Industry Call for Opportunities

Orally Bioavailable Peptides and/or Peptide Therapeutics for Modulating Intracellular Targets

A top five pharmaceutical company with a history of successful academic collaborations, wishes to identify **novel methods that allow for the discovery or design of orally bioavailable peptides** and/or **peptides that can access intracellular targets** through passive permeation, endocytosis or via transporters.

Approaches of Interest

Peptides designed to be intrinsically permeable/orally bioavailable through rational

design (e.g., cyclisation, incorporation of non-natural amino acids, etc), next generation conjugation or other innovative approaches

- Design of cell permeable/orally bioavailable peptides inspired by evolutionarily optimised 3D peptide scaffolds derived from natural sources (e.g., lasso peptides)
- For augmented delivery approaches such as conjugation, **plug & play approaches are preferred**. If re-optimisation of the peptide payload is necessary, then design-make-test (DMT) capabilities for re-optimisation at reasonable throughput must be demonstrated
- · Methods for generation of libraries of cell permeable/orally bioavailable peptides
- Novel in vitro assays for prediction of oral bioavailability/intracellular targeting with proven translation to in vivo models are also of interest

Out of Scope

- The use of well-known cell-penetrating peptides (CPPs) unless significant innovation is demonstrated
- Drug delivery systems/formulation strategies

Stage of Development

- Opportunities from basic research phase to late preclinical stage are within scope
- For orally bioavailable peptides, in vivo oral bioavailability (of >5% in rat/dog) is required
- For intracellular targeting reliant on endosomal uptake pathways, demonstration of endosomal escape and cytosolic delivery is required
- In silico design of peptides must be accompanied with DMT capabilities at reasonable throughput

Submission Information

Submissions should contain 200-300 word briefs along with the following optional (but highly encouraged) **submission form**, highlighting any relevant data and supplementary information e.g., relevant publications and patents. In submitting to this campaign, you confirm that your submission contains only non-confidential information.

Opportunity for Collaboration

Our client is open to a range of collaboration opportunities, with the most appropriate outcome being decided on a case-bycase basis. Example outcomes include licensing, project/PhD funding and research collaborations.

Opportunities sought

- Ω Technologies
- 🞓 Academics and expertise
- 🟆 Centres of excellence
- Research projects
- Spinout companies

Submissions

Please submit relevant, non-confidential opportunities online via: <u>discover.in-part.com</u>

Deadline: 9th May 2023 - 10:59 pm GMT

Have any questions? Contact our team at <u>discover@in-part.co.uk</u>

