"La vie en RUB" sounds like a chanson – and is supposed to. The name is meant to be catchy, after all. Most importantly, the ephemeral flyer does in fact reflect "Life at RUB." It's been designed to help francophone exchange students find their way around RUB. "La vie en RUB" was devised in a language course at the RUB University Language Centre (ZFA).

Initially, what the 25 students attending the beginners' course (Az/Bz) did was polish their language skills. Some attempted to collect credit points for their optional modules. However, lecturer Sylvain Pousset wished to offer the course participants more than that. "Why shouldn't the students create something useful that has a practical application?" explains the Frenchman, who has been a lecturer at ZFA since March and had been a teacher there prior to that. After all, hundreds of international students arrive at RUB every year via exchange programmes such as ERASMUS or via university partnerships to attend degree programmes for the period of one or two semesters. They are assisted by the International Office. Every new francophone exchange student receives a copy as a matter of course. The first opportunity to distinguish the flyers was on 23-28 March 2015 resp. 14-19 September.

For six days, Valerie Brosch's life revolves around the Russian language. Cramming vocabulary, practising pronunciation and studying grammar – eight hours per day, at that. The 20-year-old student is preparing herself for her Russian Culture degree programme at RUB by attending LSI's intensive language course "Russisch Start-up." The course has just been launched for the first time.

The Russian start-up curriculum includes everyday situations and small-talk, as well as intercultural themes. The objective is to get the exchange student to feel at home in the space of less than a week. "How is that supposed to work? With a lot of fun in learning and a tight daily schedule with eight lesson units each, plus homework. With all this going on, it's easy to forget ever anything. I can barely remember the first day of the course," jokes Valerie. "That's just so much input every day."

The foundation of the Russian lessons is the Cyrillic alphabet. Learners of Russian know that behind quickly: "We had mastered the Russian alphabet after the first day and were able to introduce ourselves in Russian. It was fantastic!" says Valerie. In the following days, she and her three comrades-in-arms learned how to talk about university and jobs, about daily routine or about plans; how to talk on the phone or how to ask another person for information on specific subjects.

Authentic insight

The start-up course stands out even among the tightly scheduled LSI language courses. "The participants understand with the shortest space of time how the Russian language works, and they are given an authentic insight into Russian culture," says Leo Wiechmann (Head of the Institute des LSI-Russicum). The application-oriented concept is only one of the course's outstanding aspects. Each lesson unit begins by activating the previously learned material.

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VISIT FROM LATIN AMERICA

A delegation of eleven high-ranking officials from partner universities in Mexico, Chile and Argentina visited University Alliance Ruhr at the end of September. Organised by UA Ruhr’s Latin American liaison office in collaboration with the International Offices, the guests spent four days exploring the Ruhr region. After an introduction that took place at the Ruhr museum in Zollverein, the agenda for the following days included a tour through one of the three Ruhr universities each.

The guests learned about the respective campus and met up with interested colleagues from the faculties and the admin departments to exchange information and to network. They also visited lighting facilities such as DELTA (Dortmund Electron Accelerator), CENIDE (Center for Nanointegration Duisburg-Essen) and RUB Research School.

“We are impressed by the diversity and quality of the facilities, as well as by the friendly and frank welcome afforded to us by our colleagues at University Alliance Ruhr,” explained Prof. Diego Fernando Hernandez, Vice Rector at National University of Colombia in Bogotá. “We’ve developed many project ideas and collaboration opportunities, and we will be striving to turn them into practice in the upcoming months,” was Dr. Stephan Hillekens’s, Coordinator at the UA Ruhr Latin American office in Rio de Janeiro, positive conclusion.

NEW RESEARCH CENTRE

In mid-August, a new research centre opened its doors at RUB: Hans-Kilian-und-Ludwig-Köhler-Center für sozial und kulturell psychologie und historische anthropologie. It is integrated into the Chair of Social Theory and Social Psychology (Prof Dr Jürgen Strauß). The centre’s foundation date (15th August) is the birthday of its patroness, Dr. Lotte Köhler. The launch of the centre by Köhler Foundation was preceded by a lengthy run-up phase, which kicked off when the Hans Kilian Award for outstanding achievements was first presented in 2011. The award with a value of 80,000 Euros is international Hans Kilian lecture, short-term fellowships for guest researchers and the Hans Kilian archive constitute the new RUB centre’s main pillars. Moreover, K&C specialises in the full range of topics associated with interdisciplinary and internationally-oriented research and teaching. The dialogue with neighbouring disciplines such as sociology, ethnology, history and anthropology, education and philosophy is just as important as participation in interdisciplinary and international research fields such as critical psychology, cultural and postcolonial studies, gender and religious studies. Information: www.kilian-koehler-centrum.de

DUAL DEGREES

In 2015, DAAD will once again provide financial support for dual or joint degree programmes. The support range includes personnel and non-personal costs as well as grants for students who transfer from RUB to a partner university. Spon- sored degree programmes can expect up to 20,000 or 50,000 euros per sponsored year, depending on whether they apply for funds for a preparation and test phase. The current call will remain open until the end of January 2015.

In the last round, all six applications submitted by RUB were granted a sponsorship. Four degree courses were selected: start-up funding (“preparation phase”) for 2015 is now being implemented, and their concepts will be put into practice with the support of their partner universities. The aim is the launch of their programmes for students in 2015. Two other degree programmes were sponsored in their “test phase”, here, a sponsorship can be applied for directly (i.e. without taking the “testus” via the preparation phase), if the groundwork has been laid.

The Réunions Universitaires du Centre de l’Amérique Latine, housed in the container of the Centre de la Culture d’Amérique Latine at RUB (Photo: Christian Mühlheir)
Performing the song “Li Bu Kai Ni” (“I cannot leave you”), Buchs-born Simul- tage student Tobias Wilke was one of the winners of the 13th Chinese Bridge com- petition in Germany. He was invited to China for the global finals and to compete against 60 participants from 50 coun- tries. Together with last year’s German finalist, Niklas Donath (East Asian Stud- ies), he talks about his experiences with the competition and the Chinese culture with the RUBENS reporter Marlin Naasen.

Rubens: Tobias, tell us briefly: what is the purpose of that competition and what did the German finalists look like?

Tobias: The candidates have to pass three rounds: a conversation to assess their Chinese language skills, a round of questions regarding Chinese regional- ist studies, and an artistic performance. Subsequently, points are awarded by a ju- ry. The winners were invited to China for the global finals.

Rubens: How did you end up taking part in the competition?

Tobias: My language teacher Mi Liu drew my attention to it. She is very dedi- cated to helping her students participate in the competition and the Chinese culture.

Rubens: When were you in China, did you get the chance to explore the country as well, or did the competition keep you busy all the time?

Niklas: The schedule is very tight, but the competition is complemented by a fabulous cultural programme, which you experience together with your group. Our group, for example, went to Beijing and we visited the National Museum, the Great Wall, the Forbidden City and the Confucius Institu- tion. That was an exciting ex- perience.

Tobias: The two of you dropped out after the first competi- tion round. Were you given a reason?

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Tobias: I don’t really know what the ultimate reason was. It may have had something to do with television appeal.

That’s a vital aspect of the for- mat in China. But that’s what it was given as the official reason. Officially, I was told that I would be better at singing than at speaking Chinese (Tobias laughs). Well, I was awarded the special prize for out- standing performance, which is present- ed to only two participants in the entire Chinese Bridge competition. Therefore, I guess that my performance was not at all bad, even though I dropped out early.

Brazil wins this time

Rubens: But did you follow the entire competition?

Tobias: Of course, I checked online what was going on. I couldn’t stay in the country due to the fact that the organisers financed my return ticket. The winner was a candidate from Brazil. She did not only have the necessary television appeal, but actually speaks Chinese better than many natives. She truly deserved the title.

Rubens: Would you recommend the competition to others?

Niklas: Definitely. It is an experience worth having, because your language competence will improve. But I wouldn’t advise entering the competition before your 4th semester, because you have to be able to speak Chinese very well by the time the competition starts. If you’re in- terested in taking part, get in touch with Mi Liu or with Tobias and myself!

Rubens: What are you going to do next?

Niklas: I’m going to go for my spon- sored semester China this year, and will apply for a job at a company with Chinese background. Tobias: I think I’m going to take ad- vantage of my sponsorship as well as go to Beijing University. I am already look- ing forward to the experiences that await me there.

Rubens: Sounds like you have exciting times ahead of you. All I can do now is wish you the best of luck and a safe jour- ney! Thank you for the lovely interview!

TEN FAVOURITE SPOTS

Rubens reporter Marlin Naasen interviews Chinese Bridge competition tournament Tobias Wilke and Niklas Donath in the competition. If you win in the Ger- man finals, the organiser, namely the Confucius Institute in Beijing, awards you a scholarship for a Chinese uni-

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ROUNDTRIP TO CHINA

Two RUB students took part in a Chinese TV show

A GLIMPSE INTO THE 3D BRAIN

Novel technology: computer simulation of the hippocampus

People who wish to know how memory works are forced to take a glimpse into the brain. They can now do so without bloodshed: RUB researchers have developed a new method for creating 3D models of neuron-network brain structures.

The way neurons are interconnected in the brain is very compli- cated. This holds especially true for the cells of the hippocam- pus. It is one of the oldest brain regions and in form resembles a sea horse (hippocampus in Latin). The hippocampus enables us to navigate space securely and to form personal memories. So far, the anatomical knowledge of the networks inside the hip- pocampus and its connection to the rest of the brain has left scientists guessing which information arrived where and when.

Information become memories

Accordingly, Dr. Martin Pyka and his colleagues from the Mercator Research Group have developed a method which fa- cilitates the reconstruction of the brain’s anatomic data as a 3D model in the computer. This approach is quite unique, be- cause it enables automatic calculation of the neural intercon- nection on the basis of their position inside the space and their projection directions. Biologically feasible network structures can thus be generated more easily than it used to be the case with the method available to date. Deploying 3D models, the researchers use this technique to monitor how neural sig- nals spread throughout the network time-wise. They have, for example, found evidence that the hippocampus’ form and size could explain why neurons in those networks fire in certain frequencies. In future, this method may help us understand how animals, for example, combine various information to form memories within the hippocampus, in order to memo- rize food sources or dangers and to remember in certain situations. Jürgen Börm

MRG “STRUCTURE OF MEMORY”

In a joint project with the Mercator Foundation, Ruhr Uni- versity has set up the Mercator Neuristech Group (MNG) “Structure of Memory”. Experimental and theoretical neuro- scientists as well as philosophers make up the team, which has been studying epistemic and semantic memory processes and the way they relate to other cognitive func- tions since 2013.

INTERNET ADDICTION ON THE RISE

Internet addicts often suffer from con- comitant disorders, most frequently from depressive disorders, anxiety disorders and ADHD. PD Dr med. Bert te Wälder studies this phenomenon at the Ruhr Uni- versity’s WLI Clinic for Psychosomatic Medicine and Psychotherapy.

The researcher from Bochum has com- piled a so-called comorbidity profile of 23 internet addicts. Each patient presented at least one concomitant disorder. Together with his colleagues, Bert te Wälder examined 32 alcohol addicts for comparison. Their comorbidity profile was quite simi- lar. However, only every other patient in this cohort suffered from a concomitant disorder. “These results highlight the sig- nificance of comorbidity for Internet ad- diction,” says te Wälder. He also points out: “This is not a one-way street, the disorders interact.” In another study, he found evi- dence that in a number of patients inter- net addiction may be traced back to simi- lar personality structures.

According to estimates, 500,000 Ger- man and in the age bracket from 14 to 64 years suffer from Internet addiction, which most commonly takes the shape of online gaming addiction. The studies conducted by te Wälder’s team at the media outpatient clinic in Bochum sug- gest that many cases remain undetected. A detailed article can be found in the online magazine RUBINS, the RUB’S sci- ence magazine: http://rubin.rub.de/en/ human-web. Dr. Julia Weber

3D image of the hippocampus of a rat
NOT A GIRL’S DREAM
RUB hosts Nigerian researcher Dr Abiodun Gbenga-Ilori

In Nigeria, engineering disciplines were a male-dominated field for a long time. Consequently, when she was a girl Dr Abiodun Gbenga-Ilori did not dream of working in that field one day. She wanted to study medicine — a prestigious career choice among women in Nigeria. However, her tutor recognised her genuine potential in mathematics and physics. “It is very important that you choose something that will make you happy, because you will work in this profession for the rest of your life,” he advised her. Thus, Abiodun Gbenga-Ilori became one of the first women in Nigeria to study Electrical Engineering and Information Technology at Lagos University.

Abiodun Gbenga-Ilori has been a Georg Forster research fellow (a programme of the Alexander von Humboldt Foundation for researchers from developing countries) at RUB since September 2014. At the Faculty of Electrical Engineering and Information Technology, she takes advantage of the good conditions for her current research project; her host is Prof. Aydin Sezgin (Chair for Digital Communication Systems). “A developing country like Nigeria still lacks the facilities necessary for high-quality research. In my home country, it is still difficult to conduct good research work, and I am glad I can use the state-of-the-art equipment at Ruhr-University,” explains the Nigerian researcher. In Lagos, she is researching into device-to-device communication (new information box) and she wishes to gain new insights during her stay at RUB.

CULTURES IN CONTACT
International Catalan Scholars Convention at RUB

Between September 27 and 19, RUB hosted the international Congress for Catalan scholars “Cultures en contacto”. It attracted some 60 participants to Bochum, including numerous scientists from Spain, Italy, the UK, Mexico and other countries. They dedicated themselves to the Catalan language, which, with barely seven million speakers, is one of the smaller Romance languages.

It was not by accident that Bochum had been chosen to host the international congress; the Romance Seminar at RUB is one of the most active ones when it comes to Catalan studies in Germany. It offers lectures and seminars dealing with Catalan practice, linguistics, as well as literary and cultural studies on a regular basis. Moreover, RUB is one of the few universities in Germany where students can obtain the “additional qualification Catalan language and culture”. This was pointed out by the director of the Catalan cultural institute “Ramon Llull”, Dr Andreas Bosch, in his welcome speech. The fact that Catalan is fostered at RUB became also evident in Prof. Dr. Dehdashty’s welcoming talk. As an expert at the Faculty of Philology addressed the participants in Catalan.

Researching Investigating three phenomena occurring in contact languages, the literary section “The Catalans and Latin America” studied Latin America as an exile destination after the Spanish Civil War. The cultural section “Evolution, categories and tradition of knowledge in the Middle Ages and the Renaissance” looked into the transition from the Latin to the vernacular knowledge culture. The linguistic section “Contrastive phonology” compared Catalan and German, including translation problems.

The same subject matter was addressed in the plenary lecture held by Prof. Beatrice Schmidt (Basel University), who also showcased concrete translation examples that occur in practice. The opening and the closing speech traced connections between the Middle Ages and the present day: Prof. Nikolas Jaapert (Heidelberg University) presented ample textual and pictorial evidence to illustrate the diplomatic relations between the Crown of Aragon and Islamic countries in the Middle Ages. Catalan-Moroccan author Naji El-Hachmi used her own example to elaborate how low migrant children are between their native language (in her case Amazigh) and the language of their immigration country. The academic programme was complemented with cultural entertain-ment: the Brazilian Catalan comic “Ragner Pa Cav” presented for the first time in Europe the band “Rumba Espresso” (it combines Catalan lyrics with Latin-American rhythms) demonstrated that “the contact of cultures” produces fruitful when it comes to music. Isabel Milá

A different kind of interaction

After she received her grant, Abiodun Gbenga-Ilori scouted for the suitable host university. Ruhr-Universität was recommended to her by a colleague, who likewise conducted scientific work in Germany. The reason her talk enthusiastically about the support she’s experienced at RUB. The only things that’s still an obstacle in the language barrier, but she says: “Luckily, many people here speak English and everybody makes an effort to understand me.”

One cultural difference to her home country when she first came to Germany to work at the research center and the Bundfonds-Forschungs-Institut in Munich: “In Germany, workplace relationships remain quite formal. In Nigeria, relationships among colleagues are often much more personal, the people get to know each other and work become a second family”. After completing her research project in Germany, Dr. Gbenga-Ilori wants to return to Nigeria with her newly-gained insights and promote research in her home country.

About us

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In their analysis, the researchers studied 922 children with a birth weight between 600 and 2500 grams. The data were derived from the Bavarian Longitudinal Study. The study team had assessed maternal sensitivity via standardised observations of mother-child interactions at six ages. At six age, all children underwent a series of standardized tests assessing their mathematical, reading and writing competencies. The researchers compared the academic performance of children with a very low birth weight, i.e. less than 1500 grams, resp. low birth weight (1500 to 2499 grams), with the performance of children with a normal birth weight of at least 2500 grams.

The differential susceptibility model has an evolutionary background. “Even if all parents in one generation would raise their children in a completely wrong way, every individual child would develop differently, because some of them would not be affected by bad parenting,” says Dr Julia Jäkel. “This is what ensures the survival of our species.” Julia Jäkel

CATCHING UP, BUT NOT SHOOTING AHEAD
Low birth weight children are more vulnerable to environmental influences

Low birth weight children are more vulnerable to environmental influences than infants born with normal weight. When brought up with a great deal of sensitivity, they will be able to catch up in school, but on average they will not become better students than normal birth weight children. This result, provided by an international psychologist team, has confirmed the so-called diathesis-stress model of development for low birth weight populations. The researchers report their findings in the “Journal of Child Psychology and Psychiatry.”

Psychological theories assume that some children are more susceptible to environmental influences than others – regardless if these influences are positive or negative. Using the diathesis-stress model, the new differential susceptibility model assumes that children who are particularly susceptible will outperform less susceptible children under optimal environmental conditions, even though their increased susceptibility may be due to a risk factor such as difficult temperament. Together with colleagues from the UK and the USA, Dr Julia Jäkel from the work unit Psychological Research at the Ruhr-Universität analysed which of these two models best represents low birth weight children’s development.

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RESEARCH PROJECT

To satisfy the increasing demand for local traffic load and provide better user experience, device-to-device (D2D) communications have been proposed for fourth generation (4G) cellular communication technologies.

D2D communication in cellular networks is defined as direct communication between two mobile users without traversing the Base Station (BS). Traditionally, communication signals must go through the BS even if both parties are in the range for D2D communication. Mobile users in today’s cellular networks use high data rate services (e.g. video sharing, gaming, proximity aware social networking, etc.) in which they could potentially be in range for D2D communication. This helps to reduce the high demand on the BS. However, to obtain the potential in cellular networks for both operators and users, a lot of work has to be done in the area of interference management, because the overall cellular capacity and efficiency are degraded if interference is not well controlled.

Dr. Gbenga-Ilori’s research is based on interference management to ensure that D2D significantly improve network throughput and access rate without degrading the Quality of Service (QoS) for regular cellular users.