

## Summer modeling work

Every summer IIASA holds its Young Scientists Summer Program attended by around 50 young people from over 20 countries. Advanced graduate students Kate Calvin (USA) and Kiarash Nasserassadi (Iran) took part in the 2006 program.

It is said that most of today's policy decisions are too complex to be made without a sizable substantive input. How can "mere" politicians muster the necessary scientific and technical arguments to gain national advantages or concessions at, for example, the climate change talks—unless they receive appropriate expert advice?

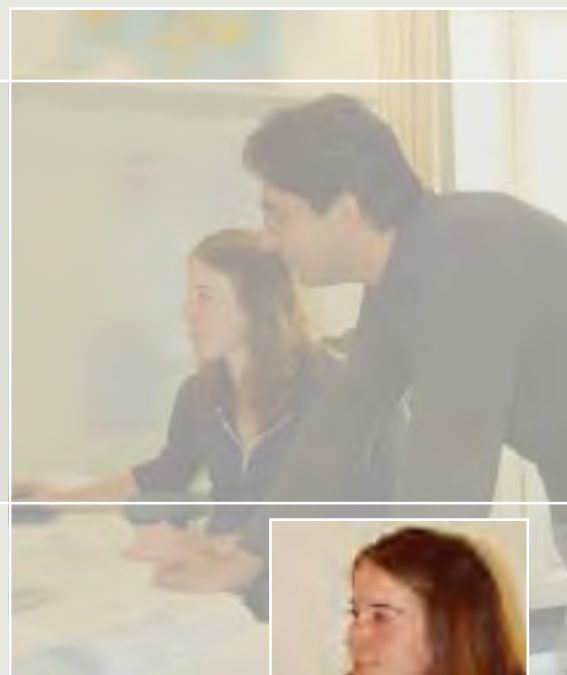
Kate Calvin, carrying out research related to game theory and its application to the climate change negotiations as part of IIASA's 2006 Young Scientists Summer Program (YSSP), is likely to be among a future generation of experts involved in top-level scientific briefings. Although her home country, the United States, signed the Kyoto Protocol in 1998, the Bush administration withdrew three years later, claiming the treaty was "fatally flawed." Nevertheless, the Stanford University PhD student, who is working with IIASA's Processes of International Negotiation Network to develop a model to clarify the climate talks negotiation process, believes that a stronger system of financial incentives might convince the United States and other nonsignatories to relax their stance. Such countries could be persuaded to sign up to instruments such as Kyoto, says Kate, but only if they see emission reductions as being in their own interests.

Reducing the impact of earthquakes is unquestionably in the best interests of Iran, which experienced some 64 earthquakes of varying magnitudes between 15 July and 15 August this year. Since 1989 the country has a dedicated International Institute of Earthquake Engineering and Seismology (IIEES) in Tehran, where YSSP participant Kiarash Nasserassadi is finishing his PhD. In conjunction with IIASA's Risk and Vulnerability Program, Kiarash is modeling the most appropriate and cost-effective methods of managing the direct and indirect impacts of earthquakes—from physical preparedness to predisaster insurance schemes—on oil-related industrial facilities.

YSSP participants enjoy the challenging interdisciplinary atmosphere at IIASA where experienced scientists are accessible, not just for lectures, courses, and workshops, but also for one-on-one discussions and advice. During the Program, which was founded in 1977, young scientists research and produce a paper with a policy-related theme on a topic related to IIASA's current research activities and methodology. YSSP leisure activities and relaxation, including strenuous alpine hiking, are also high on Kate and Kiarash's agenda, and good friends and contacts have been made. Kate will be meeting up with two 2006 YSSPs running the November New York marathon, and Kiarash hopes some YSSP contacts will visit him in Tehran next year.

Could Kate and Kiarash's work at IIASA this summer influence future relations between their respective countries? Possibly. If Iran, which signed the Kyoto Protocol in 2003, should find itself locked in climate change negotiations with the United States, then Kate could be advising her government on how to do an advantageous deal.

And with Iran and the United States both being earthquake-prone countries, Kiarash could one day be exchanging valuable information on earthquake impacts with US counterparts, perhaps even at Kate's alma mater, Stanford University. Interestingly, 2006 marks the centenary of the Great San Francisco Earthquake, which damaged several Stanford buildings. ■



### Daily schedule of Kate and Kiarash

- 7.00 Get up and have breakfast at hostel in Mödling, a picturesque town next to Vienna
- 7.45 Cycle to work with other YSSPs from Mödling along the bike path to IIASA at Laxenburg
- 8.00 Catch up on e-mails
- 9.00 Do some reading for summer research project or meet with supervisor
- 10.30 Attend YSSP Outbreak Forum, attend a lecture, research project
- 13.00 Lunch at IIASA's Schloss restaurant followed perhaps by relaxation in Laxenburg Park
- 14.15 Further work on summer research; consultation with scientists and other students to gain "new angles" on work
- 18.00 Bike to Biedermannsdorf for a drink at a Heuriger on the way home with other students staying at Liesing and Wienerberg; then back to Mödling  
or  
Attend evening social events such as dinner, sport, or barbecue