

Interview with prof. dr. Daniel Nettle

Visiting KNAW professor from Newcastle University

Could you shortly introduce yourself?

My name is Daniel Nettle. I am a behavioural scientist from Newcastle University and I am a KNAW visiting professor this year, here in the Psychology Department. I am here for some time now, but the KNAW professorship allows me to make several visits during the year, so I will be back later this year.

In my career, I started out as an anthropologist, but then I went to psychology and now I work in neuroscience. For me, the fundamental issues are: How do we understand human behaviour; what part of behaviour comes from the situation people are in and what part comes from the properties of the individual; the way their brain is set up. Whichever way you study behaviour, it is going to involve many disciplines, like biology, psychology, neuroscience, anthropology. When I worked on different problems concerning behaviour, it just was easier to be attached to different institutes. You cannot isolate psychology from anthropology, neuroscience and biology. It is all kind of a mixture.

Can you tell us about your research?

My recent work is on reproductive decisions, specifically how do we decide when to have a baby. Do you have your first baby at 18 or 28 and if you have had one, how long do you keep breastfeeding and when do you decide to have another child. All of these decisions that we make are influenced by the experiences we have had in our social environment and by our emotions and motivations. It is very interesting because clearly different people reach very different decisions. In Britain, for example, we have neighbourhoods, where the average age of first motherhood is twenty while five kilometres down the road, you will find that the average age of first childbearing is thirty. That is a massive difference in just a few kilometres. How is it that the people just a few kilometres down the road are making such different decisions?

These decisions are, in a broad sense, about what way you are going to attempt to leave something behind after you are gone. In that way I am applying a Darwinistic approach to my research, which is: In this environment, am I going to have many children soon, or am I going to wait for a long time. You can think of it as a kind of decision that the individual is making about how to do best in terms of reproduction, given the environment



they live in. The ways we have of deciding in such questions will have been subject to natural selection over many thousands of years.

Do you see that as a conscious decision?

I think it is a funny old mixture. We do a lot of work with young women, about 15 or 16 years of age, and



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they already have clear intuitions about when they might like to have a baby. It is not just out of nowhere, they can give you some reasons for this, but I think it is also influenced by very powerful unconscious factors. For example, if your own parents had their babies very young, or you see that other people around you are doing so, you might not be able to consciously articulate it, but that is going to have a massive effect on your decisions. Therefore, like in every human decision, it is a mixture. There is some consciousness in it, but there are also low level processes that we do not have conscious access to.

You have also written about the relation between behaviour and, for example, poverty. Could you tell us a bit about that?

By poverty I simply mean the environment you live in. If you live in a very poor neighbourhood, what you see is that people's health is not very good, maybe there is more crime, bad things happen to people, people lose their resources and you also see that people do not live so long actually. I think that all of those things are going to have a dramatic influence on you as you grow up. Your environment feeds into your life expectancy, but also, more importantly, into your perception of your life expectancy. Sometimes the perception can be worse than the reality. If you see an environment that looks very chaotic and kind of dirty and disordered, it may feel worse than it is. Maybe you will be OK, but you certainly do not feel that way.

Consequently, my idea is that if you grow up in a poor neighbourhood, you end up following a faster strategy, where basically you want to have babies sooner and you do not want to wait too long between them. You are getting all this information about your environment that it actually is pretty dangerous and people are not living tremendously well into old age, so it does not feel like one has a lot of time.

What specifically are you working on here in Groningen?

We are asking young people about their perception of their future, such as their future life expectancy, and what kind of upbringing they had. We also ask them to tell us about the motivations for having children, both explicitly and implicitly. Which is to say that we try to acquire the information in more subtle ways than just questionnaire responses, like their subtle responses to different kinds of pictures. While I am here, Thomas Pollet – who used to be my PhD student and now is an assistant professor here, at the Department of Psychology – and I will be running these studies – well, he will be running them actually – using the student body as participants. Furthermore, we are doing similar work to what we did on British reproductive decisions in a Dutch sample, to make comparisons.

What are your plans for future research?

So far we have thought a lot about women, about when they start childbearing and so on, but what about men? Particularly I think there is an interesting story to be told when men grow up in an environment where things seem kind of dangerous and they are not very well taken care of and where there is this environment of poverty around them. What does it do to their risk-taking behaviours? What we know is that young men from certain parts of the city or certain parts of society do a lot of risky stuff. They drive their cars too fast, they drink too much, they break things; they do all those classic male behaviours. However, not all young males do that, so I think it



is really affected by the kind of experiences that you have had in life, even in the first few years of life. We will be interested to look more at men and see if the kinds of things they do between the age of, say, 20 and 30 depend on the kinds of things they experienced in their early few years. I think that is important, because it is young men that cause most of the problems in society and it can be quite useful if you can really understand how early experiences feeding into the kind of psychological make-up of young men.

■ LÉON FABER

The BCN community from a new member's perspective

I am Deniz Başkent, a new Rosalind Franklin Fellow, and an assistant professor at the Department of Otorhinolaryngology (or, Ear-Nose-Throat, a much easier combination of words than the previous one) of the University Medical Center Groningen. I am also affiliated with BCN.

I only started in June of last year, but the university and UMCG communities already feel like family. BCN has played a big role in this quick adaptation.

As a new faculty member, I was handed a draft copy of the student supervision handbook by Nynke Penninga, the BCN scientific coordinator, and one of the most central people of the programme. When I was reading it, I could not help but shaking my head in agreement with what was written about BCN, especially about the important support mechanism for the students. The BCN office not only organises interesting courses for the Master and PhD students, which prepare the students professionally for their future careers, but the office also encourages them to be active in conferences by providing financial support. I cannot see a better opportunity than taking advantage of these benefits for personal and professional growth.

The support that BCN provides extends to other areas as well. The importance of networking has been mentioned many times in the past issues of the BCN newsletter, both in this Editorial section and in other sections. BCN plays an active role in this as well, by providing an array of media for researchers from different backgrounds to know each other better. In earlier times, 'networking' was mainly perceived as making business connections. However, these days, the lines between business and social networking are becoming blurry. As mentioned earlier, there are many websites now, such as Facebook, Hyves, and LinkedIn, which are widely used by faculty, researchers and students, and which vary in terms of their contents. Just sign up for any of them and get in contact with (former) BCN people. BCN has a group in LinkedIn, for which any BCN member can sign up. If you prefer old school face-to-face interaction, BCN organises different events throughout the year, such as poster presentations or social events, where BCN members, staff and students, can meet each other in person. Moreover, there is an active email list, which makes being up-to-date with the latest BCN events much easier. In fact, all these opportunities collectively make it easy for us to build strong connections, and so they do not leave an excuse for not doing it. If you're not on the email list, let the staff at the BCN office know and they will make sure you will be added to the list and be alerted to the events automatically. Just show up at the BCN events and you make instant friends with your colleagues. From my personal experience, I can wholeheartedly say, it is so much more fun to work when you know your colleagues/fellow students in person. And there is so much to learn from each other, and so much support we can use from each other. In my research, for example, we have found out that we can borrow an expensive piece of equipment from another BCN faculty. This will help our project tremendously. Additionally, you never know where you get a new idea for your next research project, or even better, for your next vacation or hobby project.

Last but not least, I would like to mention that, despite the strong programme that BCN offers, there is always room to make it even better. At times, I hear from students good ideas and suggestions they have about potential improvements, but this usually happens during informal chats over coffee. It is important to make your voice be heard and to have your messages, suggestions, ideas be delivered. I am ready to listen, and from my experience I can say, so is the BCN office. Please do not hesitate to contact us. Remember, this is your programme!

■ DENIZ BAŞKENT
ROSALIND FRANKLIN FELLOW, ASSISTANT PROFESSOR
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BCN under construction

As mentioned at our New Year meeting the BCN board has decided to update the organisation of our Research School. Since there is much organisational work to be done we decided to extend the board and we have included prof. N. Maurits (dept. Neurology UMCG) as a board member. At the end of last year it was decided to renew the BCN-website and to produce a BCN brochure containing a presentation of the major BCN research topics, the BCN PhD teaching programme and the BCN research master. The restructuring of the website is organised by prof. Maurits and is proceeding. The organisation of the brochure is done by dr. M. Lorist.

Another current issue concerns the financial situation of BCN. Due to the different stages of organisation of the faculty graduate schools it is not yet entirely clear which elements of the PhD education programme are financed by BCN. Therefore, a clear agreement between the faculty graduate schools and BCN needs to be made in order to warrant transparent financing of the BCN PhD programme and BCN research activities such as symposia and master classes. All preparations have been made to resolve this problem soon.

A positive announcement is the fact that our current rector magnificus, prof. F. Zwarts, will return to the BCN board next year. F. Zwarts is a renowned BCN member, who has served in the past as a very successful BCN director. He will dedicate his attention to external BCN affairs including the organisation of collaborations with the neuroscience research schools at Nijmegen and Maastricht.

Clearly, the board, the BCN staff office and a number of BCN members have worked very hard and the result is becoming visible.

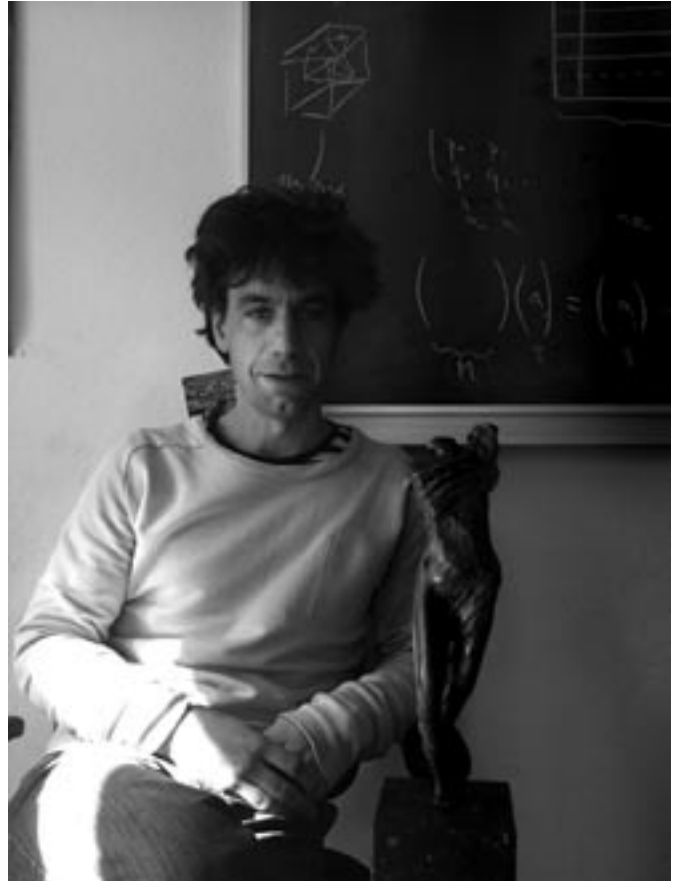
■ **PROF. ERIK BODDEKE**
BCN DIRECTOR



Philosophy: Ancient and renewing

Meet the best lecturer 2009: Jan-Willem Romeijn

In 2009, the election for the lecturer of the year award was organized for the third time. With this award the RuG wants to honour exceptional teachers for their commitment to create good education. During the first round of the election, a faculty internal voting takes place, where students choose their favourite lecturer. The 9 winners then have to give a presentation of 7 minutes that is evaluated by the audience in the room, by the audience at home (who were able to watch the presentations on the internet), and by a jury chaired by the Rector Magnificus Prof. Dr. Zwarts. In this way three awards are bestowed: an audience award, a web award and the award of the best lecturer of the year. The first two were received by Kees de Vey Mestdagh of the Faculty of Law, and by Gert-Jan Pepping by the Faculty of Medical Sciences. The main award for the best lecturer of the year, however, went to Jan-Willem Romeijn, a young philosophy teacher and BCN member. The jury selected him based on multiple criteria, which included the renewing capacity of the lecturer in the development of education, the ability to transfer enthusiasm about the subject to the students, the proactive theses and internships that are offered and the ability of the lecturer to scientifically and socially apply subject matter. As Jan-Willem Romeijn is still a new member of both the Faculty of Philosophy and BCN, we thought that it is time that the BCN community gets to know its awarded member better.



Jan-Willem Romeijn studied philosophy and physics at the University of Utrecht and finished both cum laude. After a short stint in financial consultancy, he decided to go on in the field of philosophy. In 2005 he finished his doctorate in philosophy cum laude at the University of Groningen and subsequently took a job at the University of Amsterdam. There he worked as lecturer in 'Philosophy of Science' in the methodology group at the department of Psychology. Although Jan-Willem was already giving lectures as a guest teacher at the RuG, he started to work as a full lecturer at the Faculty of Philosophy in September 2009.

In the past half year, Jan-Willem did not only offer courses for philosophy students, but also for students from other faculties. In collaboration with Fred Keyzer he provided a course about 'Philosophy of Psychology' to psychology students, and taught 'Philosophy of Natural Sciences' to physicists, mathematicians and biologists. At the Faculty of Philosophy, he gave master courses on 'Causality and Statistics' and 'Belief, Probability and Uncertainty', and an introductory subject about the 'Philosophy of Science'. This subject was for 2nd years-philosophy students and introduced certain traditions of the

field. Jan-Willem likes these subjects a lot because they are about the basics of his own research, which "of course is nice to talk about". His enthusiasm about his research also seems to be transferred to his students, as they describe Jan-Willem's lectures to be "exceedingly interesting lectures, during which it is impossible to keep one's attention away".

During the second round of the best lecturer of the year election, Jan-Willem and the other 8 faculty winners had to give a presentation of 7 minutes. Jan-Willem's winning lecture was about 'Reasoning with probabilities' and can also be found online: www.rug.nl/corporate/rugdocentvanhetjaar/genomineerden

His philosophy students elected Jan-Willem for giving the best lectures in the whole faculty. His students say that his lectures are unbelievably intriguing and captivating. When asked what his secret is, Jan Willem laughed and answered: "To this question I of course have no answer." But he further said: "It certainly helps to be passionate and convinced of the importance of one's own research."

The 7-minute lecture 'Reasoning with probabilities' about the justification of statistical methods that Jan-Willem gave during the second round of the lecturer of the year-election is also a core-subject of his own research. "There is a really beautiful relationship between a old philosophical problem and statistical techniques", tells Jan-Willem. The philosophical problem is called the 'problem of induction', and has been introduced by the philosopher Hume. It has been known for hundreds of years and states that it is impossible to acquire justified knowledge based on just a few cases. This problem can also be observed in statistics, where general conclusions are drawn based on a small portion of the population. Examples of the scientific application of statistics are also abundant within the scientific practice of researchers in the BCN community. In fMRI studies, for instance, the decision has to be made whether a certain 'voxel' is active or not. This is done by statistical tests, who eventually give a probability for finding the observed level of blood circulation in a voxel on the supposition that there is no significant activity in the voxel; this probability is the 'p-value'. The question however arises, whether a very low p-value warrants the conclusion that the voxel is indeed active.

It is exactly this kind of inversion of probability judgements that Jan-Willem dealt with in his 7 minutes lecture. It is also the more general scientific application of statistics that much of his research focuses on. Jan-Willem tries to get to know whether the assumptions that are at the basis of these kinds of experiments and analyses are justified or not. He thereby shows why statistics, which is used by nearly all the sciences, is also a study-object to the faculty of Philosophy. Jan-Willem's research thereby exemplifies a really important guiding principle in the Faculty of Philosophy of the RuG at large, namely that philosophical research has to be both, related to and relevant for science.

Jan-Willem studied two subjects that at first seem to be contradictory: physics and philosophy. When asked about his choice of subjects, he answered "although it seems like it, the two subjects actually are not contradictory at all". As example he named early scientists, like

Isaac Newton and Robert Boyle, who did ask truly philosophical questions. Questions like: "What is space?," "What is time?," "What is matter?," "What is life?" are still up-to-date and keep scientists, as well as philosophers, busy. With his statement "many philosophical questions are best to be answered with science at hand", Jan-Willem makes clear that philosophy does not only interact with science, but that it actually needs science in order to answer its questions. Einstein's theory of relativity, for instance, will help some way towards the answering of the question "What is time?".

And how about science? Is there really a need for philosophy? Jan-Willem says there is. In his opinion the relationship between philosophy and physics or other sciences is a two-way relationship. As just discussed philosophy does need science in order to come to answers. Philosophy on the other hand has a lot to give to science when it comes to the justification of scientific methods, the understanding of what one is actually doing or measuring, and to the interpretation of scientific results.

Jan-Willem is lecturer for 'Philosophy of Science', which is quite a broad term. He focuses as well on the general 'philosophy of science', as on the philosophy of a certain field of science, like 'philosophy of physics' and 'philosophy of psychology'. Jan-Willem's research mainly focuses on general methodological questions, like "What is a theory?", and "How does it relate to the data that can be obtained?" He also investigates questions that discuss what it means to believe or accept a certain theory, leading his research to more epistemological and metaphysical questions. Take the chance that some patients will die within the next 10 years for instance. Depending on this chance, certain decisions with regard to medication and therapy are made, which means that in such a case the chances are not applied to a population, but literally become a matter of life and death for an individual. In such a case, is it crucial to know what these chances are: can they pertain to single cases? Jan-Willem's research focuses on finding answers to exactly these kinds of questions.

Jan-Willem is aware of the fact that 'hard scientists' often smile at philosophy, and see it as being unscientific. He acknowledges that these people sometimes are right. He further points out that research does not always have to be centred around fact-finding, practical applicability, or money raising in order to be useful. In Jan-Willem's opinion the use of research is not always equally easy to see, which does not mean that it is useless. He himself has no problems with this, as the use of his work about statistics is easy to recognize. The same is true for most of the researchers of the faculty of Philosophy, where nearly everybody does research that is important for scientists, policymakers, or the general public.

Some people see philosophy as being ancient; others see it as being anticipating. Ancient because it was one of the first subjects ever, and anticipating and renewing because it widens the scope of our thoughts, of what we can conceive. When asked about this Jan-Willem answered that both statements are true. He agrees that philosophy is a very old field, and that it is really close to our knowledge tradition about knowledge production and conservation. He also points out that questions asked in ancient times are still up to date. On the other hand, Jan-Willem thinks that philosophy is creating in the way

that philosophy is still at its best in giving shape to how people think and where they will eventually end. As example he introduces the thoughts of Descartes. Descartes was one of the first that gave shape to the influential idea of a distinction between the physical body and the mental 'soul'. He was a philosopher by heart, and worked out his idea piece by piece. Nowadays philosophers, alongside biologists, neuroscientists and psychologists, again discuss this distinction made by Descartes, and develop a view on the mind known as embodied cognition. In this way philosophers also have some sort of guiding function for neurosciences. They take a critical look at how neuroscientists talk about thinking and the brain, and thereby contribute to the generation of new ideas. Again Jan-Willem puts his finger on the two-way-relationship of sciences and philosophy, and says that one cannot live without the other. Scientists need new ideas and interpretations in order to be able to go on with their work. Philosophers on the other hand need answers to their questions in order to be able to go on with their work as well.

When asked about his plans for the future, Jan-Willem wants to go

on with his research about chances. He however also wants to follow new dreams, which can actually more fittingly be described as visions, as he for sure plans to make them reality. At the top of his list is to dive into the field of life sciences. Jan-Willem sees many possibilities for philosophers there, and tells with glowing eyes about his wish to think about muscles, biological sorts, the proteins that make up our whole living, the relationship between genes and gene expression and the idea that information transfer takes place. He could go on and on, and has thousands of questions, that he for sure will make reality in the near future.

In a nutshell it is to be said that we witness a completely different kind of neuroscientist in Jan-Willem, one in the clothes of a philosopher. But he is no less a neuroscientist than biologists and psychologists are, as he -just as all in our community- tries to unravel the mysteries of the human brain and its thinking processes.

■ MELANIE MEISTER

BCN website

Towards a new BCN website

Have you seen the new BCN website recently? If not, try it:

<http://www.rug.nl/bcn>

As you might notice, we have made some changes to the BCN website and we will continue to do so in the coming months. Even though we will still use the RUG-website layout, the structure of the BCN-website will see some big changes.

The main change in the structure has happened by now. You will see these changes in the next few weeks with updated texts in the pages. After that, we will be looking for new features that we can incorporate in the website, such as an agenda and videos.

To promote the BCN researchers and the research they are doing we will be using the MePa possibility more and more, so keep your profile up-to-date! MePa is the system that enables you to make your own webpage as part of the university website. This is a convenient way of making your own website quickly, especially if you do not have one. If you need help with this, have a look at: <http://www.rug.nl/staff/index>.

One idea that we are excited about is publishing research highlights; publications and scientific activities by BCN researchers, symposia organised by BCN members, prizes won, newly appointed staff, staff retiring, visiting fellows, orations, Cum Laude PhD defences, anything you can think of that might be of interest to the BCN community and other visitors of the BCN website.



Of course we need your help to realise these changes! If you have any items on any of the above themes, please let me know (my contact details are listed below). We also like to have more visual content on our website, so if you have any nice pictures or videos, send them to us. What is more, if you have any comments, ideas or tips, let me know of those too!

We hope you will like our new website!

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Interview with Dr. Monika S. Schmid **'Learning and Forgetting languages'**

(NWO Vici grant 2010)

In January 2010, The Dutch Organization for Scientific Research (Nederlandse Organisatie voor Wetenschappelijk Onderzoek: NWO) awarded 31 researchers a Vici grant. The Vici, which is one of the largest personal grants that one can get in the Netherlands, is awarded to those senior researchers who want to conduct challenging and innovative research. Three of those innovative researchers are of the University of Groningen and the BCN Newsletter spoke with one of them: Monika S. Schmid from the Faculty of Arts.

Monika S. Schmid was already introduced in the BCN Newsletter 75 when we interviewed her as a leaving member of 'De Jonge Akademie'. Monika studied English at the Heinrich-Heine-Universität in Düsseldorf (Germany) and received her PhD there on 'First Language Attrition, Use and Maintenance' in 2000. In 2007, she got appointed as a Rosalind Franklin Fellow at the Faculty of Arts. Monika is specialized in language attrition (or language loss) and language change and had already received a Veni for her research on German migrants in the Netherlands and Canada. With the Vici grant, Monika Schmid will now compare language acquisition to language attrition in order to expand our knowledge and try and overcome the long-lasting gap concerning whether or not a Critical Period for language acquisition exists.

Could you tell us a bit more about the project for which you received the Vici grant?

"The project will investigate the age effect in language learning. It is a well-known phenomenon that if you start to learn a foreign language when you are older, you will eventually not become quite as good as someone who started at a young age. Among these older learners, we also find a large amount of variability, i.e. some of them do become very good and others do not. In younger learners, on the other hand, we do not find the same variability. Early learners all become very good, particularly in their first language. The real question is whether this age effect is related to our brain and the way in which our brain is specialized for language learning. We know that, in the evolution of human kind, there is an advantage to being able to learn a language when you're young. Once you have learned the language, the mechanism is not very necessary anymore. In line with this reasoning, there is a possibility that the brain has evolved to specialize for language acquisition for a certain period of time in your life, until around puberty, and after that there is no specialization for language anymore. Opposite this view of a genuinely language-specific maturational effect is the view the age effect we find has to do with more general and less language-specific factors. For example,

if you have already spoken your first language for a very long time, it becomes very deeply entrenched in your brain. Your mother tongue is then very strong and the longer you've spoken it the more competition there is for the second language. These two opposing views constitute one of the very big questions that are out there at the moment in bilingual research and the problem has always been that it's very difficult to prove one way or another. My idea for this Vici project was to look at people who have very high entrenchment of one language, so for whom one language is very strong, and the other language has weakened. I'm going to try and compare people who learned a second language at a later point in life and became very good at it to people who learned a language as children, then migrated to another country, and learned another language which has caused the knowledge of their first language to weaken."

So this project will compare learning a language to 'loosing' a language. Is this also the strength of this specific project?

"Yes, I think the idea of providing a novel perspective on the Critical Period is why this project got awarded a Vici. Most of the reviewers seemed quite convinced and immediately acknowledged that this is the perspective that we need. There was one reviewer who claimed that my argument was extremely tenuous and that the conflict does not exist. Of course, the conflict does exist and, fortunately, I was able to show that in my responses. The controversy about whether or not there is a language-specific Critical Period has been going on for a very long time. Many people have conducted research on this topic and have written about it and yet it has reached a dead end. The conflict eventually turned into a ping-pong match where each side rehashes their arguments and shows more evidence to support their own point of view. In response to that, the other side comes and claims the evidence could equally well be interpreted in terms of their point of view. The only way to distinguish between language-specific and more general cognitive factors is to compare bilingual groups who learned their non-dominant language at different points in life. So I believe that, from the point of language attrition, we can add corroborative evidence that might really serve to move us out of this dead end that we have landed in."

You are going to compare people with different linguistic background and different second languages. Where will you collect the data?

"Data will be collected in The Netherlands, Germany, and North America. We will be looking at second language learners of Dutch and German with a Polish and a Turkish background and, of course, a Dutch and German native control group. The control group will consist of native speakers of German and Dutch who have emigrated to North America. The Dutch PhDs within the project will probably also have to travel within the Netherlands, because it is quite unlikely that we can collect all the data here in Groningen. In order to be able to do so, I am hoping to be able to work together with other



universities, maybe Leiden and Nijmegen. The German data will be collected in Hamburg, but probably also in Potsdam. The most important thing is that it has to be collected in big cities where there are lots of migrants."

How is this project related to the school for Behavioural and Cognitive Neurosciences?

"The ultimate goal is to assess how language is processed in the brain. More specifically, we want to investigate the existence of a Critical Period for language learning, which is highly related to the maturation in the brain. In particular, we will perform neurolinguistic experiments by using the event-related potential technique (ERP) to measure electrical activation in the brain and eye tracking experiments. So, we shall be camping out in the EEG-lab in the next 5 years."

Until now, your work has mainly focused on language attrition, or language-loss. Where does this fascination come from?

"Well, I first came in contact with the phenomenon of attrition by accident. I had just finished my study on literary translation and was going to do a PhD in English linguistics. At the department in Düsseldorf where I was studying, the focus was very strongly on language development, language change and historical linguistics and I was initially going to do something along those lines. Eventually, it became a completely different topic.

This sudden and unexpected change occurred when I did a staff exchange with the University of California at Davis. During that time I came in contact with a project which was carried out at the Holocaust Memorial Museum in the city where I was based, Düsseldorf. At that time, they were doing oral history interviews with German Jews who had lived in Düsseldorf prior to World War II and then emigrated. While I was in Davis, I met some of the people who were interviewed. Some of them said that they had never spoken German after they left the country. One person even said: 'When the war broke out, I vowed that I would never speak, read, nor write German ever again'. Others had gone on using their language frequently in daily life. After 60 years, it was quite striking to see that some of these people were very good in their first language and others were not. As I said before, there seems to be no variability in first language ultimate attainment, but there is in the second language and it now seemed to me that this variability was also present in attrition and I wanted to find out how come. The cause of variability in first language attrition is very difficult to explain and it was immediately apparent that it was not

solely caused by the obvious factors, such as age at immigration or amount of use of the language."

In 2007, you were appointed a Rosalind Franklin Fellow. What does this mean to you?

"Being a Rosalind Franklin Fellow is definitely something I am very proud of. Last year in May, we had the Rosalind Franklin symposium in the Academy Building. Of course, Rosalind Franklin died at a very young age, but her sister was present at the ceremony that day. To me, this was a wonderful meeting and it indeed means a lot to me to be a Rosalind Franklin Fellow."

The Rosalind Franklin program promotes successful women in science. Do you think it is important to have women in the scientific world and will that play a role in hiring people for the current project?

"I think it is very important to get women into science. I have always been a proponent of the view that if you have two equal candidates, you should take the woman. So far, I have only had female PhD candidates, but that is mostly because the vast majority of applicants were female with only one exception so far. To be honest, I think women do not need encouraging at the PhD level, but more at the higher levels in the scientific world. What I am and will be trying to do, and that is thus probably not so much within this project, is to help the women I have been working with in the past. For example, a former PhD student of mine has just been awarded a Veni and I looked over her application and I tried to give her the best advice that I could. Women need help with respect to these higher levels and, of course, I'm going to try and use my influence and my advice as much as I can to make that happen."

Rosalind Franklin can be seen as a real role model for women. Do you, yourself, have any role models?

"Kees de Bot is my personal role model and he has helped me enormously. My supervisor at the University of Düsseldorf, Professor Dieter Stein, was very supportive in all sorts of ways, especially getting me into contact with other people. Because I had changed the topic of my PhD, he did not have a lot of knowledge about the content of the project itself. I was fortunate that a visiting scholar at our department, Richard Young, got me into contact with Bert Weltens, who was in Nijmegen at the time and Bert brought me into contact with Kees de Bot. Because Nijmegen is pretty close to Düsseldorf, I went there to meet Kees about every other month or so and he was wonderful and read everything that I wrote. I still very clearly remember one time, when I had a meeting with him the next morning at 9, I finished a chapter rather late in the evening and I emailed it to him just so that he would have it. And, when I got to Nijmegen the next morning, he had read it which was incredible. So, Kees is God."

When will the project start and are you still looking for potential PhD-candidates?

"The project is going to start in September and the PhD positions will start in January. There are 5 PhD positions and on top of that the faculty has given me an extra post-doc. So: anyone with a background in linguistics or psychology or anyone who's interested in this, and who speaks Dutch and/or German at near-native level is invited."

■ HANNEKE LOERTS

Research Master students abroad, part 2

In the previous BCN magazine we interviewed four BCN master students that had just arrived in North America to work on their major thesis project. Now four months have passed and the end is coming closer, so these students are working hard to get their project finished. In their spare time they are enjoying the cities in which they are living. Else Eising and Jennifer de Boer are doing a project at the University of British Columbia in Vancouver. Although the Olympics are gone, this city is still filled with culture, parties and neuroscience. For Inge Holtman it is no longer necessary to live undergrounds. The snow melted and the city changed into a completely different place. Montreal's southern side emerged, and with its ice-hockey team, winning in the play offs, the city turns crazy. Sygrid van der Zee has adjusted to the American life style of southern Florida easily. She turned into a relaxed hippy and enjoys Saint Pete very much. Two more months and then these students will come back to the Netherlands to get their BCN-masters degree. Therefore each student has to make an important decision about their future. What will they do after the master?

Jennifer de Boer in Vancouver

Jennifer is performing her major research project on glioblastoma multiform. 'Studying abroad can make one become nostalgic after a while, especially when moments of huge festivities are coming up in your own country like Queen's day in the Netherlands.' Vancouver city on the other side doesn't seem to give her the time to think about by keeping her busy with activities and venues not only friend related. The science society is very dynamic in this part of North America; it's not all about lab work and meetings. The community keeps it-selves busy with many speeches, lab dinners and especially lab trips. One of them is coming up soon: a trip to a place called Loon Lake, located in the mountains where several lab groups come together for 2 days with a tight schedule full of speeches which give you the possibility to know other researchers and specifically what they're working on. This, while socializing in a beautiful environment where hiking, kayaking and canoeing, is at the order of the day. All these activities related to science are starting to show their importance. It is giving her an amazing amount of ideas not only for her project but also for the essay on microglia that she is writing. Talking to experts coming from different parts of the world and listening to their point of view is certainly helping her out with her topic. Jennifer wants to continue in science but she is not yet sure where. She would like to go back to Europe and maybe even Groningen, but she thinks that it is more likely that she will find a project to her needs in Vancouver.

Else Eising in Vancouver

Else is still working on her project about epigenetical contribution to Huntington's disease. The project is a collaboration between two labs in her research building: the Huntington's disease lab and a lab that specializes on epigenetics. Both subjects are exciting: Huntington's disease being one of the only neurodegenerative diseases of which the cause is known, although its disease process is still a big mystery,

and epigenetics is a research field that just starts being explored. Especially the latter receives a lot of attention: Friday afternoon lectures at the lab, talks at the university campus from experts from abroad and great discussions during science cafés teach Vancouver about this subject. Now the results of Else's project are starting to come in; she is hoping to have some great findings! Else is sure she wants to continue in science in Groningen and is looking for a PhD position at the moment.

Inge Holtman in Montreal

Inge is doing her project at the Douglas Mental Health Institute in Montreal, which is affiliated with the McGill University. As one of the founders of the Montreal Neuroscience Institute (MNI), the McGill University in Montreal has an excellent reputation in medical and neuroscientific research. Therefore, many meetings are being organised. Inge's lab is momentarily quite empty because everybody went to the international epigenetic meeting in Singapore. 'Our professor, Michael Meaney, has a lab in Singapore too, and he wanted both labs to get acquainted.' At the Douglas Inge's project progresses slowly but gradually. Inge learned an important lesson: research often takes more time than one expects...

Montreal is a city with two faces. In the winter when the city is covered with snow it feels like a northern city, but lying at the same altitude of Bordeaux and 1200 km inland it has a typical land climate. Therefore in the spring the city starts to show its southern side. The sun shines brightly, the grass turns green, terraces open, and many people just hang around park 'Mont Royal'. However you never know how long it stays. 'One day it is 25 degrees and the next it is snowing.'

There are strong ties between the Netherlands and Canada and the Dutch consulate in Montreal has just organized a special queen's day celebration. Here both Dutch exchange students, Dutch emigrants from the fifties, and even second and third generations come together

to dress up in orange and celebrate the kingdom. 'I found it funny to see that Dutch people who are living abroad for a long time seem to be more nationalistic than the Dutch exchange students. We were really surprised that we had to sing the national anthem!!'

Inge has just accepted a PhD position at the new ERIBA institute of the UMCG about microglia function in the aging brain under supervision of Professor Erik Boddeke. Some obstacles have to be overcome but if everything goes as planned she will start this autumn.

Sygrid van der Zee in Florida

So far, Sygrid's research project at the All Children's Hospital is going well, as well as the sunny life in St Petersburg. A weekend trip every

now and then makes it possible for her to see more of this wonderful state. In the past four months Sygrid enjoyed some of the American culture by going to football and baseball games and even using degrees Fahrenheit, miles and inches instead of the degrees Celsius, kilometers and meters.

Meanwhile she's getting closer to some results in her research project. Being around pediatric neuropsychologists and patients all day long, Sygrid is getting more and more interested in this aspect of neuroscience. Sygrid is considering starting with a masters degree in clinical neuropsychology after graduating from the BCN Research Master.

■ INGE HOLTMAN

BCN research Master is "top"

2009/2010 is the year in which the BCN Research Master celebrates its 5th anniversary. This also makes the master programme subject to visitation by the Netherlands-Flemish Accreditation Organisation (NVAO). This official organisation checks the quality of every educational programme in the Netherlands and Belgium on a five-year basis in order to provide a good education for Dutch and Belgian students. In November 4, second-years master students and two alumni, together with the key-figures in BCN-Master organisation, travelled to Amsterdam in order to answer to the visitation committee. The committee mainly consisted of psychology professors and by a communication error was largely unprepared for the interview with professors and students, which lead to some initial stepping-stones. Despite these initial obstacles the result of the visitation was positive, as just was confirmed by the final report. The committee was especially positive about the flexible and responsive manner the programme reacts to proposed changes by the students.

The Research Master not only was approved by the NVAO, but also it now officially belongs to one of the best Research Master programmes in the Netherlands. According to "Elsevier," the Behavioural and Cognitive Neuroscience Master is the best research master in the category "Nature," with a grade of 8.2. This makes Groningen the leader to the research masters of Nijmegen and Amsterdam that respectively were graded with an 8.0 and a 7.0.

That the BCN Research Master programme is extraordinary is also proven by the achievements of its students. Out of 50 minor and major projects in 2005 and 2006, 17 were published. Additionally, two years in a row, in 2007 and 2008, two groups of N-track students won the journal club of the "Journal of Neurosciences," resulting in the publication of their review articles. And there is even more! One student, who needs special mentioning for her extraordinary start into science, is Else Eising. Else is a second year's BCN Master student, and won this year's Unilever Research Price for her minor research project on learning and memory-processes in mammals. The success of the masters programme also shows in the high number of students, about 80%, that directly pursue a PhD project after their graduation.

Collectively, it is to be said that the young BCN Masters programme is on a good track, and that its founders should be proud of what they have achieved in only 5 years time. As a proud student of the BCN Masters programme -and I think I speak for all students- I would like to thank the professors for their hard and passionate work that enabled us to take part in this programme, and for their help and support regarding our start into science.

■ MELANIE MEISTER

The brain on music – assignment for the Neuroanatomy course

Have you ever wondered what happens in our brain when you listen to your favourite song?

Music is, and always has been, a very important part of nearly all of earth's cultures, as confirmed by the occurrence of war chants, lullabies, yarning or birthday songs in all cultures and times. That music accompanies us way back in history is proven by the finding that even the extinct hominids were found to have played instruments. Music seems to be inscribed in our nature, and that so deeply that even infants prefer songs to speech.

Music is an enormously important communication tool, and always has been used as a way for people to connect with its ability to reinforce the ties underlying the formation of human societies. Examples for this are national hymns or the song of the world championship of soccer. Songs like this transport an emotional message and bond people. When looking at musical outings like this it appears to be one of the most direct forms of emotional communication and consequently forms an important part of human life and communication, just like its co-stars language and gesture do.

When taking a closer look at the communicational tools music and language, they do have a lot of things in common. Both contain grammar that is organised by smaller components, and both are made up of melody, tension and resolution. When comparing the brain responses to music and language we see that music excites brain regions involved in understanding and producing language. The difference between music- and language-derived activation patterns is that music largely facilitates an emotional response, whereas language largely facilitates semantic tone. The question for the origin of our music-processing systems thus arises: Does music stem from the normal activity of language centres or was the processing of music there before language centres did arise in our brain? An idea for a possible answer may derive from an evaluation of the way our brain processes music.

When we hear music it is morphed by the pinna of our ear and enters the ear canal. It makes the ear drum move in rhythm to the music, which makes the ossicles that transfer the rhythm of the ear drum to the cochlea move as well. In the cochlea a fluid is moved by the rhythm that has been transferred from the ossicles to the oval window and small waves move small hair receptors at a certain location in the snake-shaped cochlea. From the hair receptors the information is transferred to the 8th nerve, which is also called the auditory nerve. This nerve brings the information to the central nervous system.

The auditory nerve ends at the cochlear nucleus of the brain stem. Here individual neurons react either to individual sounds, frequency changes or to the beginning and the end of a stimulus. From the cochlear nucleus information is passed on unchanged to the inferior colliculi at the top of the brainstem. The inferior colliculi integrate and route information

from multiple modalities to the left and right medial geniculate bodies of the thalamus. The thalamus, who works as a sort gateway to the cortex, either selectively directs information to the cortex or suppresses it.

Before and while the information is processed by the multiple areas of the cortex it is processed by subcortical structures like the cerebellum, the amygdala, the hippocampus and the nucleus accumbens.

The cerebellum is involved in the emotional reactions resulting from listening to music. This goes together with activity of the emotional brain, namely the limbic structures. In this emotional brain the hippocampus and the amygdala should achieve special attention. The hippocampus creates memory for music, is also responsible for musical experience and contexts, whereas the amygdala is the orchestrator of emotional reaction to music. A further internal brain structure involved in music is the nucleus accumbens, which is responsible for the feeling of reward.

As imaging studies confirm, a lot of brain areas do light up when a person listens to music.

The first stages of listening to sounds, and the perception and analysis of tones take place in the auditory cortex. The prefrontal cortex creates expectations about how a melody should go on, and either reacts to violation of these expectations when a 'false tone' comes up, or generates satisfaction when the 'harmony-expectations' are fulfilled. When taking a closer look at the cortex it becomes clear that the two cortical hemispheres do not react in a similar way to the different aspects of music. The more general processing of music takes place in right hemisphere. Melodies in general are processed in the areas of the perisylvian fissure and the medial temporal gyrus, whereas complex musical structures mostly activate the inferior temporal gyrus, and the auditory working memory situated in the superior temporal gyrus. Pitch comparison however mostly happens in the lateral frontal cortex bordering the superior temporal gyrus.

The left cortical hemisphere mostly is involved in analytical processing of music, namely rhythm. Rhythm seems to be processed all over the left hemisphere; the neurons of the motor and premotor areas, the superior temporal gyrus, the association area of the posterior parietal lobe and the cerebellum.

Music thus seems to yield processing of the whole brain, and not 'only' of the normal auditory and language areas. It also yields a cascade of emotional reactions that have influences on our bodily experiences and enhance memory. But still the question remains: What was there first, processing of music or processing of language? Maybe the specialists of the BCN know a way to bring us closer to an answer, so please enlighten us and send in some ideas.

■ MELANIE MEISTER

Regulation concerning the protection of scientific integrity

In its letter dated 19 February 2010, the University of Groningen updates its regulations regarding the protection of scientific integrity. A committee for scientific integrity (Commissie Wetenschappelijke Integriteit, CWI) will be put in place which will deal with complaints regarding scientific integrity. It will also serve as a confidentiality group and will advise the Board of the University about the complaints and the measures to take, if necessary.

The following text (in Dutch) is taken from:

<http://www.rug.nl/bureau/expertisecentra/abjz/producten/pdf/regelingBeschermingWetenschappelijkeIntegriteit.pdf>

Regeling Bescherming Wetenschappelijke Integriteit Rijksuniversiteit Groningen

Preamble

Binnen de Rijksuniversiteit Groningen rust op alle betrokkenen bij het wetenschappelijk onderwijs en onderzoek een eigen verantwoordelijkheid voor de preventie en signalering van wetenschappelijk wangedrag. De algemeen aanvaarde uitgangspunten voor het verrichten van professioneel wetenschappelijk onderzoek dienen daartoe te allen tijde te worden nageleefd.

In de "Notitie Wetenschappelijke Integriteit, Over normen van wetenschappelijk onderzoek en een Landelijk Orgaan voor Wetenschappelijke Integriteit (LOWI)" van november 2001, een coproductie van de Vereniging van Universiteiten (VSNU), de Koninklijke Nederlandse Akademie voor Wetenschappen (KNAW) en de Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO), worden richtlijnen gegeven voor het omgaan met schending van de normen van wetenschappelijke integriteit en de procedure die hierbij dient te worden gevolgd. In de Nederlandse Gedragscode Wetenschapsbeoefening (VSNU 2005) is een uitwerking gegeven aan de beginselen voor het verrichten van professioneel wetenschappelijk onderzoek.

Een van de middelen ter toetsing van de wetenschappelijke integriteit is het recht te klagen over vermoede inbreuken daarop. Voor de verwezenlijking van dit klachtrecht heeft het College van Bestuur onderstaande regeling vastgesteld. Hierin is tevens de mogelijkheid opgenomen voor het op verzoek van het College van Bestuur verrichten van onderzoek naar vermoede inbreuken op de wetenschappelijke integriteit.

More information and updates regarding this regulation can be found here: <http://www.rug.nl/Bureau/expertisecentra/abjz/producten/wetEnRegelgeving/index>

■ NYNKE PENNINGA

Coming over to Groningen

It is said that every person has a story to tell. In fact, our whole lives are one constant ebb and flow of events unfolding in space and time, like a beautiful Shakespearean plot complete with characters, emotions and audience. The story of my life is not anymore sublime or commonplace than that of about 188,000 stories that inhabit the city of Groningen. The dramatic plot of my life has had its fair share of pathos, bathos and catharsis. But as a guest columnist, I choose to talk about the slice of my life which is associated with my job/PhD in BCN, not only because it is the most cutting edge of my current life, but also because it is a very interesting part of my still unfinished biography.

Leaving Groningen

The year was 2009, when in the month of September, on a magnificent Tuesday afternoon I chivalrously defended the coy mistress of my Master thesis from the prying questions of my Master thesis panel in Groningen. With the successful completion of my Master degree, I was left staring at the dreadful "What next" question.

Finishing a Masters degree throws up a spectrum of conclusions. The immediate conclusion of a Masters degree is a sigh of relief. The natural conclusion of a Masters degree is the feeling of pride on being slightly more educated. The logical conclusion of a Masters degree is a well-paid job. I, fortunately or otherwise, ended up with the unnatural conclusion. I decided to go for a PhD degree. The conclusion to join a PhD degree was not unfortunate because I did not decide to finally get out of my academic reverie and earn money in a real life job. No! The disappointment sprung for the reason that my days of leaving the Netherlands for good were drifting closer inch by inch, and I had no PhD position in hand. I come from India, and Indian parents are some of the most dominating parents in the whole wide world. My returning to India empty handed after spending two toilsome years in Europe would not have been so much of a let-down for myself, as much it would have spoilt the jolly mood of my parents. So, if not for my own sake, I had to find a PhD position before I went back to India and faced my father quietly snarling under his welcoming smile "I am welcoming you, but let's not forget that you could not get a PhD position". The time was running out.

Thankfully, about 3 days before I had to leave Groningen, I got an interview call from the UMCG for a PhD position. I met Prof. Pim van Dijk and Dr. Deniz Baskent for an interview. The interview went well, and I was promised that I would be contacted soon regarding the position. Since I had to catch my flight from Amsterdam, I decided to leave Groningen one day earlier. Early that morning, I took all of my sparsely used Ikea furniture and put it out on the street. My beautiful computer table, my amazing revolving chair, my trusted wooden book rack, even my utensils, pots, pans, lamps... basically, everything that turned my house into a home was left out on the street for people to pick up. It broke my heart immensely to leave all of that stuff out there. But I found strength in the much revered Hindu virtue of detachment from the worldly belongings.

After leaving the stuff, I bade goodbye to the beautiful city of Groningen, caught the train to Amsterdam and reached my hotel room. I had a flight in few hours. I sat on the couch with a thousand-yard stare, not knowing what I felt about leaving Groningen, going back home, and not knowing what I was going to do in life. It was during this session of soul-searching, that my cell phone rang with the call that was about to change my life. I answered the phone, and it was Deniz on the other side. She asked, "How soon can you come to join the PhD position?" I stammered, hesitated, smiled in joy and shook my head in disbelief, all at once. After the five minutes of talk on phone, I was told that I was accepted for the position, and I was invited to join the position in the month of November. After the phone call, the first thought that struck me was, "Oh God, my beautiful computer table! My amazing revolving chair! My trusted wooden book rack!" I was sad about the fact that they must have been gone from the street already, and I anyway had no time left to go back to Groningen. Thankfully, I again found strength in the Hindu virtue of detachment from the worldly belongings.

While in India, I declared the good news to my father. He remained stone cold stoic he always is towards any news good or bad. I knew that his silent nodding of head is the biggest approval I will ever get... almost as good as a pat on the back saying "Well done, my son!" Sometimes I wonder if he is more of a sceptic or more of a stoic towards my achievements.

Arriving in Groningen

Finally, after three months of stay in India, I flew to the Netherlands from India on the 1st of January 2010. This was the beginning of the New Year and a new life for me. I arrived in Groningen late at night, only to find the entire city disfigured by the thick layers of snow. The feeling of joy and pride of coming back to Groningen quickly froze over as I discovered that there was no staff at the University Guesthouse to open the doors, and that's where I was supposed to spend my night. No amount of ringing bells would bring any attendant to the door. To make the matters worse, my cell phone was not working. Stereotypically overweighed with luggage, I started trotting through the thick sheet ice on the roads to find a payphone in order to make a call to the Guesthouse authorities. Soon Murphy's law came true... the only payphone I knew about in the vicinity was broken and out of order. There was no one on the road to lend me a cell phone for a quick call. I barely managed to spend my night at the only hotel which had (only) one room available.

The next morning, I took the wrong bus to UMCG, and ended up further away from the hospital than I originally was from where I had caught the bus. After I found my way and walked up to the hospital, I was given a warm welcome by the officials waiting for me. For the rest of the day, I darted from one office to the other, from one desk to the other trying to fill in paper work. This whole day gave me a better understanding of the Dutch official culture, which was impossible to experience as a Masters student the previous year. Over the rest of the day and up to a few more days later I made a couple of realisations. Dutch people have a knack of being very procedural in their approach. There were hundreds of forms to be filled in, often with the same information required in most of them. Everything has to be down in the writing on the paper in a hardcopy. There were many dotted lines to be signed and several agreements to be agreed to.

Another thing that I learnt is that the Dutch people believe in dividing one big job into smaller jobs and then they distribute these jobs to various organizations. There were so many organisations and offices that were handling my transfer from India to the Netherlands that I remained very confused for the first whole month. Specially, the first fifteen days were pressure cooker. Three different health authorities wanted me to go through similar health checkups for various reasons. Different education authorities wanted me to register with them for the PhD work. Various other offices demanded my attention for logistical work such as residence permit application and registration at the Gemeente. The best part of it all is that on the surface it looks like all this should frustrate a new incumbent to no extent, but the fact is that the officials and personnel that work in these organizations and offices are cooperative above and beyond the call of their duty. This helps the new incumbent, like me, to sail over the problems smoothly.

One more feature of my arrival at Groningen was the vicious circle of the bank, housing agency and Gemeente in which I was caught up. The housing agency would not give me a house till I had a bank account. Bank authorities would not let me open a bank account till I was registered at the Gemeente. Gemeente would not register me till I had a permanent address in Groningen. I did not have a permanent address in Groningen because the housing agency needed to see my bank account. The phrase you are looking for is "back to square one". I got out of this vicious circle by asking the bank authorities to revive my bank account from my previous year as a Masters degree student. Once I had a bank account, everything else fell in place. Soon, I started finding a good pace in the official work. I met my really amazing colleagues at work, and everybody at the department was very welcoming. I was left thinking that in the Netherlands, so much of problems that should arise due to long procedures to be followed necessitated by protocols, get resolved due to the very cooperative and friendly attitude of the people who execute these procedures.

So, my departure from Groningen to India, and my arrival to Groningen from India was eventful and pleasantly stressful. The high point of all this was the moment when I was informed that instead of making me a bursary student, I have finally been made into an AiO. This was great news for me and up to today I remain pleasantly surprised at this turn of the events.

Today, I have settled down in the grooves of day-to-day life in Groningen, and a lot of things come as granted for me. But everyday when I walk up to the hospital and I spot the huge neon letters spelling Universitair Medisch Centrum Groningen lit up under the constantly rotating radar pod on the top of the terrace, I get goosebumps. I feel proud to be an employee of the UMCG, and to be a part of BCN. I get to live in a beautiful city and get to work with amazing people. For this, I feel thankful every day.

■ PRANESH BHARGAVA

AiO, DEPARTMENT OF OTORHINOLARYNGOLOGY, UMCG



BCN PhD student Linda Geerligs awarded with NENS Stipend

In April, Linda Geerligs, BCN PhD student, in the groups of Monicque Lorist and Natasha Maurits, received a NENS Stipend to do research abroad. Network of European Neuroscience Schools (NENS) Stipend are awarded every year and are intended for Master and early PhD students registered within NENS member schools or programmes, of which BCN is one. The stipends will cover travel and accommodation costs of up to 1000 Euros and will give her the opportunity to visit the fMRI Group in the University of Bergen (Norway) for one month. We asked her to tell something about her research and her plans in Norway.

As a beginning researcher, writing a proposal for your own PhD project is usually not one of the possibilities. By the time I almost finished the BCN research master, the NWO Toptalent scholarships had been cancelled and applying for other scholarships would simply take too long. At the point where I had actually given up on the ambition to write my own proposal, I heard about the possibility of the PhD Fund at the Faculty of Behavioural and Social Sciences (BSS). Research master students from BSS and BCN could compete for a scholarship by writing a research proposal and presenting this to a committee of the faculty. After a lot of work, a couple of stressful months, and an absolutely nerve wrecking presentation, I received one of the scholarships. Despite the effort, I would recommend every BCN master student to pursue this option.

From September onward, I have started realising my research proposal. I am supervised by Monicque Lorist and Natasha Maurits, who also guided me in writing the research proposal. My project is about the ageing brain, and the differences between elderly individuals in the way they use their brain. It appears to be the case that some elderly use additional brain networks, compared to young people, to maintain good performance with advancing age. If this will prove to be true, it might open up a lot of opportunities for interventions in elderly with declining cognitive function. In my PhD project, I will try to gain more insight into these differences between elderly. More specifically, I will compare brain activity in elderly with good cognitive functions, especially attention, to the brain activity of elderly who show a decline in cognitive function. Additionally, I am planning to look at the effects of training or intervention on performance and brain activity.

One important part of my PhD project is to use combined EEG-fMRI to untangle differences in attention between elderly individuals. By combining the temporal resolution of EEG and the spatial resolution of fMRI, we can make a more complete characterisation of differences in regional brain responses. In the first year of the research master I had heard about the possibility of a Network of European Neuroscience Schools (NENS) Stipend for a training stay in a different European research school. Such a stipend would allow me to visit the Bergen fMRI group in University of Bergen, Norway, who are specialised in the analyses that are used for integration of EEG and fMRI data. Therefore I decided to apply for a grant. After only 1,5 months I received the news that I was one of the 4 European students who were granted a stipend. I am looking forward to travelling to Bergen in September and learning these new and exciting techniques firsthand.

■ LINDA GEERLIGS

The BCN-EEG course: alive and kicking!

For the past couple of years, BCN PhD students have been asking for an EEG course regularly, but unfortunately the number of PhD students interested in participation in an EEG course was recently not enough to warrant the organization of it. We have now found a way out of this problem. The EEG course has been embedded in the C-track of the BCN Research Master, thereby guaranteeing a minimum number of participants and a fixed time at which the course is given (November-December). Since PhD students are allowed to participate as well, this allows them to plan their participation in the course more easily and ahead of time. The first run of this 'new and improved' EEG course took place between November 30th and December 14th, last year.

The course entailed theoretical lectures given by psychologists (Monique Lorist and Berry Wijers), a mathematician (Natasha Maurits) and a neurologist (Han van der Hoeven), stressing the interdisciplinary nature of the EEG field. Lectures took place during two mornings to start with. After that hands-on acquisition of EEG data was planned for a day and theory and practice of EEG analysis was covered during another two days. Treated topics were:

- EEG backgrounds, EEG recording and EEG analysis techniques
- Clinical applications of EEG
- Setting-up an ERP experiment

- Executing an ERP experiment
- Getting acquainted with the EEG-lab at the NiC and executing first recordings
- Getting acquainted with Brain Vision Analyzer (BVA) software (EEG analysis) and analysis of data recorded on previous days

After the course, participants were supposed to have a basic understanding of theoretical concepts underlying EEG recordings, to be acquainted with EEG hard- and software and to be able to analyze EEG data using BVA.

The last part of the course entailed an introduction to BVA, an analysis software tool for EEG signals that has been widely adopted amongst the EEG researchers within BCN. Within two days, all necessary aspects, from the fundamentals of working with BVA, to Fourier analysis and off-line calculation of evoked potentials were covered, so that the data collected earlier in the course could be analysed almost independently by each student by the end of the second day. The demonstration of different functions and routines was directly projected on a big screen, so that it was easy for all students to follow. After a demo period, there was plenty of time to play around with the software, in groups of two or sometimes three students, while the tutors, Monique Lorist and Natasha Maurits, walked around to help where necessary. And there were home-made cookies too! Finally, a period of self-study was included, in which students had to prepare for the written exam 10 days later. All chapters that were covered in the theoretical lectures, were topics for the exam. Even though some students found the more mathematical parts of the course tough, most of them passed the exam. We hope that by revising the set-up of the EEG course, we have provided a good format for the coming years, so that many BCN PhD and master students will be able to judge the value of and employ EEG investigations for their research.

■ NATASHA MAURITS

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9	1	3	6	7	5	4	8	2
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8	3	9	5	2	4	1	7	6
1	2	7	8	6	9	3	4	5
3	4	5	9	8	6	2	1	7
2	7	8	4	5	1	6	3	9
6	9	1	2	3	7	8	5	4

1

Opllossen sudoku (pagina 22)

Draden door de geest: hoe de touwtjes in handen houden in een wereld van multitasking

ORATIE

N.A. Taatgen

TITEL

Draden door de geest: hoe de touwtjes in handen houden in een wereld van multitasking

LEEROPDRACHT

Cognitive Modelling

DATUM

9 maart 2010

Multitasking lijkt een verschijnsel te zijn van de moderne maatschappij: het aantal apparaten dat automobilisten bedienen tijdens het rijden neemt toe, kantoorwerkers wisselen gemiddeld elke 3 minuten van taak,

en studenten luisteren tijdens het studeren naar de televisie terwijl ze textberichten versturen. Dit roept het beeld op van mensen die continue verdrinken in een veelvoud van taken.

Mensen blijken echter goed te zijn in multitasking. Volgens de threaded cognition ("draden door de geest") theorie kunnen mensen prima taken tegelijk doen zolang de hersengebieden die nodig zijn voor die taken niet teveel overlappen. Problemen treden pas op indien een bepaald gebied overvraagd wordt. Zo wordt een deel van de prefrontale cortex overbelast indien we proberen meerdere nieuwe dingen tegelijk te doen, en de parietale cortex overbelast indien we meerdere taken doen waarbij mentale tussenresultaten moeten worden bijgehouden. Cognitieve modellen, computersimulaties van menselijke informatieverwerking, kun-

nen verklaren en voorspellen wanneer taken wel en wanneer niet goed samen gaan, en kunnen zo behulpzaam zijn bij het voorkomen van gevaarlijke en kostbare multitasking-calamiteiten.

Multitasking kan ook een nieuw perspectief bieden op menselijke intelligentie. De cognitiewetenschap heeft altijd moeite gehad met de vraag hoe het parallelle karakter van de hersenen te verenigen is met de serialiteit van menselijk bewustzijn. Een bundel van multitasking-draden kan wel eens de juiste metafoor zijn om deze vraag beter te begrijpen

■ EVELYN KUIPER-DRENTH, OP BASIS VAN PERSBERICHTEN VAN DE RIJKSUNIVERSITEIT GRONINGEN

Promotions

Dimensional phenotypes and molecular genetic studies of obsessions, compulsions and tics

PROMOVENDUS

H. Katerberg

PROEFSCHRIFT

Dimensional phenotypes and molecular genetic studies of obsessions, compulsions and tics

PROMOTORES

Prof. dr. J.A. den Boer

Prof. dr. P. Heutink

Genetische oorzaken dwangstoornissen en tics vooralsnog niet duidelijk

De oorzaken van Obsessieve-Compulsieve Stoornis (OCS) en ticstoornissen zijn moeilijk te achterhalen, onder andere omdat beide stoornissen veel verschillende symptomen kennen. Patiënten met OCS hebben steeds terugkerende obsessies, en proberen hun angst en/of spanning te verminderen door repetitief gedrag (dwanghandelingen). Ticstoornissen als Gilles de la Tourette leiden tot ongewenste spierbewegingen (tics) en

het ongecontroleerd uitstoten van klanken en woorden.

Hilga Katerberg bracht de symptomen van beiden aandoeningen in kaart, aan de hand van medische dossiers van 1224 OCD patiënten en 290 patiënten met ticstoornissen, uit instituten over de hele wereld. Met behulp van statistische analyse onderscheidde ze vijf symptoomgroepen voor OCS en zes symptoomgroepen voor ticstoornissen.

Op basis van deze symptoomgroepen onderzocht Katerberg de rol van twee genen (BDNF en COMT) die een rol zouden kunnen spelen bij de ontwikkeling van OCS en ticstoornissen. Een duidelijke relatie werd niet gevonden. Wel werden aanwijzingen gevonden dat de variant in het BDNF-gen invloed heeft op de symptoomgroep met seksuele en religieuze obsessies. De variant in het COMT-gen, die de afbraak van de neurotransmitter dopamine beïnvloedt, speelt mogelijk een rol bij een symptoomgroep met somatische obsessies. De variant in het BDNF-gen, verantwoordelijk voor de aanmaak van een neuronale groeifactor, bleek geassocieerd met ticstoornissen bij vrouwen. Ook

bleek deze variant bij vrouwen geassocieerd met een vorm van OCS die op latere leeftijd ontstaat en minder vaak familiair is.

Hilga Katerberg (Ouderkerk aan den IJssel, 1972) studeerde geneeskunde en biomedische wetenschappen in Utrecht. Ze verrichtte haar onderzoek bij de afdeling Psychiatrie van het Universitair Medisch Centrum Groningen (UMCG), de afdeling Klinische Genetica van het VUMC, de polikliniek angststoornissen van de Valeriuskliniek en binnen onderzoeksschool BCN. Het onderzoek werd mede gefinancierd door de Amerikaanse Tourette Syndrome Association en Solvay Pharmaceuticals. Katerberg werkt thans als staf-arts donatie bij de Stichting Bio Implant Services, een stichting die weefseldonatie verzorgt. Zij promoveerde op 23 november 2009.

In the absence of a gold standard

PROMOVENDUS

A. Noordhof

PROEFSCHRIFT

In the absence of a gold standard

PROMOTORES

Prof. dr. J. Ormel

Prof. dr. A.J. Oldehinkel

Betere psychiatrische diagnoses op basis van meerdere informanten

Wanneer is gedrag normaal? En wanneer is het afwijkend en moet iemand psychiatrisch behandeld worden? Veel psychiatrische diagnostische handboeken, waaronder de gezaghebbende DSM IV, maken dit onderscheid op basis van kunstmatige categorieën met arbitraire grenzen tussen gedragskenmerken.

Promovendus Arjen Noordhof onderzoekt mogelijkheden om normaal en afwijkend gedrag niet op basis van categorieën, maar op basis van dimensies te beschrijven. In de literatuur worden verschillende methoden gebruikt om informatie van meerdere informanten te combineren tot één diagnose. Bijvoorbeeld: rapportages van een kind zelf, en van ouders en van leraren over het gedrag van het betreffende kind. Noordhof bepleit een interpretatiemethode waarin verschillen niet worden 'gladgestreken', maar juist centraal staan in de rapportages die gebaseerd zijn op zowel onderzoek als praktijk. Deze methode leidt uiteindelijk niet tot één diagnose, maar tot een voorzichtige aanduiding van wat er aan de hand zou kunnen zijn.



Arjen Noordhof (Dieren, 1980) studeerde klinische psychologie in Amsterdam. Hij verrichtte zijn onderzoek aan de afdeling psychiatrie van het Universitair Medisch Centrum Groningen (UMCG) en binnen onderzoeksschool BCN. Noordhof werkt inmiddels als

universitair docent aan de Universiteit van Amsterdam (UvA). Hij promoveerde op 3 februari 2010.

Pathogenetic mechanisms in Parkinson's disease: studies with Positron Emission Tomography

PROMOVENDUS

A.L. Bartels

PROEFSCHRIFT

Pathogenetic mechanisms in Parkinson's disease: studies with Positron Emission Tomography

PROMOTORES

Prof. dr. K.L. Leenders

Prof. dr. R.A. Dierckx

Beschermingseiwit niet betrokken bij ontstaan ziekte van Parkinson

De bloed-hersenbarrière is een beschermende laag rond de hersenen. In deze barrière pompt het eiwit P-glycoproteïne (P-gp) schadelijke stoffen de hersenen uit, naar het bloed. Sommige wetenschappers vermoeden dat de ziekte van Parkinson ontstaat doordat P-gp minder goed gaat werken. Promovenda Anna Bartels toont echter aan dat een verminderde functie van P-gp geen rol speelt in het ontstaan van de ziekte.

Verminderde P-gp functie kan wel een rol spelen bij de voortgang van de ziekte van Parkinson en bij andere vormen van beschadiging van de hersenen, zoals Alzheimer. Hier moet nog meer onderzoek naar gedaan worden.

Bartels bracht de activiteit van P-gp in kaart door het eiwit radioactief te labelen en met behulp van PET-scans in beeld te brengen.

Saakje da Costa



Met PET scans en gelabeld PK11195 probeerde ze ook het effect van ontstekingsremmers (COX-2 inhibitors) op het ontstaan van de ziekte van Parkinson te onderzoeken. Ze vond aanwijzingen dat ontstekingsremmers het ontstaan van de ziekte tegengaan, maar de onderzoeksmethodes zijn nog niet betrouwbaar genoeg. Die zullen eerst nog verder verbeterd moeten worden.

Anna Bartels (Niehove, 1978) studeerde geneeskunde te Groningen. Ze verrichtte haar onderzoek aan de afdeling Neurologie van het Universitair Medisch Centrum Groningen (UMCG). Het onderzoek werd mede gefinancierd door de Michael J Fox Foundation, de International Parkinson Foundation en het European network of excellence "Diagnostic Molecular Imaging (DiMI). Bartels is in opleiding tot neuroloog in het UMCG. Zij promoveerde op 17 februari 2010.

Development of sucking patterns in preterm infants

PROMOVENDUS

S.P. da Costa

PROEFSCHRIFT

Development of sucking patterns in preterm infants

PROMOTOR

Prof. dr. A.F. Bos

Afwijkend zuigpatroon maakt drinken moeilijk voor vroeg geboren baby's

Te vroeg geboren kinderen hebben vaak moeite met leren drinken. In de meeste ziekenhuizen in Nederland begint men ongeveer zes weken voor de uitgerekende datum om het kind zelf te leren drinken. Langer

wachten zou de zuigontwikkeling vertragen of zelfs belemmeren. Promovenda Saakje da Costa onderzocht de ontwikkeling van zuigpatronen bij te vroeg geboren baby's. Ze pleit ervoor per kind te meten of het toe is aan orale voeding.

Da Costa onderzocht een groep van ruim zestig te vroeg geboren baby's vanaf het moment dat ze begonnen te drinken tot tien weken na de uitgerekende datum. Door kaak- en tongbewegingen te meten ontdekte de promovenda dat te vroeg geboren kinderen, in vergelijking met op tijd geboren, gezonde baby's, een verstoord zuigpatroon laten zien. Te vroeg geboren baby's blijken moeite te hebben om hun ademhaling te combineren met het zuigen en slikken tijdens het drinken. Verder hebben ze vaak moeite om het zuigen vol te houden, en vertonen ze niet dezelfde ritmische bewegingen van kaken en tong als in een normaal zuigpatroon. In de groep te vroeg geboren kinderen bleken bovendien verschillen te bestaan tussen baby's met een normaal en met een te laag geboortegewicht voor de zwangerschapsduur. Die laatste groep heeft vaak extra aandacht nodig om goed te leren drinken.

Saakje da Costa (Amsterdam, 1952) studeerde logopedie in Groningen. Ze verrichtte haar onderzoek vanuit het Lectoraat Transparante Zorgverlening van de Hanzehogeschool Groningen in samenwerking met de Rijksuniversiteit Groningen. Het onderzoek werd door hetzelfde lectoraat gefinancierd. Da Costa is docent logopedie aan de Academie voor Gezondheidsstudies van de Hanzehogeschool Groningen. Zij promoveerde op 10 maart 2010.

Chemotherapy. Neurobiology of cognitive impairment in rats

PROMOVENDUS

R. Seigers

PROEFSCHRIFT

Chemotherapy. Neurobiology of cognitive impairment in rats

PROMOTORES

Prof. dr. J.M. Koolhaas

Prof. dr. F.S.A.M. van Dam

Veel gebruikt cytostaticum bij kanker leidt bij ratten tot hersenschade

Riejanne Seigers beschrijft in haar proefschrift een dierstudie waarin een veel gebruikt middel in de kankerbehandeling, methotrexaat (MTX), onderzocht wordt op cognitieve en neurobiologische effecten. Sommige patiënten die met chemotherapie voor kanker behandeld zijn, ervaren tot lang na de behandeling problemen met geheugen, concentratie en het tegelijkertijd uitvoeren van meerdere taken. De laatste jaren wordt steeds meer onderzoek verricht naar de oorzaak van deze cognitieve problemen. Uit het onderzoek van Seigers blijkt dat ratten die behandeld werden met een hoge dosis MTX geheugenproblemen kregen. Zij waren minder goed in staat nieuwe taken te leren te opzichte van controledieren en ook hun vermogen om zich een eerder geleerde taak te herinneren was verminderd.

Opvallend was dat uit het hersenonderzoek onder andere bleek dat er na behandeling met MTX minder nieuwe neuronen werden gevormd in de hippocampus, een hersengebied dat sterk betrokken is bij geheugenfuncties. Ook waren er na behandeling minder bloedvaten en was er minder glucoseopname in dit hersengebied, vergeleken met ratten die niet met MTX behandeld waren. Dit alles leidt wellicht tot een verminderde activiteit van de hippocampus en daardoor tot de cognitieve problemen.

Deze resultaten tonen aan dat MTX, althans bij ratten, schade in de hersenen veroorzaakt. Dit onderzoek vormt een aanknopingspunt voor een verklaring voor vergelijkbare problemen bij patiënten. Gezien het toenemende belang van cytostatica bij de behandeling van kankerpatiënten, is verder onderzoek naar nadelige effecten van cytostatica op het cognitief functioneren noodza-



Riejanne Seigers (Emmen, 1981) studeerde medische biologie aan de Rijksuniversiteit Groningen, waar zij haar promotieonderzoek verrichtte bij de afdeling Gedragsfysiologie, Research School of Behavioural and Cognitive Neuroscience. Haar onderzoek is gefinancierd door het Nederlands Kanker Instituut, de Gratama stichting en de René Vogels stichting. Zij promoveerde op 19 maart 2010.

Functional magnetic resonance imaging of tinnitus

PROMOVENDUS

C.P. Lanting

PROEFSCHRIFT

Functional magnetic resonance imaging of tinnitus

PROMOTOR

Prof. dr. P. van Dijk

Oorsuizen in beeld met fMRI

Wie een avondje naar een concert gaat of naar de kroeg, heeft vaak achteraf last van een piep of suis in het oor. Dit verschijnsel wordt tinnitus genoemd. Iemand met tinnitus hoort geluiden als fluiten, suizen, piepen, brommen en zoemen. De geluiden kunnen hoorbaar zijn in één oor of in beide oren. In veel gevallen gaat tinnitus vanzelf over, maar soms is het permanent, en het verschijnsel

komt vaak voor bij mensen die gehoorschade hebben. Bij oorsuizen is het moeilijk om vast te stellen waar de representatie van het geluid precies zit in de hersenen, omdat de patiënt zelf vaak als enige kan aangeven waar het geluid vandaan komt.

Promovendus Cris Lanting onderzocht of het mogelijk is om oorsuizen in beeld te brengen met functionele MRI-scans, waarbij de doorbloeding in de hersenen wordt gemeten. Hij voerde experimenten uit waarbij tinnituspatiënten een geluid te horen kregen. Hieruit bleek dat de doorbloeding in de hersenen omhoog ging bij het horen van een geluid, meer dan bij de gezonde proefpersonen. Niet alle tinnituspatiënten hadden echter deze verhoogde respons. De experimenten tonen aan dat er meetbare, maar subtiele verschillen zijn tussen groepen mensen met en zonder tinnitus. Deze verschillen suggereren dat er meerdere vormen van tinnitus zijn.



Cris Lanting (Bedum, 1980) studeerde technische natuurkunde aan de Rijksuniversiteit Groningen. Zijn promotieonderzoek voerde hij uit aan de afdeling Keel-, Neus, en Oorheelkunde van het UMCG. Lanting werkt nu als postdoc (Career Development Fellow) bij het MRC Institute of Hearing Research in Nottingham (Groot-Brittannië). Hij promoveerde op 31 maart 2010.

Imaging the vulnerable brain: functional and structural MRI in psychosis proneness

PROMOVENDUS

G. Modinos Comellas

PROEFSCHRIFT

Imaging the vulnerable brain: functional and structural MRI in psychosis proneness

PROMOTORES

Prof. dr. A. Aleman

Prof. dr. J. Ormel



Ook verschillen in hersenactiviteit bij lichte vorm van psychose

Symptomen van een psychose (bijvoorbeeld hallucinaties, ongewone overtuigingen) komen niet alleen voor bij personen met een zenuw/geestesziekte zoals schizofrenie. Er zijn ook personen die minder ernstige symptomen van een psychose ondervinden, die niet tot behandeling hoeven te leiden. Gemma Modinos ging in haar proefschrift na of deze minder ernstige symptomen een risicofactor zijn voor het ontwikkelen van een psychose.

Studies naar hersenactiviteiten hebben bij schizofreniepatiënten een aantal afwijkingen in hersenfunctie en structuur vastgesteld. De resultaten van het onderzoek van Modinos tonen aan dat er ook verschillen zijn in hersenactiviteit en hersenstructuur tussen mensen met de minder ernstige klachten en gezonde mensen. Deze bevindingen ondersteunen de veronderstelling dat er een verband is tussen de minder ernstige vormen van psychose en de daadwerkelijk ontwikkelde psychose.

Gemma Modinos (Barcelona, 1980) studeerde NeuroScience in Barcelona. Zij verrichtte haar onderzoek bij de afdeling Neurowetenschappen van het Universitair Medisch Centrum Groningen en het BCN Neuroimaging Center. Zij werkt nu als postdoc bij het Institute of Psychiatry, King's College, London, UK. Zij promoveerde op 26 april 2010.

■ EVELYN KUIPER-DRENTH, OP BASIS VAN PERSBERICHTEN VAN DE RIJKSUNIVERSITEIT GRONINGEN

PhD-day for BCN PhD-students at all points of their trajectory

Topic

OUT OF THE BOX! Beyond the boundaries of traditional research.

Programme

Plea by award winning and controversial researcher Pek van Andel about his innovative studies on serendipity, appealing workshops for PhD-students willing to cross the borders of science, discussions, etc.

Date and time

22 September 2010, 13.00-17.30. Location: Medical Faculty. Further information will be provided.

Contact

Odilia Laceulle, o.m.laceulle@med.umcg.nl.

Reader's Contribution

Do you want to contribute something to the BCN Newsletter? Announce an event? Tell about your research? Or respond to an article in the BCN Newsletter? That is possible!

Please send your contribution (max 300 words) to bcn@rug.nl. Pictures should be at least 300 dpi.

Sudoku

Fill this diagram in a way that all numbers from 1 to 9 appear just once in every horizontal and vertical row, as well as in each square.

1

6			2					4
2		8	4	5	1	6		
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5					2			1

2

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1	8	2							
	6		8	4			1		
5							6	3	
	2		5	9	3		7		
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Arjen Noordhof
Monika Schmid
Riejanne Seigers
Erik Boddeke

Druk

Drukkerij Thieme Groningen

Deadline for the next edition:
1 August 2010

BCN Training Programme 2010

The new edition of the BCN Training Programme is ready. Everyone should have received a copy by regular mail. If not, please inform me. All the information is also accessible on the website: www.rug.nl/bcn/education/phd/index. Please inform me if you find links in the text that don't work.

In September you will receive a new edition of the Training Programme. At that time, I hope that all rules and regulations concerning finance and training activities are clear. At this moment I advise you to read the disclaimer on page 3 of the Training Programme.

Accredited educational activities

New in the BCN training programme is that lectures, conferences, symposia, other events organised by groups within BCN that are accredited by BCN, will be awarded by EC. If you would like that the event organised by your group is accredited by BCN, please ask the organiser to inform BCN, by sending an e-mail to me. In the Training Programme on page 54 you will find a form that should be sent to request accreditation and a form that should be filled in during the event.

BCN Symposium 2010: July 1, 2010

Please block July 1 in your agenda for the BCN Symposium "Cognitive neurosciences of dopamine-related brain function". After the morning lecture of Klaus W. Lange (University of Regensburg): "Dopamine and attention deficit hyperactivity disorder", you can choose one of the three parallel workshops sessions: Motor functioning, Pain and Reward or Cognition and Genetics.

After the lunch break there are three plenary lectures: Roshan Cools (University of Nijmegen): Dopaminergic modulation of cognitive and motivational control, Antonio Strafella (University of Toronto): Role of dopamine in reward and impulse control disorders in Parkinson's disease and Anthony Grace (University of Pittsburgh): Dopamine system dysregulation by the ventral subiculum as the common pathophysiological basis for schizophrenia psychosis, psychostimulant abuse, and stress.

Please check the BCN website for more detailed information about the programme. If you want to attend the Symposium, please send an email to janine.wieringa@med.umcg.nl.

BCN Orientation 2010: start September 10, 2010

The Orientation course 2010 will start on September 10. Other course data: September 24, October 8, and 22, November 5 and 19, 2010.

If you already decided to participate, please send an email to d.h.koopmans@med.umcg.nl

Training-programme-registration-form

In June you will receive the training-programme-registration-form. On this form you will find the information that we have registered for you in our system. Please have a good look at the contents and complete the list with your training activities until now. Send the corrections and additions to Janine: janine.wieringa@med.umcg.nl

■ DIANA KOOPMANS

COMMON SLEEP DISORDERS IN ACADEMIA



Alumnus column

After finishing my master biomedical sciences at the University of Nijmegen, I did not really know what to do with my life. But what I did know was that I did not want to be a PhD-student. However, as always, opinions can change. Mine changed when I saw a vacancy at the department of medical physiology of the University of Groningen. It concerned a job as a PhD-student; the subject was involuntary hand-movements and brain activation. This topic really fascinated me and, although the job was in far-far-away Groningen, I decided to apply. After a job-interview with Inge Zijdewind and Erik Boddeke and a speech on the results of my research-internship, I got the job and moved to Groningen.

My time as a PhD in Groningen was fun, interesting and sometimes very difficult, but I learned a lot. Of course, I learned how to do research which implied learning how to use the fMRI-scanner, writing articles, analyzing data etc (I assume you have all been there). Furthermore, I learned a lot about myself. For example, I experienced that it is difficult to live 300 km away from friends and family. Luckily, I could cope with that, because of the friendly atmosphere at the department of medical physiology and the Neuroimaging Center. I made lots of friends there and it was often very "gezellig." Another thing I learned about myself is that I do like the practical part of research, but that I am not really into the theoretical part. So, I decided that after my PhD I did not want to be a researcher anymore and that I wanted to live closer to my friends and family again. Furthermore, I decided I wanted to do something more practical for a job. Because of this I considered studying physiotherapy and I started to search for possible physiotherapy-schools.

There are lots of physiotherapy schools in the Netherlands, but only two had the option of studying part-time. These were a public school in Breda and a private school in Nieuwegein ("Thim"). I went to both to test the atmosphere and to inform

myself about some practical issues (such as how much money and time it was going to cost). At "Thim" in Nieuwegein I had a personal talk with the director of the school, Jeroen van der Laan, and then something funny happened. At the day I was in Nieuwegein, one of the anatomy teachers at "Thim" quit his job, and thus they had a vacancy. I had given the director of Thim my curriculum vitae and suddenly my personal "school-information interview" turned into a job interview. I was asked by the director if I wanted to become a teacher at his school. I was flabbergasted with my luck; I was definitely at the right place at the right time. I had only little experience in teaching during my PhD but I knew that I liked to teach students. This was the reason that I already had considered the teaching-option during my PhD. So I decided that I had to give it a try and I started as an anatomy-teacher.

So, after two years I still work as a teacher at "Thim". I teach anatomy, physiology and some science-minors and I help students who write their bachelor theses. Nowadays I even use statistics again; I check our exams for validity and reliance. I really like being a teacher at Thim, the ambiance is just as social and "gezellig" as it was at the NIC and the department of medical physiology. Pleasantly, you can do a lot of work at home and every eight weeks I have one or more weeks off. Furthermore, I live in Arnhem again, which is very close to all my friends (except for the ones in Groningen of course) and my family. There are also some disadvantages: you have to start strictly at nine and you cannot take a sudden "nothing-works-today" day off. But the number of holidays makes up for these "disadvantages." So, for now, it is a very nice job, and for the moment I am really happy with it. I do not know what will happen in the future, but there is a big chance I will continue being a teacher.

■ MARIJN POST

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