

DARE TO **11** THINK

NOVEMBER • 2015



COMMUNITY MAGAZINE OF GHENT UNIVERSITY

A close-up photograph of a woman with short brown hair and glasses, wearing a white lab coat. She is smiling broadly and looking directly at the camera. Her hands are in the foreground, slightly out of focus, as if she is holding something. The background is a blurred laboratory setting with various pieces of equipment.

PASSIONATE AND COMMITTED

Ghent University sends out her daughters

'RWANDAN HIGH JUMPERS WERE WORLD CLASS'

ANALYSIS OF HISTORIC PHOTOGRAPHS AT GHEENT UNIVERSITY



'THEY COULD HAVE WON AN OLYMPIC MEDAL!'

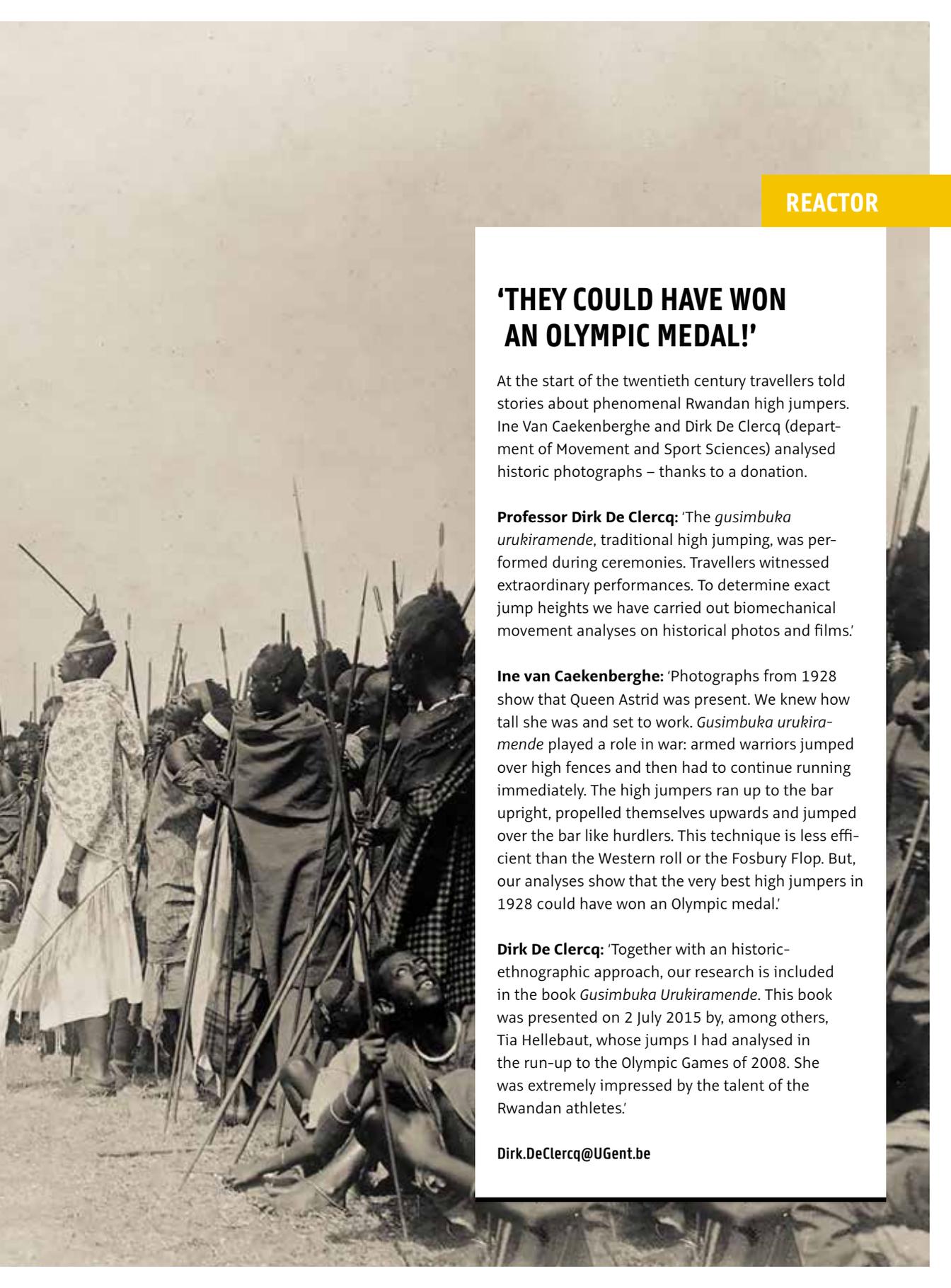
At the start of the twentieth century travellers told stories about phenomenal Rwandan high jumpers. Ine Van Caekenberghe and Dirk De Clercq (department of Movement and Sport Sciences) analysed historic photographs – thanks to a donation.

Professor Dirk De Clercq: 'The *gusimbuka urukiramende*, traditional high jumping, was performed during ceremonies. Travellers witnessed extraordinary performances. To determine exact jump heights we have carried out biomechanical movement analyses on historical photos and films.'

Ine van Caekenberghe: 'Photographs from 1928 show that Queen Astrid was present. We knew how tall she was and set to work. *Gusimbuka urukiramende* played a role in war: armed warriors jumped over high fences and then had to continue running immediately. The high jumpers ran up to the bar upright, propelled themselves upwards and jumped over the bar like hurdlers. This technique is less efficient than the Western roll or the Fosbury Flop. But, our analyses show that the very best high jumpers in 1928 could have won an Olympic medal!'

Dirk De Clercq: 'Together with an historic-ethnographic approach, our research is included in the book *Gusimbuka Urukiramende*. This book was presented on 2 July 2015 by, among others, Tia Hellebaut, whose jumps I had analysed in the run-up to the Olympic Games of 2008. She was extremely impressed by the talent of the Rwandan athletes.'

Dirk.DeClercq@UGent.be



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Professor Korneel Rabaey: 'For water, chemistry, technology and biotechnology Ghent University has top experts. With Capture we will build on this to become a global player.'

RECOVERING RESOURCES FROM WASTE

*Capture gathers
top experts*

Resource recycling is hot. 'People sometimes forget that a lot of technology is needed for this', say Professor Korneel Rabaey and researcher Steven De Meester of Ghent University. 'More than what one research group or even university can achieve.' This is why the Capture centre is being set up now.

Capture stands for the Centre for Advanced Process Technology for Urban Resource Recovery. 'An individual faculty and even a university doesn't have the capacity to take on the big social challenges, such as waste recovery and recycling', says Professor Korneel Rabaey (department of Biochemical and Microbial Technology). 'You have to bring all

the relevant players together on one platform. With Capture we want to expand this kind of platform. All the relevant people in waste recycling can make their contribution, also from outside Ghent University.'

Various disciplines

Capture's predecessor was the consortium R2t – in full Resource Recovery Technology. It is mainly concerned with water purification. Steven De Meester (department of Biochemical and Microbial Technology): 'Capture will also carry out research and development into the recycling of gasses and plastics. At present the joint venture is still virtual, but we hope to be able to build a centre shortly on the new technology park Het Eilandje in the south of Ghent.'

'For the recycling of plastics in particular it's a huge advantage that we bring various disciplines together. In the past companies or authorities looked for someone specialised in one processing route. If they couldn't find someone, the project often ground to a halt. Capture brings together specialists from different disciplines so that a constructive solution can be found much more often.

Join in or be left behind

A research centre of this kind is very unusual in the present-day university world. Korneel Rabaey: 'Universities are organised by faculty, ▶



- ▶ also on a financial level. At Capture the resources of various faculties and research groups go into one pot. Capture sails alongside the existing structures. A lot of people realise that we need umbrella collaborative ventures. At Ghent University we have a great deal in-house, but not everything. And the same is true for other Belgian universities.'

'Multidisciplinary research groups like Capture are being set up throughout the world. If you aren't part of this development, you will quickly be left behind. For the themes water, chemistry, technology and biotechnology Ghent University has top experts in house. With Capture we aim to build on these to become a world player. The management of Ghent University gave a lot of support to our project at the start.'

Double win

Capture works closely together with industry. 'For them it's interesting to know what's in the pipeline. We need to develop solutions that are usable in practice.'

'People often think that environmental efforts cost money, but the opposite is true. For example, a company that reuses water, makes twice as much profit: it no longer has to buy fresh water and it doesn't have to pay for purification. We want to take advantage of win-win situations like this. Within one company, or because the waste from company x becomes the resource for company y.'

'Ultimately this is also beneficial for the local economy. As new technologies often give rise to new companies. And because we can keep industry here. A company that operates more sustainably locally won't be hit as hard by the stricter emission norms that are undoubtedly coming in the future.'

CAPTURE IN PRACTICE



PLASTIC

THE BETTER BEAMER

Steven De Meester: 'Plastic is a highly versatile product. It is used in domestic appliances, electronics, cars, cling film, etc. Unfortunately this versatility is also a disadvantage when it comes to mechanical recycling. There are so many different kinds of plastic, frequently also contaminated with other elements so that you can't throw everything in together. It contains too many impurities. That's why you can't just put everything in the blue PMD bag. Clean plastic bottles can easily be recycled into new bottles or other applications, such as fibres for carpets. But when other plastics are added, this can cause problems.'

Identifying flows

'With the Capture line *Solid Plastic Waste* together with the industry we are looking for plastic flows that are suitable for recycling. We are then developing innovative technology. This isn't easy: flow by flow all the pieces of the puzzle have to fit together correctly. There must be sufficient volume, you have to find a customer for the product, collection must be feasible. In fact, a European approach is needed so that everyone can collect in the same way.'

Design for recycling

'We also take a close look at the whole lifecycle of the plastic. A promising option is, for example, *Design for*



recycling: design the product so that it's easy to recycle later. An example is cling film that is now generally made up of three layers of different plastics. If you could make it with one layer, this would be a big step forwards.'

'Another example is polyurethane or 'pur', a thermoset that normally you can't melt. At Ghent University it is now being studied how pur can be modified to make it recyclable under certain conditions.'

Design from recycling

'Recently we were also successful with *Design from recycling*: we take a look at which compound we are dealing with exactly and then study how we can make optimum use of it. We have designed a beamer from plastic contaminated with aluminium that has *better* properties than non-contaminated plastic. The material

conducts slightly better, feels more solid and also looks more attractive!'

Pyrolysis

But at the end of the day there are lots of plastics that cannot be recycled, realises Steven De Meester. 'At present the rest is burnt. This produces energy, but the molecule is lost. A recent alternative that we are studying in depth is pyrolysis and gasification: heating at very high temperatures with no or a reduced oxygen supply. This technology has existed for a while, but is still not well established for plastic waste. The result of this pyrolysis is an oil that can be used as a fuel, for example in cars, or from which you can recycle certain components.'

Bottle becomes carpet

Steven De Meester: 'Plastic bottles can easily be recycled into new bottles. Did you know that we can also make fibres for carpets from them?'



CO₂ FROM GAS TO VINEGAR

Korneel Rabaey: 'We'll never be able to prevent CO₂ emission completely. So we need to convert CO₂ into something useful. At the moment this still costs a lot of money, particularly as chemicals from oil or biodiesel are still very cheap. But in the long term the costs of CO₂ emission will continue to increase and then it will probably be interesting to reuse CO₂.'

Vinegar

'CO₂ is the most oxidised molecule. It's an end product that contains no energy. To do something with it, we have to add energy. Compare it to a person: we eat sugar, for example, a very reduced molecule, and breathe in oxygen, a very oxidised molecule. We produce energy by oxidising the sugar with this oxygen. That's why a room full of people gets warm: we all produce about 80 watts of energy.'

'People need oxygen to produce energy, but some bacteria can use about everything. About five years ago we had succeeded in dissolving CO₂ in water in which bacteria live that can convert the CO₂ to acetic acid. The energy is obtained from electrical current that we put on the water.'



Possibilities

'The concept is still in its infancy, but the chemical possibilities are almost unlimited. Based on acetic acid you can also make lactic acid, for example, that can then be processed in other applications. And we work with electricity that is increasingly produced from sustainable sources. This is a big advantage if we want to keep our chemical industry here. As Flanders doesn't have any coal or oil.'



Organic antibiotics

Professor Korneel Rabaey: 'We have developed a fatty acid from bio-refinery waste. When we mix it in animal feed, it has a bactericidal effect.'



ALTERNATIVE TO ANTIBIOTICS

Korneel Rabaey: 'We've been purifying water for a hundred years and have achieved enormous successes. Now we must take the step to recycling as on a global level we're using more water than nature can produce. You can do your bit by using water efficiently, but that's not enough.'

'For example at Capture we are setting out guidelines to produce water that is fit for purpose. Not all the water has to be 100% purified, depending on what it's intended for: process water for industry, irrigation water for agriculture, etc. Up to 100% pure drinking water.'

Anti-antibiotics

'The waste products of this purification process can also be used. We recently developed a fatty acid from bio-refinery waste that can be mixed in animal feed. This natural acidification of the feed has a bactericidal effect. In this way we obtain an organic alternative to antibiotics, without the disadvantages.'

The toilet test

'The problem with recycling water is often psychological. We recently brewed a beer for a conference based on purified water that we called appropriately *From sewer to brewer*. All the scientists at that conference drank this beer without hesitation, but the man in the street? You have to fight against the *toilet to tap* feeling. Technically it's perfectly feasible to purify urine and the result will be even better than average drinking water. But there's a lot of resistance.'

Back to the dunes

'A few years ago together with a number of partners that included Ghent University the West-Flemish water company IWVA found a way to get around this. The drinking water is obtained from a nature reserve in the dunes. This was causing the ground water level to fall, with the result that the dunes started to silt up. Nature was badly damaged. Now the waste water is purified to a level that it could be used as drinking water, but instead we inject it back into the dunes. Double win: the psychological resistance is overcome and the natural balance of the dunes is restored.'



#UGent

Vdp@ThijsVandepoele

Every year I take a quick look at
the 1st bachelor student timetable, I just
can't leave my student time behind me.

#ugent#tears

ONGOING EVENTS



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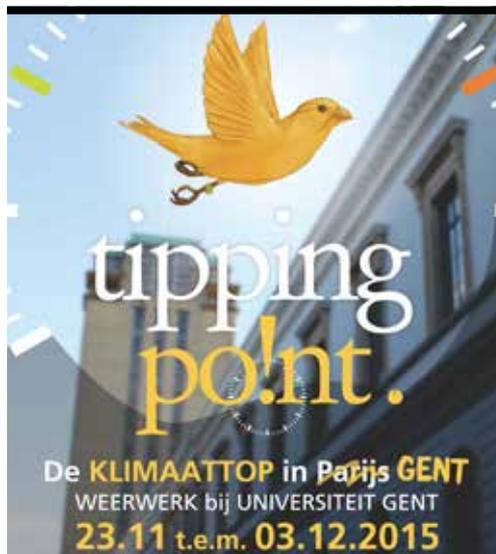
THE INNOVERSITY CHALLENGE

A platform that enables group work to be organised better, an app that puts students in contact with alumni from interesting business sectors, a digital classroom where students can take part interactively. These are only some of the ideas that can give education a real boost. With the Innoversity Challenge Ghent University is calling all students and personnel to share innovative ideas on digitisation in education.

The Innoversity Challenge consists of a number of rounds. Ideas can be submitted until 17 November 2015. Each idea is assessed by education experts for originality and feasibility, among other things. If you reach the next round, you get to receive professional coaching. At the end the three to five best ideas will be set up as pilot projects at Ghent University from the next academic year.

Those who submitted the winning projects will receive a letter of recommendation from the rector together with numerous other prizes. And for those ideas that (just) don't make it, there are lots of prizes too.

www.innoversity-challenge.be



CLIMATE SUMMIT – AT GHEENT UNIVERSITY TOO!

The Climate Conference in Paris (30 November – 11 December 2015) is very important. We urgently need a climate agreement that will help the world on its way towards a low-carbon, sustainable future. To emphasise the importance of the conference, Ghent University is bringing all kinds of activities and actions together into the total programme *Tipping Point. Weerwerk bij Universiteit Gent.*

So from 23 November to 3 December 2015 a climate journey is planned: at various locations artists and creative minds will challenge the audience with images, text or structures, in order to encourage reflection on a more sustainable future. Various professors are organising open lessons. A lot of former students of Ghent University are active in the Climate Express: they are trying to get as many people as possible to Paris for the big climate march (see also p. 20). A tip: special busses for staff from Ghent University are being laid on!

Take a look at the full programme at
<http://tippingpoint.UGent.be>



LOOKING SOUTH

Ghent University focuses on development cooperation

Ghent University has been working on cooperation with the South for a long time. What does this university development cooperation involve exactly? And why do we consider it so important?

There are many aspects of university development cooperation (UDC), according to dr. **Nancy Terryn**, research project coordinator of the ten-member Development Cooperation unit of Ghent University. 'We offer students from Flanders and the developing countries all kinds of scholarships and training initiatives: summer courses, internships, but also full-time courses and research work for a master's thesis or PhD. In addition, there are currently more than seventy Ghent University projects together with institutions from the South. The main focus of these projects is to develop independent research capacity there.'

Why is this important?

'A lot of the institutions are perfectly able to offer this kind of training, but don't have the experience to generate research output as well.'

So Ghent University wants to offer local academics extra development opportunities. Universities are strong levers for the social progress of a country.'

What does Ghent University hope to gain from this cooperation?

'It can encourage our academic personnel to take a different look at their subject area. And if our students gain an insight into global problems, this helps them to develop into real world citizens. And don't forget that the South has unique ecosystems and gives rise to all kinds of unique research questions. If you want to specialise in tropical agriculture or in the ebola virus, this is the only place you can study. We have also gained specific knowledge from our colonial past. It's vital that we retain this expertise.'

And don't forget the developing countries of today are often the emerging nations of tomorrow. Just take a look at Brazil, South Africa and China – they have developed into real world players in scientific research. They need well-trained researchers for their universities.'



***The world in
your hand***

Nancy Terryn: 'Insight into global problems helps our students develop into real world citizens.'

So university development cooperation doesn't just mean 'helping'?

'We set up equal partnerships that result in win-win situations. Over the past five years our UDC involvement has resulted in more than 2,500 co-publications with institutions from the South. That also has a positive effect on the number of PhD students at our university. And every year about 1,500 students from developing countries continue their education at Ghent University.'

Who decides where new projects will be set up?

'We obtain 95% of our project resources for development cooperation from the VLIR-UOS that is part

of the Flemish Interuniversity Council (VLIR). The VLIR-UOS itself depends on the Federal Ministry for Development Cooperation. Logically this determines the direction we take. In the first place we focus on the OESO/DAC list of least developed countries in Asia, Africa and Latin America. The emphasis is on about 20 states that are eligible for VLIR-UOS funding. Independently of this our policy is certainly not set in stone. New partnerships always develop from old ones, from the concrete areas of interest and the personal networks of our academics.'



Healing war traumas in Uganda

At the start of September Rector Anne De Paepe visited the Centre for Children in Vulnerable Situations in Lira, Uganda, and talked to Janeth, a former child soldier. Professor Ilse Derluyn (department of Social Work and Social Pedagogy, second from left) is coordinator of this centre that in a number of developing countries provides psychosocial support to young people with a traumatic war past.



8 SECTORS



Agriculture



Health



Environment and ecology



Education



General programme management



Infrastructure, industry and technology



Culture, communication and information



Government and civil society

72 ongoing VLIR-UOS projects with Ghent University as promoter

3 CONTINENTS



BUDGET



15 PARTNER COUNTRIES

16 Vietnam	5 Tanzania	1 Burundi
14 Ethiopia	5 South Africa	1 Ghana
7 DR Congo	4 Mozambique	1 Peru
7 Cuba	4 Uganda	1 Suriname
7 Ecuador	2 Kenya	1 the Philippines



Source: VLIR-UOS, 2015

What role does the Development Cooperation unit play in this?

'We take care of the logistical and administrative side of things. This enables the professors to concentrate on what they're good at – their specialist scientific work. It's also a misconception that cooperation with the South is only useful in areas like medicine and agriculture. Cooperation is certainly just as useful in say law, education or psychology. There are, for example, studies into the psychological problems of black policemen in South Africa and into psychological support for former child soldiers in North Uganda. Science has no borders.'

You also regularly take steps internally to promote UDC further.

'In September Ghent University launched internally another call to define a fourth priority region, in addition to the existing Africa, India and China Platforms. At the start of December our unit will explain to all the faculties exactly what we want to achieve with our university development cooperation. Students who want to prepare themselves for an internship abroad can attend the specific UCDC preparation days (University Centre for Development Cooperation).'

www.UGent.be/en/research/devcooperation
www.ucos.be



CASE 1 ETHIOPIA

The team of Professor **Jan Nyssen** (department of Geography) goes out to the Ethiopian Highlands regularly. 'Here we are studying the effects of various land management strategies on water, vegetation and soil erosion. Our team of Belgian and Ethiopian researchers is trying to reconstruct the effect people and the environment have had on one another over the past decades. To do so we are screening an impressive archive of historical photographs and aerial images. By measuring soil erosion and river flows, we aim to identify which agricultural strategies give the best results.'

Fighting erosion

Degraded river systems have enormous erosive power and can destroy large areas of land.

'The academic cooperation is in itself already valuable, but besides this our strong local anchoring has also resulted in tangible innovations. For example, the Selam-WatSani project has improved access to drinkable water for 50,000 people. To give another example, we have designed a new type of check dam to prevent ravine erosion by blocking water flows via soil tunnels with a geomembrane.'



Foto: Gilles-Maurice Die Schryver



CASE 2 SOUTH AFRICA

Social change

Ghent University is helping to support the Chumisa Primary School in Khayelitsha, the biggest township near Cape Town.

▶ In South Africa Professor **Stef Slembrouck** (Department of Linguistics) coordinated the project *Dynamics of Building a Better Society* (2003-2013), a collaborative venture with the University of the Western Cape (UWC). 'We thought the university community had a role to play as the facilitator of social change. We worked on five thematic project cores. Piece by piece this resulted in new research centres. Subjects tackled included poverty and participation in the democracy but, for example, also sport as a catalyst for devel-

opment. In addition, we carried out university-wide projects on student development and ICT infrastructure & digital inclusion.

The UWC, historically a disadvantaged black university, underwent a real transformation in this period: from an institute in financial difficulties to the top non-white university in the country. For me personally it was a privilege to be part of building the new South Africa. And I also got to know Ghent University much better as a result of the many excellent contacts with other departments and faculties.' ◀◀



FAIR TRADE @UGENT

Ghent University's commitment to the South is not limited to education and research. Where possible, in its purchasing policy Ghent University chooses products produced at the correct wage, in decent working conditions and in an ecologically responsible manner. For example, coffee and tea, fruit juice, wine, sugar, cocoa powder, fruit and chocolate bars are fair

trade, just like the cotton for a selection of hoodies at the Ghent University shop.

And it doesn't stop here. Ghent University developed a sustainable buyer's guide for frequently used products. Every year in the Week of the Fair Trade – in 2015 this was from 7 to 16 October – there are lots of fair promotions and events

on the programme. And soon Ghent University will be presenting for the second time the Ghent University Fair Trade Award to a department or office that has successfully organised a small-scale initiative. All these efforts are very visible: Ghent University was the first Belgian university to receive the Fair Trade Campus Award.



CYCLING FOR THE CLIMATE

At the end of November Heidi Degerickx (department of Social Work and Social Pedagogy) is cycling to Paris. There she wants to encourage the Climate Summit participants to put together a robust agreement.

A lot of people are calling this 'the last-chance summit'. Unless a global agreement is reached to limit the emission of greenhouse gasses, it will be almost impossible to prevent serious climate disruption.

On 29 November 2015 Climate Express, a campaign supported by many enthusiastic people at Ghent University, is organising a big climate march. They want as many people as possible to go to Paris. I had registered for the bike ride, but it was full up. But if I take care of accommodation and food myself, I can cycle along with them. Together with my husband

I'm going to go for it: 350 kilometres in five days, we should be able to do this, even on a second-hand tandem. Let's hope the weather keeps fine ...

I graduated from Ghent University in 2000 and during 13 years I worked on structural poverty reduction, side by side with people in poverty. A view expressed in the General Report on Poverty in 1994 was that poor people with first-hand knowledge of poverty should be able to participate in the policy. Since 2014 I've been working as an assistant at Ghent University. In my PhD research I ask whether this objective has been realised. Can poor people actually participate themselves and make themselves heard, or is their role mainly interpreted through professionals? And does this help combat poverty – or serve rather to "manage" poor people?

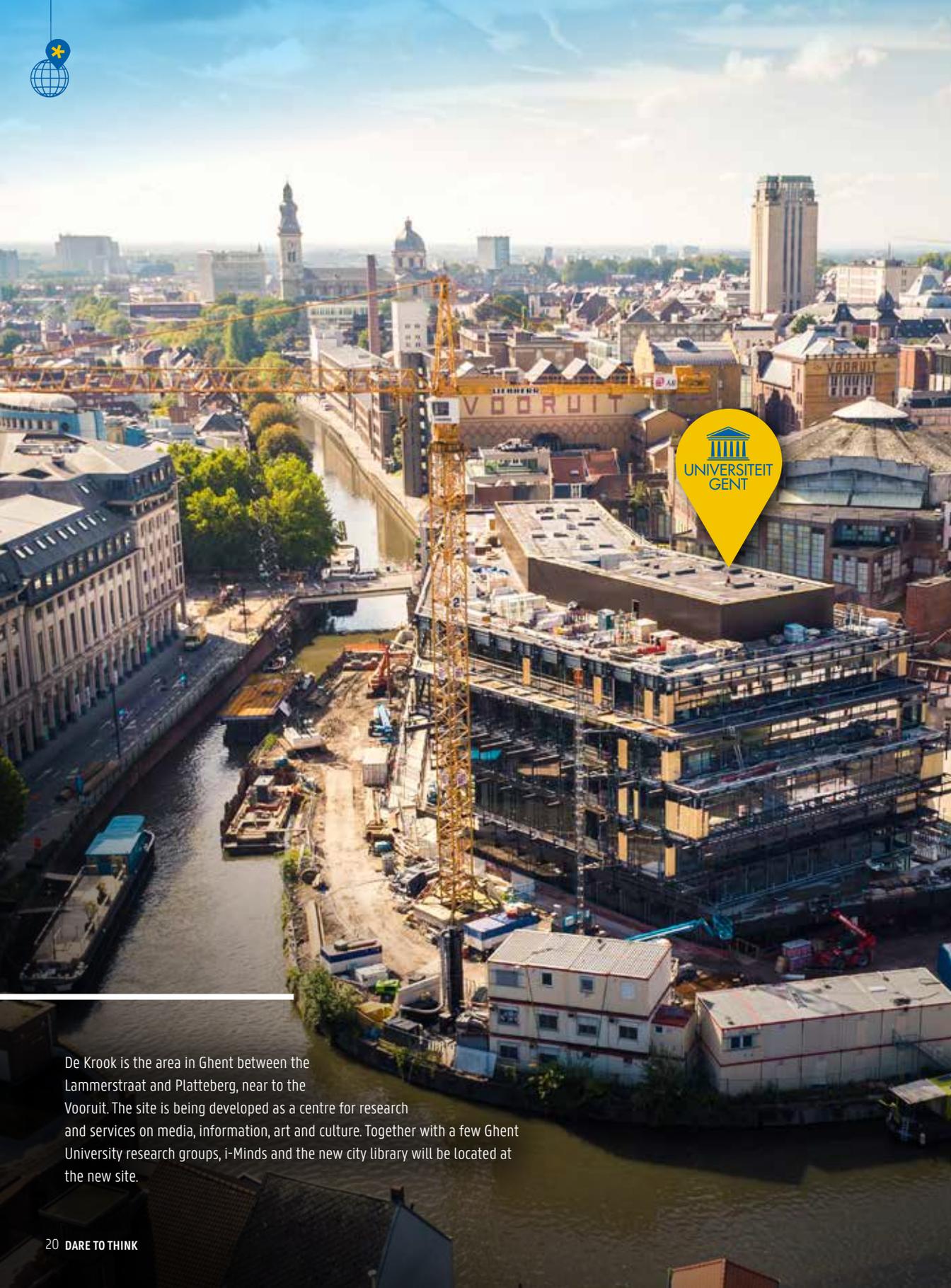
After almost 15 years working in the field I think it's useful to take the time for reflection. At the same time I continue to work actively against social injustice. It was my commitment to the citizen's movement *Hart boven Hard* that put me on the track of the bike ride. Global warming will increase social inequality even more and affect poor people the most. That's why I'm cycling to Paris.'

www.climate-express.be

Want to go to Paris on the bus? Register with the group code 'Ghent University to Paris' and we will sit on the same bus.

Any ideas for a fun activity on the bus or a presentation? Send an email to Janis.Baeten@UGent.be





De Krook is the area in Ghent between the Lammerstraat and Platteberg, near to the Vooruit. The site is being developed as a centre for research and services on media, information, art and culture. Together with a few Ghent University research groups, i-Minds and the new city library will be located at the new site.



OUR AMBITION: WORLD LEVEL

Cooperating at De Krook

De Krook will open in Ghent next year. A number of research groups from Ghent University will be moving there. Expectations are high: 'The site breathes multimedia'. ▶



Peter Lambert
Multimedia Lab



Lieven De Marez
Department of
Communication Sciences

▶ 'THE LATEST TECHNOLOGY'

'Multimedia Lab carries out research into new technologies for interactive (multi)media and digital information. It's an engineering discipline, but to improve our technical solutions, we also need to have a better understanding of how the user perceives them. That's why we often work together with research groups from the social sciences, for example.

Together with a number of these partners we want to develop a Smart Space for Interactive Experiences at De Krook. It will be a huge space of ten by ten metres and six metres high. It will be full of the latest technologies to study the interaction between users and digital environments. Video screens and very high-quality audio systems will be installed in the acoustically controlled space. We'll be able to monitor the users in detail: multi camera video analysis, eye tracking, motion capture – even registration of brain activity using EEG. In this way we'll be able to measure very accurately what a user does and feels during games, concerts, etc.

Worldwide there are only a handful of laboratories that approach the interaction between people and the digital environment in such a holistic way. So our ambition is to put De Krook on the world map.'

'1 PLUS 1 MAKES 3'

'Many parts of the Communication Sciences department will use De Krook for education and research projects. It really is a golden opportunity for students studying journalism, for example. The whole site will breathe digital and new media. Our students will use the production facilities – video cameras, editing rooms, studios – and creative coaching by the REC radio centre. A lot of young companies will move into the former Winter Circus, in the city library hundreds of people will pass it every day: here we are at the centre of our biotope.

Our research group MICT (Media and ICT) specialises in innovation research: What does the user think about new technology and new media and what is his or her experience of it? To do this we regularly work together with, for example, the Multimedia Lab engineers – but at present we don't *live* together. But at De Krook we will. This will give cooperation a big boost: 1 plus 1 will really make 3 here.

The Smart Space for Interactive Experiences is an additional asset. For example, we will be able to study in great detail what's going on in the users' brain while they are playing video games. What are the learning effects? What impact does it have on certain areas of the brain? What is it that gives a different 'experience'? With all this new technology and the stronger cooperation we'll be able to set up a unique knowledge centre for new media here.'



Kris Rutten
Research group Culture
and Education



Pieter-Jan Maes
IPEM (Institute for
Psychoacoustics and
Electronic Music)

'CULTURAL CHANGE'

'Our research group is linked to the department of Educational Science within the faculty of Psychology and Educational Sciences. One of our areas of study is the consequence of digitisation for culture production, reception and experience. How does digitisation change reading, looking and listening?'

At De Krook our aim is to set up interdisciplinary projects on games and digital and media literacy. In addition, we hope to enter into dialogue on changing practices in art. What new genres are there and what is the implication of these for contemporary culture education in the widest sense? What new competencies must the librarians, educators or teachers of the future have?'

De Krook will be a place where research and innovation on digitalisation are central. At the same time we will have the opportunity to reflect on this digital world in depth. We hope to initiate a dialogue between specialists from a variety of disciplines and in this way we also aim to stimulate the social debate.'

'A SPUR TO CREATIVITY'

'IPEM is the research institute for systematic musicology within the department of Art, Music and Theatre Sciences of Ghent University. We carry out experimental research into musical interaction and the role of movement in this. This involves the emotions that people feel with music, but also how you stimulate people to move with music and even make them walk faster or slower. Or how sound feedback can help recovering people coordinate their movements better. It's a very multidisciplinary research. The fact that we'll now be able to physically sit down together with many of our partners at De Krook will definitely promote cooperation.'

Personally I'm really looking forward to the possibilities that the Smart Space for Interactive Experiences will offer us. It will really be an environment in which you can immerse people so that you can approach and study the experience of a concert or festival, for example. But without all the disadvantages: Tomorrowland only lasts three days, at De Krook we won't be dependent on time and place. And the technology will be state of the art.'

So our research will advance by leaps and bounds. And I'm convinced that innovative ideas for art productions will also be generated in the lab. The combination of all these new technologies will stimulate creativity tremendously in the area of research, education and practical applications. The human sciences sometimes still have a stuffy image, but here we will have the opportunity to demonstrate that they can be truly innovative and dynamic.'





PASSIONATE

Ghent University sends out her daughters

AND COMMITTED

Women in top positions are still the exception rather than the rule. On the occasion of Women's Day, *Dare to Think* had a talk with two alumnae: Griet Nuytinck, founding mother of laboratory group Anacura, and Heidi De Pauw, general director and chief executive officer of Child Focus.



Griet Nuytinck

° 1952, Pharmacy (1975),
post graduate Clinical
Chemistry (1978)

Heidi De Pauw

° 1972, Criminology (1994),
post graduate Business
Administration (1996)

Equality self-evident

Griet Nuytinck: 'For me equality is self-evident. We must make sure that we don't lose what we have achieved.'

As a child did you know what you wanted to do later?

Heidi De Pauw: As a child I liked to watch series such as *Miami Vice* and *Chips*. An adult once said to me that perhaps I should study criminology later. I thought this was cool. Ultimately I did go on to study this subject and really enjoyed it. What I find so interesting about criminology is the

combination of legal with social-cultural!

Griet Nuytinck: 'It was really by chance that I enrolled to study Pharmacy. As a teenager I was interested in everything, in Latin and Greek and also in mathematics. I read in the journal *Natuur en Techniek* (Nature and Technology) that biochemistry was the science of the future, but this didn't exist as a subject you could study at the time. The student registration officer

recommended Pharmacy as a subject where you could learn about biology and chemistry (*laughs*). So that's what I studied and I've never had cause to complain.'

Did you live student life to the full?

Griet Nuytinck: 'Yes I did, though I never lived in student digs. I liked to combine going out with an activity of some kind. First playing sport together or making music and then going out for a drink, for example.'

Heidi De Pauw: 'I always lived at home. My parents were fairly strict, but I did enjoy student life. I loved going to lectures, particularly those of Professor Jacques Timperman. His lectures on legal medicine were a kind of *Body of Proof* before the term was coined. He always said that it's the detail that causes all the problems. A motto that I now always carry with me.'

Griet Nuytinck: 'I found the lectures on Pharmacy very exciting. Professor Prosper De Moerloose, for example, showed us how you can predict the effect on an illness or an organ using the chemical structure of a drug. A whole new world opened up to me.'



► **You currently both have top jobs.**

Were you always ambitious?

Griet Nuytinck: 'I prefer to be guided by my curiosity and my commitment. I really wanted to remain in the academic world, but during my PhD Jacques Parys – an acquaintance of mine – asked me to take over the management of his medical lab temporarily because he had been appointed mayor. I thought this would be an excellent opportunity to gain practical knowledge, but then Jacques was told that he had cancer. I couldn't let him and his family down, could I? As time went on I became attached to the employees and took over the lab. In the meantime it has developed into a company with 220 employees. We carry out laboratory analyses for patients, but also support research into

new medicines and new biomarkers to identify illnesses more quickly and to keep people healthy for longer. Fascinating!'

Heidi De Pauw: 'I wanted to work as a criminologist. In particular the theme of children as the victim of crime really interested me. My first job was with the Ministry of the Interior. I worked with drugs in the large discos. But when I heard that Child Focus had been set up, I seized the opportunity right away: this was what I really wanted to do. I started work there as a case manager. Pure pioneering work. We had to prove that Child Focus is not a watchdog, but a partner. Later I worked on projects at the Study and Prevention department of Child Focus. Because I was unable to progress my career further, after seven years I went to work for Eurochild, an organisation that fights against the social exclusion of children. But I missed working together with the police and justice system so I then became director of Pag-Asa that works with human trafficking victims. When they later asked me to become general director of Child Focus, I didn't have to think about it long. This was a dream come true.'

GHENT UNIVERSITY AS ROLE MODEL

The gender theme at Ghent University – the only Flemish university with a female rector – is visible in both the policy and research and in the lectures. Ghent University campaigns for equal participation and aims to improve the gender balance on the advisory councils and governing bodies – half of the Board of Governors is made up of women. Ghent University also creates a family-friendly work environment for men and women. The university ultimately has a pioneering role as coordinator of the interuniversity master Gender and Diversity.

www.UGent.be/en/ghentuniv/diversity-and-gender

Has the fact that you're a woman ever worked against you?

Heidi De Pauw: 'I've never come up against the glass ceiling – and if I did I would simply go through it (*laughs*). As a young woman I was sometimes given the advice to surround myself with "wise men". This kind of remark just motivates me to prove myself all the more. But I do notice that women are often underrepresented on company boards. But I'm not a lover of men/women statistics. I want my seat because I have added value, not because I'm a token female. But statistics of this kind can set things into motion.'

Griet Nuytinck: 'I make a deliberate point of ensuring that my teams are diverse, both with regard to gender and personality. For me equality is self-evident. Of course, I'm lucky that I was born in this time and in this place. So we must take care to ensure that we don't lose what we have achieved. I see very many talented wom-



Not a token female

Heidi De Pauw: 'I'm not so keen on gender quotas. I want my seat on a board because I have added value, not because I'm a token female.'

en who devote themselves completely to their family. I respect them, but this is not the path I've chosen.'

Heidi De Pauw: 'If you aim at a top position as a woman, you have to make choices. My daughter is at a boarding school. So she is being brought up partly by other people. The choice is not so urgent for men. They don't have to justify themselves so often in this respect.'

Do you have any advice for other women in top positions?

Griet Nuytinck: 'I think giving advice is a bit pretentious, but what works for me is to allow myself to be vulnerable. I know my strengths and my weaknesses

and I'm not afraid to admit them. I surround myself with people who can do what I can't, and value these qualities. This calls for the necessary self-confidence, something that women – wrongly – don't always have. What women are good at is building bridges, showing empathy. These are strengths that they should use to the full.'

Heidi De Pauw: 'My advice to all women is: don't be put off by prejudice. If you want to do something, go for it. If you choose your family, that's ok too. I respect the choice of other women and I hope that they also respect mine.'





Professor Johan Braeckman
department of Philosophy
and Moral Sciences

'It takes the soul out of the sport'

Top footballers earn more than CEOs. But this doesn't seem to cause as much outrage as the bonuses awarded to CEOs – I don't see any demonstrations about this and politicians don't lie awake at night worrying about it. Football entertains millions of viewers. It's difficult to demonstrate against the people you are supporting in the evening. For football fans who identify with their club, the players become a part of their identity. And probably a lot of people doubt whether CEOs contribute as much to operating results, whereas they can see that Kevin De Bruyne plays excellent football.

Those that do have a problem with it can put forward good arguments. No-one

should earn so much money from what is just a game. Footballers contribute a good deal less to quality of life than a nurse or a teacher, but they sometimes earn up to 1000 times more. Such extreme differences illustrate the growing income inequality that has serious social consequences. Moreover, most footballers don't know how to spend their fortune sensibly – they generally go out and buy expensive cars with it and don't worry about a return for society. Top salaries also cause a perverse dynamic: rich clubs get even richer and attract even better players. Footballers are becoming mercenaries, who are thinking about their next transfer even during the match: loyalty to the club and its supporters is becoming an empty concept and the sport is losing its soul.



Professor Johan Albrecht
department of
General Economics

'An example of superstar economics'

Why do top footballers earn so much? Because the big football clubs can pay such astronomical amounts. They earn a tremendous income from the worldwide sale of television rights – even in Asia millions of people watch the English Premier League. Clubs such as Barcelona or Chelsea are multinationals and world brands. This means that these clubs are attractive for sponsors, oil sheiks and Russian oligarchs who pump millions of euros into the clubs.

In 1981 the economist Sherwin Rosen called this phenomenon the *economics of superstars*. Technological innovations such as satellite television and internet reach a maximum number of people at minimum cost, so that icons – footballers, but also actors and musicians – can tap an unlimited market.

And because these superstars promise top quality, people from all over the world are prepared to pay for it. And in Flanders too people with a Belgacom or Telenet subscription would prefer to watch Manchester City play rather than Westerlo. Real supporters still go to the stadium, but they realise that their team cannot compete with the European level in financial and sporting terms. So they've had to adjust their expectations.

Have the top salaries reached a ceiling? Probably not. The super star economy will continue and bring in extra income sources. Top clubs are already starting, for example, with their own TV channels, on which subscribers can follow training sessions worldwide and can see interviews with the stars, etc.



You think on Facebook as well. Here are a few of the responses:



Steven Dobbelaere

I don't have a problem with it, a footballer is finished by the age of 32.... so why shouldn't he earn this kind of money while he can? It's a shame that other sports like athletics don't get as much.

28 September at 8:45



Joachim Faingnaert

There are possibilities to do something about it: abolish subsidies for football, force financially unhealthy clubs to stop, cut tax benefits for sponsoring football, close back doors for taxing football income abroad and a new tax on extremely high wages.

28 September at 23:46



Wim Naessens

They earn so much because we give them so much. Every time we buy a ticket to see them, buy merchandising or watch matches on TV we justify their wages. At least, that's true of the financially healthy clubs. So I'd rather the players who play the game well get the money than the club owners

28 September at 13:04



Wim Bruyneel

If you compare the wages with the total income of top managers and condense it to fifteen years, it comes to the same.

28 September at 7:22

**WATER RECYCLING IS POSSIBLE,
BUT IT COMES UP AGAINST
A PSYCHOLOGICAL THRESHOLD.
WHAT DO WE CALL IT?**



Read more about Capture, the unique material recycling platform at Ghent University, on page 7.



THEY DARE TO THINK

Ghent University stars at Virginia Tech

In August 2015 Eva Degraeuwe (first bachelor Medicine) and Robin Ramael (third bachelor IT) presented the life-saving application EVapp at the international business competition of Virginia Tech (VS). With it they won second prize.

EVAPP SAVES LIVES

Robin: 'Someone on the street has a heart attack. A passer-by presses the EVapp application on his smartphone. This tracks all registered medical volunteers in the area. By chance there's a paramedic at the baker's, who comes running over and starts resuscitation. Another volunteer uses EVapp to locate the nearest defibrillator.'

Eva: 'EVapp – *Emergency Volunteer Application* – was the idea of Medical student Steven Vercammen who gathered a large team around him: programmers, PR people, etc. EVapp won Ghent University's Durf Ondernemen Goes Global competition that led to participation in the Virginia Tech competition. There we had to give a 10-minute pitch, not only about EVapp itself, but we also had to speak about things like our business

plan. We had prepared this pitch in New York, with the support of Belcham, the Belgian American Chamber of Commerce.

Robin: 'This was a great help: in front of all kinds of people we were able to test out and improve our pitch and tailor it to an American public. And we got to meet experts who studied assistance after Hurricane Sandy. They were really enthusiastic about the possibilities of the EVapp concept.'

EVapp will be tested in the provinces West and East Flanders in spring 2016:

www.EVapp.org

ANSWER



THE *TOILET TO TAP* FEELING

Scroll back for the question

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