## Former students about the Chalmers International Master's Programme in Bioinformatics

During the autumn 2005 we perform a Survey among former Masters students in Chalmers International Master's programme in Bioinformatics. We are still collecting late responses, but below you find all answers so far (Nov 16 2005) to the question:

"Finally, if you wish to you may comment here on the role that your years in the programme have played for you on a personal as well as professional level:"

#### Student answers

Your programme made it possible for me to change from pure biology to something I found much more interesting, and I don't say this because I don't like biology - on the contrary! I'm very interested in understanding the evolutionary processes in nature. However, it's my belief one can't conduct good and meaningful studies in this field without any bioinformatics knowledge. One has to learn mathematical statistics, a lot about HMMs, and if one wants to conduct evolutionary research one always benefit from a course in population genetics from the mathematicians perspective. It's also good to learn about algorithms and different data structures, and of course much more.

Your educational programme gave me a good foundation to learn more about my research interests. It's true though that the studies were quite hard as my previous training was in molecular biology, and sometimes I thought the biological parts in the course projects could have required more in depth biology knowledge from the students. However, my studies at Chalmers qualify among one of the things in my life I'm the most proud about doing. I'm proud to be a Chalmers alumni!

*Åsa Perez Bercoff* (2003-04) works with research project at Stockholm Bioinformatics Centre, Sweden. I was very fortunate to find employment as a biostatistician right after graduating, and I have great use of the biology and genetics I learned on the masters programme.

### *Karin Björck* (2002-03) works with genetical statistics and bioinformatics at SWEGENE Bioinformatics, Göteborg University

The Master was exactly what I needed. It gave me a good introduction to biology, which I really needed as an engineer, and it taught me to face bioinformatics problems from different perspectives, including statistics and machine learning, which have become indispensable tools for me in my PhD in biomedical engineering. For sure I remember the months spent in Chalmers and Göteborg as the best period of my studies.

### Salvatore Cappadona (2001-02) PhD-student at Politecnico di Milano, Department of Bioengineering.

This programme is quite good, people, environment and the course. I will take all I learned from here to the future. There are also some bioinformatics programme in China now, it could help China and other developing countries a lot on their own education system.

*Ying Cheng* (2003-04) **Bioinformatician at MRC - Edinburgh, Scotland.**  I found that the programme gave me a great overview of bioinformatics and the necessary merits to continue pursuing it. Although many of the subjects are covered very superficially and it's impossible to grasp it then. The basics in biology introduced me to the whole new area and I though that was the single most important course. I also learned most during the thesis projects because there was enough time to dwell deeper, and the "real-life situation" made it much more fun and valuable as well.

## *Marcus Claesson* (2000-01) PhD-student at Bioinformatics Microbiology Department University College of Corck, Ireland.

It was interesting to see at the end how all courses were connected and while doing project from one course we were using knowledge from others, too. Great gratitude for this I owe to all people gathered around this programme. Lectures were on a very high level and professors had excellent communication with students. They helped me a lot and most important they were there for us all the time.

I have spent 2 wonderful years in Göteborg, which I now consider as my second home. Knowledge I had acquired at Chalmers helped me to improve myself both on professional and personal level. I got an opportunity to work with people which are best in their field and which shared their knowledge disinterestedly.

#### Marija Cvijovic (2003-04)

PhD-student in systems biology at Max Planck Institute for Molecular Genetics in Berlin, Germany.

I would like to express my gratitude to my supervisors Sven Nelander and Olle Nerman and all teachers at Chalmers University of Technology/Bioinformatics Programme. I also would like to thank the Swedish Institute for the support to study in Sweden. It was best years of my life as from the point of educational gain as social life. Mixture of Scandinavian culture and international environment in Göteborg left unforgettable days in my mind. Thanks to you I have got lots of friends from all over the world!

*Nino Demetrashvili* (2002-03) work as Biomedical Engineer in Tbilisi, Georgia

> Bioinformatics is a very wide field. Nevertheless, I think the bioinformatics programme at Chalmers has succeeded in introducing the most important topics in the field. Being a student with molecular biology background, I was worried at first that the program would be too difficult since it sits in the Mathematical Statistics Department of the university. However, the course progression is well-designed, starting from important fundamental concepts onto which more advanced courses are built upon. In the second quarter, the two groups of students (one with mathematics background and the other with biology background) can already "communicate" and work as pairs in solving assigned tasks. Finally, the thesis project is the culmination of the program where one could really focus on one bioinformatics topic and develop specific skills in the chosen field. Right after my master's thesis work in structural bioinformatics, I was granted a PhD position at another research group at Göteborg University. Looking back, I am proud to have been part of a strong bioinformatics program which definitely prepared me to tackle a multi-disciplinary PhD project I am involved in at the moment.

### Jonathan Esguerra (2001-02) PhD-Student in Microbiology at Department of Cell and Molecular Biology, Göteborg University.

My overall experience at Chalmers University of Technology has been very fulfilling. It has been the most wonderful and rewarding time of my life. Professionally, this masters program has benefited my career in more ways than one. It has enhanced my qualification, expertise and now I am settled in a rewarding job. At Chalmers, I have had the opportunity of interacting with extremely qualified and professional teachers and associates. On the personal note, living in Gothenburg has been an interesting and pleasant and feel-good experience for me. I will never forget my time I spent in Gothenburg Sweden.

### Jasmita Gill (2003-04) Research-worker in Computational Science mainly related to Bioinformatics in New Dehli, India.

The time I spent in Sweden is as valuable as time can be. I arrived to bioinformatics in search for the newest questions of science and thanks to its multidisciplinary character I found a completely new view on research possibilities.

#### Carolina Figueroa Helland (2003-04)

PhD-student in Non-linear Dynamics Group, University of Potsdam, Germany.

My studies at the program has given me the skill to look at biology from a computational point of view, giving me the power to plan and conclude my experimental studies better.

#### Anders Hellström (2003-04)

PhD-student at Department of Medical Biochemistry and Microbiology, Uppsala University, Sweden. The masters program in Bioinformatics has really helped me to get thorough knowledge about the interplay between biology and computer science/statistics. A knowledge which I could not do without in my current position as a biostatistician. Moreover, the mix of different nationalities contributed to a most stimulating and interesting study environment.

*Åsa Hellqvist* (2002-3) works with genetical statistics and bioinformatics at SWEGENE Bioinformatics, Göteborg University.

Even though my background, mechanical engineering was far from bioinformatics, I could learn many fundamental subjects from this program. They are very helpful for my current research.

*Mun gwan Hong* (2003-04) PhD-student at Center for Genomics and Bioinformatics, Karolinska Institute, Stockholm, Sweden.

My study at Chalmers did bring me to the real world of bioinformatics, which did benefit me a lot and will benefit me forever.

*Li Huihua* (2001-02) works related with bioinformatics in Singapore.

Going to Chalmers was a life-changing opportunity for me. Not only was I able to expand my education in new directions, I made friends and colleagues from around the world. As an American living on the west coast, I'd had almost no experience with European culture before I moved to Sweden. I came out of Chalmers with host of new skill sets, a newfound appreciation for international cooperation and a strong desire to work or study abroad again in the future.

#### Marshall Huston (2002-03) Research Scientist at Roche Molecular Systems, San Francisco, USA

The bioinformatics programme at Chalmers fostered the latent genes in my genome to become activated and I learned a lot from the dedicated teachers not only about bioinformatics but life in general.

## *Mamta Jaiswal* (2002-03) works as team leader in Bioinformatics MSc - programme at Welingkar Institute in Mumbai, India.

The Master's programme in Chalmers certainly had an important role in my life. Studying abroad was a very pleasant and useful experience. Besides good education, it gave me a valuable network of contacts all over the world, and the internationally accepted diploma. Thanks to the programme I got my job in AstraZeneca.

*Eva Kessler* (2000-01) Estonia

> I did not finish the whole programme and in my research I am not directly dealing with bioinformatics, nevertheless the courses I have

taken during the first term of the programme have helped me to gain a better understanding of the concepts that I encounter on daily bases and provided me with the tools that I would not know how to use otherwise. Beside that, the programme was my first experience as an international student, studying in an international environment, which I enjoyed a lot. It was very interesting and enriching to meet people from different countries and backgrounds and to share the opinions and views on the common subject we studied.

#### *Olga Kourtchenko* (2002-03) PhD-student at Department of Botany, Göteborg University.

For me, the program opened a door to the biomedical world. As a computer engineer, the most important tool that I acquired was an understanding of basic cell and molecular biology principles. I was also introduced to the many different aspects of bioinformatics which helped me see how my engineering skills could be applied in this field.

### *Erik Larsson* (2002-03) PhD-student at Medical Biochemistry, Göteborg University.

This is a very appealing master's programme. I was attracted to and enjoyed the multidisciplinary subjects introduced in this programme. I had developed strong interests in life sciences when I finished my master's study at Chalmers, and I decided to go on my career in Bioinformatics. I am current a PhD student in Computational Biology.

*Yinchung Liu* (2000-01) **PhD-student in Computational Biology, Lund University, Sweden**  The Master's Program meant the world to me. I acquired skills and experiences far beyond what I had expected - and indeed this knowledge has been very useful to me in my present project. I feel it has allowed me to bridge the gap between theory and practice in my field (systematic biology) and has as result opened up a whole new world of exciting questions. It is probably safe to say that this door would have remained shut for me were it not for the Master's Program. On a personal level, I made many friends, both national and international. This was of course fun in itself - at the time I did not think of it as a network. Indeed, however, that is what it has become. It has proved very useful and personally rewarding on many occasions.

### *Henrik Nilsson* (2000-01) **PhD-student at Botany Department, Göteborg University.**

In the group where I did my molecular biology master's thesis there was a bioinformatics PhD student. Whenever he presented his work I was amazed - I had no idea how he managed to do that stuff but I knew I wanted to learn it! That is how I ended up applying to the program and moving to Göteborg. In Göteborg I found enthusiastic teachers and a challenging environment. There was also a fantastic international and interdisciplinary mix among the students. The program gave me a broad basic understanding for the interdisciplinary bioinformatics area. I also acquired skills that have been very useful for me in my career. I am happy for my bioinformatics skills and wouldn't want to be without them. In addition, Göteborg is a very nice place, I plan to stay here.

#### Maja Olsson (2000-01)

PhD-student, National Medical Bioinformatics Research School, Göteborg University.

Looking back at my days at Chalmers, I think it truly had been the best period of my studies. Coming there I found myself in an utmost motivating and challenging environment sharing these unique moments with fantastic people, many of which are now amongst my best friends. Professionally, not only it gave me the insight on the field and the basic tools to handle it, but also the passion and will to pursue my studies and research.

## *Fabio Parisi* (2002-03) PhD-student at the Swiss Institute for Cancer Research, Lausanne, Switzerland.

The mix of students from different professional backgrounds was very useful in providing a more broader understanding of things, not just from a CS point of view. The mix of subjects was very good as well, giving me a good foundation to the various topics in bioinformatics. Also, through the friends and contacts made in Gothenburg, I have been able to stay in touch with current research areas, apart from my own work. The time in Sweden was very memorable both personally and professionally.

## Hannah Rajasingh (2002-03) PhD-student in systems biology at CIGENE, Norwegian University of Lifesciences, Ås-Oslo, Norway

The Chalmers University of Technology, with its strong academic reputation and highly competitive postgraduate program in Bioinformatics, was easily my first choice. The academic atmosphere of the University, the classmates and lecturers in my programme are among what I value most about Chalmers. I would advise students thinking of studying Bioinformatics to attend CTH Bioinformatics program as it is one of the best way to experience the wide range of topics taught in this area. The collegiate system gives students the opportunity to meet people not only in their respective departments but also away from university, making it easy to socialise with other students sharing the same interests. Gothenburg is a fantastic place to live and its size makes it easier for new students to get accustomed to busy student life, finding a balance between work and fun. It is also quiet and safe, but historic and commercialised, making it ideal for studying and acquiring culture.

#### *Shruti Rastogi* (2003-04) PhD-student at Institute of Informatics, University of Bergen, Norway

The International Master Programme in Bioinformatics from Chalmers University of Technology allowed me to discover a wonderful country, and to study bioinformatics. I left Sweden after my diploma but I am still in the bioinformatics field. The multi-disciplinarity is an essential insight of the programme and is helping me very often since I am now working as a "link" between a biology lab and a bioinformatics lab.

My definition of bioinformatics is the development of mathematical and computational methods, applied on large set of biological data, to produce "biological" results. Therefore, bioinformatics without biologists wouldn't really make sense.

#### Nicolas Robine(2002-03)

## PhD-student at Service de Bioinformatique - Equipe Recombinaison et Instabilite Meiotique, at Institut Curie - Paris

Had a fantastic time at Chalmers and in Sweden! Would certainly not want to miss it! The program was extremely helpful in pursuing my desired career.

#### Helge Roider(2003-04)

PhD student at Department of Bioinformatics, Planck Institute for molecular Genetics, Berlin, Germany.

My 2 years in Göteborg have certainly influenced me a lot, in a very positive way. Through Chalmers, I got to know bioinformatics as a fascinating field, which I am planning to continue. The people in the course (students and teachers) were friendly and helpful, and it was a wonderful experience to work with such an international group of people with different backgrounds.

# *Mattias Schenk* (2002-03) works partly with bioinformatics in Ottawa, Canada.

I think the whole program is very good. And I like this multinational and. multi-background environment.

### *Ying Sheng* (2002-03) PhD-student at Department of Bioinformatics, University of Bergen, Norway.

The programme has given me a lot of information of how science, technology and ethic are working together in the 'genome era'. Personally, the diversity among students in terms of nationality, background education, ages, etc. has made the programme more than just an International Masters Programme.

*Selpi* (2002-03)

PhD-student at School of Computing, the Robert Gordon University, Aberdeen, Scotland.

I've enjoyed the range of topics covered in the course and practical classes attached to each course excellent support by tutors. What I learned at Chalmers has been invaluable in my present work. I have never felt daunted by the problems and have known from the start what to do and how to so about it. I totally agree that my present work would have been highly impossible to carryout without the knowledge I gained at Chalmers and for which I am always indebted to the teachers and my classmates at Chalmers.

#### Ramakrishna Sompallae (2002-03) PhD-student at Microbiology and Tumor Biology, Karolinska Institute, Stockholm, Sweden.

I really enjoyed my study in Göteborg. To study with people from all over the world gives an understanding for other cultures and ways of living. That is something that will always be useful in the future when meeting people. I'm really glad for all my new friends, I hope there will be time to visit them in their home countries to get an even better understanding of their lives.

I hope, in the future, to get a job in the bioinformatics field. For now, I'm working with database solutions and I think that when I have experience of this, I will more easily get a job in the area of Bioinformatics. The education has given me a good contact net in the Bioinformatics field that will be useful in the future.

#### *Lisa Wallman* (2002-03) Computer Scientist currently working with databases in Uppsala, Sweden.

On a personal level, the programme offered me a chance to study abroad, to get trained in a foreign language and in a different way, and to experience the wonderful culture in Sweden. On a professional level, the programme opened the gate to me and provided many useful strategies and techniques in the field of cell and molecular biology.

*Xianghua Zhou* (2002-03) PhD-student at Dept. of Anatomy and Cell Biology, Göteborg University. I don't feel poetic today, but I am convinced that studying at Chalmers was the best thing I did in my academic life. I am pleased with the city, the university, the people, the lectures and my own research. I certainly would study at Chalmers again.

*Antonio C. Mora-Ortiz* (2003-04) University teacher at Corporacin Universitaria del Caribe, Colombia