Impact Report 2021

Excellence Scholarships

Nurturing outstanding talent.
For business, science and society.

ETH Foundation

A strong community for excellent emerging talent

Rector Sarah M. Springman has been patron of the Excellence Scholarship & Opportunity Programme for the past seven years. Before handing over the reins to Günther Dissertori, she takes a look back.

The Excellence Scholarship & Opportunity Programme has always been a project close to Sarah Springman's heart. She appreciated being able to get to know the talented students and the donors too.

You are now in your final year as Rector, so this is also your final year as head of ETH's Excellence Scholarship & Opportunity Programme: where do you think we stand with the programme at the moment?
I am delighted that the programme is such a resounding success and that we were recently able to increase the number of scholarships. That was essential because of the rising number of students. ETH is very fortunate that it is able to afford a programme like this, thanks to the support from a growing community of donors.

Which of the scholarship students made a particular impression on you?
There are so many impressive individuals among them. Two who immediately spring to mind are Rosa Visscher, President of AVETH (Academic Association of Scientific Staff at ETH Zurich), who carefully guided her organisation through the first wave of the coronavirus, and Mauro Hermann, who is committed to combatting climate change and was part of an Arctic expedition.

Events such as Meet the Talent also bring you into contact with the programme's donors. What does this direct contact mean to you?
These events are a vital means of demonstrating to our supporters that we use their donations responsibly and that their contributions can make a big impact. It's also lovely to be able to meet them in person and engage with their individual stories and feedback.

From conversations, we know that there are many different factors that motivate people to support the Excellence Scholarships. You are a donor too – what is your motivation?
Giving back to the institution that has offered me so many opportunities. I also feel it's important to nurture the next generation of talent. We want our alumni to stimulate innovation and to be in a position to tackle and even solve our world's problems. What better way than to give the most talented individuals the opportunity to focus on exactly that?

For a talented young individual, being awarded an Excellence Scholarship represents a fantastic opportunity. In your view, what responsibilities are incumbent on the Excellence Scholars?
A responsibility towards themselves – discipline – and a responsibility towards society as a whole, in the spirit of citizenship. Since so many ESOP alumni actively support the programme financially, I take it as a sign that they are serious about walking the walk in terms of citizenship.

What are your hopes for the future of the programme?
I hope that it is possible to increase the number of scholarships. The need is there. And the economy, science and society depend on that next-generation excellence, because brilliant minds usually have brilliant ideas that can also be implemented.

Three questions for new rector Günther Dissertori

Learn more about Günther Dissertori:

From February 2022, one of your many new duties will include responsibility for ETH's Excellence Scholarship & Opportunity Programme. What are you most looking forward to?
I'm looking forward to my first Meet the Talent event. It will allow me to get to know the current Scholars and, above all, the donors who make this programme possible.

Have you already come across any Excellence Scholars? Perhaps the ones in the Department of Physics?
Yes, I've come across many Excellence Scholars in my capacity as director of studies and chair of the admissions committee in my department and have always been impressed by these young individuals' enthusiasm and abilities.

What is important to you, personally, as the future head of the programme?
We need to retain the programme's exceptionally high quality standard. I'm also very interested in keeping the active conversation with the students and donors going. And I would be particularly pleased if we were able to make further increases to the number of scholarships.

Select news and profiles

"Thank you so much for your support! It is enabling me to concentrate fully on my studies and achieve my full potential."

Václav Volhejn

Excellence Scholar 2020

Master's in computer science

Second place in a field of 350,000 students

This spring, Excellence Scholar Václav Volhejn from Czechia celebrated a fantastic achievement – second place in the TCS CodeVita programming competition, staged by Indian IT giant Tata Consultancy Services. The ninth running of the competition attracted record numbers of participants: more than 350,000 students from 98 countries signed up. The best 25 went head-to-head in the final.

"The great thing about programming competitions is that you usually get to travel somewhere interesting for the final," Václav explains. "I had hoped to fly to India, but sadly the pandemic put paid to that." Of course, the result was more important than the missed travel opportunity. "I was very nervous before they announced the results," recalls the Master's student. He had taken part in this competition before but had never made it to the final round. "My aim was to be in the top three this time and I was so relieved when I heard I'd made it!" The next major goal on Václav's list is to find the most interesting research topic in the field of machine learning for his Master's thesis.

On track for success: Anna Saur, running with her team.

Anna Saur

Excellence Scholar 2016

Master's in management, technology and economics

Fast-track career with internationally successful running shoe company

During her Master's degree, Anna Saur worked as a trainee at Swiss running shoe and clothing company On. This March, she was not only promoted to Head of the Sales & Operations Planning team but, in the same month, her Master's thesis, based on her work at On, was awarded the BME University Prize by the Association for Supply Chain Management, Procurement and Logistics.

Speaking of her success, Anna Saur commented, "Of course I was absolutely delighted about the BME University Prize! But it means far more to me that the program I wrote for my Master's thesis is now a core component of the supply planning process at On and supports the work of our team. It allows us to make processes simpler and increase product availability." Continuously improving processes will be crucial if On is to achieve its ambitious targets. At the same time, Anna Saur is improving her leadership skills: her team is growing, and the former Excellence Scholar is developing with it.

From primary healthcare to nanobots

Excellence Scholar Giulia Amos wants to use her fascination with technology to benefit human health. She is establishing herself in the field by gaining practical experience and seeking out role models.

Gaming your way through your traineeship? Giulia Amos is doing just that. For four months, she has been working in ETH's Sensory Motor Systems Lab, which focuses on our sensorimotor control and the interaction between humans and machines. Her research is part of a project led by Florian Haufe and Michele Xiloyannis. The problem that the two postdocs are looking to address is as follows: while rehab patients dutifully perform their exercises in the clinic, they often tend to neglect them once they return home. There are video games that are designed to motivate patients by providing a fun way in to the exercises, but these are frequently deemed too boring and players tend not to stick with them in the medium to long term. On the other hand, existing movement-based games with more engaging gameplay are not specifically tailored to physiotherapy and rehabilitation needs. The aim of the team in which Giulia works is to adapt fun games so that they can be played as therapy. The aim is for the games to be usable also in association with exercise robots, developed in the lab. As a result, Giulia Amos is testing a broad range of games to see which would be suitable for rehabilitation purposes. The team is in talks not just with physiotherapists but also with potential partners in the games industry. The Excellence Scholar explains that the businesses were interested in the idea of improving the accessibility of their games for people with physical disabilities. The first demo versions are planned for autumn.

Role model found

Her traineeship in the Sensory Motor Systems Lab is not her first: at the orthopaedics company Mathys, Giulia Amos learned what is involved in bringing an implant to market from scratch and what project management means in the field of medical technology. "My 'problem' is that I'm prone to enthusiasm and interested in a whole range of different areas. Traineeships have been hugely helpful as they have given me insight into different fields," explains the Excellence Scholar. The field of rehabilitation instantly appealed, but she is also fascinated by the use of microtechnology and nanotechnology in medicine. She is, therefore, yet to make up her mind about the topic of her Master's thesis. She speaks highly of the tutor for her thesis, Simone Schürle-Finke, ETH Professor of Responsive Bio-medical Systems – a role model not just as a result of her academic achievements but also because of her approachability and readiness to help. The fact that the professor also seems to manage to strike a balance between family and a career in research has not escaped the Excellence Scholar either. Giulia Amos is aiming for a doctorate at the very least.

A human focus

The 24-year-old is not the only one in her family with an interest in natural sciences: her identical twin sister Samira is also studying at ETH – for a Master's in science, technology and policy with a focus on environmental issues. The two sisters grew up in Schwerzen-bach in the canton of Zurich, and completed their schooling at the cantonal school in Uster. When Giulia Amos decided in 2016 to study health sciences and technology, it was the interdisciplinary nature of the programme and its human focus that appealed.

Asked about her longer-term aims, the talented young student points out the wide gulf between the highly developed medicine available in the industrial nations and the poor primary healthcare conditions found in other areas of the world. Giulia Amos's future plans therefore include being part of a project that makes good medical care accessible to more people. In autumn, she is heading to Nigeria, where she will spend three months carrying out research in the trauma ICU at the University of Benin Teaching Hospital.

Developing all-round excellence

Giulia was actually due to go abroad in 2020, but Covid put paid to the Excellence Scholar's plans. "I normally anticipate every eventuality. To have things not work out as intended and be forced to change my plans at the last minute was very unfamiliar ground for me." Sitting around twiddling her thumbs would not have been in Giulia Amos's nature. She ended up spending two months working in the Cantonal Pharmacy in Zurich, manufacturing hand sanitiser: "I was happy to be doing something useful during lockdown."

And what does she associate with the term "Excellence"?

"For me it's not just about academic knowledge. Aspects such as being a team player, taking responsibility and critical thinking are all part of it too. I want to develop in all of these areas, and the Excellence Scholarship is a wonderful support. I'm very grateful to have been awarded it."

The joy of giving back

From scholarship recipient to donor and champion of young talent: more and more Excellence Scholars are becoming supporters of the programme themselves shortly after completing their studies, perpetuating the encouragement they received. We present a few of those former Excellence Scholars here.

Andrei Poenaru

Romania, Computer Science

Since receiving the Excellence Scholarship in 2015 and earning my Master's degree
I have been working for Google in Zurich, currently as a Senior Software Engineer.

What I would still like to achieve is
to realise my entrepreneurial ambitions.

I donate to the programme because
ETH and the scholarship represented a terrific opportunity for me and I would like to see others receive that potentially life-changing chance as well.

Fabio Widmer

Switzerland, Mechanical Engineering

Since receiving the Excellence Scholarship in 2015 and earning my Master's degree
I have gone on to become a doctoral student at the Institute for Dynamic Systems and Control at ETH and am aiming to develop intelligent thermal energy management software for a prototype trolleybus.

I donate to the programme because
I would like to enable others to enjoy the experiences I had. The community of scholarship students was unbelievably valuable to me.

Denitsa Baykusheva

Bulgaria, Chemistry

Since receiving the Excellence Scholarship in 2012 and earning my Master's degree
I have completed a doctorate in the Laboratory of Physical Chemistry at ETH. I'm currently a postdoc in the Department of Physics at the University of Harvard.

I donate to the programme because
I was only able to study at ETH because of the scholarship. My time at ETH moulded me as a scientist and as a person. Today I'm a donor myself because I want to take the opportunity to give something back to ETH.

Redona Hafizi

Albania, Medicinal and Industrial Pharmaceutical Sciences

Since receiving the Excellence Scholarship in 2016 and earning my Master's degree
I've been studying for a doctorate in pharmacology at the University of Bern.

What I would still like to achieve is
to work in the pharmaceutical industry, at the interface between science and management.

I donate to the programme because
ETH gave me so much: a great environment in a new country and insight and experiences that are simply priceless. I'll never be able to repay the debt I owe my alma mater.

Mauro Salazar

Switzerland, Mechanical Engineering

Since receiving the Excellence Scholarship in 2012 and earning my Master's degree
I have completed a doctorate at ETH and spent a year as a postdoc in the Autonomous Systems Lab at Stanford University. In April 2020 I was appointed assistant professor at Eindhoven University of Technology.

What I would still like to achieve is
to contribute to a zero-emissions society through my research into intelligent mobility systems. On the teaching side, I not only want to pass on "state-of-the-art" knowledge to prospective engineers but teach them about human values too.

I donate to the programme because
I am aware how important it is for ETH to attract and support talented and creative students.

Tamara Eicher

Switzerland, Pharmaceutical Sciences

Since receiving the Excellence Scholarship in 2014 and earning my Master's degree
I have worked in a pharmacy. Today I am employed as a scientific officer for sterile production in the Cantonal Pharmacy in Zurich.

What I would still like to achieve is
a leading position in the pharmaceutical industry.

I donate to the programme because
I was very glad for the support during my own studies. Because I completed my education at a later age, I had to cover my own living expenses.

Philanthropy across borders and generations

ETH alumnus Eric Winkler has lived and worked in various locations around the world. He has always retained his ties to ETH – which has led to an unusual family commitment.

You and your family support ETH's Excellence Scholarship programme. Why?
Life makes us part of a cycle: we receive, we achieve and we pass on the baton. I feel grateful to ETH, as my alma mater, and to Switzerland. In my family, we agreed that we would like to give something back to society. That's why we support talented individuals, who have the potential to achieve exceptional things for the benefit of us all.

How did your family come to support Excellence Scholar Janine Wetter?
It was our younger daughter Louisa who suggested, during a family council, that our family philanthropy should pay more attention to the problem of climate change. We looked at three proposals from scholarship recipients whose studies focus on climate issues. We felt that Janine's research into the effects of climate change on the polar regions was particularly promising.

What memories do you have of your time at ETH?
The thing that's really stayed with me is the energy my lecturers seemed to have. They were so inspiring. The only place I ever witnessed anything similar was at Stanford. I have particularly fond memories of my first lecture series, "Analysis 1", given by Professor Peter Henrici in the Audimax. His clarity of thought was impressive. Back then at ETH, all the teaching staff were male and they taught with a certain wit or, as the professor for classical theoretical physics used to say, "cum grano salis". I owe my two best mathematical jokes – which I still tell to this day – to the Professor of Numerical Analysis, Eduard Stiefel. My father would have liked to study at ETH, but the family didn't have the money.

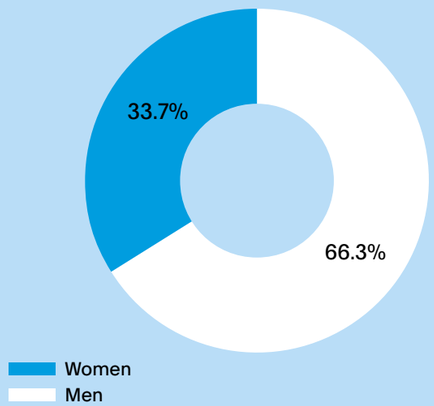
How do you look back on the past two years that your family has been supporting a Master's degree student during her academic journey?
It's been delightful! A thought-provoking dialogue developed between us and gave us some insight into the life of a younger person today. And I had the pleasure of reading her informative Master's thesis. I was also interested in the insights into life today at the "Poly", as we used to call ETH. As the father of two daughters, I hope to have given a little moral support to someone who is just starting out on her journey.

Eric Winkler grew up in Hong Kong, the son of a Belgian mother and a Swiss father, and attended grammar school in Davos. He studied physics at ETH, graduating in 1971. In 1979, he founded Ryder Industries in Hong Kong, providing electronics design and manufacturing services. In 2007 he sold the "Saitek" product division (electronic chess games and PC peripherals) and since then has held the position of non-executive chair. He lives in London with his wife Rowena. The couple have two daughters and four grandchildren.

Facts & figures 2007–2021

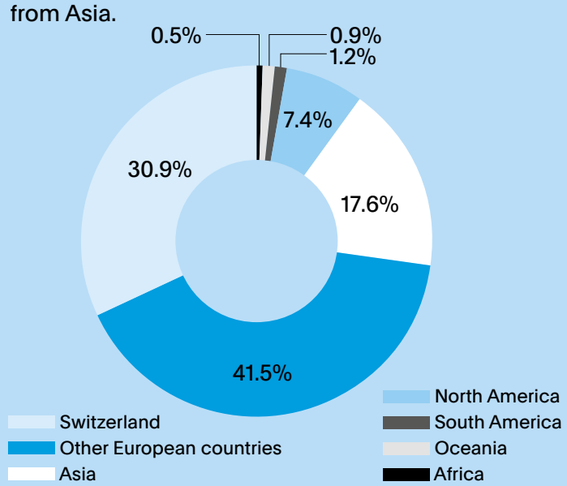
Women and men

Around one-third of Excellence Scholars are female – over the last ten years, the proportion of women has averaged around 34%, while the proportion of women among all Master's students at ETH is 31.6%.



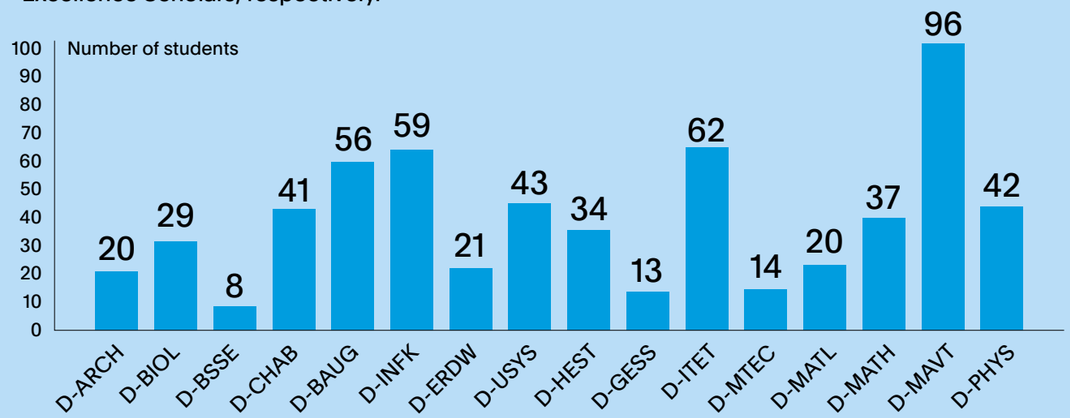
Nationality of scholarship students

Of the total number of Excellence Scholars, around 31% come from Switzerland, 42% from other European countries and around 18% from Asia.



Excellence Scholars by department

Every year, the programme provides support to talented individuals in the top 2 to 3 percent of their year group. The largest number of scholarship students – 96 in total (16%) – studied in the Department of Mechanical and Process Engineering, followed by the Department of Information Technology and Electrical Engineering, the Department of Computer Science and the Department of Civil, Environmental and Geomatic Engineering, with a total of 62, 59 and 56 Excellence Scholars, respectively.



D-ARCH: Department of Architecture
D-BIOL: Department of Biology
D-BSSE: Department of Biosystems Science and Engineering
D-CHAB: Department of Chemistry and Applied Biosciences
D-BAUG: Department of Civil, Environmental and Geomatic Engineering
D-INFK: Department of Computer Science
D-ERDW: Department of Earth Sciences
D-USYS: Department of Environmental Systems Sciences
D-HEST: Department of Health Sciences and Technology
D-GESS: Department of Humanities, Social and Political Sciences
D-ITET: Department of Information Technology and Electrical Engineering
D-MTEC: Department of Management, Technology and Economics
D-MATL: Department of Materials
D-MATH: Department of Mathematics
D-MAVT: Department of Mechanical and Process Engineering
D-PHYS: Department of Physics

Promoting talent

ETH Zurich awards Excellence Scholarships to particularly gifted students for the duration of their Master's programme. These scholarships cover study and living costs and include a waiver of study fees, enabling students to concentrate fully on their studies. The funding, however, is not just an investment in talented individuals: the scholarship recipients have excellent prospects of holding key positions in business, science or politics, or founding their own companies, thereby letting their knowledge and skills flow back into society.

www.ethz-foundation.ch/en/esop

Many thanks!

Since its inauguration, the Excellence Scholarship & Opportunity Programme has been supported by more than 4,800 alumni, friends of ETH Zurich and, among others, the following partners:

Adrian Weiss Stiftung, Ammann Group, Anna Caroline Stiftung, Apple, Avaloq, Basler & Hofmann, BKW, bmpi AG, Bühler, Bühlmann-Kühni Stiftung, CA Indosuez, Clariant Foundation, Dätwyler, DGFI Foundation, Disney Research Zurich, Dow, Dr. iur. Jstvan Kertész Stiftung, EBP Schweiz, Fabrimex Systems AG, Familie Eric Winkler, Fondation Dimitris N. Chorafas, Forum for Supply Chain Management, Franke, Gamil-Stiftung, Gemeinnützige Stiftung Basler & Hofmann, Glencore, Google, Green Leaves Education Foundation, Gruner, GVM, Hardturm AG, Helmut Fischer Stiftung, Huber+Suhner Foundation, Implenia, Josef P. und Nelly Spiess-Mohn Stiftung, Klostermann-Stiftung, Leoni, Nederlandse Vereniging van Zurichse Ingenieurs, Novartis Foundation, Open Systems, Partners Group AG, Plastic Omnium, RMS Foundation, Rütli-Stiftung, Sensirion, Shell, Starr International Foundation, Stavros Niarchos Foundation, Stiftung Agnostizismus und Meritokratie, Stiftung z. Unterstützung u. Förderung Begabter, SWF Stiftung für wissenschaftliche Forschung, tibits, United Technologies Research Center, upc, Zuger Stiftung für Wissenschaft und Wirtschaft

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