as the years you statistically have left to live rather than the years you've already lived and can have quite a profound impact on the provision of social policies. Says Anastasia: "The Russian North has few resources for adjusting to the consequences of population aging and has given aging a rather low policy priority." Her results did indeed show life expectancy picking up during this decade for both men and women in the northern regions, posing potential problems for Russian policies on aging and elderly wellbeing.

"The results I got turned out to be very different from those which I expected, applying new metrics introduced here in IIASA. The World Population people gave me lots of wise thoughts on the projects and representation of results at the final workshop."

The Annual Fund has proven to be a very worthwhile investment in summer 2011 for three young people, who will not only benefit in career terms from the three months spent at IIASA, but will also bring tangible benefits to their home countries, both those studying science and those who will benefit from its insights.

To bring even more young scientists to IIASA next year, donations are needed to reach the €5,500 required for flights to and from Austria, accommodation, and living expenses while here. ■

Further information To make a donation to IIASA's Annual Fund, visit www.iiasa.ac.at/donate. To apply for the YSSP, visit www.iiasa.ac.at/yssp.