

R&D Postdoctoral Challenge

At AstraZeneca, we push the boundaries of science to deliver life-changing medicines. Our ambition is to discover transformative breakthroughs that hold a key to improving the lives of people with some of the world's most complex diseases.

Our pioneering R&D is focused on preventing, modifying, and hopefully in the future curing disease, to deliver innovative medicines for diseases where there is currently huge unmet need. Our R&D approach is evolving from symptom control to disease modification, focusing on earlier and smarter interventions that defy the natural course of disease. By reaching more patients earlier, we aim to slow disease progression and drive remission.

About the R&D Postdoctoral Challenge

The R&D Postdoctoral Challenge has been designed to drive R&D productivity, promote diversity of thought and stimulate research opportunities across the globe. Unlike traditional pre-defined industry postdoctoral programmes, the R&D Postdoctoral Challenge encourages autonomy and innovation, inviting outstanding scientists to propose their own research ideas and hypotheses that could contribute to tackling some of the world's most complex diseases.

Entry Criteria:

- Open to final year MD and/or PhD students and Postdoctoral Researchers, within 5 years of receiving their advance postgraduate degree (MD and/or PhD) by 31 December 2022
- Candidates may be based anywhere in the world – the programme embraces international collaboration providing opportunities to travel and progress the science within the most appropriate of AstraZeneca's R&D strategic centres
- The whole scientific canvas of AstraZeneca is open for exploration, with innovative research proposals sought across the breadth of AstraZeneca's therapy areas and novel scientific approaches:
 - Enhancing our understanding of disease biology
 - Designing next generation therapeutics
 - Pioneering new approaches to drive success in the clinic



World-leading Judging Panel

Research proposals were critiqued by a world-leading judging panel consisting of AstraZeneca and external life science leaders based on scientific merit, and opportunity to create real impact for patients, society and healthcare systems.

- **Dr Asma Al Mannaei**, Director of Healthcare Quality and Executive Director of Research and Innovation in Abu Dhabi Department of Health, UAE
- **Prof David Goldstein**, Director of the Institute for Genomic Medicine at the Columbia University Medical Center, US

- **Prof Christopher Lowe**, Emeritus Professor of Biotechnology in the Department of Chemical Engineering and Biotechnology, and Director of the Institute of Biotechnology and Director of the Cambridge Academy of Therapeutic Sciences at the University of Cambridge, UK
- **Dr Jenni Nordborg**, National Life Sciences Coordinator, The Office for Life Sciences, Sweden

AstraZeneca:

- **Prof Sir Mene Pangalos**, Executive Vice President, BioPharmaceuticals R&D, AstraZeneca
- **Dr Susan Galbraith**, Executive Vice President, Oncology R&D, AstraZeneca
- **Dr David Wilson**, Vice President, Global Head of Oncology Chemistry, AstraZeneca, UK
- **Dr Sharon Barr**, Senior Vice President, Head of Research and Product Development at Alexion, AstraZeneca's Rare Disease group

2022 Programme Results

More than 120 research proposals were submitted between March and June 2022. Shortlisted candidates were invited to live pitch their research ideas in Gothenburg, Sweden on 19 October 2022.

Six successful candidates from Africa, the Middle East and Europe have been awarded fully funded postdoctoral positions to translate their ideas into meaningful benefit for patients.

The selected 2022 research proposals cover a diverse range of scientific approaches including:

- Investigation into the anti-inflammatory properties of *Lippia javanica*, a plant commonly used in South Africa to treat inflammatory conditions
- Application of experimental and computational approaches to design pharmacological chaperones to stabilise enzymes in rare metabolic disorders
- Regenerative medicine and its translation to the clinic by advancing extracellular vesicle-based therapies that promote cardiac tissue regeneration and repair
- Use of multiomics as a research tool to study respiratory diseases, with particular focus on developing microbiome-based therapeutics for asthma
- Use of proteomics to develop targeted therapies for heart failure and beyond
- Targeting and degradation of Fcγ receptors, whose aberrant activation can lead to harmful inflammation, severe tissue damage and the development of chronic autoimmune diseases

The successful candidates will conduct their research at one of AstraZeneca's leading R&D facilities for two years, and will join our vibrant research community with:

- Access to novel tools and technologies, compounds, expertise and mentoring
- Support for professional development including congress presentations and scientific publications
- Professional networking opportunities that could last a lifetime

Further details:

More information on the R&D Postdoctoral Challenge can be found at:

<https://openinnovation.astrazeneca.com/rd-postdoctoral-challenge.html>