

R&D Postdoctoral Challenge

At AstraZeneca, we push the boundaries of science to deliver life-changing medicines. Our ambition is to transform the lives of patients with improved outcomes and a better quality of life, through more effective treatment and prevention, ultimately working toward a cure for some of the world's most complex diseases.

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 2023
- 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 and technologies.



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.

External:

- **Prof David Goldstein**, CEO and Founder, Actio Biosciences
- **Dr Jenni Nordborg**, Director, International Affairs Lif, Sweden

AstraZeneca:

- **Dr Sharon Barr**, Executive Vice President, BioPharmaceuticals R&D, AstraZeneca
- **Prof Sir Mene Pangalos**, Executive Vice President, BioPharmaceuticals R&D, AstraZeneca (retiring)

- **Dr Hitesh Sanganeer**, Executive Director, Head of Emerging Innovations BioPharmaceuticals R&D, AstraZeneca

2023 Programme Results

Nearly 100 research proposals were submitted between March and June 2023. Shortlisted candidates were invited to live pitch their research ideas at The Discovery Centre (DISC), in Cambridge UK on 28 September 2023.

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

The selected 2023 research proposals cover a diverse range of scientific approaches including:

- **Tobi Ayorinde**, *Bridging the Gap: Utilizing 3D Histopathology and Deep Learning in Renal Transplantation to Decipher the Underpinnings of Chronic Kidney Disease*
- **Sarah Barron**, *A 3D gut-lung-axis model for screening novel antibody-drug-conjugates mediated by FcRn transytosis*
- **Igor Beckers**, *Organocatalytic activation of amino acids and peptides in C(sp³)-C(sp²) cross-coupling reactions*
- **Santosh Gupta**, *RepReg - A dual cell therapy strategy for repairing and regenerating fibrotic liver*
- **Bariaa Khalil**, *Inflammasome pathway at the single cell level in severe steroid resistant asthma (SSRA) and its mechanisms of action on steroid resistance*
- **Sabrina Mackinnon**, *Investigation of substrate reduction and pharmacological chaperone therapeutic approaches to treat primary hyperoxaluria and other disorders of oxalate homeostasis*
- **Javier Aguirre Rivera**, *Multiplexed optimization of mRNA translation for nucleotide therapies*
- **Jacob Franklin Wardman**, *Towards bespoke protein modification and next-generation therapeutics via engineered enzymes*

The successful candidates will conduct their research at one of AstraZeneca's leading R&D facilities for at least 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>