Catapult Researchers in Residence (RiR) Programme: Opportunity Description

Digital Technology for Outcome-based Urban Planning

Name of the Catapult(s)	Future Cities Catapult
Location(s)	London
Description of the Catapult(s)	The Catapult centres are a network of not for profit world-leading centres designed to transform the UK's capability for innovation in specific areas and help drive future economic growth. At the Future Cities Catapult, our mission is to help UK firms develop innovative products and services to meet the changing needs of cities, and to sell them to the world. In doing so, we will support the emerging Advanced Urban Services sector in becoming an enabler of national productivity and a central plank of the UK economy. We develop ambitious and impactful new projects that leverage our established strengths as a neutral convenor, helping buyers better articulate their needs to the market, working with suppliers to respond to those needs, engaging academic leaders to translate the latest R&D into application, driving the dissemination of evidence that unlocks investment and adoption, and provoking creative disruption in services and systems overdue for innovative transformation. https://futurecities.catapult.org.uk/
Description of the Challenge	According to the UN, by 2050, another 2.5 billion people are estimated to be living in urban areas. Researchers from the LSE have also shown that urban footprints are growing at twice the speed of urban population. Urban planners across the globe are urgently trying to ensure that this growth is accommodated with the right number of homes, at the right density, with the right amount of transport, social infrastructure (e.g. schools and hospitals), employment and green space. But today these planners are driven by these numbers with little if any way to measure the impact that they are having on outcomes such as health, well-being, or productivity. New and emerging technology is giving us the data and tools to better understand these human outcomes. We're now at a point where urban planning objectives can focus more on them. To measure the impact of the built environment, we need to decide what we should measure and how. We need to have comprehensive and robust frameworks to know what to prioritise and how to interpret different data sets. We need to embed the necessary technology to collect data at the right level of detail.

	This challenge is aimed towards researchers who are interested in exploring new approaches to measuring the impact of urban planning/ built environment on human beings, with the support of emerging digital technology. The ultimate purpose of this research is to develop a toolkit to promote the transformation of urban planning from output-based measures to outcome-based ones.
Researcher Specification	RiR fellowship applicants must be academic employees of an eligible organisation and must be resident in the UK. For this scheme, we are following EPSRC eligibility criteria. For detailed information, please see EPSRC Eligibility Criteria. Ideally, candidates should have extensive knowledge in, but not limited to, some or all of the following areas: • Urban planning, Urban regeneration, Architecture, etc. • Environmental psychology/ Neuroscience/ Anthropology • Internet of things/ Data science/ New technology
Other Details	The aims of the Researchers in Residence (RiR) programme are to build connections, support pathways to impact, and knowledge exchange between academia and the Catapult centres. The project duration is 12-24 months with time spent in the catapult spread over regular intervals. The outputs of this residency could include a final report, co-authoring of papers, conference proceedings and potentially a toolkit to illustrate the application of the findings to the built environment industry
Closing Date for Applications	17:00 (GMT) Monday 3rd December 2018