Medical Technologies

INNOVATION AND KNOWLEDGE CENTRE

Medical Technologies IKC Industry Partnership Proof of Concept Award Call

Regenerative Devices and Medical Devices with Enhanced Regenerative Functions

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IKC industry Partnership Proof of Concept Award

Aim of call -

- To accelerate innovation, translation and commercial development of regenerative devices, medical devices with enhanced regenerative function and related technologies
- Facilitate and support technology development towards commercialisation to achieve investment by commercial organisation
 - Take technologies from TRL 2/3 to TRL 5
- Support strong and closer collaboration between academia and medical technology industry

Proof of Concept Projects up to £100,000 will be funded in academic setting

 (80% Full Economic Cost will be awards, 20% covered by host institution as per all RCUK grants)





Technology Readiness Levels in Medical Device Development

POC projects do not fund basic research

• It is expected basic research has been done

| TRL 1 TRL 2 TRL 3 TRL 4 TRL 5 TRL 6 TRL 7 TRL 8 TRL 9 TRL 10 | | | | | | | | |
|--|----------------------|-------------------------------|-----------------------------|-----------------|--------------------------|------------------|------------------------------|--|
| Basic Idea | Concept developed | Experimental Proof of Concept | Manufacturing Validation | Clinical Trials | Reg Approval | Launch | Post- Launch | |
| Basic Research | | Preclinical Research | Late Preclinical | Clinical Phase | Clearance preparation | e & market on | Monitor & Surveillance | |
| University | | IKC PoC | Company | | | | | |





Scope of Call

- Directly implanted regenerative devices
 - scaffolds, biomaterials and devices that deliver tissue repair and regeneration
 - e.g. in Wound repair, CV, MSK, dental/max-fac, aging population
- Enabling technologies for regenerative device development
 - simulation methods that support development of regen devices
 - In vitro, ex vivo, in silico simulation
- Companion technologies for regenerative device development
 - Advanced imaging and diagnostics earlier diagnosis, patient stratification, enhanced surgical delivery
- Implantable medical devices with enhanced regenerative functions
 - Conventional medical devices with added regenerative features
 - e.g. joint replacement with bioactive coating





IKC Proof of Concept Award - Overview

Eligibility

- Funded projects must led by UK academic institution.
- IKC unable to directly fund industry/commercial organisations

Conditions

- Maximum duration is up to 24 months
- Grant value up to £100k
- Projects must have industry partnership

What can be supported

- Direct staff costs in HEI
- Professional costs e.g. commercial business plan development, market reports
- Prototype development, manufacturing costs
- Additional commercial engagement

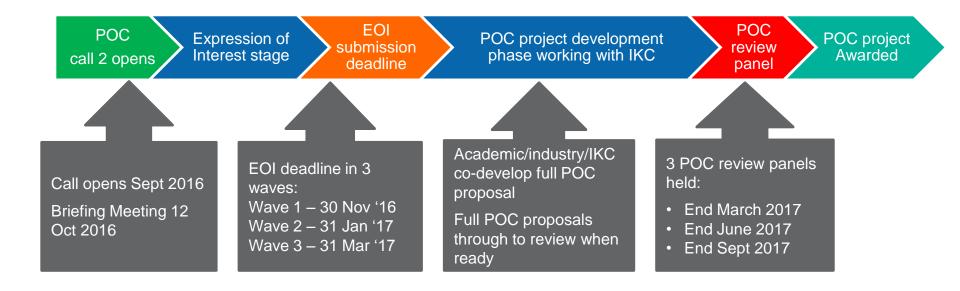
What is not supported

Patent costs, patent/FTO searches





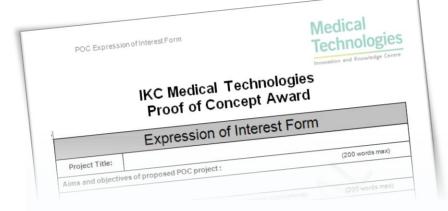
Application Process







Considerations for Eol



- Vital to consider clinical need, commercial opportunity and route to market – even at an early stage in development pathway
- Is your development ready for PoC funding?
 - -Where does your idea sit on the TRL scale?
 - -Where do you expect to progress to with the PoC funding support?
 - -Must be translational not 'just' a research project
 - Show background to work done previously
- Must have an industrial partner
 - -Develop proposal with industry input.
- Do you know how a product might be regulated?





Eol Hints and Tips



- Be specific about aims and objectives or the proposed project
- Tell us why project/technical solution is a good idea (under "Project Scope") and can meet the clinical need better than existing/alternative approaches
- Tell us why the clinical need is an important one (patient numbers, expected addressable (total) market). Start to think about competitors.
- Tell us how you will protect your technology (or if IP has already been secured)
- What do you expect the next steps after this PoC project to be?
- Be specific about why this will succeed but don't ignore the risks (and have ideas about how to mitigate these)
- Be realistic about what can be achieved
- Think about work packages and an outline Gantt chart





Project Finances

- Requested costs must be realistic and appropriate will need to be fully described and justified in full application.
- What can be included:
 - Salaries for staff (PDRA) working directly on the project
 - Consumables include in overall budget (headline figure at Eol stage)
 - Prototyping costs / equipment
 - Animal study costs (provided due consideration given to 3Rs)
- In line with RCUK practice, IKC will pay 80% of the Full Economic Costs
- IKC can fund up to 6 POC projects with grant values up to £100,000





IKC Proof of Concept Award - Full Application Stage

Medical Technologies



IKC PoC Funding Application

| POC Funding N | | Return to Application 3123 | |
|-----------------|------------------------|----------------------------|------|
| Recommendation | a royal roffice us | e only] | Date |
| Project Directo | or Approval [office us | Signature | |
| Name | | | |

- Academic team, industry partner and IKC work together to co-develop the full proposal Title Pr
- Full application is more detailed than Eol but follows pattern of Eol
 - 20 pages max

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- More detail on clinical need, commercial opportunity, route to market and technical solution.
- Detailed project plan Gantt chart, work packages, milestones and deliverables
- Resource requirements including project team needed
- Detailed financial breakdown needed
- Risk Register –technical, commercial, financial, organisational
- Development plan following POC funding to commercialisation/clinic



IKC Industry Partnership Proof of Concept Award - Timeline

| Stage | Deadline | |
|---|----------------------------------|--|
| Expression of Interest proposals submission deadline - wave 1 | 5pm 30th November, 2016 | |
| Expression of Interest proposals submission deadline - wave 2 | 5pm 31st January, 2017 | |
| Expression of Interest proposals submission deadline - wave 3 | 5pm 31 st March, 2017 | |
| 1st Full Application Review panel meeting | (tbc) end March 2017 | |
| 2nd Full Application Review panel meeting | (tbc) end June 2017 | |
| 3rd Full Application Review panel meeting | (tbc) end Sept 2017 | |
| Applicants informed of outcome | 1 week after panel | |





Translational Proof of Concept Award Further Information and Contacts

- Panel Q&A session
- Further 1 to 1 discussion today
- Key contacts:

| Contact Details | | | | |
|--|--------------------------------------|--|--|--|
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