UCL Grand Challenges Special Initiative
Call for Expressions of Interest
Mini-Sandpit 19th December 2019

UCL Grand Challenges are making up £10,000 available for cross-disciplinary activities that address topics and issues related to Engineering Solutions to the SDGs. Funding is available to support one or several cross-disciplinary activities that could be taken forward by collaborating sandpit participants.

The event is open to all UCL-based researchers and professional services staff. To be considered for participation, you should submit an expression of interest (EoI) using the online form by Thursday 12th December, stating your area of interest and approach to the topic. The aim of the sandpit is to introduce participants to potential collaborators by sharing different approaches then refining and combining participant’s plans, leading to novel cross-disciplinary collaborations and research ideas.

Themes

The theme of Engineering Solutions to the SDGs provides opportunity for researchers across UCL to develop examples of responsible innovation within the context of the SDGs and guiding by GCTT priority themes:

- Food
- Nature-inspired engineering
- Disability Innovation
- Bigger Data, Better Data
- Responsible Innovation

By forging collaborations across faculty, the eventual funded project(s) should bring new and innovative solutions that advance UCL’s commitment to have impact on the UN’s SDGs and global targets. This is an opportunity for researchers to develop a methodology or pilot project with a view to attract further support and partnerships in the future.

For example, provocations and areas to consider could include:

- Creating new narratives around technologies and the complex relationship between humans and technology
- Opportunities presented by Open Data that impact the SDGs, for example tackling modern slavery
- Limiting energy trade-offs through responsible innovation
- Developing mutated agriculture to adapt to climate change
- Nature-inspired solutions to SDGs, adopting desired characteristics of natural systems (such as resilience, adaptability and overall efficiency), but cognisant of the often-different contexts of nature and society
Ideas, however, need not be limited to these themes or topics. Additional documents that may further stimulate research ideas and contribute to thinking, include:

- SDG goals and targets
- SDG indicators database
- Nature inspired design
- How to make your research open access
- Net Zero report to the UK

Funding and outputs

Due to the UCL fiscal year end of July 31st, all expenses must be identified and invoiced by that date, with costed activities taking place by Monday 27 July 2020. Project outputs are not limited to article publications and could include:

- Research or policy workshops;
- Films, exhibitions or performances;
- Symposia or conferences;
- Reports;
- Preparatory or exploratory research towards larger grant applications;
- Public and community engagement activities.

Expression of Interest

EoIs should include:

1. Name(s) and research interests of cross-disciplinary collaborator(s)
2. Your interpretation of the call and how the applicant’s expertise relates to the topic
3. Experience of relating research to those outside of the applicant’s field
4. Details of expected outcomes from attending the mini-sandpit

The GC team, along with academic co-chairs of the GCTT Working Group will apply a first-step selection, with those who meet these criteria invited to participate. We will specifically invite a diverse range of participants to the sandpit, so as to explore the scope of this call; prioritise issues to be addressed; define the outcomes to be achieved; and identify applications to be considered for funding.

Participants will be encouraged to use their EoIs as the basis for contributing radical ideas and innovative approaches at the sandpit with the aim to subsequently develop these into more detailed proposals.

The sandpit will be held on Thursday 19th December 2019, from 10am to 12pm. In order to be considered as prospective recipients of funding under this initiative, EoI submitters should be prepared to attend on this date and for the duration of the sandpit. If necessary, a collaborator on the project can represent you. Please give us their details on the EoI application form.

Should you have any questions or for further guidance, please contact Sophie.mepham@ucl.ac.uk