

Research

Sound check

by Maximilian G. Burkhart

Phonetician Jonathan Harrington uses technology to measure with scientific precision how individuals form and perceive sounds. The results suggest possible models of how languages evolve over time.

For the complete article, see www.en.lmu.de/news/insightlmu/2012/01_01.pdf



Does the Queen Speak Cockney? – Jonathan Harrington studies recordings of the Queen’s annual Christmas broadcasts to analyze sound shifts taking place in Standard English pronunciation.

Cultural sensitivity – a prescription for medical students

by Elizabeth Willoughby

A Nigerian walks into a German doctor’s office. The doctor looks at him and says, “How can I help you?” The Nigerian says, “Entschuldigung Sie bitte?” Not the start of a joke, this is an example of cultural stereotyping missteps played out in examining rooms everyday. IMECU has a solution.

[continued on page 2](#)

International networking in real time

by Clemens Grosse

Andreas Kaplony, Professor of Arabic and Islamic Studies at LMU, runs a web-class that allows scholars based all over the world to work together on the translation of Arabic texts – without having to leave home.

[continued on page 3](#)

What’s inside

Academics

| | |
|--|---|
| Cultural sensitivity – a prescription for medical students | 2 |
| International networking in real time | 3 |

Research

| | |
|---|---|
| Spirals of violence | 4 |
| Crafting catalysts for a greener future | |
| Calculating to capture the Cosmos | |
| “Social jetlag is a health risk” | |

People

| | |
|-------------------------------|---|
| Between reagents and regattas | 5 |
|-------------------------------|---|

In Short

| | |
|---|---|
| THE World Reputation Ranking 2012: LMU is the most highly reputed German university | 6 |
| LMU extends cooperation with UC Berkeley for a further five years | |
| LMU to receive funding from the “Pact for High-Quality Teaching” | |
| Crafoord Prize awarded to LMU Honorary Professor Reinhard Genzel | |

Between reagents and regattas

by David Lohmann

Water affects the behavior of many chemicals, and that of some chemists. After a busy day in the chemistry lab at LMU, Alexander and Florian launch their double scull on the regatta course in Oberschleißheim. Their aim is to qualify for next year’s European University Championships (EUC) in Poland.

[continued on page 5](#)



Cultural sensitivity – a prescription for medical students

by Elizabeth Willoughby

Intercultural doctor-patient contact is increasing across the globe in step with emigration patterns. Ethnic sensitivity training for doctors, however, has not developed in unison, relegating the learning of when cultural stereotyping is good and when it's bad to mistakes made on-the-job.

Born in Germany to an Iranian father and Italian mother, third-year medical student Neda Ghotbi says, "Coming from a multicultural background, you think you know how to interact with people from different countries, but I'm surprised how much prejudice there is."

When PROFIN, the program of the German Academic Exchange Office to promote integration of foreign students, called for proposals in 2009, LMU's Prof. Dr. Matthias Siebeck asked Fabian Jacobs to outline an examination of perspectives to broaden medical student sensibilities. PROFIN accepted Jacob's tender for funding, allowing him and fellow project manager Barbara Habermann to create IMECU, the "International Medical Culture" program at LMU.

Self-perpetuating

Considering medical students' study load, Jacobs and Habermann split the voluntary course into three parts. Module one, lasting one semester, is the most time intensive, but at only 10% theory and 90% participatory is a welcome break from lecture. Every other week during a two-hour seminar and two six-hour Saturday sessions, 20 foreign and German students meet to discuss and role play, drawing upon each other's cultural expertise.

It's through role play that most eureka moments occur; like that a German doctor could small talk with her patient, maybe about how he is enjoying his stay in this

foreign city, before she tells him he has prostate cancer. And she should not take it personally when the Saudi Arabian insists that she send in a more experienced male doctor to talk to him.

Besides immigrant patients, the number of doctors practicing in foreign lands is growing as well. According to a 2009 survey by the Robert Koch Institute, 12% of doctors practicing in Germany are not from Germany, adding another layer to the intercultural dynamic. The IMECU program addresses each perspective in turn, from that of international students and doctors in German settings to German students and doctors in foreign ones.

Listening to first hand experiences of a physician from Doctors Without Borders setting up a camp in Africa and the challenges his team faced, from determining the hospital structure to whether they would accept patients from outside the camp, becomes particularly meaningful once students are divided into groups and tasked with planning their own fictional camps in Uganda.

The other two legs of the course are without a schedule. To complete module two, a student must design his own event to address difficulties experienced by foreigners, and in module three integrate it into a future module one. It's an astute way to keep IMECU's content current and crucial. Although students completing all three modules will receive a certificate outlining what they've covered, they will not receive a credit for it. Nevertheless, stu-



Avoiding cultural stereotyping missteps played out in examining rooms everyday: it's through role play that most eureka moments occur.

dent response to the program has been overwhelmingly positive.

Designs on the future

"The original plan was to offer the course every other semester," says Habermann, "but then we received emails from more students to join the program, so we decided to offer it every term, and it's full. That's pretty good feedback. They are here because they want to be here and they take part actively."

Brazilian LMU medical student Tassia Lau Zinser was shocked by her treatment as a patient in Munich until she realized the issues were her own misunderstandings. She thinks other universities should take a cue from IMECU's course. Ghotbi agrees: "This program shines a light on topics that you wouldn't think about otherwise. You get real advice here, things that you will need professionally. It's not only something that is interesting, but a necessary and valuable program."

Jacobs is even more hopeful. In future, he'd like to see IMECU's topics become part of LMU's medical curriculum.

For more information, see:

www.imecu.med.uni-muenchen.de



International networking in real time

by Clemens Grosse

Andreas Kaplony, Professor of Arabic and Islamic Studies at LMU, runs a web class, a virtual classroom in which young scholars from far-flung parts of the globe work together on the translation and interpretation of poorly known historical texts in Arabic.



Connected over thousands of kilometers: Professor Kaplony and Federico Bruzone work together on the translation of documents from Al-Andalus.

"Ahmed is probably stuck in rush-hour traffic," remarks Professor Andreas Kaplony, when the Skype call to Egypt evokes no response. "We'll try again in a short while." In the meantime, Kaplony, Professor of Arabic and Islamic Studies at LMU, tries to get through to Federico in Argentina, who promptly checks in. Three further participants in the web class on "Documents from Al-Andalus" are closer to hand – ensconced in rooms elsewhere in the building that houses Kaplony's own office. Within a few minutes, all of them are linked up; only the connection to Cairo remains silent. But the course must go on.

Access to the international scientific community

On Kaplony's monitor is the text of a letter from the Emir of Granada to the King of Aragon during the period in which Andalusia was ruled by Muslims from North Africa. "All those taking the course should now have this screen-shot on their computer," he explains. And sure enough, one can now make out what looks like a multicolored scrawl on the screen. "That confirms that the link is up and running." The members of this web class use a specialized conference software with which computers that are thousands of kilometers apart can be connected to each other.

"Would anyone care to summarize where we were at the end of the last

session?" Kaplony asks. Federico

Bruzone chimes in to say that they had been discussing the characters used to indicate vowels in the letter. The forms that occur in the document are a distinctive feature of the Arabic script that was used in Islamic Andalus.

Bruzone has taken part in several web classes. Trained as a historian, he taught himself Arabic and is "really very, very good," as Kaplony readily acknowledges. Bruzone himself sees the class as a useful way for him to communicate and collaborate with scholars of Arabic worldwide. "There are no academic institutions in Argentina that work on the subject, so I would otherwise be forced to move to Europe or the United States in order to carry out research." And anyhow, engaging in dialogue with real experts is much more stimulating than learning on one's own from books, he adds. "I find the web class extremely inspiring and quite unique." In particular, Bruzone underlines the value of the dynamic learning process within the group, which has had up to 20 members. "In the beginning, things were a bit chaotic, but everything soon came together."

The goal of the web class is not just to nurture the ability to translate, interpret and query the texts themselves. The participants carry out fundamental research, which contributes directly to a better understanding of the history of Andalu-

sia during the period of Muslim rule. As Andreas Kaplony points out, "All the documents we work on have never been translated, have been inadequately translated or have been poorly edited." Integration of learning and research is one of his major concerns. This explains why the web class is so research-oriented. The texts and translations will be published, thus providing a new and valuable resource for modern Islamic Studies.

Focused on research

Apart from making a valuable contribution to research, the project is a compelling demonstration of how the concept of 'international networking', often merely a catchword, can be turned into something of real significance. The web class is an example of the rational pooling of globally distributed resources, bringing together, as it does, participants living in many different time zones, from Germany and Switzerland to the USA, Egypt and Uzbekistan, to discuss and resolve concrete scholarly problems. "It would otherwise be quite impossible to tap the potential of such talented people as Federico in Argentina." The web class could develop into a potent advertisement for LMU. And perhaps all the participants will finally meet – for real – at the next international research conference in Munich.

Translation: Paul Hardy



Forensic Psychiatry

**Spirals of violence**

Interview: Martin Thureau

Nature, nurture: Norbert Nedopil, Professor of Forensic Psychiatry at LMU Munich, is one of the most highly respected expert witnesses in Germany. His basic task is to uncover the roots of violent behavior.

For the complete article, see www.en.lmu.de/news/insightlmu/2012/01_02.pdf

Chemistry

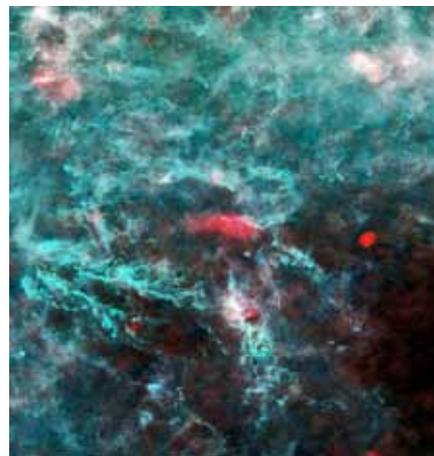
**Crafting catalysts for a greener future**

by Monika Gödde

Biologically degradable plastics: LMU chemist Sonja Herres-Pawlis is developing novel environmentally friendly catalysts designed to make the production of synthetic polymers more efficient and more economical.

For the complete article, see www.en.lmu.de/news/insightlmu/2012/01_03.pdf

Theoretical Physics

**Calculating to capture the Cosmos**

by Alexander Stirn

To understand the cosmic expansion set in train by the Big Bang is the ambitious goal of Viatcheslav Mukhanov, Professor of Theoretical Physics at LMU. He seeks to frame concepts that can explain how the Universe evolved, and illuminate the workings of black holes and dark energy.

For the complete article, see www.en.lmu.de/news/insightlmu/2012/01_04.pdf



Chronobiology

"Social jetlag is a health risk"

Interview: Kolja Kröger

Are you feeling tired? Perhaps you get up too early for your chronotype. As chronobiologist Till Roenneberg, an expert on biological clocks, points out, we all have an ideal sleep schedule. Unfortunately, the exigencies of modern life pay little heed to it.

For the complete article, see www.en.lmu.de/news/insightlmu/2012/01_05.pdf

Between reagents and regattas

by David Lohmann

Alexander and Florian are connected by a double bond. Not only do they work together in the chemistry laboratory at LMU Munich, they team up every day in a double scull for a training session on the Olympic regatta course in Oberschleißheim, north of Munich. The goal is to qualify for next year's European University Championchips (EUC) in Poznań in Poland.

With an ease born of long practice, Alexander and Florian pick up the boat, carry it to the regatta course and set it gently down on the chilly water. Taking their seats in the shell, they lean into the oars and with a few determined strokes disappear in the mist. "Of course, in winter it's not very inviting," Alexander admits, but that doesn't stop him from training with his partner Florian in their double scull on six days of every week.

Last year the two had their best result in competition so far, coming third in the B final at the 64th German University Championships in Bremen. For 2012 they have set their sights higher. "Next year we intend to represent LMU in the European University Championships," says Florian with quiet confidence. To help them qualify, they have a new boat and, from May on, they will train every day.

Connected by a double bond

Alexander André and Florian Rott grew up in Munich. They have been rowing together in double sculls since 2004, and have become virtually inseparable. But their packed training schedule, squeezed in between lectures and taking up much of the weekend, is no picnic. "It does place severe restrictions on our private lives," Alexander remarks.

And race days bring further trials, like coping with hunger. As the sculler-chemists point out: "One is not allowed

to eat for two hours before the first heat at 6 in the morning, and the final may not start until late in the evening. "After 100 meters, you feel drained of energy, says Alexander. On the final stretch, it is as if one is in a tunnel." Note that the average speed for the distance is a good 18 km/h and the oarsmen have their backs to the finish line.

A positive effect on their studies

But the effort involved does have its rewards. Both Florian and Alexander stress that their sporting activities have a positive effect on their studies. Rowing helps them to cope with mental pressure and to take stock of their laboratory work. "If I take a week's break from training, I am much less relaxed and find it more difficult to concentrate, even at home," says Florian. Most of their university teachers have no idea of their exhausting routine, although the scullers can count on support if they need time off to take part in competitions.

The thing that really irritates them is that rowing has so few fans. "The German Rowing Association, together with its counterpart in Britain, is the best in Europe." In spite of the high level of performance, very few people take an active interest in the sport. Only German Rowing League fixtures, on a fine day,



Florian Rott and Alexander André stress that their sporting activities have a positive effect on their studies.

draw significant numbers of spectators to cheer the competitors on.

Alexander and Florian also wonder why more young people do not take up the sport. "Talent helps, of course, but anyone who takes it seriously and persists can acquire a serviceable technique," they say. Of course, everything is a bit uncomfortable at first, slow and not so easy. But after a few training sessions, things come together and one can enjoy it – and working as a team can even become addictive. One major advantage is that there is little risk of injury. Indeed, Florian says it is almost impossible to get hurt – except in the gym perhaps, or a collision with another boat. "Nothing of that sort has ever happened to us."

Rowing has made Florian and Alexander fast friends. "You learn to rely on your partner in the boat," they both say. The pressure before a race is shared, and the duo can reach a higher level of performance than either could achieve alone, as each is determined not to disappoint the other. But as Florian cannily remarks: "The best thing about double sculling is that, if things do go wrong, there are always two to take the blame."

Translation: Paul Hardy

THE World Reputation Ranking 2012: LMU is the most highly reputed German university

In the latest edition of the World Reputation Ranking compiled by the Times Higher Education magazine, LMU has once again come out very well, improving its position by no less than six places in comparison with last year's showing. Now ranked in 42nd position, LMU is the leading German university in the table and, among continental European institutions, it is bested only by the ETH in Zurich, which is placed 22nd. The Reputation Ranking assesses universities on the basis of their perceived stature as teaching and research institutions, and is based on a survey of the considered opinions of eminent and experienced experts from all over the world.

www.timeshighereducation.co.uk/world-university-rankings

LMU extends cooperation with UC Berkeley for a further five years

Meeting in San Francisco, the President of LMU Munich Professor Bernd Huber and Professor Robert J. Birgeneau, the Chancellor of the University of California at Berkeley, have agreed to extend the existing cooperation arrangement between the two institutions, which has been in operation for the past five years. The agreement will now remain in force for a further five years, and continue to facilitate the exchange of graduate students, scholars and researchers, and promote collaborative research ventures. As before, the main emphasis in this academic partnership will be on the Humanities. Established scholars and junior researchers from both universities will formulate problems cooperatively and work together to solve them, as well

as organizing bilateral conferences and publishing their results in scholarly journals. In addition, LMU has set up a Visiting Professorship specifically for guest academics from Berkeley.

www.en.lmu.de/about_lmu/international_net/coop_excellent/berkeley

LMU to receive funding from the "Pact for High-Quality Teaching"

LMU has won a total of approximately 23 million euros in grants awarded by the "Pact for High-Quality Teaching." The program was set up by the German Government in June 2010 with the specific aim of improving the learning environment and the quality of teaching at third-level institutions. In all, about 2 billion euros will be provided for this purpose over the 10-year period up to 2020. LMU's action program (Lehre@LMU) includes projects that promise to have a broad and positive impact on the guidance and mentoring of students and on the overall quality of teaching. It will be funded until 2016 and focuses improvements in three major areas: (i) systematic integration of research-intensive and practice-oriented elements in the teaching of course content; (ii) guidance and counseling for students at critical transitional stages in their career paths, and (iii) continuing further education of staff to enable them to meet present and future challenges in a rapidly changing work environment.

Crafoord Prize awarded to LMU Honorary Professor Reinhard Genzel

The Crafoord Prize for Astronomy 2012 has been awarded to Professor Reinhard Genzel, Director of the Max Planck Institute for Extraterrestrial Physics, holder of an Honorary Professorship at LMU

and Professor of Physics at the University of California (UC) in Berkeley. Genzel shares the accolade, which is worth some 600,000 US dollars, with Dr. Andrea Ghez of UC in Los Angeles. The two prizewinners independently carried out detailed studies on the orbital motions of stars that are located close to the center of the Milky Way, and their observations provide the best evidence for the presence of a massive black hole at the heart of our galaxy. The annual Prize has been in existence since 1982, and is awarded by the Royal Swedish Academy of Sciences for outstanding achievements in disciplines that are not among those recognized by the Nobel Foundation. It is conferred in turn on astronomers and mathematicians, geoscientists and bioscientists (with particular emphasis on ecology and arthritis research).

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