

## De Jonge Akademie, a new and a leaving member meet

**'De Jonge Akademie' (The Young Academy, DJA) was formed in 2005 by The Royal Netherlands Academy of Arts and Sciences (KNAW) in order to create a group of young, excellent scientists from various disciplines. As an 'elite' organisation, De Jonge Akademie selects only ten new members every year for a limited membership of five years. These members will be given the opportunity to interact with research fields outside their own area of specialisation, but they will also be asked to use their scientific enthusiasm and expertise for the benefit of society.**

**From the 80 DJA members, 7 have an affiliation with the University of Groningen. Of those 3 are BCN members: André Aleman, Monika Schmid and Simon Verhulst. On March 26th, André Aleman was officially appointed one of the ten new members of DJA. Next year, Monika S. Schmid will leave DJA after her 5-year membership at the beginning of 2010. BCN Newsletter brought these two together to find out more about DJA and their roles, expectations and experiences as members.**

**What exactly is De Jonge Akademie (DJA) and what do they do?**

**André:** De Jonge Akademie is a society of young scientists affiliated with The Royal Netherlands Academy of Arts and Sciences (KNAW: Koninklijke Nederlandse Akademie van Wetenschappen). The main goals of this society are to have an interdisciplinary platform to discuss research and research related activities with members from different fields. Moreover, we also focus on science policy as well as making science available and reaching out to the general public. But maybe Monika can say more about this, as she has more experience.

**Monika:** Well, I think André has made the point quite clearly. De Jonge Akademie was formed in 2005 and a very limited number of young scientists are appointed for a 5-year membership. It is not the same as being a member of the KNAW, where you are appointed for life:

De Jonge Akademie offers a limited membership, which is not renewable after this period. Eventually, the goal is to have fifty members in DJA, so a group of ten new members will be selected every year, replacing the ten members who are leaving.

**One of these ten new members this year is André Aleman. Could you tell us how the nomination and selection procedure works?**

**André:** Only a limited number of people are actually allowed to nominate candidates as members of DJA. In general, you are nominated by, for example, a head of a University, a head of a research school, or a member of the KNAW. I think the most important criterion for nomination is scientific excellence. Furthermore, all members should be young scientists between 25 and 45 years of age. You not only have to be an excellent researcher, but you should also be able to get your message across. So after the nomination procedure, potential members are invited for an interview where they have to show their enthusiasm for research and their ability to explain in a manner that most people will understand.

**Monika, you have been a member from the beginning of De Jonge Akademie. Was this procedure the same for you?**

**Monika:** I was also nominated by the Head of Department where I worked back then and we also had interviews in the second round of selection. I think mainly because it was the first time, and



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### IN THIS ISSUE

- 4** Editorial
- 5** Introducing the new BCN Newsletter Team
- 6** Interview with Peter Albronda
- 7** Science and Arts
- 12** The Odoorn study of gender specific behaviour
- 18** BCN PhD Council
- 20** Column of Hanneke Loerts

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because it was a very big thing, there were lots of nominations and it became a much bigger procedure than anybody had anticipated. This first year, the Academy selected forty young scientists (17 women and 23 men) from a wide variety of disciplines as the first group of members.

***Now I heard there is also a German Junge Akademie. Is DJA based on this concept?***

**Monika:** Yes, the German Junge Akademie was the model. The situation is a little bit different in Germany, because there's not really one recognized Academy of Sciences. In Germany, science and education are not organized on the Federal level, but they fall into the domain and into the authority of the substates. However, there is the Akademie der Wissenschaften (the Berlin-Brandenburg Academy of Sciences and Humanities) and they founded the German Junge Akademie in 2000 in collaboration with the Leopoldina. At some point, the heads of the German Academy met with the heads of the KNAW and I believe it was then decided to introduce an equivalent of Die Junge Akademie in the Netherlands as well.

***What exactly is the goal or the job of DJA and its members?***

**Monika:** As a member, it is actually up to you to decide. When we began in 2005, we were really left to come up with ideas ourselves. So the first thing that we did, when we were first put in place, is that we all brainstormed about what we wanted to do. We finally came up with three main areas that we wanted to work in, which became the goals of DJA. One is, as André mentioned, science policy. One is the transmission of science to the general public and the third one is interdisciplinary collaboration.

***André, what are your expectations of being a member?***

**André:** Well, what I really like is discussing various things with other scientists. Not only science itself, but also issues that have to do with science like how your university treats you, for example. It is very interesting to discuss these issues with people from other universities and to hear their stories and experiences. Furthermore, we will work on a specific project. Every year, the members of that year work on their own project. Like DJA on Wheels last year, where young scientists travelled to secondary schools to work together with young people on small scientific projects and experiments.

Our project is called DJA online and we will make a website on which we put Vodcasts and Podcasts of lectures. The lectures will have to be in Dutch, because we want to reach out to the Dutch public. On the internet, you can already find many sources mainly about exact science, but the sources in Dutch are rather limited. The DJA online project is quite similar to websites that already exist in the USA, for example for Yale University and Princeton University. Besides that, we will organize science cafés, where people can have face-to-face conversations with scientists about specific topics. These events will be captured on video as well and will be put on the website. Last week I was in Amsterdam for a radio program by Teleac called Hoe?Zo! and they also made a video of that program, which has been put on the internet and eventually will be on our own DJA online.

**Monika:** These projects are very nice and Hoe?Zo! has been doing those radioshow for a long time. I think every Thursday they have one person from DJA to come and talk about their research.

***One of the goals of De Jonge Akademie is to bring science to the general public. Besides these radioshow, how do they do this?***

**André:** There are a lot of different ways in which DJA does this. The projects we work on every year are very exciting, like DJA on Wheels, De Jongste Akademie, and DJA Online. We also collaborate with science cafés, journals, and recently also with the TV-show 'De Wereld draait door', where young scientists presented their research to the general public.

I believe telling the public about science is very important. For example, I was talking about schizophrenia on this radio program and many people still believe that it is a kind of multiple personality disorder, which is something very different. It is important to educate the public and take away the stigma on schizophrenia, because these patients really have a hard time mentioning that they have schizophrenia just because not everybody understands what this means. So there is an important role for science there.

**Monika:** Absolutely, I also think DJA is very often a place for the media. If there is something going on in the world, for example at the moment with the swine flu, you need scientists to explain the background in an understandable manner in the news. In this particular case it was not somebody from DJA who was interviewed, but it happens quite often that members of DJA are asked to explain issues in the news. I think that the media like it, because they can get young, enthusiastic and accessible people to explain complicated issues in a good and understandable way to the general public.

**André:** It actually surprised me when I became a member that De Jonge Akademie is really taken seriously in the Netherlands. A lot of major newspapers, like the Volkskrant and NRC Handelsblad, reported all the names of the new members. It seems that the media really know what DJA is and how they can reach us.

**Monika:** I was really impressed by that as well. Whenever something happens, De Jonge Akademie often takes responsibility to make a press release and send that to Volkskrant, NRC and other newspapers. Like André said, DJA is really taken seriously. I remember when Ronald Plasterk became the new minister of Education, Culture and Science, we decided to write him a letter in which we congratulated him and asked him whether we could meet and talk about our plans. Surprisingly, we immediately got invited, which shows that De Jonge Akademie is definitely a force to be reckoned with.

***Does being a DJA member help your career?***

**Monika:** Definitely yes, there's no question about that. First of all, it helps to just have it on your CV, but it also provides a lot of opportunities. For example, there is the opportunity to work with other people whom you would probably otherwise never meet. DJA very much promotes interdisciplinary collaborations by organizing meetings approximately five times a year. During these meetings, two people give a lecture about their own project and research. For example, a couple of years ago that lecture was given by a statistician from Leiden, Elise Dusseldorp, and she presented a statistical model that she had developed mainly in diagnostic psychology. Because this model was very interesting to me, I started talking to her about my data and we collaborated and put together a special issue of Second Language Research on quantitative methods in linguistic research. In that manner, you just get contacts you would otherwise not be able to have and to find.



**André Aleman** is a Professor of Cognitive Neuropsychiatry at the Department of Neurosciences of the University Medical Centre in Groningen and director of the BCN-UMCG research school. For one day a week he is also a Professor of Psychology in the Psychology Department of the RuG. His research focuses on psychiatric disorders of observation. At the end of March, he was officially introduced as one of the new members of De Jonge Akademie.

**Monika S. Schmid** is a Rosalind Franklin Fellow and Associate Professor at the Faculty of Arts of the Rijksuniversiteit Groningen. She has been working at our University for almost two years now and her research focuses on aspects of first language attrition. Monika was part of the first group of DJA-members in 2005 and next year, she will resign after her 5-year membership.



**André:** I think this interdisciplinary aspect is very important. In science, it is not at all uncommon that a method from one field is being used in a very innovative way in another discipline. In neuroimaging, for example, Christian Keysers' group here at BCN/NIC is now using a method which was originally used in Economics to analyse and make predictions related to stockmarkets (Granger Causality). They are now successfully using this method to investigate causality in brain analyses. But besides this, being a member also gives you some special privileges. For example, you can nominate visiting professors from the KNAW, something that can only be done either by KNAW members or DJA members. In the UMCG there are only three people who are allowed to do this: two KNAW members, and I am now the only DJA member. The university or hospital board asks you if you can think of somebody who would be interesting. You can then invite a person to come over for three months as a visiting professor. So there are certain opportunities only possible for people related to the KNAW/DJA.

#### **What is the relationship between De Jonge Akademie and BCN?**

**André:** BCN is of course very positive about having members in DJA, because BCN is very focussed and very supportive of interdisciplinary research. I actually guess that BCN is the only, really interfaculty research school in Groningen. And maybe one of the few left in the Netherlands, because most are now going to be faculty-based. So having members in DJA provides another opportunity not only to collaborate within the university but also to look outside to other universities.

#### **Monika, what was the best experience with DJA in the five years that you've been a member?**

**Monika:** Well, going on DJA on Wheels and seeing princess Maxima there was great and wonderful. But overall, I think some of the lectures were also really fantastic. I got the opportunity to meet and listen to people who are doing cutting-edge research in fields that I know nothing about. Having these unfamiliar but interesting fields explained to me in a manner that I can understand is very valuable. I learned about growing bananas somewhere in Middle America and about developing flu vaccines, which is very different from my own

research. All in all, I think I really broadened my own horizon beyond my own field, beyond my own institution, and beyond the people I would normally meet at conferences. Many of the people I met work in very different fields and I would probably never build a professional network with them, but I also like them very much personally. Therefore, I am extremely happy that I have been a member of De Jonge Akademie.

#### **Do you have any recommendations for André?**

**Monika:** I would say: go to as many meetings as you possibly can. Sometimes it seems difficult, especially because we have to travel all the way from Groningen, which can take a whole day. Still, I would say go to as many meetings as you possibly can and try to talk to people, particularly the people you might think have nothing to do with your field of research. You will be surprised of how many cross-connections there are and what you can develop.

#### **And André, do you have any questions for Monika?**

**André:** I would like to know whether you, now that you are leaving DJA, will stay in touch with the people you worked with?

**Monika:** I have not thought about that yet, but there are definitely some people I hope to stay in contact with.

**André:** What I would like, but that is a different issue, is that DJA members can become standard KNAW members after their membership, because it is well-known that the KNAW members are relatively 'old'. The problem with this idea is, of course, that there might be too many KNAW members in the end.

**Monika:** Yes, it is probably too soon to say that you become a KNAW member after this, because that is supposed to honour a real lifetime achievement. It is always the temptation of course that if you have a young academy then clearly the other is going to be the old academy, but people did not like that very much. But maybe it would be nice to have some kind of intermediate group.

■ HANNEKE LOERTS

More information on DJA on Wheels:

<http://www.knaw200.nl/Pages/DEF/1/347.html> (Dutch page)

# To network or not to network, that's the question

Do you have a page on Hyves? Did you put your CV on LinkedIn? Apparently, 50% of all Dutch people between the ages of 26 and 39 visit online social networks every day (Intermediar 2-4-2009). If you have a higher education, 80% of you choose Hyves, 42% choose LinkedIn and 20% prefer Facebook. As most of BCN PhD students and part of the senior staff fall in the above age category, it must mean that BCN has an active online social network community. For those of you who now wonder what Hyves or LinkedIn is, think that social networks are just for fun and/or are not yet convinced that social networks are useful for scientific purposes, here follows my view on why you should try it.

First, a short introduction on social networks. There are many, many social networks, or more generally speaking: social media. Besides Hyves (that has 7 million active members in the Netherlands alone), LinkedIn and Facebook, we have MySpace, Twitter, Plaxo, Digg, Jaiku, Plurk and more every day. It is hard to give a formal definition of these social media, but what they have in common is that the contents are supplied by the users, thereby providing an online interactive platform for communication between groups. Some networks (still) have a business focus (LinkedIn, Plaxo), others focus more on sending messages, posting photos and chatting.

Now I don't think that I have to convince you that networking is important for scientists. You need your network to get other people to know you and your work, to get invited to conferences, editorial boards and organizational committees, to get expert knowledge on topics outside your direct research field, to get good applicants for your job openings, to organize visits to other labs for yourself or for your (PhD) students, to set up convincing new (inter)national research proposals, to get good speakers for your conferences and to get introductions to scientists who are not yet in your network. Traditionally you build your network by being visible and active at and talking to people at (inter)national scientific meetings, by visiting other labs and very importantly, by keeping in touch with former colleagues.

I would like to argue that a social network such as LinkedIn can aid you in achieving all your networking goals from behind your desk. LinkedIn is an international online network targeted at business professionals, which doesn't mean that it is of no use to scientists. It has a functional and rather boring appearance but rather extended functionality. A free account is easily made, after which you can start filling your own profile, which mainly consists of your past and present jobs and your interests. You can add your current projects if you want. Once you have made a start like this, you can begin building your network by finding past and present colleagues and asking them to join your network. Once you have added people to your network, their profiles and networks become visible to you as well and you can ask members of your networks to introduce you to other people in theirs, or you can introduce people in your network to each other. Sending messages is easy, without the need to keep updating your email address book: when people in your network adapt their contact information, this is automatically changed in your network as well. Furthermore you can ask questions to your network and answer questions that are posed by others. It is possible to post job adverts, which is however a paid option. And you can recommend people or ask others to recommend you.

Another very interesting option in LinkedIn is the possibility to start and join so-called groups. A group is moderated by a group manager, so that not just everyone can join. You can be invited to join a group or ask to join a group yourself. Within groups it is easy to ask questions to the whole group at once, start discussions, post news items or place job adverts. These options together with the standard options of LinkedIn have made us decide to start a BCN group on LinkedIn. Its main purpose is to provide a network for BCN alumni. Furthermore, present BCN members can join as well, so that they can profit from the networks, knowledge and expertise of former BCN members. An additional attractive advantage for the BCN bureau is of course that it will be easy to track present BCN members once they themselves have become alumni!

Of course, the success of this BCN LinkedIn network depends on all of you and our former members joining. So if you receive an email from the BCN bureau shortly, asking you to join the BCN group on LinkedIn and to provide us with email addresses of former BCN colleagues, I hope I have convinced you of the advantages of joining LinkedIn and please act positively! Or be proactive and go to [www.linkedin.com](http://www.linkedin.com), create a profile and ask to join the BCN group.

NATASHA MAURITS

# Introducing the new BCN Newsletter Team

For the first time since years we've got a full BCN Newsletter team.

They introduce themselves here:

## **Léon Faber**

I'm a PhD student at the department of experimental psychology and work psychology. For my PhD I'm doing research on cognitive processing during mental fatigue, which I will study using EEG and fMRI. I was persuaded by Nynke to join the BCN newsletter team, because it would be a lot of fun. I hope you will enjoy reading my articles, like the interview with Peter Albronda in this issue.

## **Inge Richelle Holtman**

During my bachelor psychology I soon discovered that I was really interested in neuroscience, and I applied for the BCN research master last year. Immediately after I started I felt amazed with the immense diversity of research within BCN, and I wanted to keep up with what's going on. Therefore I thought it was a good idea to join the BCN newsletter. I have been a member of the editorial office of *Raffia* magazine, a journal for the institute of gender studies in Nijmegen, and very much liked the process of working together with a group of people to create a magazine. As one of the newest members of the BCN newsletter I hope I can make a valuable contribution.

## **Evelyn Kuiper-Drenth**

Since November 17, 2008 I am working as a secretary for BCN. Before I joined BCN, I have been working at the secretarial office of the department of pulmonology for 7 years. My job for the BCN newsletter is to update the promotions and orations. So, all the nice photos and/or figures which you would like to be placed with the announcement of your promotion/oration can be sent to me (e.t.kuiper-drenth@med.umcg.nl).

## **Hanneke Loerts**

I started my PhD at the department of Linguistics in September 2008. My research will focus on second language learners of Dutch with different first languages. I will study their production as well as their comprehension of the Dutch language by using eye-tracking and EEG. Some time ago I joined the BCN newsletter and I am very happy to be part of this team. I would like to use this experience to learn more about all of the research areas within BCN. I also hope to write some interesting articles for the BCN newsletter in the time to come and I hope you will like them too.

## **Natasha Maurits**

I am an applied mathematician and 'adjunct'-professor of Biomedical signal analysis in the Neurology Department of the UMCG. I have been an editor of the BCN Newsletter since 2006. I have quite some experience within BCN (a.o. lecturing, organizing events, chairing the education committee and the thesis-prize committee and since recently: coordinating the BCN-BRAIN institute 'Perceptual Neuroscience and Motor Systems') and like to use this experience to generate ideas for interesting and news-worthy articles for the Newsletter.

## **Melanie Meister**

I joined the BCN-community last summer by being allowed to study "Molecular and Clinical Neurosciences" (the N-track) in the BCN-research Master programme. I left my hometown Hannover (in Lower Saxony, Germany) and came to the Netherlands 3 years ago to study Psychology in Groningen. I am very glad to now also be able to express my journalistic passion and to get more in touch with the BCN-community, by writing for the BCN newsletter.

## **Nynke Penninga**

I'm the scientific coordinator of BCN and as such automatically involved in writing parts for and editing the BCN Newsletter. My background in journalism (as you could have read in BCN Newsletter, no. 73) helps me a lot with this. I'm looking forward to working together with this Newsletter team and I am responsible for keeping the deadlines and planning the next edition.

We're always interested in new stories, so if you've received a nice price, or grant, or want to tell something about your research, please contact us via [bcn@rug.nl](mailto:bcn@rug.nl). Please mention BCN Newsletter in the subject line. Our names and email addresses are also listed at the colophon at the back of this BCN Newsletter.

## Peter Albronda

**They are the people that almost never get mentioned in publications, however, they play an essential role in science. They are the ones that make sure that the equipment used by the scientists are kept in working order. This is an interview with one of these people; Peter Albronda.**

### ***Can you tell us a bit about yourself?***

Well, I can't blow you away with my education and I don't have any titles, like most people who work here. I learned most things in practice and not through formal education.

I was born in Groningen where I got my MAVO education (Lower General Secondary Education). After that I did MTS (technical school), which I didn't finish due to circumstances at home. After I quit school I had some jobs at Okaphone and Crescendo (electronics shops), and some other jobs that had nothing to do with electronics at all. Then I met someone who was studying experimental physics at the Kernfysisch Versneller Instituut (KVI; Nuclear Accelerator Institute) and at the same time he had started a small business and I became his first official employee. This company made different kinds of electronic products. Some for the KVI, but mostly inverters, which were sold to different clients. In the beginning I didn't know very much about electronics and I basically made the things that others designed. Working there I learned more and more about electronics and I also started doing development. You can basically say that working at that company was my education.

After nine years, I went to Lode Medical Technology, because I was very interested in medical technology. Here I would do a combination of support on location, production and development, but in the end I was always on the road, and I didn't like that and there also were some other aspects about that company that I didn't like.

Then an acquaintance told me that there was a position for an analogue electro-technician at the Verkeerskundig Studie Centrum (traffic research centre). At first I was like: "I can't do that, because I don't have any education. I never finished my MTS.", but it did work out after all, because I did have the skills that I needed. At the Verkeerskundig Studiecentrum I mostly worked on driving simulators and the instrumented bicycle and later on an instrumented car. In 1996 the Verkeerskundig Studiecentrum was shut down, and we became part of the psychology department. Some five years later the psychology department made a financial commitment to BCN and they decided to fulfill this by sending me for technical support, so I came to work at the neuroimaging centre.



### ***Can you tell us what you do at BCN?***

I give technical support for running the EEG cabins and for the portable EEG devices. Currently I'm working on making it possible to use EEG amplifiers that we have with LabVIEW software, because that would give many opportunities for new types of research.

### ***What do you like most about your job?***

Working with young people! Not that I'm that old, but I just like the drive of the people that are working here. It's also nice that I can pass on some knowledge. For example; the students from the faculty of arts that are measuring here, have had no practical course in electronics or EEG measuring, so I help them with that.

### ***Are there any projects that have your particular interest?***

No, not really. I just think this is a very interesting environment, though I, together with Ruud Kortekaas, would like to combine transcranial magnetic stimulation (TMS) with EEG. We are first going to try this on a polystyrene head with a wet cloth on it, just to see what happens. It's just mostly that I like to find practical solutions to problems of researchers and students.

LÉON FABER

## Science and Arts

**In 2009 the University of Groningen is celebrating its 395th anniversary. The theme of the celebrations is 'Arts Meet Science'. Within the BCN community a lot of people combine their love for research with a love for the arts, be it painting, acting or playing an instrument. We've found 5 BCN-members, staff and students, willing to talk about their research, their art and how their work and hobbies interlink.**

### Sanne Kuijper MSc– theatre sport

Sanne has studied psychology and is doing her PhD at the Faculty of Arts in cooperation with Accare, the National Expertise Centre for Child and Adolescent Psychiatry. She is part of the NWO/ VICI "Asymmetries in grammar" project group and her research centres on the development of language in children with autism spectrum disorder and ADHD. Children with autism spectrum disorder can have a delay in language acquisition; their language skills might develop in a different way than is considered normal, which may be related to their inability to consider the perspective of others.

In her spare time Sanne can often be found on stage in different theatres. During secondary school she started with traditional plays, and later she switched to theatre sport. Improvisation and interaction with the audience are the main features of theatre sport. Both the jury and audience can give grades to the players, and can make suggestions to influence what is going on on stage. The audience shows its appreciation by throwing flowers, or – when they disagree with the jury – throwing sponges at them.

Sanne really likes the freedom of theatre sport, because she has little time to learn an entire script. She feels that trust in yourself, in your group and optimism are extremely important personality traits in both science and theatre sport. A group of people can come up with more creative ideas than a single person who's putting in twice as much effort. In group dynamic processes it is of utmost importance to be flexible, because there is not a single way in which research can be done. If multiple people have an influence on a process, lots of viewpoints have to be taken into account, and rapid shifts of perspective can occur. Therefore an open mind to all what is going on can help making a scientific project or a theatre sport play into a success.

For everybody who is interested in experiencing a theatre sport play and likes to see Sanne on stage, check the website of her team for dates and more information: [www.ulteam.nl](http://www.ulteam.nl), [www.improsubrosa.nl](http://www.improsubrosa.nl).



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## Dr. Bauke de Jong – organ and harpsichord

Besides being a neurologist, Bauke is also a classical organ and harpsichord player. As a teacher for medical students at the UMCG he is actively involved in medical research that centres around two themes. He looks at the organisation of function in the brain of normal people and of patients with movement disorders, from a cognitive point of view. Secondly he focuses on underlying biomechanical qualities and mechanisms by which these functions can take place, at a physiological level.

Furthermore he is also a classical organist and harpsichord player and an enormous fan of 17-18th century Baroque and Renaissance music. The common associations most people have with organs are with the ones found in churches that make a lot of noise and produce a blurry mixture of sounds. The 17-18th century organs on the contrary are characterized by bright, easily distinguishable layers, which resemble certain instruments like a flute, saxophone or hobo. 'Every sound by itself is a joy to play with.' Bauke is inspired by musicians like Gustavon Leonhardt, Ton Koopman and Frans Bruggen who took Baroque and Renaissance music to a new level in the seventies of the last century.

Playing music is an important reminder for Bauke that a researcher should never lose touch with hands-on experience and always needs to go into depth. Many researchers in later phases of their career become an impresario. They arrange funds, METC- approvals, and guide others in their research but are no longer part of the creative process. For Bauke it's the combination of improvisation and dedicated work that makes both science and music worthwhile.

## Prof. dr. ir. Natasha Maurits

As an applied mathematician and associate-professor at the department of clinical neurophysiology, Natasha is not someone you would easily imagine spending her holidays in nature freeing her mind by making paintings and photographs of flowers and landscapes.

In her job Natasha uses clinical neuroengineering approaches to improve understanding and diagnosis of neurological disorders in close collaboration with clinical neurophysiologists. Natasha uses different neurophysiological and imaging techniques like fMRI, EMG and (multichannel) EEG in order to come up with answers and practical solutions. Together with neurologists she also investigates different movement disorders such as tremor and dystonia. In this process, she supervises and assists many other people at the department of neurology in their research.

Next to brain imaging Natasha loves taking up a brush or a pencil. She paints and draws for as long as she can remember, but started to take it more seriously in her later years of secondary school. Arts became her eighth school subject (for all of you who have taken part in the old system). She took courses and did summer classes in France, and has painted many astounding landscapes throughout Europe and the USA.

Natasha explains how painting helps her take her mind off science: 'It has an almost meditative effect in that it helps me to relax by completely focusing on what I am painting'. Moreover it is a way to spend quality time with her father. Natasha really likes to paint landscapes and she tries to incorporate many details. She laughs while she tells that her paintings therefore really resemble the original places. Maybe it is a mathematician's trait to recreate nature in many ways with different approaches and techniques. Her art can be admired at [www.artbynatasha.net](http://www.artbynatasha.net).





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## Prof. Dr. Erik Boddeke

As the chairman of the BCN board and an active researcher in the field of stem cells and neuroinflammation the question rises where Erik finds the time to play guitar. Erik started playing classical guitar as a youngster, but nowadays his focus is on jazz music. He is inspired by jazz legends like John Scofield, Pat Metheny and Martijn van Ittersson. The power of jazz, he says, is its many possibilities. For example, certain chord schemes can be used in a lot of different ways. Jazz incorporates a freedom of interpretation that goes beyond any other style.

According to Erik the main difference between science and arts is the time scale. In music you can change what you're doing and still keep up, but in science it is necessary to maintain a long term plan in order to be successful. Science is a lot less flexible than music and every change of direction should be planned carefully. A while ago Erik's research group had succeeded in differentiating neural stem cells into oligodendrocyte precursor cells, and applied them in animal models for multiple sclerosis. Then suddenly induced pluripotent stem cells were introduced and these cells seem to hold much more promise for application in MS. Even though they knew that it would take quite a while to master the new technology they realised that it had the future. Science always has to do with strategy and long term planning while music is much more in the here and now.

Erik admits that he can be a little impatient from time to time, and music helps him to channel these tendencies. 'Once you have mastered your instrument, you can have immediate results, and that's sometimes really nice as opposed to science in which you have to wait a lot longer for your revenues.'



## Dr. Valeria Gazzola

Valeria has just won the "Van Swinderenprijs" for her PhD project on the mirror neuron system, and she ambitiously continues in this field. As most BCN members will probably know by now, the mirror neuron system responds similarly when seeing somebody else performing an action and when we are performing the action ourselves. It is considered to be important in attributing goals and purpose to other people and crucial for empathy. There are many brain areas involved, but it is unknown what the unique contribution of each area is. Valeria's current research focuses on the function of the primary somatosensory areas and her aim is to inhibit activity in this area by repetitive TMS and see how it will affect empathy.

Valeria is also a photographer and strives to catch an image of people in their naturalistic environment. Many people change their facial and bodily expression when they are photographed, which results in polite smiles, and withheld expressions. Valeria's aim is to go beyond this shallow appearance to capture the 'real' emotional state of people, by trying to take pictures of people that do not notice her or by making so many pictures that they stop paying attention to her camera.

Valeria thinks that she is not actively combining arts and sciences, but since they are both products of her mind there are many similarities. For one thing Valeria admits that she is quite a perfectionist in the visual stimuli she uses for her research. Moreover she strongly realizes that both in science and in photography the performer always has an influence on the process and the outcome. As a scientist and a photographer it is crucial to be aware of this influence, and to minimize its effects in order to create optimal results.

■ INGE RICHELLE HOLTMAN

# BCN Research Master

**Since the introduction of the Bachelor Master system in the Netherlands in 2002 many new master programs have been developed. One of these master programs is the BCN research master, an interdisciplinary master that selects (international) promising talent and creates an atmosphere in which ambitious students are encouraged to develop their full potential. Students come from a variety of different bachelor programs that are linked to biology, medical sciences, computational sciences and psychology. Many teachers from within the BCN community and from other universities have contributed to a diverse educational program in which students are trained to become internationally competitive and well equipped to obtain a PhD degree.**

## **General introduction**

The BCN research master is part of the faculty of mathematics and natural sciences but works in close cooperation with the faculty of medical sciences, faculty of behavioural and social sciences, the faculty of arts and the faculty of philosophy. It concentrates on three focal and closely related areas of particular strength within BCN: behaviour, cognition and neuroscience. It is a two year program in which the first year is used to focus on track specific courses and a minor research project. In the second year students can get more thorough insight in subjects of their own interest, and they can do a major research project. A majority of the students starts a PhD after graduation.

## **Tracks: B, C and N**

The B-track is called 'animal and human behaviour' and is designed for students who are familiar with the basic theoretical foundations of behavioural research. They follow the "four why's" of evolution, function, causation and development of behaviour.

The C-track is called 'Cognitive neuroscience and cognitive modeling'. This track has made quite a large shift in the last couple of years and used to be called 'computational modeling of cognition', but the emphasis has changed from a strong computational towards a more neurological perspective.

The N-track, which is named 'molecular and clinical neuroscience', focuses on the brain and the central nervous system as key players in behaviour and cognition. It is designed for students that are interested in molecular mechanisms of brain function and in the neuropathology of disease.

## **Research projects**

Approaching the summer holidays most BCN master students have already finished their research projects. During their practical works they have been working at a variety of locations. Many were doing animal or cellular research joining groups at the biological centre in Haren. Others were involved in clinical projects at the neurology and neuropsychology departments of the UMCG hospital. Some were taking part in theoretical cognitive studies at the department of psychology, the department of artificial intelligence or at the Neuroimaging Centre. A few went abroad to do an internship in an international research group.

## **Congress visits**

Last but not least BCN master students are encouraged to take part in or visit a congress at least once during their study. Most congresses are too expensive for students to visit; therefore BCN master students can be financially compensated. There is an individual budget of budget of 400 Euros, which can be spent on anything from train tickets, to hotels cost or dinner at the congress. Recently a small group of students has been to the Dutch Endo-Neuro-Psycho meeting in Doorwerth to give a presentation about their research project and to feel the vibe of a scientific congress.

## **Research Master Page**

The BCN Research master page in the BCN Newsletter will be written to keep master students and researchers informed about what's going on in the master programme, e.g. the need for supervisors for research projects in different fields of the BCN community. Maybe there are some possibilities within your facilities for a master student to do a research project. In the next issue there will be an election of our favourite teacher and an interview. Moreover important decisions made by the course committee will be communicated here too. We hope you'll enjoy reading it.

■ INGE RICHELLE HOLTMAN

# Academic teaching skills

## Course attended in spring 2009

The course entitled "Academic Teaching Skills" was a pilot course organized by the University Teaching Centre (UOCG) and the Groningen Graduate School of Science (GGSS). This course encompassed two modules consisting of a total of 2 ECTS credits. The responsible teacher of the course was Daan Romein from the UOCG. Each module took two days and additionally required some preparation at home, about one day per module. The course was given for a total of 10 PhD students. There were individual activities, as well as activities in small groups. The whole course was given in English.

The first module, Academic Teaching and Course Design, encompassed four assignments mainly orientated to course design skills. Prior the first class took place a series of documents was provided. Amongst all these documents I found the necessary information to build up the required background and definitions used in this course, e.g.: Aims & objectives, Teaching/learning process, Blooms Taxonomy, Active learning, Capturing and directing the motivation to learn etc. I would like to stress the importance of the first assignment in which we

had to prepare a written example of a best and worst practice in our education process that we have experienced. We had to explain our choice and evaluate why these examples are either a best or worst practice example. This assignment gave us the starting platform to design a course by using the information that we have learnt from the documents and our own experience as a student. The following three assignments led us to design a course about a topic related to our profession, in my case Neurobiology.

The second module, Lecturing, was directly linked up to the first module. A set of documents was a priori provided in which we could find information about, e.g. Explaining, How to create memorable lectures, Creatively Speaking, Notes on lecturing, Chalkboard skills, Giving and receiving feedback, etc. In this part of the course we had to prepare different lectures of a determinate duration time. In these lectures we had to apply the knowledge obtained during the course. I learnt the importance of the different parts of a lecture; introduction, core and ending. I would like to highlight the importance of a well defined structure, which is

the most important aspect of a successful lecture. A well well lecture is easy to follow not only by the audience but also by the expositor.

Concluding, the structure in a course and/or lecture, as much as clear aims and objectives, are crucial points in designing a course and/or a lecture. As an additional point, this course increased my self-awareness while giving a lecture. Thus, I learnt the importance of the precise fluctuation of the voice, the body language and the interaction between audience and expositor. Summarizing, as a participant of this course, I have learnt many skills that are important for teaching in a university environment, including course design, course development, teaching methods, designing and presenting lectures, supervising small groups, coaching of individual students, assessing students, reaction to feedback, and course evaluation. I definitely suggest this course to other students who want to improve their teaching skills.

■ MARCELO F. MASMAN  
DEPARTMENT OF MOLECULAR  
NEUROBIOLOGY

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# Publishing in English (1)

The first time I heard about the publishing in English course was from a colleague who was very satisfied with its impact on her writing. Strong recommendations by my supervisor made my expectation on this course even higher. Especially at such costs, I expected even more that this course would specifically leverage my scientific writing skills and heighten the chance to publish in high impact journals.

Apparently, the course turned out to be a disappointment compared to my very high expectations. After I took the course, my sci-

entific writing skills remained the same, there was only a slight improvement on my English grammar. The course felt a little like a regular English course instead of a publishing in English for scientific writing course. By taking this course, I expected to learn more on how to structure my writing, how to publish a paper, what the editors of journals expect, and what kind of content I should put in, instead of only getting my grammatical errors corrected. I also expected to learn more about tips and experiences on how to publish a paper and the reasons behind them. Although being grammatically correct

is indispensable, I expected to learn how to write in English at a more advanced level than what this course had offered me.

Nevertheless, I was not entirely dissatisfied with the course. I met other students who have published some articles and we learnt from each other. We did some exercises in revising some texts and learnt different writing styles. The grammatical exercises did help to some extent to prevent pitfalls such as reversion and inconsistent tenses. We also learnt some techniques in re-writing in different impressions such as reversing negative

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scientific results into a positive contribution. Learning together with other PhD students who have experiences in publishing in journals did impact my own writing process. This was the point I benefitted from the most. I actually learnt something from this course although the result did not meet my initial expectations. In the end, I concluded that writing is a continuous process and the publishing in English course is just a "vitamin" to support the process.

■ TITA LISTYOWARDOJO  
EXPERIMENTAL PSYCHOLOGY

## Publishing in English (2)

In general I thought it was an interesting course that helped me with writing articles. The course consisted of 2 hours of lectures per week. Every 2 weeks the participants were expected to hand in a piece of writing (part of an article, or an abstract). The course was adapted to the problems that became apparent from the texts. The teacher gave general guidelines, for both English grammar and the set-up of an article. We had to see whether these guidelines were applicable to our field of research, which made the theory relevant. I liked the course because you got

personal feedback on your own writing and because the content of the course was adapted to the needs of the people taking the course. This might, however, mean that the course could be less useful if the group of people taking the course with you have very different needs than you. But even in that case, the feedback on the texts you handed in will be worth taking the course.

■ GRETHA BOERSMA  
DEPARTMENT OF  
NEUROENDOCRINOLOGY

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### Report

## The Odoorn study on gender-specific behaviour at academic retreats

**This project is part of a larger project on Indicators of Academic Career Development (IACD). Research has shown that academic careers are influenced by many different factors, such as the quality of the educational program, quality of supervision, market forces, but also individual characteristics of young researchers. A main concern is the percentage of female members of staff at different levels. It is a well known phenomenon that there are decreasing numbers of women at higher positions in the academic community. Our university has made an explicit effort to increase the number and percentage of female full professors, amongst other things through the Rosalind Franklin program.**

In this small scale project we focus on the issue of visibility of female researchers. On the basis of a pilot study carried out in 2005, it was hypothesized that female researchers tend to be less visibly active during scientific meetings, in this case a retreat with presentations by young researchers from BCN. Visibility is operationalised as the percentages of questions asked after presentations by male or female participants, corrected for the gender distribution in the group as a whole.

### Set up of the study

The study consisted of two parts, an observational study and an intervention study.

The aim of the observational study was to assess to what extent male and female participants take part in the discussions after presentations.

The setting in which the data were gathered was the yearly BCN Retreat in Odoorn (NL). The retreat consisted of two days of presentations by 2nd and 4th year PhD students from different faculties of the University of Groningen. In total there were 40 female participants and 12 male participants and a total of 24 presentations

The dependent variable was the number of questions asked or comments made by male and female participants as observed by the principal investigator in this project. A part of the meeting consisted of two parallel sessions of presentations. Only one of these sessions has been observed.

The main findings of this part of the study are presented in table 1.

TABLE 1 Percentages of interventions by male and female participants

M/V	# M/V	%	# of questions expected (Total 82)	# of questions asked
M	12	23%	19	38
V	40	77%	63	44

A statistical analysis using ChiSquare showed a significant effect in the sense that the number of interventions by female participants was lower than expected on the basis of the total number of participants.

The main conclusions from this part of the study showed the following:

- The main hypothesis was not confirmed: female participants ask fewer questions than male participants
- This is not caused by male 'big mouths': after most of the presentations there was enough time for questions to allow time for whoever wanted to join in.
- The male questions were asked by a small number of individuals.
- The gender of the presenter had no impact on the gender of the interveners.
- The outcomes are in line with the findings in the 2005 pilot, while at this retreat the number of female participants was significantly higher.

The second part of the project was a small scale intervention study. The aim of the study was to find out whether raising awareness of female participants on male/female participation would have an impact on behaviour. For this part two female participants were ran-

domly selected (with the help of Dr. Eddy van der Zee). Over dinner the two informants were casually informed about this male/female issue. They were not told that they had been selected for participation in the study. They had been observed during the first day and the difference in behaviour between the two days was taken as the effect measure.

The observations of these two participants are presented in table 2.

TABLE 2 Question asked on day 1 and day 2

# of questions asked on day 1	1
# of questions asked on day 2	6

The number of observations was too small for proper statistical testing but the data are at least suggestive of a change.

### Conclusions

Despite an overall female dominated group of participants, the relative contribution of male participants to the interactions and questions was significantly higher than that of female participants. This effect cannot be explained by male dominant behaviour that might have led to lack of opportunity to ask questions by female participants. There was no indication of a correlation between quality of questions and gender: the proportion of stupid questions was equal for men and women.

Raising awareness of this difference in behaviour seems to have an effect, though figures are too small in this study to warrant final conclusions.

The message is this:

- Visibility matters! Relevant people will remember you when you ask a question, and it helps when that question is not too silly.
- Modesty doesn't pay off! No one will remember that silent young woman in the group when a position becomes available!

*Post-script: In order to assess the effects on awareness raising of this report, new data will be gathered at the 2010 retreat.*

■ KEES DE BOT

### **The PhD council is looking for new members**

*You are very welcome to join a meeting and see what we do.*

*For more information, you can send an email to: [bcnphdcouncil@list.rug.nl](mailto:bcnphdcouncil@list.rug.nl)*

*THE PHD STUDENT COUNCIL*

### **Parkinson's disease: Neuroimaging and clinical studies on cognition and depression**

PROMOVENDUS

J. Koerts

PROEFSCHRIFT

Parkinson's disease: Neuroimaging and clinical studies on cognition and depression

PROMOTORES

Prof.dr. K.L. Leenders

Prof.dr. W.K. Brouwer

### **Parkinson treft meerdere hersenfuncties tegelijk**

Dat de ziekte van Parkinson leidt tot traagheid, stijfheid en beven, is vrij algemeen bekend. Minder bekend is dat de ziekte naast het motorische domein van de hersenen, ook het cognitieve en het emotionele domein aantast. Janneke Koerts onderzocht in hoeverre de aantasting van deze verschillende domeinen samenhangt.

Het onderzoek laat zien dat de symptomen van Parkinson binnen de motorische, cognitieve en emotionele domeinen met elkaar samenhangen of elkaar overlappen. Binnen het motorische en cognitieve domein treedt de automatisatie op: informatieverwerking gaat niet langer vanzelf, maar de patiënt moet dit nadrukkelijk controleren. Ook is het voor patiënten moeilijker nieuwe vaardigheden of automatismen aan te leren.

De depressie die door Parkinson wordt veroorzaakt, kan een negatieve invloed hebben op het cognitieve functioneren van de patiënt. Een depressie bij de ziekte van Parkinson is echter moeilijk vast te stellen, aangezien de symptomen van depressie en van Parkinson elkaar overlappen.

**Janneke Koerts** (Delfzijl, 1981) studeerde psychologie te Groningen. Ze verrichtte haar onderzoek aan de afdeling Neurologie van het Universitair Medisch Centrum Groningen (UMCG) en binnen onderzoeksschool BCN. Zij werkt thans als universitair docent aan de faculteit Gedrags- en Maatschappij wetenschappen van de RUG. Zij promoveerde op 18 februari 2009.

### **Counterregulation to acute and recurrent hypoglycemia in rats**

PROMOVENDUS

S.D. Bouman

PROEFSCHRIFT

Counterregulation to acute and recurrent hypoglycemia in rats

PROMOTOR

Prof.dr. A.J.W. Scheurink

### **Diabetesmedicatie en antwoorden van het lichaam op hypoglycemie**

Stephan Bouman onderzocht de regulering van de suikerspiegel in het bloed en vooral de tegenregulerende responsen op hypoglycemie (te laag suikergehalte). Daarnaast onderzocht hij hoe en waarom deze responsen verminderen bij herhaalde hypoglycemie. Alle experimenten werden uitgevoerd in ratten.

Glucose in het bloed is essentieel voor de energievoorziening van het lichaam en er zijn daarom verschillende mechanismen om het glucosegehalte te reguleren. Bij veel glucose in het bloed wordt glucose onder invloed van het hormoon insuline in de weefsels opgenomen. Insuline vormt daarmee het belangrijkste mechanisme om te hoge glucosegehalten tegen te werken. Als het glucosegehalte daarentegen te laag wordt (hypoglycemie), zijn er meerdere mechanismen die dit tegengaan, met als belangrijkste de hormonen glucagon en adrenaline. Samen met de andere mechanismen zorgt dit voor een effectieve tegenregulering van lage glucosespiegels.

Voor patiënten met diabetes is de situatie echter anders. Diabetes gaat gepaard met hoge glucosegehalten en wordt daarom behandeld met glucoseverlagende medicijnen, bijvoorbeeld insuline. Dit resulteert regelmatig in hypoglycemie en diabetespatiënten zijn daarom erg afhankelijk van een goede tegenregulering. Bovendien is gebleken dat herhaalde hypoglycemie leidt tot steeds lagere tegenregulerende responsen. De reden hiervoor is niet bekend.

De belangrijkste bevinding van Bouman is dat de tegenregulerende mechanismen op een uiterst complexe manier gereguleerd worden, met als doel het glucosegehalte boven een bepaald minimum te houden. Tevens toont hij aan dat een specifieke neurale route in de hypothalamus hierbij belangrijk is. Met een aantal experimenten met

herhaalde hypoglycemie bewijst hij dat ook in ratten een vermindering van de tegenregulerende responsen optreedt.

**Stephan Bouman** (Nieuw-Lekkerland, 1973) studeerde biologie aan de Rijksuniversiteit Groningen, waar hij zijn promotieonderzoek uitvoerde bij de vakgroep Neuroendocrinologie, onderzoeksschool BCN. Het werd gefinancierd door het Diabetes Fonds Nederland. Inmiddels werkt Bouman als farmacoloog bij het farmaceutisch bedrijf Novo Nordisk, in Kopenhagen, waar hij onderzoek doet in verband met de ontwikkeling van nieuwe insulinebehandelingen. Hij promoveerde op 20 februari 2009.

### **Guided peer support group for psychosis**

PROMOVENDUS

S. Castelein

PROEFSCHRIFT

Guided peer support group for psychosis: A randomized controlled trial

PROMOTORES

Prof.dr. D. Wiersma

Prof.dr. M. van der Gaag

### **Lotgenotengroepen effectief bij psychosen**

Dat patiënten met kanker, diabetes en astma veel hebben aan lotgenotencontact, is al lange tijd bekend. Hun kwaliteit van leven neemt erdoor toe. Lange tijd werd verondersteld dat patiënten met een psychose geen behoefte zouden hebben aan contact met lotgenoten. De stemmen in hun hoofd zouden groepsgesprekken onmogelijk maken. Het tegenovergestelde is nu aangetoond.

Castelein pleit ervoor dat lotgenotengroepen standaard worden aangeboden aan patiënten met een psychose. Met financiële steun van ZonMW, een organisatie voor vernieuwing in de zorg, is inmiddels een handboek voor hulpverleners gemaakt. Een dvd met voorbeeldmateriaal en een website met informatie voor beleidsmakers, hulpverleners en patiënten is inmiddels in de maak. Ook wordt onderzocht of de interventie kan worden opgenomen in de nieuwe richtlijn voor behandeling van patiënten met een psychose.

Patiënten met een psychose voelen zich zowel sociaal als emotioneel geïsoleerd. Dit

komt mede door de druk op zorginstellingen om langdurige opnames te vermijden en zoveel mogelijk ambulante hulp te bieden. Ook belangrijk is dat een psychose zich veelal in de adolescentiefase openbaart. Met name jonge mensen die nog volop in het leven staan, worden daardoor beperkt in hun sociaal functioneren. Ze krijgen niet de kans hun opleiding af te maken, een baan te zoeken en een partner te vinden. Een kwart van de patiënten herstelt volledig na een eerste psychose, vijftig procent herstelt gedeeltelijk, bij een kwart wordt de ziekte chronisch.

**Stynke Castelein** (Rauwerderhem, 1974) studeerde sociologie aan de Rijksuniversiteit te Groningen en werkt sinds 1999 als onderzoeker in het Universitair Medisch Centrum Groningen (UMCG). Ze verrichtte haar onderzoek aan het Universitair Centrum Psychiatrie (UCP) van het UMCG, en promoveert tot doctor in de Medische Wetenschappen bij prof.dr. D Wiersma en prof.dr. M van der Gaag. Het onderzoek werd gefinancierd door ZonMw, het Rob Giel Onderzoekcentrum en Stichting Roos. De titel van het proefschrift luidt: 'Guided peer support group for psychosis: A randomized controlled trial'.  
Zij promoveerde op 11 maart 2009.

### **The GALM effect study: changes in physical activity, health, and fitness of sedentary and underactive older adults aged 55-65**

PROMOVENDUS

J. de Jong

PROEFSCHRIFT

The GALM effect study: changes in physical activity, health, and fitness of sedentary and underactive older adults aged 55-65

PROMOTOR

Prof.dr. E.J.A. Scherder

### **'Groningen Actief Leven Model' zet ouderen aan tot meer sport**

Het Groningen Actief Leven Model (GALM) blijkt een unieke en goede methode te zijn om ouderen in de leeftijd van 55-65 jaar te stimuleren tot meer sportieve activiteiten. Deelnemers aan GALM behalen bovendien op korte termijn gezondheidswinst en zijn ook buiten het programma lichamelijk actiever. Op lange termijn gaan de deelne-



mers meer sporten en verbetert hun fitheid. Het doel van GALM is om ouderen die veel stilzitten en onvoldoende lichaamel k actief zijn te stimuleren tot deelname aan sportieve activiteiten. Voor het programma zijn in de periode 1997-2005 meer dan 550.000 personen in Nederland benaderd en meer dan 55.000 personen getest. Uiteindelijk zijn 41.310 personen gestart met het GALM sportprogramma. Het veelzijdige programma heeft twee doelstellingen: zoveel mogelijk tegemoetkomen aan de beweegwensen en behoeften van de doelgroep en ervoor zorgen dat alle aspecten van motorische fitheid (kracht, lenigheid, snelheid, uithoudingsvermogen en coördinatie) aan bod komen. In zijn onderzoek is De Jong nagegaan wat de effecten zijn van deelname aan het GALM sportprogramma op lichaamel ke activiteit, gezondheid en fitheid.

**Johan de Jong** (Bergum, 1970) studeerde bewegingswetenschappen in Groningen. Hij verrichtte zijn onderzoek bij Bewegingswetenschappen (RUG/Universitair Medisch Centrum Groningen) en bij het lectoraat Sportwetenschap van de Hanzehogeschool Groningen. Hij promoveert in de Medische Wetenschappen bij prof.dr. E.J.A. Scherder. De titel van zijn proefschrift is: 'The GALM effect study: changes in physical activity, health and fitness of sedentary and underactive older adults aged 55-65'. De Jong werkt momenteel bij het Instituut voor Sportstudies van de Hanzehogeschool Groningen. Hij promoveerde op 11 maart 2009.

### **Serotonin, cortisol and stress-related psychopathology, from bench to bed**

PROMOVENDUS

M.A.C. Tanke

PROEFSCHRIFT

Serotonin, cortisol and stress-related

psychopathology, from bench to bed

PROMOTORES

Prof.dr. J. Korf

Prof.dr. P. de Jonge

### **Relatie stress-depressie nader in kaart**

Veranderingen in de activiteit van de hypothalamus-hypofyse-bijnier as en veranderingen in het serotoninesysteem hebben invloed op de gevoeligheid voor stress. Dat blijkt uit onderzoek van promovenda Marit Tanke. Omdat stress een belangrijke oorzaak is voor psychiatrische aandoeningen, is hiermee nader inzicht verkregen in het ontstaan van veelvoorkomende psychiatrische aandoeningen, waaronder depressie.

Tanke onderzocht onder meer de gevoeligheid voor stress bij kankerpatiënten, die door hun ziekte een verminderde hoeveelheid tryptofaan in hun bloed hebben, en daardoor minder serotonine aanmaken. Deze patiënten ontwikkelen niet direct depressieve klachten, zoals somberheid of lusteloosheid, maar hun gevoeligheid voor stress neemt wel toe en ze werden prikkelbaarder en impulsiever. Ook blijkt dat bepaalde genetische variaties van de serotonine transporter (5-HTTLPR) ervoor zorgen dat mensen gevoeliger zijn voor lage tryptofaan-spiegels. In de klinische praktijk worden deze symptomen niet altijd herkend. Tanke pleit ervoor dat onderzoek van het serotoninepeil een aparte plaats krijgt binnen de psychiatrische vragenlijsten.

**Marit Tanke** (Enschede, 1981) studeerde geneeskunde te Groningen. Ze verrichtte haar onderzoek aan de afdelingen Psychiatrie en Medische Oncologie en het Laboratoriumcentrum van het Universitair Medisch Centrum Groningen (UMCG), en binnen onderzoeksschool BCN. Zij promoveerde op 18 maart 2009.

### **Parental care in relation to offspring sex and mate attractiveness in the blue tit**

PROMOVENDUS

T. Limbourg

PROEFSCHRIFT

Parental care in relation to offspring sex and mate attractiveness in the blue tit

PROMOTORES

Prof.dr. J. Korf

Prof.dr. P. de Jonge

### **Pimpelmees met mooie partner zorgt beter voor zijn jongen**

Omdat de opvoeding van een nest jongen nu eenmaal een grote klus is, moeten ouders beslissen hoeveel energie ze investeren in hun huidige jongen en hoeveel ze bewaren voor zichzelf, voor eventuele broedsels later. Tobias Limbourg ontdekte bij pimpelmezen dat een ouder met een aantrekkelijke partner meer zorg besteedt aan de opvoeding van zijn jongen. De aantrekkelijkheid van een pimpelmeesman wordt bepaald door zijn blauwe petje, dat wil zeggen de hoeveelheid ultraviolet licht die zijn blauwe kruinveren reflecteren. Hoe meer hoe mooier. Als zijn zonen op hem lijken, zullen ook zij een betere kans hebben op de huwelijksmarkt en daarmee een grotere bijdrage kunnen leveren aan het doorgeven van de genen van zijn ouders.

Voor de pimpelmeesvrouw is het andersom. Het lijkt erop dat een flinke uv-reflectie van hun blauwe kruin de mannen juist een beetje afstoot. Pimpelmeesmannen zijn in ieder geval zorgzamer voor de jongen van een vrouwtje met weinig 'uitstraling', wat hij blijkbaar aantrekkelijker vindt. Haar nakomelingen vindt hij dusdanig meer waard dat hij ze meer voedsel brengt.

Limbourg vond geen aanwijzingen dat de sekse van de jongen of de sekseratio van een nest van invloed is op de voerfrequentie. Interessant genoeg lijkt het er wel op dat mannetjes alleen meer investeren in broedsels met veel zonen in jaren waarin er veel rupsen beschikbaar zijn. Rupsen vormen het hoofdbestanddeel van het pimpelmeesdieet in de broedperiode.

**Tobias Limbourg** (Duitsland, 1972) studeerde aan de universiteit van Bonn. Hij promoveert aan de Rijksuniversiteit Groningen, op onderzoek dat hij verrichtte bij het Centre for Terrestrial Ecology van het NIOO in Heteren. Het werd gefinancierd door NWO. Inmiddels werkt Limbourg bij het Institut für Herzinfarktforschung in het Duitse Ludwigshafen. Limbourg is in 2004 al veel in de publiciteit geweest met de resultaten van een deel van zijn onderzoek. Hij promoveerde op 27 maart 2009.

### **Cognitive functioning of children treated for acute lymphoblastic leukaemia with chemotherapy-only**

PROMOVENDUS

N.C.A.J. Jansen

PROEFSCHRIFT

Cognitive functioning of children treated for acute lymphoblastic leukaemia with chemotherapy-only

PROMOTORES

Prof.dr. W.A. Kamps

Prof.dr. J.M. Bouma

### **Chemotherapie bij kinderleukemie: geen schadelijke gevolgen voor cognitieve functies**

Chemotherapie lijkt geen nadelige gevolgen te hebben voor de cognitieve ontwikkeling van kinderen met acute lymfatische leukemie (ALL), noch op korte termijn, noch op langere termijn van 4,5 jaar. De kinderen lijken zich normaal te ontwikkelen op het vlak van intelligentie, leren, geheugen, aandacht, mentale snelheid en fijne motoriek, zonder verschil met hun gezonde broers en zussen die de controlegroep vormden. Dat concludeert Nathalie Jansen in haar promotieonderzoek. Wel scoren patiënten 4,5 jaar na diagnose lager dan gezonde leeftijdgenoten op een complexe, fijn-motorische taak.

ALL is de meest voorkomende vorm van kanker bij kinderen. Zo'n 85% van de patiënten overleeft de ziekte tegenwoordig. Tot midden jaren tachtig werd bij de behandeling van ALL schedelbestraling toegepast. Dit had negatieve invloed op de cognitieve ontwikkeling van de patiënten. Inmiddels is schedelbestraling voor de meeste patiënten niet meer nodig. Wat voor invloed de huidige behandeling voor de cognitieve ontwikkeling heeft, was tot voor kort niet bekend, althans, er was geen uitgebreid prospectief onderzoek gedaan met een goede controlegroep. Jansen spreekt van 'geruststellende' resultaten voor patiënten, ouders, oncologen en overige zorgverleners. Overigens tekent zij aan dat de cognitieve ontwikkeling pas op jongvolwassen leeftijd is voltooid. Pas dan kan met volledige zekerheid worden aangetoond dat chemotherapie geen effect heeft op het cognitieve functioneren.

**Nathalie Jansen** (Noordoostpolder, 1972) studeerde psychologie aan de Universiteit van Amsterdam. Ze verrichtte haar onderzoek aan de afdeling Kinderoncologie van het Universitair Medisch Centrum

Groningen (UMCG). Het onderzoek werd mede gefinancierd door KWF Kankerbestrijding. Jansen werkt thans als gezondheidszorgpsycholoog in het UMC Utrecht. Zij promoveerde op 8 april 2009.

### **Novel cyclic AMP signalling avenues in learning and memory**

PROMOVENDUS

A. Ostroveanu

PROEFSCHRIFT

Novel cyclic AMP signalling avenues in learning and memory

PROMOTORES

Prof.dr. P.G.M. Luiten

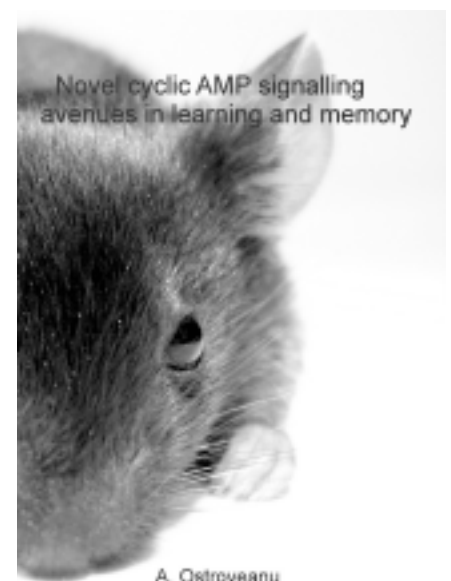
Prof.dr. E.A. van der Zee

Prof.dr. U.L.M. Eisel

### **Nieuwe aanknopingspunten behandeling geheugengerelateerde ziekten**

Anghelus Ostroveanu deed fundamenteel onderzoek naar de moleculaire mechanismen die betrokken zijn bij de opslag van informatie in de hersenen. Ons geheugen wordt gevormd in de connecties tussen de zenuwcellen, de zogenaamde synapsen. Tot nu toe heeft men een groot aantal moleculen weten te identificeren die een verandering in de sterkte van deze verbinding tussen zenuwcellen teweeg kunnen brengen en die tevens betrokken zijn bij informatie-opslag.

In zijn dissertatie concentreert Ostroveanu zich op de rol van twee recentelijk ontdekte cAMP signaal transductie cas-





caedes, A-kinase anchoring proteïnen (AKAPs) en exchange proteïne activated by cAMP (Epac) in leer- en geheugenprocessen. Hij laat zien dat twee leden van de AKAP familie (mAKAP en AKAP150) maar ook Epac allen overall in de hersenen te detecteren zijn. Daarnaast toont hij aan dat AKAP150 en Epac beiden een opvallend specifieke rol spelen leer- en geheugenprocessen. Terwijl AKAP150 alleen een belangrijke rol speelt bij de opslag van het geheugen, verbetert Epac activatie juist specifiek het ophalen van deze opgeslagen informatie. Naast het verzamelen van belangrijke informatie over de rol van AKAPs en Epac in de verschillende stadia van het leer- en geheugenprocessen, bieden de resultaten van Ostroveanu ook interessante en veelbelovende aanknopingspunten voor de ontwikkeling van nieuwe, specifiekere therapeutische strategieën om geheugengerelateerde ziektebeelden zoals dementie te behandelen.

**Anghelus Ostroveanu** (Roemenië, 1976) studeerde biologie aan de universiteit van Boekarest. Zijn promotieonderzoek deed hij bij de afdeling Molecular Neurobiology van de RUG. Het werd gefinancierd met een beurs van het Ubbo Emmius Fonds voor internationale promotiestudenten. Inmiddels werkt hij als postdoc bij het Universitair Medisch Centrum Utrecht. Hij promoveerde op 1 mei 2009.

## The commuting parent. Energetic constraints in a long distance forager, the Cape gannet

PROMOVENDUS

R.H.E. Mullers

PROEFSCHRIFT

The commuting parent. Energetic constraints in a long distance forager, the Cape gannet

PROMOTORES

Prof.dr. S. Daan

Prof.dr. J.M. Tinbergen

Er is geen persbericht over deze promotie beschikbaar. Voor informatie over dit project en de oorspronkelijke onderzoeksvragen zie: <http://www.rug.nl/bcn/research/phdProjects/mToRprojects/ralfmullers>.

**Ralf Mullers** promoveerde op 4 mei 2009



## Orthotic interventions to improve standing balance in somatosensory loss

PROMOVENDUS

J.M. Hijmans

PROEFSCHRIFT

Orthotic interventions to improve standing balance in somatosensory loss

PROMOTORES

Prof.dr. K. Postema

Prof.dr. J.H.B. Geertzen

Een verstoorde balans als gevolg van verminderd gevoel in de voeten komt veel voor bij oudere mensen en bij diabetespatiënten. Het leidt vaak tot valpartijen. Botbreuken betekenen voor ouderen doorgaans een langdurige revalidatie en de angst om te vallen kan leiden tot een sociaal isolement. Onderzoek van Juha Hijmans, bewegingswetenschapper bij het Universitair Medisch Centrum Groningen, toont aan dat een vibrerende zool de balans kan verbeteren.

Diabetespatiënten kunnen als gevolg van hun ziekte een neuropathie ontwikkelen waardoor ze slechter gaan voelen. Dat leidt tot een slechtere balans en dus tot vallen. Hijmans onderzocht of door verbetering van de sensibiliteit van de voet zool de balans te beïnvloeden zou zijn. De resultaten tonen aan dat een vibrerende zool de balans kan verbeteren. Door een subtiele, niet-voelbare trilling onder de voet zool aan te bieden, kunnen mensen met een neuropathie beter hun balans handhaven.

**Juha Hijmans** (Enschede, 1978) studeerde bewegingswetenschappen aan de Rijksuniversiteit Groningen. Hij verrichtte zijn promotieonderzoek bij de afdeling Revalidatiegeneeskunde van het Universitair Medisch Centrum Groningen. Hij promoveert in de Medische Wetenschappen bij prof.dr. K. Postema en prof.dr. J.H.B. Geertzen. De titel van zijn proefschrift is: 'Orthotic Interventions to Improve Standing Balance in Somatosensory Loss'. Het onderzoek werd mede mogelijk gemaakt dankzij financiële bijdragen van het Annafonds en de Stichting Beatrixoord Noord-Nederland. Hij promoveerde op 13 mei 2009.

## Early motor repertoire and long-term neurological outcome

PROMOVENDUS

J.L.M. Bruggink

PROEFSCHRIFT

Early motor repertoire and long-term neurological outcome

PROMOTOR

prof.dr. A.F. Bos

## Bewegingsrepertoire vroeggeborenen voorspelt ontwikkeling

Vroeggeboren baby's hebben een relatief grote kans om een handicap te ontwikkelen, uiteenlopend van milde neurologische afwijkingen tot spasticiteit. Het is belangrijk eventuele afwijkingen vroegtijdig te signaleren. Daartoe wordt het vroege bewegingsrepertoire van deze baby's geanalyseerd, op basis van video-opnames. Er wordt dan vooral gekeken naar de complexiteit, variabiliteit en het vloeiend verlopen van de bewegingen.

Uit het promotieonderzoek van Janneke Bruggink blijkt dat het bewegingsrepertoire rond de leeftijd van drie maanden na de uitgerkende datum voorspellende waarde heeft voor de neurologische uitkomst en de verstandelijke ontwikkeling op schoolleeftijd. Ook bij kinderen van wie vooraf duidelijk is dat ze een grote kans hebben neurologische schade op te lopen, is er een verband tussen het bewegingsrepertoire en het functioneren op schoolleeftijd. Hiermee laat Bruggink zien dat analyse van het bewegingsrepertoire nog breder toepasbaar is dan vooralsnog werd aangenomen. Bij kans op neurologische schade bij pasgeborenen, zou vroege bewegingsrepertoire systematisch geanalyseerd moeten worden, aldus Bruggink.

**Janneke Bruggink** (Enschede, 1983) studeerde geneeskunde te Groningen. Ze verrichtte haar onderzoek aan de afdeling Kindergeneeskunde van het Universitair Medisch Centrum Groningen (UMCG) en binnen onderzoeksschool BCN. Bruggink is thans in opleiding tot chirurg in het UMCG. Zij promoveerde op 3 juni 2009.

■ EVELYN KUIPER-DRENTH

OP BASIS VAN PERSBERICHTEN VAN DE RIJKSUNIVERSITEIT GRONINGEN


## The BCN PhD-student council

### Activities

- Monthly PhD-student council meetings
- Regular meetings with the educational committee
- Biannual survey to assess opinions on project related issues
- First year's barbeque
- Borrels
- Sports day

Graduate School for Behavioral and Cognitive Neurosciences

**Promotes the interests of all  
 PhD-students within BCN**



**Keeps a keen eye on the  
 quality of the educational  
 program**

**Organizes social activities**

13.06.2006, BCN Orientation Course

The council is looking for new  
 enthusiastic members. Interested?  
 Email the council!

Questions or suggestions? Let us know!

[bcnphdcouncil@list.rug.nl](mailto:bcnphdcouncil@list.rug.nl)

[www.Rug.nl/Bcn/Organisation/Staff/StudentCouncil](http://www.Rug.nl/Bcn/Organisation/Staff/StudentCouncil)

### BCN Website

New on the BCN website are the course reviews. If you participated in a course, I would appreciate it very much when you write a review to inform other PhD students. On the website: <http://www.rug.nl/bcn/education/phd/other/index> you will find already reviews of Academic teaching skills, Modeling individual histories with state uncertainty, PENS school, Publishing in English, Publishing with Word and the Workshop Animal Imaging. I hope that this list of reviewed courses will be much longer at the end of the year.

### BCN Master Classes

We would like to organize more Master Classes. Therefore we need input from our PhD students. If you meet researchers on conferences or other events who might be interested in giving a Master Class for BCN PhD students: please let us know. We have budget to invite them to come to Groningen.

### Training-program-registration-form

In June you will receive the training-program-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 Evelyn: [E.T.Kuiper-Drenth@med.umcg.nl](mailto:E.T.Kuiper-Drenth@med.umcg.nl).

### Description of your PhD project on the web site

We would like to have the description of the PhD project of all our PhD students on our website, but there are still a few missing. You can help us to complete the overview: if your description is missing: please send it to Evelyn: [E.T.Kuiper-Drenth@med.umcg.nl](mailto:E.T.Kuiper-Drenth@med.umcg.nl).

■ DIANA KOOPMANS  
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Deadline for the next edition:  
1 August 2009

# The Life of a PhD/bursary student

In the previous edition of the BCN Newsletter, I wrote my very first column about my (still limited) experiences as a PhD student. These experiences, however, may not be as similar for everyone as I initially thought. Of course, everybody is working on very individual subjects, but this is not the only aspect in which we differ. It was during one of the first drinks, which we organised with our 'borrel committee', that we realised that not only our works, but also our lives differ in many more interesting ways, like our titles and consequently our wages, tasks and privileges.

This is probably the right moment to admit my first lie on paper. I was lying when I introduced myself as a PhD student. Actually, I am not really allowed to call myself a PhD student, because I am in fact a bursary student (note that I did mention this in the title). As a Dutch bursary student, I am the product of an aim of the university to increase the number of doctorates by making their positions less expensive. Now I don't want to bore you with all the details that you have probably already heard before, but just to be precise about this I'll give a short summary of the rather disadvantageous consequences of this bursary system.

First of all, because we are students, our dissertation might be considered less professional compared to those written by the well-known AIOs who are employees of the University. Furthermore, we do not save any money for our retirement fund and we are not even insured when we (God forbid) become incapacitated. Moreover, it is rather difficult to get a mortgage, because we don't really have an income. And, the thing I hate the most, is that we are not allowed to teach, whereas I believe teaching can be a very fruitful education. Now I know that in some countries (like France, as I've been told) you even have to pay to be able to write a dissertation, so we should not complain too much. But the strange thing to me is that I still do not really know my status: on paper I am a student, but in reality I'm doing the same thing that employees do.

I can imagine that everybody would just say that I am a student, after reading the short summary of consequences above. However, I was told that I was not, but I should consider myself a 'fictional' employee who is paying taxes, social security and everything. In my mind I can thus only conclude that I am neither a student nor an employee. One of the good things about this is stressed by some of the very positive-minded bursary students, because when you are half employee and half student (or maybe neither of them) you can still hang out with the undergrads at the bar without feeling ashamed. We can always say that we are still students, who are involved in the beer craziness that is part of being a student. I like to see myself as one of these positive-minded students, because although there are many things about the life of a bursary student to moan about, we are students (or employees, depending on the situation) who get paid to do what they really want to do; in my case doing research in Linguistics.

This story could have been multiple pages long, but I hope we can focus more on all the separate aspects of being a bursary student, a PhD, or anyone doing a doctoral study in future columns. Therefore, we have decided to change this final page of the Newsletter into a page where we all (PhD, bursary student or whatever) can share our experiences, doubts, hopes and more. In the next edition, Jonathan Mall, who is doing his research in Experimental and Work Psychology, will fill up this page with some of his experiences so far. Of course, anyone who has nice experiences, doubts, irritations or anything else that has to do with the life of doctoral students: don't hesitate to send me an email! Maybe we will find out that we're completely different, but maybe we will see that we are not that different after all.

■ HANNEKE LOERTS

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