

2027 AstraZeneca Physical Sciences UK PhD Collaborations Call for Proposals

Dear Collaborators,

Please forward to anyone within your department that might be interested in future PhD (CASE-type) collaborations with AstraZeneca.

General context for new PhD collaborations:

AstraZeneca has been a strong supporter and sponsor of collaborative PhD studentships for many years. We have a significant portfolio of collaborations, which provide great benefits for the company, academics, and students. AstraZeneca supports several CDTs and prosperity partnerships. If your institution has a CDT or prosperity partnership in an appropriate area, then we prefer that proposals are progressed through those mechanisms.

General objectives and scope for the 2027 Call

We are looking to fund several individual industrial doctoral landscape awards (IDLA), typically this has been 10-15 collaborations.

- We are looking for projects that provide opportunities for PhD students to receive an excellent training in research methodology and produce a body of pre-competitive knowledge that is of value to AstraZeneca R&D and to the wider scientific community.
- We will prioritize proposals that are expected to give rise to publications in leading journals.
- We aim to maintain a strong Physical Sciences based portfolio of PhD collaborations shared between our Discovery and Development functions. This includes projects which align to the scope of EPSRC including chemistry, analytical chemistry, chemical engineering, materials science, and pharmaceuticals.
- We will prioritize proposals that align with both departmental and broader AstraZeneca science and technology strategies

Areas of Research

We would like to highlight that AstraZeneca has an ambition to be carbon negative by 2030 – [link](#). The manufacture of our medicines is a significant contributor to our carbon footprint, and we can contribute to this in many ways. For example, approaches that enable the discovery of more potent molecules such that we will have to manufacture smaller amounts in the future or alternative methodologies and technologies that can be applied in our current or future manufacturing processes.

Specifically, we are interested in proposals in the following areas:

- Innovative chemical biology / medicinal chemistry. e.g. Target-guided synthesis approaches; Novel approaches to conventionally intractable targets; Chemogenomic approaches to drug discovery; Protein folding and misfolding as a degradation strategy; Novel strategies to discover molecular glues outside of the PROTACs field.
- Innovative research employing artificial intelligence (AI) to advance drug discovery and development, drug delivery and synthetic chemistry, including the development of new AI-driven algorithms for molecular design and route prediction, as well as integration of AI workflows into experimental chemistry. Projects should demonstrate how AI can generate mechanistic insight, accelerate discovery, and enable data-driven decision-making in chemical research.
- Innovative and improved computational, modelling and AI methodology relevant to medicinal chemistry, process development and analytical sciences. For example, in the medicinal chemistry area, methods such as affinity and free-energy of binding predictions, conformational sampling, and identification of cryptic / allosteric pockets in proteins.
- Innovative analytical methods relevant to all areas of discovery, early and late-stage development and manufacturing. For example, novel biomimetic chromatography; label-free technologies, quantification of in-cell drug concentrations or underlying analytical methodologies required to

characterise and understand the properties of an increasingly diverse range of compounds, including new modalities, in addition to improve analysis for small molecules.

- Innovative synthetic organic chemistry with medicinal chemistry relevance. e.g. novel heterocyclic synthesis; functional group tolerant CH activation, novel chemistry to covalently link to proteins.
- Synthetic methods to enable shorter or more environmentally friendly manufacturing processes
- Proposals bringing additional understanding, improved processing or alternative approaches to species such as peptides, oligonucleotides, antibodies, ADCs, dendrimers and polymer conjugates.
- Approaches for the optimization of reactions, including mechanistic modelling, process analysis and kinetic studies.
- Improvements to isolations and drying of drug substances and intermediates.
- Physical aspects of processing, including work-ups and fundamental understanding of physical properties of drug substances and intermediates.
- Understanding and modelling of crystallisation.
- Advances in drug product design and manufacture.

Submission and selection of Proposals:

You are restricted to the submission of one proposal per individual academic as a UK based PI. However, we would like to encourage collaboration between academic staff at the same or different universities, so we very much welcome proposals with joint supervisory support, so a PI for one proposal can be a secondary contributor on additional proposals. We may also try and link proposals if they complement each other.

Proposals should be a **maximum three pages** in length. Proposals should provide a brief background to the area, any preliminary results (if relevant) and highlight research novelty. Of significant consideration to reviewers of proposals (in addition to novel and interesting science), is that the project should provide good research training to a prospective student and an expectation that publication(s) should arise. A brief statement summarising training benefit and potential publications should be included.

We will continue to use the portal system for proposal submission. Proposals in word or pdf format should be submitted to [the portal](#) which will be live from the early July 2026. The deadline for submission is **August 31st 2026**, so that offers of sponsored studentships can be made known in November 2026. Proposals will be shared and reviewed across AstraZeneca UK chemistry and development functions as part of AstraZeneca's internal review process. The portal also shows the proposals that were supported in the previous 3 years.

For the majority of successful proposals, we plan to offer Industrial Doctoral Landscape Awards (IDLAs in partnership with the EPSRC for fully funded PhDs.) We may also offer part top up funding which can be used, together with university EPSRC funds, to build a studentship. In-line with EPSRC guidance, we prefer studentships to be funded for a minimum of 3½ years.

We would also welcome any feedback on the portal process

Best regards

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