IN-PART DISCOVER

Industry Call for Opportunities

Biodegradable Molecules with Antimicrobial Properties for use in Cosmetic Formulations

A major global personal care company is looking for **novel antimicrobial molecules which are completely biodegradable**, non-persistent and not aquatoxic, for use in cosmetic formulations. Our client is open to any novel molecules (e.g. small molecules, peptides and polymers), including molecules developed in other sectors (e.g. agrochemical, food or pharmaceutical) which may be applied to cosmetic and medical device applications.

Molecules should target/disrupt bacterial membranes by any applicable modality e.g. cationic molecules with high charge density. Molecules with the following attributes are preferred:

- Demonstrated biodegradability (>60% in 28 days based on OECD 301) and eco-friendliness
- Demonstrated (ideally broadband) antimicrobial activity (at least 3 log units in ≤20 minutes) against a) gram-positive bacteria, b) yeasts and c) gram-negative bacteria. Activity on gram-positive bacteria is a minimum
- Safety documentation or validation (e.g. by relevant tests of toxicity and skin irritation/sensitisation)
- Solubility in water, ethanol and DMSO, water solubility is preferred
- No/low skin penetration

Out of Scope:

- Approaches which are animal-derived
- Antimicrobials targeting mutable structures like proteins and nucleic acids (i.e. not targeting the membrane) and therefore (cross-)resistance-conferring
- Molecules already classified as antibiotics
- Molecule discovery/screening platforms or techniques (molecules and/or libraries resulting from these approaches are of interest)

Developmental Stages of Interest:

- Fully developed antimicrobials ready for industrial scale-up are preferred
- Our client is open to exploring approaches that satisfy some of the above criteria, providing there is a clear route towards achieving biodegradable antimicrobial molecules (e.g. biodegradable materials which require testing to assess antimicrobial action or safety testing)
- Approaches should also consider the potential manufacturing process to achieve cost-effective scalability

Submission Information and Opportunity for Collaboration

Submission of one page, 200-300 word briefs are encouraged, along with any optional supplementary information e.g. relevant publications. In submitting to this campaign, you confirm that your submission contains only non-confidential information.

Our client is open to a range of collaboration opportunities, with the most appropriate outcome being decided on a case-by-case basis. Example outcomes include licensing assets, short-term research collaboration, investment or acquisition.

Opportunities sought

- Technologies
- Academics and expertise
- Centres of excellence
- Research projects
- Spinout companies
- Biotech assets

Submissions

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

Deadline: **18th September 2023 - 10:59 pm GMT**

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