

AI/ML-ready Datasets for Peptide Permeability & Oral Bioavailability or Macrocyclic Peptide Screening Libraries to Enable Oral, Cell-permeable Macrocycle Design



AstraZeneca is seeking datasets or physical/virtual libraries of macrocyclic peptides that can help map and model the property space required for oral and cell permeable macrocyclic peptides. They particularly welcome:

- Annotated *in vitro/vivo* datasets describing permeability, oral bioavailability, enzymatic stability or other relevant properties of peptide macrocycles—including both proprietary and published collections
- **Libraries of macrocyclic peptides** which are suitable for screening, ideally with reference activity which would enable AI-led property mapping and predictive modelling. Physical compound sets are preferred but virtual libraries may be accepted for use once training datasets have been established
- Novel or **proprietary methods for predicting, quantifying, or modelling the physicochemical space** that governs permeability and oral absorption in macrocyclic peptides

Out of scope: Proposals that are hypothetical, lack experimental feasibility, or involve low-throughput experimental or predictive modelling approaches that are not scalable for parallel evaluation of large compound sets will be given a lower priority.

Submission and Programme Information and Opportunity for Collaboration

AstraZeneca invites applications from both academic and biotech organizations. Applicants should complete the **proposal form** which should contain a brief, non-confidential overview of your proposal, including a workplan, approximate budgetary requirements, desired outcomes, and background on your research group. To submit your proposal, please visit the **Inpart website**, register, and submit your application form under the appropriate campaign. **Submissions should either provide experimental proof-of-concept, published evidence, or actionable approaches for generating datasets or screening tools that address these key parameters.** Solutions that enable parallel evaluation of multiple macrocyclic peptides, or which deliver mechanistic or predictive insights into the determinants of oral and cell permeability, are particularly encouraged. **Further details on the solution criteria can be found in the proposal form.**

AstraZeneca's CoSolve challenge is a global Open Innovation programme seeking collaborators with innovative solutions to real research challenges. These challenges lie within the company's R&D research focus areas and require solutions that are immediately translatable. Collaborators are sought who can bring innovative ideas that can be rapidly translated into tangible solutions. Working together, these ideas could help shape the development and delivery of new therapies and bring them to patients sooner. Applications that are of interest will be selected to participate in the virtual Challenge Week - an intensive week where applicants will pitch their ideas and work with AstraZeneca scientists to transform their idea into a workplan. For selected winners from the challenge week, a **collaboration agreement** will be put in place with specified milestones and the winning projects can begin quickly. **Details about the collaboration benefits can be found in the proposal form.**

Opportunities sought

 Research projects

Submissions

Please submit relevant, non-confidential opportunities online [here](#)

Deadline: **6th March 2026 - 11:59 pm GMT**

Have any questions?

Contact our team at discover@in-part.co.uk