



Interval



#05 _ Knowledge, a Global Asset
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Foreign scientists contribute to Dutch academic excellence

Chinese couple on world tour

UNIVERSITY OF TWENTE



International co-operation between universities is rapidly increasing. Many Dutch students prefer post doc research abroad. On the other hand, Dutch universities facilitate positions for foreign scientists. In order to assure academic excellence, they even depend on their contribution. Interval visited six successful expats at Dutch universities.

Of all the colleges in the world, they had to enter this one. Small as chances were for Ingrid Bergman to meet Humphrey Bogart in his night club in Casablanca, even smaller were the odds for two Chinese scientists, who happen to be married, of getting jobs at the University of Twente, even in the same building (Zuidhorst), while they are not even specialised

Dear Ronald,

Do you remember? How happy we were last year when you became our Minister for Education, Culture and Science... YES! We shouted, YES, it is true: "you will get the government you deserve". In science and technology in the Netherlands we belong to the top of the world and now, finally, we have a top scientist as our new minister, YES! Then you were silent for a hundred days and we kept our breath, until you and the new government came out with your top priorities. I must admit we were a bit disappointed, for your first priority wasn't science, it was education. It's been a year, and now you say you have done what you wanted to do for the teachers. Is it now time for us, for science and technology? It sounds like it, for you now say you want "Graduate Schools according to the American model". Your own Hubrecht Lab in Utrecht is such a school, and so is AMOLF in Amsterdam, the Kamerlingh-Onnes Lab in Leiden, Kavli in Delft and MESA in Twente, in fact all Dutch labs, for science and technology in the Netherlands belong to the top of the world*. We have been able to compete with American Graduate Schools so far, but serious lack of funding now makes this a losing battle. Do you remember the NWO strategy? When you were still a scientist, you agreed: we need 450 Million Euros extra for scientific research. Is that what you mean when you say you want "Graduate Schools according to the American model"? Do you remember – and will you raise the budget for science and technology by 450 Million/year?

Yours truly, Frans W. Saris

* Het Nederlands Observatorium van Wetenschap en Technologie 2008

in the same scientific area: Xiao Li is a biologist and Zheng Zhang has his PhD in chemistry.

“We both wanted to see more of the world. To be honest, its academic reputation was not the only reason we applied for jobs in The Netherlands. We also knew the country by its reputation for tulips, wind mills, and soccer teams. During the nineteen nineties we worked in Finland, and because our appointment there ended, we started looking for a new challenge, which we more or less accidentally found here”, says Xiao Li.

Even famous in China

For Zheng Zhang, it was different. He applied for his position because he was familiar with the work of professor Jan Feijen. “He is the director of the BioMedical Technology Institute where I work now. Professor Feijen is even famous in China”, he says. “So when I saw the chance to work with him, it was an extra motivation to apply. In Enschede, I worked on biodegradable block

polymers with applications in controlled drug release and tissue engineering. The study was successful, and at a later stage I would like to develop this technique further in China, so we will be able to use in it in hospitals.”

Xiao Li also did research that will be of use later in China. “Together with my colleagues, I developed an affordable CD4 enumeration method for HIV staging in resource constrained settings. Think of an automated microscope that is able to count the cells in patients’ peripheral blood in order to find out in what stage the HIV infection is. Usually, the methods applied in the West are very expensive. We succeeded in developing one that is also affordable in South Africa and Thailand, where we tested it. I would like to find a manufacturer for this instrument in China, where it could also be applied.”

Award winning scientists

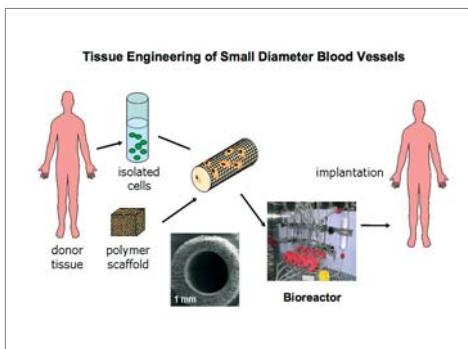
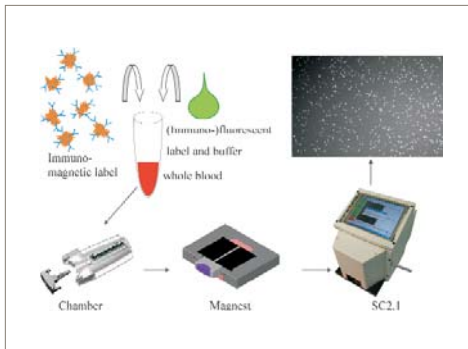
Where their next stop will be, is not clear yet. They agreed that Zheng Zhang’s career will be leading in

new choices, even though they both are award winning scientists. They both received, in different years, the Chinese government’s award for being the most outstanding self-financed Chinese students abroad. Xiao Li: “When we decide to have a child, I will probably be the one who will take care of it most of the time. That is why we think it is best to look out for new opportunities for Zheng.”

Zheng Zhang: “The scientific climate is quite excellent in The Netherlands. A big advantage is that everyone speaks English. The University provided a short course in Dutch, just enough to find your way in daily life. The only disadvantage we encountered was the amount of paperwork for registering in The Netherlands in the first month after arrival. Apart from that, living here is very nice. We have many friends, though mainly from China. At work, we have very friendly contacts with our colleagues.”

“Scientists in China are wealthy”

“In due time, we will probably return to China. The Government stimulates scientists to gain experience abroad and to come back later in order to share experiences. On a personal level, we also feel the need to go back eventually. Our parents are getting older and we want to take care of them when necessary. Besides, the economic and financial differences between China and Western countries are getting smaller, especially for well-educated scientists, businessmen, and technicians. In absolute terms, the salaries in China are lower, but in terms of living standards, scientists in China are wealthy”, says Xiao Li, adding: “Personally, I feel free in China.”



Xiao Li and Zheng Zhang

Easier procedure for knowledge migrants

Currently, the procedure for research organisations to welcome scientific researchers to their institutions is easier than it used to be. The procedure 2005/71/EG ensures this.

Procedure

Research institutions can simply inform the IND that they wish to invite a researcher on the basis of this procedure, by filling out a special form. In order to be welcome in The Netherlands, researchers of course have to comply with general prerequisites such as a valid passport and a non criminal past. Furthermore, the agreement between the institution and the researcher is essential.

This agreement can only be approved if:

- the research project is approved of by the institution
- the researcher can provide for themselves
- the researcher has health insurance
- the agreement between institution and researcher is legally binding

When applying for a permit, a copy of the agreement between institution and researcher has to be enclosed. It has to be approved by a notary or local government.

New opportunities

By implementing this procedure, the Immigration and Naturalisation Service (IND in Dutch) creates a new opportunity for a long term stay for knowledge migrants

in The Netherlands. This procedure only pertains to acknowledged research institutions. The most important characteristics of the new procedure are:

- a permit for employment is not required;
- the institution and the researcher create an arrangement, but there is no official contract;
- less strict rules will prevail for researchers and their family members regarding mobility within the European Union.

Dutch universities have more patience

WAGENINGEN UNIVERSITY AND RESEARCH CENTRE

Sajid Rehman has been a resident of The Netherlands for seven years. He graduated in agriculture at the University of Faisalabad in Pakistan, received his Master and PhD degrees from Wageningen University, and is currently involved in a post doc research project focusing on molecular plant pathology. Did he know The Netherlands before he came here? “Only its hockey team”, he laughs. Then, a bit more serious: “A colleague of my father’s was involved in a research project at the Technical University in Delft. He thought there would be ample opportunities for me in Holland.”

Rehman is relieved that the regulations concerning permits for his residence are slightly better nowadays. He and his wife met with quite some difficulties in dealing with the Immigration and Naturalisation Office (IND). “I would very much like to stay in The Netherlands, because of the politically unstable situation in my own country. In general, there should not be any problem concerning our residence here. But the authorities are not very co-operative when you make an effort to start ‘inburgering’*. My wife and I have been on waiting lists to enter this course for a long time now. We are prepared to pay for it, but we keep hearing that acknowledged refugees are allowed in first. They get in for free, as far as we have understood. How can we possibly meet the requirements for inburgering when we are being placed in a queue for this course? For me it is not as bad as for my wife. My colleagues all speak English fluently, so I can communicate freely, but my wife stays at home, and for her a course in Dutch would be extremely helpful.”

Yuling Bai teaches courses in China every summer

One of Rehman’s colleagues is Chinese Yuling Bai, an assistant professor working in the Laboratory of Plant Breeding at Wageningen University. She did not meet with the same difficulties, and she has had a lot of co-operation from the Chinese government. Nor were her reasons for wanting to stay in the Netherlands the same as Rehman’s. “Originally, I agreed to return to China after accomplishing my PhD in Wageningen”, she explains. “Personal circumstances, however, urged me to build a future in Holland. Much to my appreciation my university in China was understanding and honoured me with the title of ‘Visiting Professor’. I return to China every summer to give lectures.”

“Sajid and I are both working on resistance to pathogens in tomatoes, although from different angles. We both feel welcome at the university. Our colleagues are very friendly and they make us feel welcome. But I can imagine Sajid’s frustration regarding the authorities”, says Bai. “The formalities are difficult and the Immigration and Naturalisation Service is rather strict. Luckily, I have been naturalised now and do not have to worry about this anymore. Furthermore, I hear from friends that the Service is becoming a little bit more ‘foreigner friendly.’”

“Recently, our president visited The Netherlands”, Rehman adds to this. “I have the impression that the climate has become a bit more friendly since then. And as far as the general public is concerned, we hardly experience difficulties. Ninety per cent of the people in The Netherlands are very friendly and helpful.”

“The Dutch have more patience”

Regarding the academic climate, Bai thinks that Dutch universities have more patience in developing knowledge. “In China there is a tendency to rush research. Science is driven by governmental funding but not closely linked with utilisation. In the Netherlands, STW offers more room to do applied research and develop utilisation. I for example have been able to work on tomato resistance for ten years with STW funding, and in close co-operation with Dutch seeds companies. This makes me a true tomato person. In China I would probably not have been given so much time for one topic in applied research.”

In Pakistan the academic level is rising, although Rehman sees difficulties in bringing science to application in agriculture. “Farmers lack the money to invest in new developments”, he points out. “I am looking for methods to make tomatoes resistant against pathogens without using toxic pesticides. Hopefully, we will be able to introduce affordable methods in due time, but we will be dependent on government and other partners. The individual farmer will not be able to buy these methods on their own.”

Chinese agriculture could profit from Dutch expertise

In this respect, Bai would embrace a more intensive contact between countries. “Wouldn’t it be wonderful if China and Holland could share knowledge”, she says. “We see a lot of Dutch companies going to China, and Chinese agriculture could profit from



Sajid Rehman



Yuling Bai



Dutch knowledge. An extension officer could build an infrastructure in China and export Dutch expertise. It would be a perfect advertisement for Holland as knowledge country.”

With respect to foreign scientists in The Netherlands, Bai would be happy if STW for instance would translate the entire website

into English. Although her Dutch is quite good, reading complicated articles is difficult.

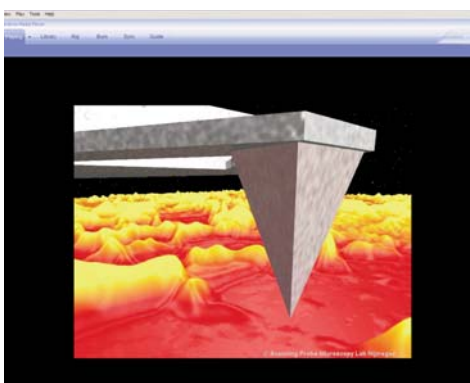
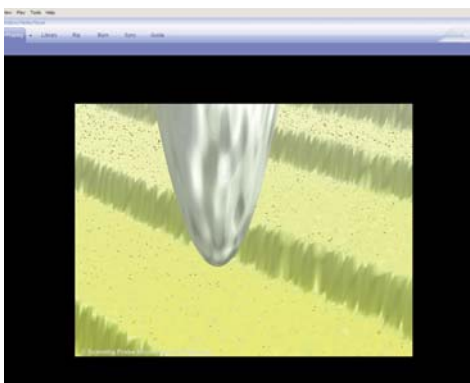
The future of Bai is in The Netherlands. “I would love, though, to be involved in exploring the possibilities of co-operation between China and The Netherlands.”

No culture shock for professor Sylvia Speller

RADBOUD UNIVERSITY NIJMEGEN

Professor Sylvia Speller and drs. Carmen Guguta are both based at the Radboud University of Nijmegen. They enjoy life and have both incidentally found jobs in The Netherlands. They both say: “Science is not restricted to nationalities”. Professor Speller sent out applications to universities in Spain, Austria and Holland. The University of Nijmegen just happened to be the first to respond.

Speller, who has been living in The Netherlands for six years now: “I am from Germany. So, moving to Nijmegen was not an enormous culture shock. Still, Germany and Holland there are quite different. Germany is more hierarchically structured than Holland. I think this is one of the reasons why I feel better here. For example, I was quite young when I became group leader at the Institute for Molecules and Materials. In Germany, there would have been little chance to receive such an opportunity at my age.”



Carmen Guguta's current research is 'an old passion'

For Guguta, there was another reason to apply for a position in The Netherlands. “During my studies in Romania, I was already interested in chemical crystallography and X-ray diffraction. Unfortunately, in Romania, resources are poor. I do keep contact with the university in Constanta and hope to contribute to improvements in the long run. But for now, I want to develop my own skills. During my master's degree I got into contact with professor Schoonman, head of a world-renowned group at TU Delft, and he made it possible for me to be part of an interesting project on Li-ion batteries. For my PhD I found a position in Nijmegen where I can combine chemical crystallography with pharmaceuticals, an old passion of mine. Dr. René de Gelder gave me the opportunity to work in a prestigious crystallography group.”

Life in The Netherlands has its pros and cons. Speller: “Quality and availability of houses is disappointing, going out for dinner is expensive (but good quality!), child care is good, certainly in compared with Germany, but not very flexible. On the other hand, people are freer, opportunities are open for everyone and I am happy here.”

Guguta is married to a Mexican PhD at TU Delft, and for both of them the Immigration and Naturalisation Service paperwork is not that straightforward. One of the most surprising experiences was that the migration officer refused to speak English to Guguta. Still, she is very happy to live in The Netherlands. “My Dutch colleagues are very helpful. When I had this incident, one of them even called the IND to protest.”

Create more possibilities for women

Speller: “The Max Planck Institute has developed special procedures for knowledge migrants. Perhaps this could be an incentive for STW or NWO. Another issue to me is that Dutch female scientists in higher management positions are hard to find. In other countries, for

* In English there is no synonym for this word. It means that government requires from foreigners who want to settle in The Netherlands, that they learn Dutch and that they are familiar with Dutch culture. They have to follow a course and do an examination. There is a lot of political debate on the question whether participants have to pay for the course or whether the government should provide for it.



Sylvia Speller



Carmen Guguta

example, a professor with a small child is allowed to reduce lecturing temporarily. In The Netherlands the mainstream is male in natural sciences, and would not even consider taking such circumstances into account.”

Credits

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Technology Foundation STW

Van Vollenhovenlaan 661

3527 JP Utrecht

telephone _ +31 30 6001 211

fax _ +31 30 6014 408

e-mail _ pr@stw.nl

internet _ www.stw.nl

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