



ECIU University:

The future of education

Pick & choose your challenge

Challenging conventional thinking

COLOPHON

ECIU is the leading international consortium of research intensive universities, with collective emphasis on innovation, creativity and societal impact, driving the development of a knowledge-based economy. (www.eciu.org)

ECIU Magazine is a publication of the ECIU PR Group and was created in collaboration with U-Today, the independent journalistic medium at the University of Twente.

Editorial team

This edition was created by Maaïke Platvoet (editor-in-chief at U-Today), Sandra Pool (editor at U-Today), Rik Visschedijk, Michaela Nesvarova, Rense Kuipers and Jelle Posthuma (editorial team of U-Today), Katrin Dirksen (Secretary General ECIU), Hinke Mulder (Strategic PR Manager of the University of Twente and Chair of the ECIU PR Group)

Coordinated by

Sandra Pool & Katrin Dirksen

Design and layout by

Marloes Jansink, Vanille Design (agency) (www.vanille.design)

Printed by

SMG Group (www.smg-groep.nl)

13 UNIVERSITIES

Aalborg University



Universitat Autònoma de Barcelona



Tampere University



Kaunas University of Technology



University of Twente



Tecnológico de Monterrey



University of Trento



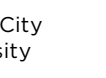
Linköping University



Dublin City University



University of Aveiro



University of Nottingham



Hamburg University of Technology



University of Stavanger



FOREWORD

THE DIGITAL UNIVERSITY

How do we make the most of technology, while safeguarding important human values in education? This question has been on my mind recently, as we keep making strides towards the digital university.

As modern universities, we have long since started digitizing our education. We are offering Massively Online Open Courses (MOOCs), flipping classrooms, blending digital and analogue learning methods, making exams digital and education more flexible. We have also created online platforms for cooperation and exploited the advantages of new technology together with the students.

Trying out digital tools in our study programmes has actually made us more aware of how valuable analogue face-to-face social situations really are. Important 21st century skills like literacy, critical and creative thinking, social and cultural awareness, and abilities to collaborate and communicate in diverse societies, are best developed through physical meetings and social interplay.

The digital university is not a place where the students spend most of their time alone in front of a computer. Quite the contrary, in this university the human component should be strengthened, developing new sustainable educational models, as well as increasing mobility of students and staff across borders.

We need to meet and work together in order to share both knowledge, skills and cultures.

In the end, maybe the most important question is what the students themselves think. The ECIU actually asked that question at a symposium in Brussels last November (see page 8). Students from almost all ECIU institutions workshopped the idea of what the “future fit university” could be in 2040. According to them, a change is needed in higher education. Teaching critical thinking, problem solving and citizenship, will be more important than delivering diplomas for specific degrees. Universities should be value driven, and lay the foundation for social sustainability.

Input like that will inform our joint policies for the future. In our application for the European Universities initiative from the European Commission, the ECIU emphasises co-creation with students, industry and society. We want to address challenges that the world is facing tomorrow, today.

As we digitize higher education using technology for the better, we will make sure that we “grow people” in the process. As one student put it: “It is not only about work and success; it is about your life as a person”. I may add: “To take part in developing a better digitized and analogue world”.

This magazine highlights some of our plans and visions for the university of the future. Enjoy reading.

Marit Boyesen,
Vice president ECIU
Rector University of Stavanger



7 THEMES


Science


Innovation


Entrepreneurship


Cooperation


Mobility


Education


Regional development

CONTENT

NOT A ‘ONE SIZE FITS ALL’

04 UNIVERSITY

COVER STORY 1/4

‘COMPANIES ARE EAGER

06 TO PARTICIPATE’

COVER STORY 2/4

‘YOUR VOICE WILL

08 BE HEARD’

COVER STORY 3/4

CHALLENGE-BASED

10 LEARNING

COVER STORY 4/4

EDUPARK WINS ECIU

13 TEAM AWARD

INFOGRAPHIC

14

‘ECIU MATTERS’

16

LET’S MEET... THE UNIVERSITY

18 OF TRENTO

ECIU RESEARCH MOBILITY FUND

20

OUTSIDE THE LECTURE HALL,

22 CREATHON

THE RUNIN PROJECT

24

MISSION UNSTOPPABLE

26

SUMMER SCHOOLS

28



Not a 'one size fits all' university

The world is changing and universities should be changing with it. That is the basic idea behind the ECIU's ambitious project, the 'ECIU University'. It's a joint university involving all ECIU members and offering a completely new type of education.

The ECIU University's type of education is open to everyone, including lifelong learners, and that is not focused on getting a diploma, but on solving real life challenges. 'I dream of a "NETFLIX" styled university, where you pay a fee and choose from all the courses available,' says Sander Lotze, Manager of International Affairs at the University of Twente and the 'ECIU University' project leader.

Where and why did the idea for the ECIU University originate?

Lotze: 'It originated in a board meeting held about a year ago in Kaunas. We were discussing the added value of enhanced collaboration and the future of education. We can see that there is an increased need for flexibility among students and an increased need for lifelong learning. Moreover, industry is asking for different skill sets than universities are currently delivering in their graduates. Society in general is dealing with larger and larger challenges. The generation of now is worrying about the problems of tomorrow. All in all, the world is changing. We asked ourselves: How can we react to it? And the typical ECIU answer is based on innovation and a close collaboration with regions and industry. We organized workshops with our stakeholders at every member

university. Together we co-created the idea for the future of education and ended up with the plan for a challenge-based ECIU University.'

What is a 'challenge-based' university?

'It is focused on getting solutions to big societal challenges. We are talking about challenge-based learning, research and innovation. We'd like to create an arena where people can set up challenges, a sort of a database where anyone - students, members of industry, government or citizens - can sign up and form teams. These teams would therefore include a diverse group of people with different expertise and background, all working on one challenge. Because of this diversity, the participants would naturally have different learning needs. Our goal is to deliver modular education. We don't want a "one size fits all" university, but an educational system based on building blocks that you put together yourself.'

Should this new type of education replace the current universities?

'The vision is not to replace the traditional universities. This should be an "add on" that can move to spaces which traditional universities have troubles

accessing. Such as lifelong learning, which is something that we still struggle to accommodate. We want to provide an environment where you go to help the world or a company to solve a real problem. That is a very different starting point from what we offer now. Now you know how your degree will look like. There is little freedom; in the ECIU University we are creating flexible learning pathways, learning that is mission driven. We also believe that this type of education could keep people bound to their home universities.'

When do you think this could become a reality?

'This is still a pilot phase. However, we are working on a challenge-based Master programme that could start in the next three years. Within this programme, you would still get a degree but not in a specific field. It would allow you move freely from one ECIU university to another during your studies. In the long run, we would also love to have one European challenge-based Master programme in a certain UN Sustainable Development Goal. If it comes to lifelong learners, the idea is to provide them with a competence passport, which - just like a regular passport - needs to be renewed after a certain amount of time. We believe this could already start in the next year. For the more distant future, I dream of a university where you pick and choose your challenge, where you are a life-long member of an educational environment, you contribute to solving relevant challenges and gain knowledge, skills and competences rather than a degree.'

'We want an educational system based on building blocks that you put together yourself'

Text

Michaela Nesvarova

Photo

Rikkert Harink

ECIU University

To start the 'ECIU University', the consortium has applied for funding under the call of the DG Education, Sports and Cultures (DG EAC) for European Universities. The plan for the ECIU University has been co-created with industry, public organisations, society, academics, future and current students at stakeholder events all over Europe. All 13 ECIU members have been involved in establishing this new joint university. If funded, the ECIU University project will kick-off in November 2019. The first phase of the project will last for three years, during which the concept will be developed further.

'Companies are eager to participate'

Text
Michaela Nesvarova
Illustrations
Vanille Design

The proposal for the ECIU University has been created in close collaboration with industry. 'We want to connect the industry's interests and challenges with our research and education,' says Màrius Martínez, Vicerector for International Relations at the UAB (Universitat Autònoma de Barcelona) and an active member of the 'ECIU University' project team.

How did companies react when you approached them for this particular project?

'They were very enthusiastic. Of course, ECIU members are already collaborating with industry, and so we approached companies from our existing network. The challenge was to involve them from the very beginning in a project that involves not only industry, but also public bodies and other stakeholders. We organized workshops to discuss key issues and the companies were very eager to participate. These included companies in the field of water resources, IT technology, chemical manufacturing and so on.'

What were the main points that the companies raised during these workshops?

'They focused on strengthening the collaboration with research in order to provide solutions to their challenges, whether that is management or manufacturing. They also expressed interest in training, such as industrial doctorates or short training opportunities in order to work on specific issues directly in the company. Overall, they wish to increase the knowledge transfer,

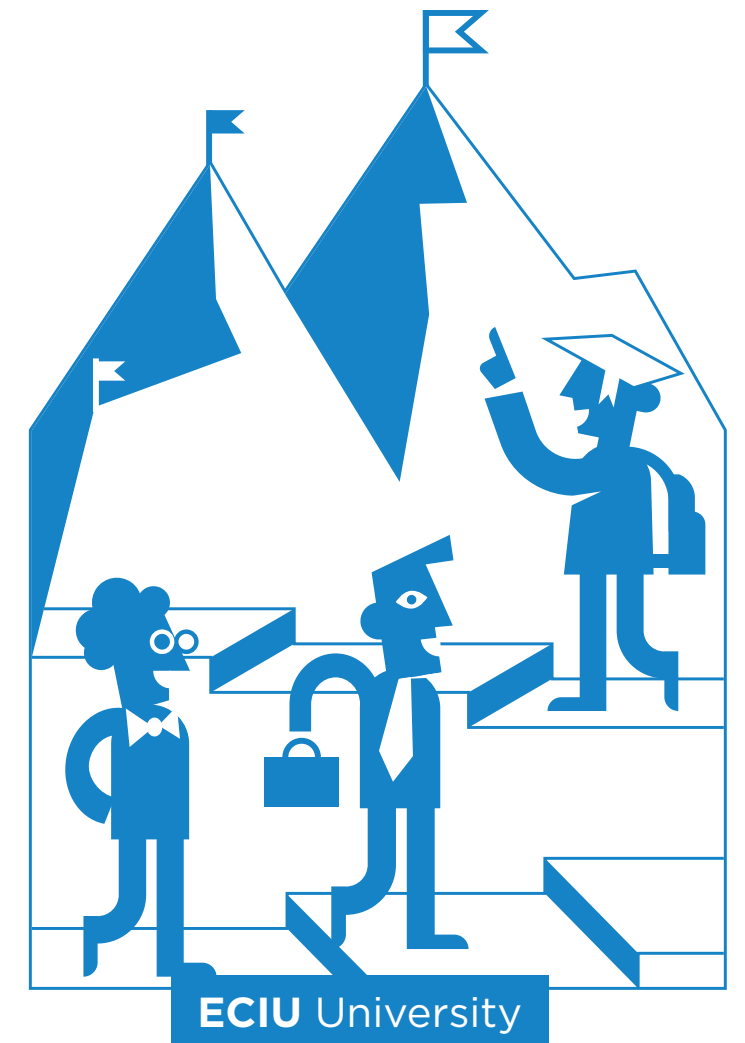
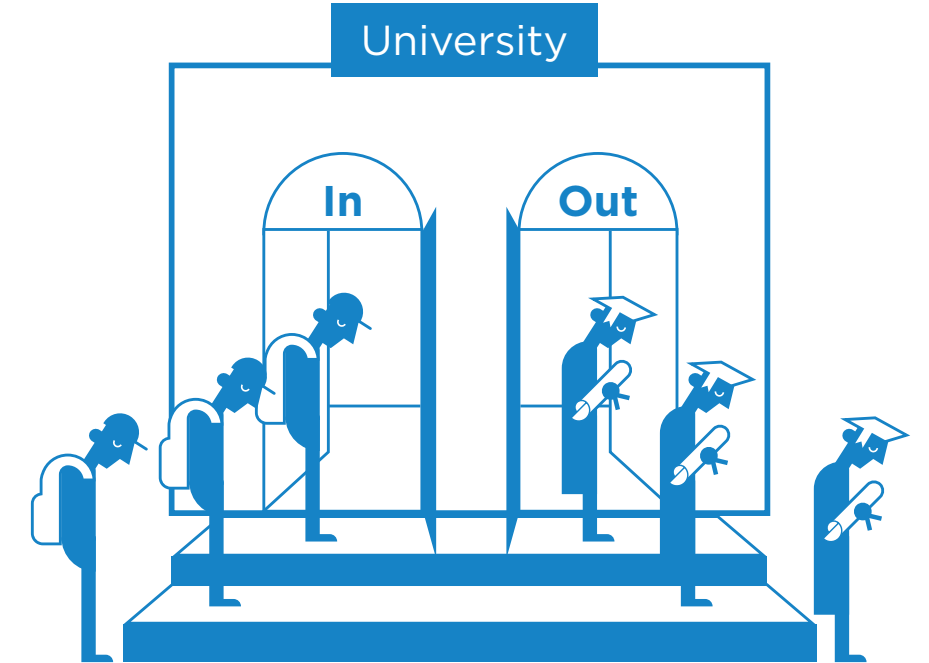
training opportunities and strengthen their links with the university. We were positively surprised by their reaction. The main issue is to find spaces where we can discuss common issues and find "win-win" scenarios.'

The ECIU University aims to bring an innovative form of education. How do the members of industry envision the future of universities?

'They would like to see more open opportunities for them and their employees. The traditional courses and curricula are often too long for their needs. They don't always need to acquire a Master degree, but only a fast training opportunity addressed to their daily or strategic needs. They would appreciate small capsules suited to their training needs. Overall, they are looking for universities that are more open to collaboration in research and knowledge transfer. We are doing relatively well in that regard, but the companies often don't know that. We haven't built enough bridges to make this open collaboration possible, with industries and with other stakeholders. That is the challenge for the future.'



Màrius Martínez



'Your voice will be heard'

ECIU organised for the very first time a discussion with students on the future of the university last November in Brussels. They held a brainstorming session with representatives of the European Commission entitled Future Fit Universities 2040.

Mark Brown, Director of the National Institute for Digital Learning at Dublin University, is Chair of the Steering Committee for Innovation in Teaching and Learning that initiated the event. 'This is the first time students have come together in a formal way. We always mention education and students in the same breath, but have never actually heard their voice. It's time we did so in a powerful network.'

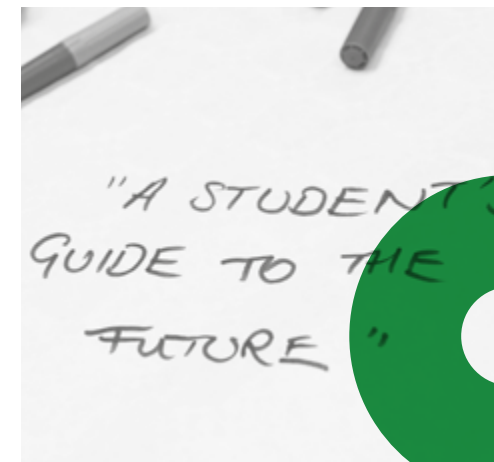
'The focus on 2040 is extremely important,' Brown continues. 'That's the year today's babies will graduate, if they've been lucky enough to be born into the right background that is. But what's the point of universities, if we have Google?

And will universities still exist? The fact is, demand for higher education grows faster than we can lay the bricks. That's why we are here. If you are not around the table, you are on the menu.'

Via a sort of musical chairs system, students and stakeholders discussed the questions in ten minute sessions per question. When the music stopped: change chairs! Among others Diana Paola (Monterrey), Una Ruzic (Stavanger) and Sverre Daniel Gaupås (Stavanger) occupied the 'How and what will students be learning' table. 'There will be more freedom of choice in what you'll learn,' said Diana. 'You will be able to take part in education anywhere in the world, so you'll also learn how to interact with other cultures.' Una: 'We'll probably move more towards online courses, but we'll never lose all our teachers.' Sverre: 'Certainly not. For example, think of receiving feedback. That comes from your fellow students as well as from your teacher.'

Text
Sandra Pool
Photos
Uli Schillebeeckx

After all the rounds, ECIU representatives Sarah Speight and Dag Husebø concluded the event. 'Everyone agreed that in 2040 there would still be a physical university with lecturers,' mentioned Sarah Speight. 'The main changes however will probably lie in student involvement. And that means you. You are our future leaders. The key thing is that the student voice must be included in the whole process.' Dag Husebø: 'Your voice will be heard and integrated in our thoughts.'



Five big question on the future of higher education:

- How and what will students be learning?
- What role do universities play in lifelong learning?
- How can students be involved in shaping universities?
- What is the role of universities in 2040? To produce workers or citizens?
- What will universities' business model be?



Challenge-based learning

Text
Rik Visschedijk
Infographic
Vanille Design

It is a ground-breaking and highly innovative educational model: challenge-based learning. The main idea is to get the outside world in the curriculum. ECIU University is completely built on this unique form of education. Linköping University can be seen as a pioneer.



Jan Axelsson

'Students tackle societal questions and problems, brought in by our partners and stakeholders,' says Jan Axelsson, Director of Valorization at Linköping University. 'Collaboration with society around us is a cornerstone of the success of our university. We link our education to the labour market. This way we strengthen the relevance of our research, and we put our knowledge directly back to society. It's a win-win situation.'

The educational model is relatively new, but Linköping university has over twenty years of experience with problem-based learning. 'Challenged-based learning is really a step up,' he says. 'We do more than accepting a problem from our partners. We ask them for challenges. To solve these challenges, our students have to work interdisciplinary. But also interprofessional, as we expect the people who handed in the challenges to stay involved. By doing this, we really raise the level of ambition.'

‘There is no set outcome for the project. We really have to tackle the unknown’

21st century skills

The model brings a whole new dynamic in the curriculum. 'With challenged-based learning there is no set outcome for the project,' Axelsson says. 'We really have to tackle the unknown. That means we value the exploration of the challenge, the decision making and the teamwork. These are 21st century skills. Today's students, especially in the engineering domain, need those skills. When a student leaves university, the societal challenges differ from those when the student started. So it's all about adapting to the circumstances. This pedagogical method offers students just that.'

The future graduates will bring much needed skills to an ever-changing society. Employers will benefit from their abilities in communication, creative thinking, work ethics, teamwork, networking, time management, flexibility, critical thinking and motivation. 'Up to now, the reactions from both students and our partners have been very positive,' Axelson says. 'It's the best thing I've ever done, is often the feedback from our students. Our partners are also happy with the outcomes. Moreover: they get the chance to scout talent, which they actually do.'

Competence development

Kristina Ukvalbergienė, Director of Academic Affairs at Kaunas University of Technology (KTU), shares the experience of challenge-based learning at Kaunas University of Technology. KTU provided the theoretical and practical concept for the challenge-based learning model of the ECIU University. 'Firstly at KTU, we started working with challenges at a smaller scale with the students at the Talent Academy,' 'During the challenge, business companies intensively cooperate with students for four months and mentor them in solving the challenge. The main objective of this initiative is to develop practical entrepreneurship and research competences through real life research or business cases.'

This year KTU launches a new educational study model of the curriculum that includes a product development project. 'Competence development approach will be at the heart of teaching practice,' 'Students will learn to generate ideas and develop products based on these ideas, and they will go through a cycle of creating innovations. Researchers and representatives of business and public sector will participate as mentors. (text continues on page 12)

Description

challenge-based

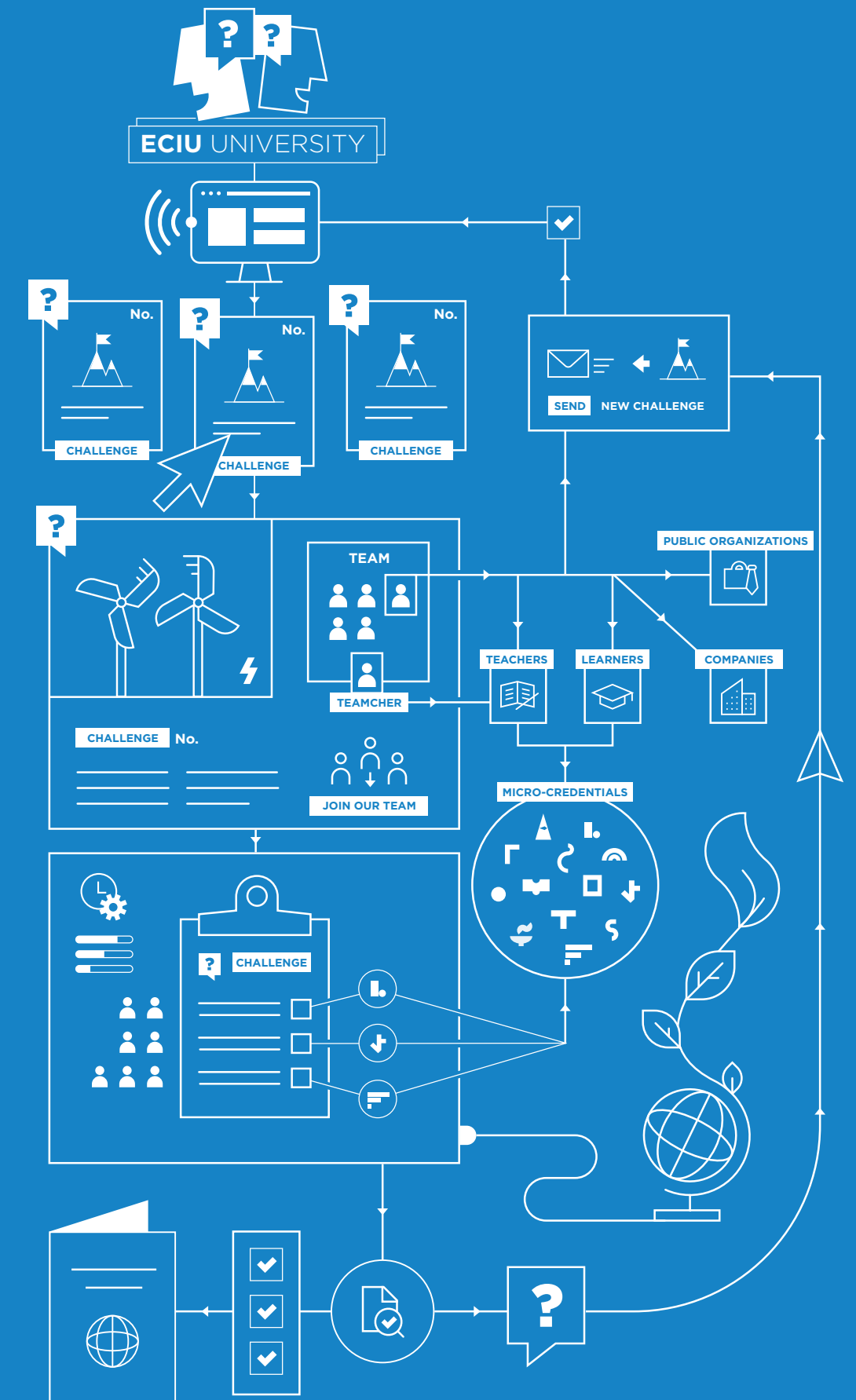
model

People all around Europe are asking to obtain relevant and state-of-the-art knowledge and skills in order to solve global challenges. Learners, researchers, industry and society can pose challenges on the ECIU University platform where challenges are listed according to the sustainable development goals of the United Nations.

The challenges will be worked out by teams in which learners and employees from industry and society will work together, supported by training teams of teamchers.

During the project, the team members notice that they lack certain skills to continue the project. Therefore, they take micro-credentials which are offered by all 13 ECIU universities. They can range from online courses to study packages at a university to summer schools to research projects.

After the successful completion, all learning will be documented in a European competence passport. Micro-credentials, as well as all skills obtained through the project are listed in the passport and can be renewed and complemented at any time. Every challenge ends with a specific outcome, which can be spin-offs, new research questions, new challenges and most importantly a better and more sustainable world.



The main aim of KTU educational model is to educate graduates as socially responsible members of civic society. 'Student develop competences of entrepreneurship and research in solving real and relevant business and research situations,' she explains the benefits. 'The participating organization can apply the latest knowledge and solutions, but also show their social responsibility through the education of talents. And we as a university can reveal the potential of talents, develop joint projects with business and research organizations and thereby integrate real cases in the study process. This way, we train specialists to meet the real-life market needs.'



Kristina Ukvalbergienė

Towards a European University

The ECIU is determined to change the way of delivering education from degree based to challenge-based. In the EU's European Universities call, the 13 members and partners proposed a concept focusing on exactly that: solving challenges provided by industry and society.

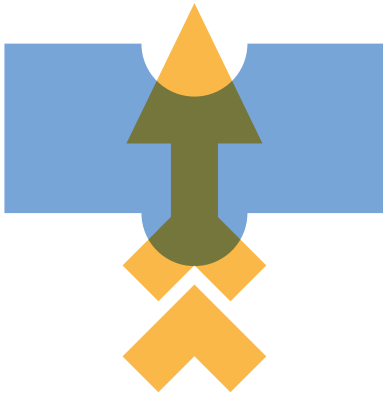
EduPARK wins ECIU Team Award

The EduPARK project has won the 2018 Award for Innovation in Teaching and Learning. Lúcia Pombo, the EduPARK coordinator from the University of Aveiro and researcher Margarida Marques received the prize at a special ceremony, held at Hamburg University of Technology last November.

EduPARK is an interactive application with augmented reality that includes four educational games, three of which are dedicated to teaching levels from primary school teaching to higher education plus one for tourists, in Portuguese and in English.

According to the jury, the EduPARK project (Mobile Learning, Augmented Reality and Geocaching in Science Education), which involves 15 researchers of the University of Aveiro, offers original and attractive inter-disciplinary learning strategies that bring together educational practice and mobile devices in green spaces in Aveiro city park.

The project had won the award because the team is composed of specialists from different academic fields who worked together in a multi-disciplinary setting, says the jury. And the integration of Augmented Reality in a day-to-day technology, like the smartphone, was considered to be very innovative. According to the jury report the project is a good example of how an everyday object can be used as an educational tool and, last but not least, the project is an excellent example of what the ECIU is all about: challenging conventional thinking in education.



The ECIU Team Award has the purpose of promoting, celebrating and disseminating innovative projects in teaching and learning developed by interdisciplinary groups. It is an initiative of the ECIU members, who share a commitment towards high quality educational practice and who seek to give visibility to exemplary, innovative pedagogical practice. Each ECIU university nominates one candidate for the Award.

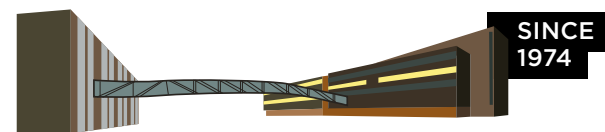


From left to right

Margarida Marques,
(researcher from EduPARK),

Lúcia Pombo,
(coordinator of EduPARK project)
both from the CIDTFF Research
Centre for Didactics and Technology
in Teacher Education,

And Artur Silva
(Vice-Rector Research, Innovation and
Doctoral School of the University of Aveiro).



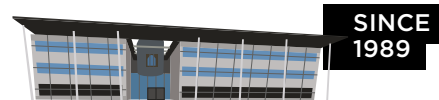
SINCE 1974

AALBORG UNIVERSITY

24.000 STUDENTS

5.000 STAFF

Ranked as the best European university for engineering.



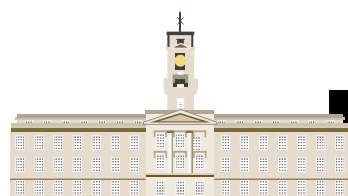
SINCE 1989

DUBLIN CITY UNIVERSITY

17.000 STUDENTS

3.000 STAFF

Ireland's University of Enterprise, leading for licensing and innovation partnerships with SMEs and multinational companies.



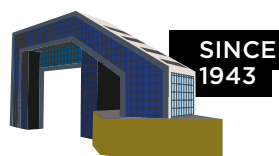
SINCE 1948

UNIVERSITY OF NOTTINGHAM

44.520 STUDENTS

8.293 STAFF

Has a £1.1bn economic impact on the UK every year.



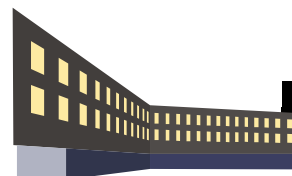
SINCE 1943

TECNOLÓGICO DE MONTERREY

89.641 STUDENTS

10.117 STAFF

Is in the Top 25 Undergraduate Schools (NO. 14) of the Princeton Review's Top Schools for Entrepreneurship Studies for 2018.



SINCE 2004

UNIVERSITY OF STAVANGER

12.000 STUDENTS

1.600 STAFF

Produces more business ideas per researcher than any other university in Norway.



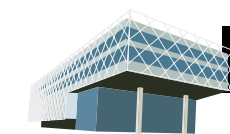
SINCE 1965

TAMPERE UNIVERSITY

19.000 STUDENTS

4.000 STAFF

From the beginning of 2019 Tampere University of Technology and University of Tampere constitute Finland's most diverse university community.



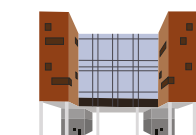
SINCE 1922

KAUNAS UNIVERSITY OF TECHNOLOGY

9.818 STUDENTS

2.112 STAFF

Return on Investment of business incubator Startup Space is 600 % - taxes paid by startups in 5 years exceed the investment of the KTU 6 times.



SINCE 1975

LINKÖPING UNIVERSITY

27.000 STUDENTS

4.000 STAFF

Produced the highest number of innovative spinouts in Sweden during the last decade.



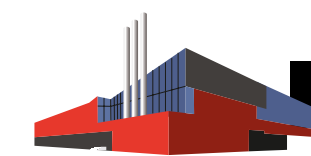
SINCE 1978

HAMBURG UNIVERSITY OF TECHNOLOGY

7.620 STUDENTS

708 STAFF

Offers one of the top 5 combined Management and Engineering study degree programs in Germany.



SINCE 1964

UNIVERSITY OF TWENTE

11.000 STUDENTS

2.950 STAFF

Europe's most entrepreneurial university with more than 700 spin-offs.

The 13 universities of ECIU

Infographic made by Marieke Abbink



Mexico, Monterrey



SINCE 1973

UNIVERSITY OF AVEIRO

15.000 STUDENTS

1.650 STAFF

Best practice by the National Strategic Reference Framework Observatory, for its close cooperation with the region.



SINCE 1968

UNIVERSITAT AUTÒNOMA DE BARCELONA

34.080 STUDENTS

10.314 STAFF

Led the UAB-CIE Sphere, comprising of scientific, technological and business parks, multinational companies, SMEs, foundations and city councils.

‘ECIU matters’

For more than a year now, Olga Wessels has been managing the ECIU office in Brussels. Ever since she was appointed, she has been pleasantly surprised by the great commitment of the involved universities to the consortium. ‘There is a lot of trust.’

It is not in the Belgian capital, but at U-Today’s editorial office that we speak with Wessels. Exactly one year after we first met in Brussels. ‘I then expressed the ambition that all of Brussels will know ECIU. Well,’ she says, ‘we worked really hard on that, and we matter now.’

This is partly the result of organising events and submitting so-called position papers. ‘It all contributes to our visibility. We wrote a paper on universities as a key to unlock Europe’s innovation powerhouse. And we shared ten criteria to maximise the impact of European Universities Networks. I noticed from the responses to them that our ideas were embraced.’ As the cherry on the cake, Jean-Eric Paquet, Director-General of the Research & Innovation directorate, dedicated one and a half hours of his time to talking with and about ECIU during one of our meetings in Brussels. ‘In the next few years, Paquet will be playing a key role in determining the European research agenda. An appointment like this proves that we are taken seriously in Europe.’

According to Wessels, the commitment of the member universities to ECIU is huge. She visited nearly all members over the past year. ‘That was very positive. There is a lot of trust in each other, and in me as well. I can see this

when, for example, we are writing a position paper. We receive a lot of input, and then I can put it into a paper without everyone having to read it and give an opinion. That is rather unique and really nice.’

In the coming year, a lot is going to happen in Europe. ‘Cooperation with other universities is essential to us. The approaching Brexit is of fundamental importance. We have to do something with that, as it turns everything upside down. The European Parliamentary elections are coming up, which could mean new parliamentarians and rebuilding a network.’ She continues: ‘The new commissioners will take up office in November 2019 and then it will be important to establish good contacts again. Finally, the European research and training programmes 2020 will expire. What is next then? We will be right on top of that as well.’

‘Whether the year has brought me what I expected it to? More than that. All these visits made it very intense, but it was so good to see that the commitment to ECIU is so great. I hope we will be able to keep it that way. And now I am off to the University of Trento in Italy, Dublin City University in Ireland, and to Monterrey, Mexico: the universities I have not visited so far.’

‘Whether the year has brought me what I expected it to? More than that!’

Text
Sandra Pool
Photo
Jean-Yves Limet



Contact details

Olga Wessels,
Head of ECIU Office
Brussels, Avenue de
Tervueren 35, 1040
Brussels, Belgium.
+32 483680182
olga.wessels@eciu.org

Let's meet... the

University of Trento

The University of Trento is the newest addition to the ECIU family. According to Trento's Vice-Rector for International Relations Maurizio Marchese, the Italian university shares the same traits as the other universities within ECIU: young, innovative and eager to collaborate.

Let's meet the University of Trento!

Marchese: 'We started in the sixties, as a faculty of social sciences. Soon after, we became a more generalised university in the seventies, when we also founded a faculty of science and a faculty of law. Then other faculties followed. Like other universities within ECIU, we're still relatively young. Nowadays, we are what you could call a more generalised university. We educate about sixteen thousand students and we are known as one of most innovative universities in Italy, especially when it comes to education.'

What are you looking for within the ECIU consortium?

'New possibilities to grow as a university. We have a strong attitude towards internationalization, with over 300 collaborations within Europe alone. We think these collaborations are important to strengthen our research network and to learn from other universities. In the case of ECIU, it helps that we share the same characteristics: we are young, relatively small-sized universities that offer a high quality in research and education. And I think we also face similar societal problems within our regions. If we strengthen our network, we could tackle those problems together.'

And what should other universities expect from you, if they are looking for collaboration?

'We are very eager to collaborate. As any other university, we are capable of making it on our own. But why should we, when we can work together? We believe internationalization is part of the answer. And as the University of Trento, we open our doors to suitable partners. They will quickly find we are strongly present in all modern research areas: cognitive and brain sciences, biology, physics, you name it.'

What are you hoping to get out of this collaboration?

'We hope that young entrepreneurs and young professionals will find fertile ground in Trento to develop themselves. One of our goals is therefore to also start more double degree and joint degree programmes and to strengthen our active collaborations. If we work together strategically, we can find solutions to both big and small problems. After all, that's what a strong network is for.'

Text
Rense Kuipers
Photo
Luisa Saviori

'We open our doors
to suitable partners'



'The old school way of visiting someone is great'

Text
Rense Kuipers

To Professor Esa Räsänen from Tampere University, visiting another scientist is the best way to boost a collaboration. In October 2018, he made use of the ECIU Research Mobility Fund and visited his colleague, Professor Philip Moriarty, at the University of Nottingham. As both scientists and avid musicians, they've started working together on researching the science of drumming.



What was the reason for your visit to Nottingham?

'I've got to know Professor Philip Moriarty three years ago, when he posted a YouTube video about the science of drumming. In that video, he was also praising our work in Tampere. Since then, we stayed in touch and I was planning to visit him in Nottingham.'

And you thought the ECIU Research Mobility Fund was the right tool for that?

'Indeed! The possibility was advertised at my university last year. And from a meeting in Brussels, I was already familiar with the ECIU network. To me, this looked like the most optimal tool to meet up with Philip. Applying to this fund was very straightforward and easy, by the way.'

How was your experience in Nottingham?

'It was one of my personal highlights of last year. I was there for one week in October. In such a short amount of time, we had to make it a very efficient week. Now, we have many ideas for joint publications on the science of music that are likely to get a lot of media attention.'

Sounds interesting, the physics of drumming...

'It is! One of our main findings was that an audience likes it when drummers make "mistakes". So, fractal fluctuations in the beats of musical rhythms make the music sound more "human". Now, we're taking that idea a bit further and are studying what happens in the brain someone is drumming. So, the question is: how does information travel from the brain to the hands? What's fascinating is that Nottingham has a very cool and "hands free" MRI tool – a sort of a hat that still allows you to

move around, and is able to measure the electronic pulses in the brain. While we in Tampere are strong in numerical and data analysis. That way, we can combine our respective strengths.'

So, 1+1=3?

'Exactly. I love the multidisciplinary approach.'

What are your plans for the future?

'We have already started to involve students in our project and we hope we can also start sending students to Nottingham. Vice versa, that's already happening, as the first group of students from Nottingham is visiting us in Tampere already in April. So there's a clear educational gain that we're working on. And we also hope that our collaboration leads to more joint publications. In the end, one week in October was a great start, which reminded me that the old school way of visiting someone is great.'

Eglė Butkevičienė

Vice-Dean for Research at the Faculty of Social Sciences, Humanities and Arts at Kaunas University of Technology, visited Tecnológico de Monterrey at the end of 2018.

'KTU's membership in ECIU is beneficial for every researcher of the University. It benefits our image and opens new opportunities to disseminate information,' says Butkevičienė. Her main focus of the visit to Monterrey was distance learning. 'During virtual lectures in Tecnológico de Monterrey, teachers are filmed in such a way that the students during the lecture can see them walking, showing the slides and communicating full size, naturally. I believe that this is technology of the future, which will be also available at KTU soon. This will definitely enhance students' involvement and study quality', says Butkevičienė. 'We are in a way fighting for students' attention – there is so much information around. Lectures have to be very attractive',

Ulla Saari

Postdoctoral Researcher from Tampere University in Finland, was a visiting researcher at the Technical University of Hamburg (TUHH) for six months.

'The mobility program provides a great opportunity to establish international contacts and build research networks,' says Saari. Together with Professor Christian Ringle and doctoral students at the TUHH, she has been working with the statistical software tool SmartPLS. Now, she would like to establish the software tool also at her home institution. 'The use of methods and software leads to co-operation in common research projects,' she says, referring to the mutual benefits from the ECIU Research MobilityFund.



Outside the lecture hall

A question, a quantity of data and lots of food and drinks

Ever heard of a Creathon? The University of Twente hosted the first ECIU Creathon. In this weekend event over a hundred people worked together to tackle various societal challenges in the respective regions of the participating ECIU member universities. Initiator Wilbert Pontenagel, project manager at Novel-T, explains the idea behind the ‘creative marathon’.

‘A Creathon is a further development of the hackathon concept that originated more ten years ago in America,’ Pontenagel says. ‘A hackathon is a meeting of “nerdy” people who can solve a problem for the business community. They get a question, a quantity of data and a lot of pizzas and cola. After the weekend, they present an answer to the question.’

‘In my view, the mechanism of a hackathon is very interesting and could also be used to develop solutions for more general challenges, for instance in the field of digitization, urbanization, climate change and sustainability. This is why we transformed hackathons into Creathons: creative marathons.

Smart cities

For the 2018 ECIU Creathon we took the development of smart cities and smart regions as a starting point and we invited ECIU member universities to discuss with their regional partners what

kind of challenges might be interesting to work on for a weekend.’ Participants of the first Creathon held last September came from Stavanger (Norway), Linköping (Sweden), Aalborg (Denmark), Hamburg (Germany) and several regions of the Netherlands.

‘We used the United Nations Sustainable Development Agenda as a guide. From these big goals, the participants defined local challenges. The event aimed to bring together international and multi-disciplinary teams to find out-of-the-box solutions to societal problems using data,’ says Pontenagel. ‘At least one expert from every participating city had to tag along. This expert could explain what the local situation looked like and must provide input at the request of the students, but they must not be the dominant actor. The student team needs to figure out that they miss certain knowledge and therefore need the help of an expert. That is a real academic skill at

the same time, the Creathon is not (yet) suitable for the educational curriculum, since we do not know what a participant will learn during a weekend’

InGenious

‘Creathons are extra-curricular events, which make it a flexible tool for student engagement, international collaboration and student exchange. If students do not receive ECTS credits for the creative marathon, they will not choose for this type of education for a long time – it is simply not affordable. Therefore, we developed an additional formula called InGenious. This program includes similar values as a Creathon, but at the same time provides a regular educational program. The new ECIU University, the university 4.0, is a wonderful environment to experiment with this form of education. I think the world has become so fast and dynamic that our traditional grading principles need to be reviewed and revalued. Creathons and InGenious projects can help us to learn about the possibilities to innovate higher education and lifelong learning principles.



Wilbert Pontenagel

Text
Jelle Posthuma
Photos
Enrico Bertolotti
Ivette Tamez

The winners: App for the most suitable kindergarten

Jungwon Seo (28, Master Computer Science, University of Stavanger): ‘One of the main reasons for me to participate in the Creathon was the location of the event. The Netherlands seems to be a startup hub, and therefore I wanted to visit the country. Although we won the competition, the experience of the Creathon was quite stressful. The main reason for this were the cultural differences. I am not an English native, which made the communication with other participants difficult. Moreover, in some countries it

is common to interrupt when someone else speaks and I am not used to that. What I realized, is that I should be prepared for these kinds of difficulties and make sure I know something about the cultural differences beforehand. ‘Our winning idea was about kindergartens, or day care. We wanted to improve the way young parents choose their kindergarten. During the Creathon our team realized that countries have different criteria of selection for a kindergarten. For example in my home country, South Korea, it is common that a bus delivers

the children back home after day care. But in most European countries the parents pick up their children. Still, the most important general requirement for selection is the location of the kindergarten. So we decided to make an application in which the users can put their home address and workplace and the way they are travelling. Furthermore, we gave an option to import other criteria, like religion or flexible working hours. This resulted in an app that showed the best route and the most suitable kindergarten on that route.’



The RUNIN Project

The world of universities, policies and regional practices

The project ‘Role of Universities in Innovation and Regional Development’ (RUNIN) aims to train PhD researchers on how universities contribute to innovation and economic growth in their regions. Two of them tell what they have found out so far.



Lisa Nieth

Host institution

University of Twente & Regio Twente

Secondment institutions

Universidade de Aveiro & Aalborg University

Topic of PhD research

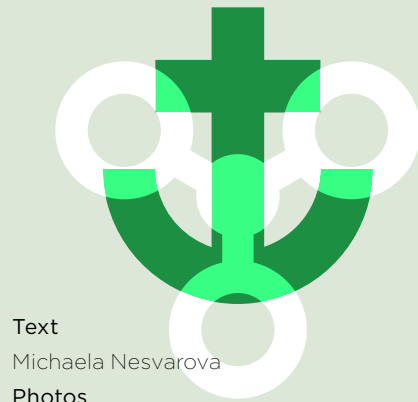
The role of universities in contributing to processes of economic development and innovative growth through their participation in regional partnerships as well as the design and implementation of development strategies.

As Lisa Nieth puts it, her doctoral research concentrates on ‘connecting

academia with the private and the public sector, three completely different worlds’. A topic she finds so important that it made her decide to leave her job at the German-Chilean Chamber of Commerce – and to study regional development full time. ‘Yes, my story is not the traditional PhD student story. I worked in Chile for several years after my Master studies. I moved back to Europe just for RUNIN. I wanted more theoretical knowledge on regional innovation and this program allows me to work not only at a university, but also in an applied setting, directly with the region.’

‘It is not taken into account how challenging it is for these partners to find a common strategy’

‘In my research I focus on how universities collaborate with regional stakeholders. I look at what the challenges of such partnerships are and how we can make it easier for them to work



Text

Michaela Nesvarova

Photos

RUNIN

together,’ says Nieth. ‘I have worked in Twente, Aveiro and in Northern Denmark, at Aalborg University. I’ve conducted interviews with stakeholders in all these regions to see what their goals and challenges are. I’d like to see how the individual universities perform and how they could become more effective in their contributions to their regions.’

Even though Nieth’s research is far from complete, she has already drawn some conclusions on how we can make regional collaboration more fruitful. ‘If it comes to European policies, it’s usually expected that the stakeholders – such as companies, universities, municipalities – come together and jointly define different strategies for the region. However, it is not taken into account how challenging it is for these partners to find common ground. They have different priorities, and so it’s difficult for them to just say “Oh yes, this is what we all want.”’

Lisa Nieth therefore believes it’s crucial for the regional stakeholders to first learn about each other. ‘They need to understand each other’s point of view and be open to compromises before they try to combine their knowledge into common long-term strategies,’ says the research fellow. ‘Innovation policy makers should take this more into account and possibly include an “in-between” step in the process, so that the partners can first get to know one another and understand the point of view of their counterparts.’



Liliana Fonseca

Host institution

Universidade de Aveiro

Secondment institutions

Universitat Autònoma de Barcelona & University of Twente

Topic of PhD research

The role and impact of universities’ participation and engagement in the design of regional innovation policies and strategies.

Liliana Fonseca is yet another ‘atypical PhD student’ within the project. ‘To tell you the truth, I didn’t even think of doing a PhD,’ she says. But once she learnt of RUNIN, she applied – because of her interest in regional development. ‘I didn’t know what RUNIN would bring me, but the network it offers is very helpful. You are so close to people in so many fields and countries. You have a big potential to grow and the intensity of the program makes us grow much faster than a regular PhD trajectory.’ Fonseca belongs to the same ‘working package’ as Lisa Nieth, which means that their research topics complement each other. Fonseca’s PhD work also focuses on ‘the world of universities, policies and regional practices’. She is exploring how universities interact with local and regional government in matters of innovation policy.

‘Are universities more involved in certain phases of the process? What is the extent of their engagement? And what are they actually bringing to the table that can benefit the policy process and regional innovation overall?’ Fonseca lists

some of the main questions addressed in her work. In order to provide answers, the doctoral candidate is conducting three case studies: one in Aveiro, one in Catalonia and one in Twente. Based on her first two studies (at Universidade de Aveiro and at Universitat Autònoma de Barcelona), she is able to share some preliminary results.

‘Aveiro is a comparatively less developed region and Universidade de Aveiro is the only university in the area. Because of that, it tends to take on a more prominent and interactive role when designing new policies together with the regional government – particularly in the formulation phase,’ says Fonseca. ‘Universitat Autònoma de Barcelona, on the other hand, is one of many universities in the region. There are at least seven other universities in Catalonia involved in policy making. Which is why the university doesn’t have the possibility of being directly involved in a new strategy, but can be more active in the implementation phase. Overall, you could say that in Aveiro the university has the role of a planner, while in Catalonia it is more a beneficiary.’

Fonseca hopes that her doctoral research helps us look at the role of universities in a slightly different light. ‘So far research has focused on the link between the university and industry, but there are many other aspects in which universities contribute to the regional development. When universities engage in the policy-process, they often emerge as mediators and they bring unique resources to the table. That is why it’s important to understand exactly what roles they can play, especially in different institutional or geographic contexts. I’d like to reflect on that in my work.’

‘In Aveiro the university has the role of a planner, while in Catalonia it is more of a beneficiary’

More about RUNIN:

RUNIN is a Marie Skłodowska-Curie Actions Innovative Training Network involving regional development agencies and seven universities, six of which are ECIU partner universities:

- University of Stavanger (coordinator)
- Aalborg University
- Linköping University
- Universitat Autònoma de Barcelona
- University of Aveiro
- University of Twente
- Lincoln University (not a member of ECIU)

It currently includes 14 PhD candidates, distributed across the seven participating institutes and all starting the final year of their doctoral research.

Mission Unstoppable

‘Sometimes you need to make a statement’

A 30-day biking journey from Denmark to Portugal: last year Martin Lehmann embarked on his ‘Mission Unstoppable’ to promote ECIU’s work on sustainability. Lehmann started his bike tour from Aalborg University, where he works as an associate professor of sustainable development and, after 3900 km long trip he arrived in Aveiro, Portugal.

Text
Jelle Posthuma
Photo
Martin Lehmann



What was the purpose of your tour?

‘To get from Aalborg to the final graduation ceremony of the JEMES CiSu programme (The Erasmus Mundus Master Course - Cities & Sustainability); it happened to take place in Aveiro. While the travel was one part of the tour, the main purposes were on the one hand to thank colleagues at ECIU institutions for the close collaboration we had had over the past 10 to 15 years, and on the other to seek out opportunities to continue our work on sustainable development. Hence the title, “Mission Unstoppable”. While our collaboration in the Erasmus Mundus Master Course would officially come to an end by December 2018, there is still a lot to do, a lot of opportunities to continue working together and a strong need for the approach that ECIU partners have.’

Why by bike?

‘The simple version is that I needed to get to the graduation in October anyway, because of the finalization of the cohort. However, I also wanted to make a statement about the ways of transport, which was the reason to combine the bike with an electric vehicle for support. We need to be more sustainable, and both cycling and EVs are everyday alternatives. To take your bike is of course extreme, but sometimes you need to make a statement and “walk the talk”. To realise sustainable transport modes, we need efforts on international, national and regional levels, but this is not an excuse to not start with yourself first.

How did it go?

‘I would say the bike tour had two distinct phases. The first two weeks, 1800 km from Denmark through northern Germany, the Netherlands, Belgium and then back to southern Germany, where I could focus mainly on cycling; and then the final two weeks, 2000 km through Switzerland, France, Spain and onwards to Portugal, where things were – shall we say – less simple. The first part of the tour, I was able to follow the original plan and travel with colleagues, graduates and students. They followed me in an electric vehicle and supported me on the route. After my stop in Freiburg in Germany, I had no one to drive the EV, and things thus became logistically quite difficult. From then on, I had to both drive the car myself, complete the average of 150 kilometers per day on my bike, and meet daily with colleagues, partners and stakeholders for a dialogue about future collaboration.’

Was it difficult?

‘I trained several months for this tour, so physically I was well-prepared. Mentally, however, especially the last two weeks were very challenging. You can compare the bike tour to our study programme, where one of our mantras is “embrace uncertainty”. I certainly had to do exactly that. You have a goal, and you need to figure out along the way what to do to succeed even if things do not exactly go your way. That is also what I did during my bike tour. I needed to make my decisions on the fly, reaching destinations while at the same time not foregoing on the promise of cycling 4000 km in a month, and ensuring new opportunities. Don’t get me wrong, though, I had a lot fun and a lot of great experiences; especially the social aspect was very inspiring with great dialogues and engagement along the way. It was a very distinct experience that will stay with me for quite some time.’

What did you learn along the way?

‘In my view, ECIU is like the “naughty” kid in the class. We do things differently and we are definitely not the “usual suspect”. That is what we need in today’s society. Too often, we look a lot to the same cities and same universities for solutions and inspiration, but this gives a very limited worldview. There may be fifty “usual suspects” – the Copenhagens, the Paris’, the Amsterdams – and five thousand unusual ones. We must embrace the full spectrum and that is where ECIU – and their city partners – come in with their innovative take on research, education, engagement, and collaboration. Together we are stronger, both on the education and research level. That is why ECIU is so important, showing that both the usual suspects – such as Barcelona and Hamburg – join up with the more unusual, small giants like Aalborg, Enschede, Aveiro and the other partners.’

‘To realise sustainable transport modes, we need efforts on international, national and regional levels’

Summer schools

Contact your International Office about free tickets and discounts for ECIU students!

Are you looking for an inspiring way to spend your summer? The ECIU Summer Schools offer you several high-quality courses to choose from. Go abroad, celebrate the summer and discover Mexico, Sweden, the Netherlands, Lithuania, Finland or Spain!

University of Twente, the Netherlands
CuriousU



Date
11 - 20 August
Fee

€750 regular price, tent accommodation included, valid until 10th June 2019
€875 after 10th June until 9th August 2019, tent accommodation included

What to expect?

The CuriousU experience is a one of a kind combination of a European summer school and a festival. Excellent academic courses, music, sports, theatre and inspirational speakers at one place. The broad range of courses that are given are based on the hottest research fields, which include Blockchain Tech, Water, Robotics and eSports Analytics.

Kaunas University of Technology, Lithuania
PhD Summer School



Date
26 - 30 August
Fee

Early bird and ECIU doctoral students €250
Regular €300. Participation fee is paid only when the registration is approved.

What to expect?

PhD Summer School provides the opportunity for intellectually curious doctoral students to explore new knowledge, to expand cultural awareness and to exchange experience. De PhD Summer School will: Equip participants with essential skills that are necessary in all fields of science, provide them valuable networking opportunity with participants from other countries and create and share friendly social environment in the historical town Trakai.

Tampere University, Finland
Tampere Summer School



Date
1 - 16 August
Fee

All courses are free of charge for degree and exchange students of Tampere Universities

What to expect?

Tampere Summer School offers inspiring courses covering various academic fields and up-to-date topics. Our course teachers are top professionals in their fields, and the courses employ multidisciplinary and experimental approaches. Tampere is a compact-sized active and vibrant city with a relaxed atmosphere, and the beautiful lake surroundings display the amazing Finnish nature at its best.

Tecnológico de Monterrey, Mexico
i Summer Mx



Date
1 July - 26 July (4 weeks on 4 different campuses in Mexico)
Fee

3600 USD for independent students
1600 USD for exchange students nominated by partner institution

What to expect?

Students will learn how to improve their skills as professionals. You can expect company visits, conferences with experts, workshops and trips. Attendees can choose between aeronautics, business or marketing.

Universitat Autònoma de Barcelona, Spain
UAB Barcelona Summer School



Date
Late June to early August 2019, two 3-week periods
Fee

€840 each course (6 ECTS)
€280 afternoon courses (2 ECTS)

What to expect?

Most courses are taught in English, with an option to learn and improve your Spanish as a foreign language. The 6 ECTS credits are transferable to your degree programme. The school provides a Buddy Programme: meet local students who can show you around Barcelona. Courses contain more than 15 subjects in a range of fields.

University of Stavanger, Norway
The Conductor's Week



Date
5 - 9 August
Fee
300 euro

What to expect?

The Conductor's Week is Norway's largest conducting course, hosting over 100 participants and a teaching staff of 15-20 acclaimed conductors and educators. The Conductor's Week is held at the Faculty of Performing Arts at the University of Stavanger, and located in Bjergsted Culture Park - the heart of Stavanger's cultural district.