Cristina Palencia Ramírez uses a continuous-flow reactor to investigate the formation dynamics of colloidal nanocrystals.

FRANK VON WIEDING

Investment in the next generation boosts science in Hamburg

Newly designated as a UNIVERSITY OF EXCELLENCE, Universität Hamburg offers outstanding opportunities, support and career development for international early career researchers.

Young and early career scientists at Universität Hamburg are driving the university's focus on excellence, which has already yielded results. The German federal and state governments named Universität Hamburg as one of the 11 Universities of Excellence in 2019, which coincided with the university's centenary year. This certification of Hamburg as a top-class university will draw more than €200 million of extra funding over the coming years, and will increase its lure as a destination for international doctoral and early career researchers.

Supporting these researchers is an integral part of the university's strategy. "Close links between our research strategy and our development path for those in the early stages of their career enables researchers to have academic independence while working at this level of excellence," explains university president Dieter Lenzen.

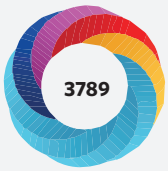
Funds from the Excellence Strategy allow the university to offer innovative support measures. The Ideas and Ventures Fund offers direct, uncomplicated and targeted support for researchers to develop new projects, with money reserved for doctoral and early career researchers. The university also provides seed money for this target group to initiate new, or consolidate existing, research and teaching projects within the institution's international strategic partner network.

"WE ENCOURAGE EXCELLENT INTERNATIONAL EARLY CAREER RESEARCHERS TO JOIN US" DIETER LENZEN.

Cristina Palencia Ramírez is a postdoctoral researcher who moved to Universität Hamburg from Spain in 2013 to work on quantum dots in the Institute of Physical Chemistry. Her research benefits from the university's Cluster of Excellence set-up. These are large-scale, federally funded, interdisciplinary research alliances that bring together researchers in related fields from across the university, and also from outside institutions. "My boss in Spain strongly recommended Hamburg to me. I've been here ever since," she says. "In our excellence cluster we have the financial resources for research. I can buy everything I need for my project, and can travel and attend conferences. These things are important for science."

EXCELLENT RESEARCH OUTPUT

UNIVERSITÄT HAMBURG'S highly influential research focuses on science's most urgent challenges.



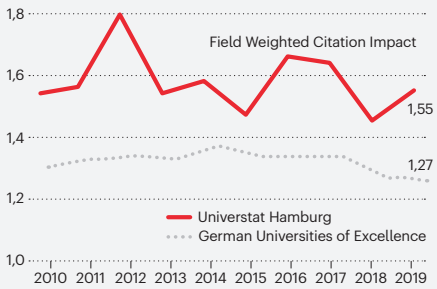
STRONG RESEARCH ON COVID-19

"SARS-CoV-2-reactive T cells in healthy donors and patients with COVID-19"

Universität Hamburg is among the top 5% in COVID-19 research output according to Altmetric.

HIGH RESEARCH IMPACT

Universität Hamburg publications have a higher citation rate than that of German Universities of Excellence on average.



Source: SciVal, October 2020, excl. self-citations, articles only

The main building of Universität Hamburg.


President Dieter Lenzen.


Jan Louis and Le Hoang Nguyen discuss the mechanism of conversion panels in the search for light dark matter particles.

L TO R: FRANK VON WIEDING; BERTOLT FABRICIUS; FRANK VON WIEDING

Palencia Ramírez works in the CUI: Advanced Imaging of Matter cluster, which focuses on how atoms, molecules and electrons behave, and how this relates to the structure, properties and functions of matter. More than 80% of CUI's funds are invested in support for young and early career researchers. For example, to promote postdocs' careers, the cluster has established Young Investigator Group Leader positions. These are aimed at giving talented scientists the ability to independently conduct challenging research projects, and the support to acquire external funds, such as European Research Council starting grants.

Similar support measures are available for scientists in the university's three other Clusters of Excellence: Climate, Climatic Change and Society; Understanding Written Artefacts; and Quantum Universe.

The Quantum Universe cluster studies the origin, composition, and evolution of the Universe, and is a collaboration between Universität Hamburg and the Helmholtz Centre DESY. The cluster is headed by Jan Louis, who is also the university's vice-president for research and early career researchers. "I think we have one of the best academic training programmes in the world," he says. "We're also involved in numerous large collaborations with partners around the world. For PhD students and postdocs, that is a fantastic opportunity to build their network."

The Quantum Universe cluster recruits students and young scientists from a variety of backgrounds and encourages them to network and work together. "Our cluster is very international, which is a real asset for everybody", says Louis. "We try to recruit the best of the best, and diversity is a prominent element in this process."

Over the past decade, the number of doctoral students at the university has increased by 60%, and the number of those from abroad has more than doubled. A quarter of students starting doctoral programmes are now from outside Germany. The proportion of international junior professors has also doubled, from 10% to 20%, over the same period. The number of international staff employed as academics has increased by 82%, and the overall share of international academic staff has risen from 11% to 16%.

Another source of vital support for young and early career researchers comes from the Hamburg Research Academy, a cross-university institution for prospective and enrolled PhD students, postdocs, junior professors and their supervisors. A unique collaborative project in Germany, the academy draws members from across nine higher education institutions in Hamburg, and offers training and networking opportunities. The academy also provides essential advice and support for scientists moving to Hamburg from overseas, helping to solve organizational and administrative logistics.

On top of networking and funding, Universität Hamburg has other support mechanisms in place. Palencia Ramírez especially values the mentoring offered in her cluster, one of several mentoring programmes at the university. "Being a postdoc is very difficult, because you are in a kind of a limbo," she says. "Having a mentor is so important. You need someone to tell you the unwritten rules — and someone to push you."

As Universität Hamburg enters its second century, it recognises that the key to securing its long-term future is to help encourage excellence in those just starting out. ■

Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG