

Press Release

For the good of society

Medicine and data science as future focuses

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Medicine and data science are top priorities for the ETH Zurich Executive Board. Initiatives such as the new Bachelor's degree course in medicine, new continuing education programmes or the return of the Cybathlon in 2020 demonstrate that ETH wants to use its knowledge more directly for the good of society. In addition to openness and internationalism, national roots are also necessary to ensure ETH Zurich's continued success.

In the middle of its first, four-year term, the ETH Zurich Executive Board today met with the press, reflected on the past two years and offered an insight into its strategic priorities for the years ahead.

Taking its national educational mandate seriously

In addition to its openness and international connections – recently highlighted by a first place in the THE rankings of the world's most international universities – Swiss roots are also of central importance for ETH. Lino Guzzella, President ETH Zurich: "For around 160 years, ETH has been the *Eidgenössische Technische Hochschule (Federal Institute of Technology)*, which reflects our national educational mandate. We take this very seriously, so it's no coincidence that 87% of our Bachelor's students are from Switzerland."

In his statements, Lino Guzzella emphasised the central role of data science, describing it as the "key to economic progress", and clarified ETH's leading role in the field of IT security: "Thanks to its expertise, ETH will make a key contribution to the successful implementation of the Federal Council's 'Digital Switzerland' strategy," said the ETH President.

Return of the Cybathlon in 2020

The ETH President describes the most moving moment of his tenure to date as the world-first Cybathlon in October 2016 in Kloten. And he's delighted to announce that this hugely successful event will be returning in the future: "The second Cybathlon will take place in the Zurich region in 2020, and will again be organised by ETH Zurich." This contest, in which people with disabilities compete against one another with the help of technological devices, is considered an important driver of innovative assistive technologies for everyday use.

The Cybathlon is an example of ETH's proximity to the field of medicine. Lino Guzzella explained: "Medicine is a top priority for ETH Zurich." Technology is also playing an increasingly important role in medicine: "Doctors increasingly require tools from the fields of natural science and data science – and the transfer and application of such knowledge is our core area of expertise." Which is why Guzzella believes it is important that ETH is offering its own Bachelor's degree course in medicine from September 2017.

Keeping pace with rapid developments

Rector Sarah Springman explained how ETH wants to educate students in the new Bachelor's degree course in medicine. "The prospects for medical diagnosis, prognosis and therapy are changing rapidly thanks to new developments in bioinformatics, molecular biosciences and imaging techniques," says Springman. She believes that ETH is already at the forefront of research and teaching in these disciplines, and that students will benefit from ETH's interdisciplinary approach in a well-established natural sciences programme. Springman is also convinced that the continuing education programme is growing in importance, in the light of rapid technological change: "In today's world, lifelong learning is essential in order to stay competitive on the employment market. ETH Zurich is making a contribution here, too; we view our commitment to continuing education as the transfer of research knowledge directly into the economy, government and society." In future, ETH's research focuses are to have a greater influence on the continuing education programme. As one example of this, Springman names the new Master's programmes Future Transport Systems and Mediation in Peace Processes.

Embedded researchers should understand doctors better

For Detlef Günther, Vice President Research and Corporate Relations, intrinsically motivated fundamental research is key: "It forms the basis for new scientific findings and is the foundation of the innovation upon which Switzerland so heavily relies." In the field of medicine, knowledge transfer is working well – according to Günther, around 20% of all patents and spin-offs from ETH Zurich have a possible medical application. He firmly believes that developments in the field of medicine are strongly driven by fundamental research and technology, hence ETH is set to play an increasingly important role in this area. "Natural and engineering sciences and medicine have different cultures and speak different languages. We need to work actively to bring these worlds together," says Günther. For example, "embedded researchers" or "embedded clinicians" are a possibility at ETH. That would mean that ETH researchers would be present in the clinic or operating room to gain a better understanding of doctors' processes and needs.

Flexible medical infrastructure

“Achieving the desired cooperation as regards content in the new strategic focus of medicine and health sciences will also require spatial cooperation,” explained Ulrich Weidmann, Vice President for Human Resources and Infrastructure, and presented two infrastructure projects that have been planned to address this need. The new BSS building in Basel promotes the efficient use of academic and infrastructural synergies, thanks to its proximity to the University of Basel. And the new GLC building on Zurich’s Gloriastrasse will enable ETH research groups to work more closely with colleagues at the University of Zurich, hospitals and industry representatives. For Weidmann, one thing is clear: “Both on the Hönggerberg campus with the masterplan and new special building regulations and in the large-scale academic project for Zurich’s central university district, spatial planning is the ideal tool to foster closer ties with the city, canton and general population.”

Sustainable financing through diversification

According to Robert Perich, Vice President for Finance and Controlling, a long-term plan is also essential for ETH Zurich’s financing. In the face of rising student numbers, increased international competition for the best talent and limited federal funding, it will become increasingly important for ETH to secure new sources of external financing. In addition to deploying donations wisely, Perich also explains that third-party funding often comes with higher indirect costs for ETH: “For it to be worth our while implementing an externally financed research project, it has to be an exceptional idea that’s in line with the university strategy and has a solid implementation plan.” Finally, he says, it’s about diversifying across different financial resources; however, a reasonable level of core funding from the government will be necessary in the future as well.

Further information

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