CAPE Grand Challenge: Systems and Devices for Healthcare

Call for Expressions of Interest

The CAPE Grand Challenge: Systems and Devices for Healthcare is a competition for project outlines aligned with the strategic research theme proposed by CAPE partner GSK Consumer Healthcare. The primary intent of this call is to support an initial body of work in this new Theme. The winning submissions will be developed into full CAPE project proposals in collaboration with GSK (which may involve other CAPE Partners), leading to a seed project. Priority will be given to smaller research proposals that lay the groundwork for larger, future investigations and to those that enhance cross-disciplinary collaborations.

The Call will be over two to three rounds. Up to £90k funding is available in round 1. In this round, we expect to fund several proposals, with project budgets in the range £5k-£50k.

The competition is open to researchers and academics in the University of Cambridge.

Objective

GSK Consumer Healthcare is in the business of supporting the ‘everyday health’ of the public. Our aim is to create new products, devices and services that can be used, in a social and domestic setting, to improve all our lives. We are interested in understanding health and condition diagnosis in order to deliver better and earlier interventions. Within CAPE, we have a focus on science and technology that helps us improve our understanding of human health and the ways it can be positively influenced.

Specifically, we are interested in research in two main areas:

- To measure and monitor the physiology, biological functions and wellness of the human body
- To understand and interpret complex measurements to create actionable insight on health interventions.

Research Topics (Round 1)

GSK currently has a particular interest in oral health, the physiological and psychological effects of stress, physiological changes associated with menopausal changes, pain, and respiratory health. However, proposals outside these areas, in general healthcare are equally welcome.

Proposals for research will be assessed on their merits and against four main criteria (noting that an individual proposal does not have to address all of these elements)

- The opportunity to access novel information or insights on human health
- The ability to generate Intellectual Property associated with the research
- The opportunity to open up novel areas of research or investigation
- The ability of the research to produce tangible demonstration or evidence of findings

GSK recognises the value of research throughout the maturation of technologies e.g.

- Edge Research – Entirely new science
- Maturation – Engineering for cost, reliability or efficiency in existing approaches
- Demonstration – Integration of technologies to demonstrate/evidence new capabilities
We encourage proposals to be clear on what stage of maturity the research is expecting to address

**Award**

£1,000 bonus will be awarded to the submitter of a Grand Challenge proposal that is developed into a project with a CAPE Partner. CAPE reserves the right not to issue an award if the criteria for the project are not fulfilled and there is no guarantee that the project proposal will be funded.

All research project proposals resulting from the CAPE Grand Challenge between the winner and partner/s will follow standard CAPE project approval procedures and will operate under the terms of the CAPE Partnership Agreement.

**Eligibility**

The competition is open to researchers and academics in the University of Cambridge. Each submission must include one applicant (i.e. the submitter or a co-investigator) who is eligible for PI status within the University.

**Criteria**

Proposals will initially be evaluated by GSK Consumer Healthcare, and they will indicate which proposal(s) most closely meet their needs and have the potential to form the basis of a full CAPE project proposal which they would support. Selection of shortlisted submissions to be taken through to full proposal stage will be made by the CAPE Steering Committee.

**Timeline**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/04/21</td>
<td>Round 1 Call for Proposals announced</td>
</tr>
<tr>
<td>07/05/21</td>
<td>Deadline for Expression of Interest round 1</td>
</tr>
<tr>
<td></td>
<td>CAPE Partner consideration of submissions, which may include exploration with PIs to clarify/shape the project ideas</td>
</tr>
<tr>
<td></td>
<td>Development of full project proposal by PI(s) with Partner(s)</td>
</tr>
<tr>
<td>21/05/21</td>
<td>Submission of project proposals</td>
</tr>
<tr>
<td></td>
<td>Announcement of Awards</td>
</tr>
</tbody>
</table>

**How to apply**

Please complete an Expression of Interest Form ([download](#)) and return to cape-office@eng.cam.ac.uk by 07 May 2021.

**Pre application discussions and online workshop**

If you have an idea for a proposal, GSK Consumer Healthcare would be happy to discuss it with you ahead of submission. Please contact cape-office@eng.cam.ac.uk to arrange a call.
In addition, we will organise an online workshop to explore possible project opportunities with GSK Consumer Healthcare (date TBA). If you would like to participate in the workshop, please contact cape-office@eng.cam.ac.uk

Further Information

To learn more about GSK Consumer Healthcare and their areas of interest in this call, you can view the recent CAPE Advanced Technology Lecture ‘GSK Consumer Healthcare: Present and future areas of interest’, by Tom Watt and Angelos Echiadis on our YouTube channel.

If you have any queries, please contact Ms Denisa Demko (CAPE Coordinator) or Dr Mark Leadbeater, CAPE Office, 9 JJ Thomson Avenue, Cambridge, CB3 0FA

Tel: +44 (0)1223 748343
Email: cape-office@eng.cam.ac.uk