



# CITO – Chief Innovation and Technology Officer

CANDIDATE INFORMATION PACK

05<sup>th</sup> of October 2015

**CATAPULT**  
Future Cities

# Contents

	Page
Welcome Message .....	3
About Catapult Centres .....	4
About us .....	5
Structure and funding .....	6
Role description .....	7
Person specification .....	12
Our culture .....	13
Timetable.....	14
Application and contacts.....	15
Equal opportunities.....	15
Our location.....	15

## Welcome Message

Thank you for your interest in the Future Cities Catapult.

As part of meeting our ambitious strategic challenges and maintaining our strong organisational growth, we are looking to reinforce our Executive Management Team with a Chief Innovation and Technology Officer.

We are looking for a high-calibre person with experience working in businesses related to the future or 'smart' city arena, making complex change happen in cities, deploying cutting-edge technology as it applies to cities and supporting SMEs and start-ups. Given our role as an 'intermediary' organisation, sitting between the research base and business, operating as a private company, but receiving support from Government, we are also interested in individuals who have knowledge of working across these sectors.

This candidate information pack will guide you through the origin of the Catapult Centres and the mission, structure and governance of the Future Cities Catapult. You will also find details of the role and person specification for this appointment.

This is a truly exciting opportunity and you could not have chosen a better time to want to get involved. If you are interested in being part of one of the most innovative and forward-thinking projects in the UK, then we look forward to receiving your application.

On behalf of the Future Cities Catapult thank you for your interest in developing solutions to the future needs of our cities and we wish you the best of luck with your application.



Peter Madden OBE

Chief Executive

## About Catapult Centres

The Catapult Centres are a network of world-leading centres designed to transform the UK's capability for innovation and help drive future economic growth. They do this by providing access to expert technical capabilities, equipment, and other resources required to take innovative ideas from concept to reality.

Catapults are not-for-profit, independent organisations which connect businesses with the UK's research and academic communities. Each Catapult Centre specialises in a different area of technology, but all offer a space with the facilities and expertise to enable businesses and researchers to collaboratively solve key problems and develop new products and services on a commercial scale.

Catapults exist to:

- Reduce the risk of innovation;
- Accelerate the pace of business development;
- Create sustainable jobs and growth;
- Develop the UK's skills and knowledge base and its global competitiveness.

Each Catapult focuses on an area in which the UK has genuine potential to generate growth in strategically important global markets. There are seven centres already open for business:

- Cell Therapy
- Digital
- Future Cities
- High Value Manufacturing (itself a network of seven centres)
- Offshore Renewal Energy
- Satellite Applications
- Transport Systems

Three more are in the pipeline - Energy Systems, Precision Medicine and Medicines Technologies.

More information about the Catapult programme is available at [www.catapult.org.uk](http://www.catapult.org.uk).

## About us

We are Future Cities Catapult. We advance innovation, to grow UK companies, to make cities better. We bring together businesses, universities and city leaders so that they can work with each other to solve the problems that cities face, now and in the future.

From our Urban Innovation Centre in London, we provide world-class facilities and expertise to support the development of new products and services, as well as opportunities to collaborate with others, test ideas and develop business models. We help innovators turn ingenious ideas into working prototypes that can be tested in real urban settings. Then, once they're proven, we help spread them to cities across the world to improve quality of life, strengthen economies and protect the environment.

Our Cities Lab provides data analysis, modelling and visualisation capabilities to understand and elucidate city problems, while on-the-ground demonstrators in our network of collaborating cities provide opportunities for testing new approaches in-situ. Combined, they help us discover which new ideas can have the biggest impact on our urban environments.

By bringing together the UK's top architects, engineers, designers, academics and business professionals, we can help them transform cities on a global scale. We will strengthen the UK's ability to turn excellent urban innovations into commercial reality.

Our work currently focuses on three core themes: promoting healthy cities, building resilience in urban infrastructure, and designing strategies to help cities adopt and finance smarter technologies.

What are we working on right now? We have projects across the UK, and increasingly internationally, looking at issues ranging from better infrastructure planning to supporting new urban predictive models to how to gather and use city data.

For more information about us visit [www.futurecities.catapult.org.uk](http://www.futurecities.catapult.org.uk) and follow us on Twitter @FutureCitiesCat.

## Structure and funding

The Future Cities Catapult is a company limited by guarantee. The Executive Management Team manages day-to-day operations under the supervision and guidance of the board of directors.

The board is chaired by Professor Sir David King. The other Board members are:

- Emma Howard Boyd, Vice Chair and Chair of Audit Committee
- Keith Clarke CBE, Vice Chair and Chair of Nominations Committee
- Professor Rachel Cooper, OBE
- Mark Spelman
- Pam Alexander, OBE
- Sir Michael Bear
- Charbel Aoun
- Peter Madden, OBE Chief Executive

Peter Madden, OBE, the Chief Executive, leads the Future Cities Catapult together with a team of executives: the Chief Financial Officer, Chief Business Officer, Chief Innovation and Technology Officer and Chief Operating Officer– the last one of which is also under recruitment.

To establish the centres, all Catapults receive a core grant, under a Grant Funding Agreement, from Innovate UK.

In addition to the Innovate UK core grant, the Future Cities Catapult currently receives funding through direct contracts with UK business, projects with UK and international cities, and from competitive Collaborative Research and Development (CR&D) grants, including EU Horizon 2020 funding.

## Role description

<b>Job Title:</b>	<b>CITO, Chief Innovation &amp; Technology Officer</b>
<b>Location:</b>	Central London
<b>Responsible to:</b>	Chief Executive
<b>Responsible for:</b>	Line management of team of approximately 40 people
<b>Salary and benefits:</b>	Competitive salary with attractive benefits
<b>Working hours:</b>	Full time. The pattern of hours may vary according to operational needs and generally work will be carried out during normal office hours. We're a flexible employer.
<b>Contract:</b>	This is a permanent contract. The period of notice is 3 months in writing on each side. There is a probationary period of three months.
<b>Holiday:</b>	25 days per annum, plus statutory holidays.
<b>Equal opportunities:</b>	We strive to be an equal opportunities employer and commitment to this process will be expected.

### The essence of this role

The essence of this role is to run ground-breaking technology innovation processes to generate new urban products and services to meet the needs of global cities. To enable this by managing a unique Cities Lab, which attracts clients and collaborators from around the world.

The Cities Lab has a dual role within the Future Cities Catapult: developing research and innovation projects; and providing deep content expertise to external projects. Our projects are exciting and varied, but also complex and challenging, combining new technologies with multiple partners to solve different city challenges in a range of places. Across the organisation, there will be some 50 projects a year ranging from small, £50,000 experimental projects to multi-million, multi-year research projects. The proportion of our work that is overseas will increase year-on-year for the next decade.

The job entails: providing international thought leadership on urban innovation; leading on understanding cutting edge technology and approaches; advising on the application in urban contexts; and driving innovation and experimentation to produce stuff that works in cities.

The CITO will have overall responsibility for urban innovation, applying quantitative and qualitative methodologies into practice and will manage a senior team of experts in a wide range of fields such as data science, technology, design, insights, digital strategy and economics.

## Main Responsibilities and Activities

The CITO will report directly to the Chief Executive, and be part of the Executive Management Team (EMT), responsible for steering the organisation. The post-holder will have direct responsibility for the innovation process and projects within the Cities Lab and will ensure the team is appropriately deployed to provide high-quality support to the projects being delivered across the Future Cities Catapult. The CITO will provide significant input to the strategic planning process and will support the delivery of high quality and high-impact innovation projects.

The CITO will be responsible for four key areas:

- (i) International thought leadership on future cities;
- (ii) The innovation processes;
- (iii) Applying technology and innovation to our practical projects;
- (iv) Management of the team and contribution to the organisational strategy.

### **International thought leadership on future cities**

- Ensure the team – and wider organisation - stay at the cutting edge of thinking and practice in the areas of: data and modelling; instrumenting the city, including urban Internet of Things; new urban design and city planning; economics, performance in use, market creation and development; citizen engagement and user-centred design practice;
- Consolidate and continue to build the urban innovation capabilities of the Future Cities Catapult, developing and integrating the content areas and experts of the Cities Lab;
- Build a reputation as one of the top three urban innovation centres in the world.

### **The innovation processes**

- Implement ground-breaking multidisciplinary innovation processes to tackle city-challenges; generating, prototyping, testing and helping deploy marketable innovations;
- Develop systematic and creative approaches to innovation across the Cities Lab, trialling, prototyping and deploying innovation using approaches such as futures and user-centred-design, while bringing together the different disciplinary perspectives;
- Establish an innovation-driven culture in the team, improving the existing processes and creating cutting-edge methodologies able to optimise the way the organisation operates and engages with their stakeholders.

### **Applying technology and innovation to our practical projects**

- Ensure the Cities Lab leads or participates in our projects with the required input on technology and urban innovation;
- Help deliver tangible outcomes, catalysing innovation, supporting SMEs and business, improving how cities function;

- Support businesses in commercialization, developing digital strategy and economics frameworks for market creation and development;
- Help establish, run and use for testing, technology demonstrator projects and sites, based in cities or major urban developments;
- In close collaboration with the Chief Operating Officer and Project Delivery team, provide internal resources, support and oversight to make sure our projects are delivered with high standards of quality, on time and budget.

### **Management of the team and contribution to organisation strategy**

- Develop a collaborative and supportive environment, enabling strong work relationships amongst the team, stimulating creativity, innovation and knowledge sharing;
- Manage the resources of the City Lab, balancing external delivery with internal research and development projects
- Set the approach of the organisation in conjunction with the CEO, wider EMT and City Lab leadership team;
- Provide input to the EMT; serve as liaison to and work with Board of Directors to keep them abreast of strategies and challenges on urban innovation;
- Share learning from innovation experience into the strategy setting and business planning process.

All C-level Officers will be expected to share the goals of the Catapult – driving, innovation, supporting businesses to be more commercially successful, and making cities more efficient and sustainable. They should also be role models of our culture of openness, respect, cooperation, learning and fun.

A core team has successfully been established over the past two years. The post-holder will have the opportunity to shape and build the team to tackle larger and more challenging projects over the coming years.

The position will be mainly based in the Urban Innovation Centre in London but requires flexibility to travel in the UK and internationally, this might mean 6 short trips per year.

## Outcomes of the job

We like to judge success against outcomes. We would expect you to achieve the following headline outcomes after one year and three years.

### i) Twelve-month outcomes

Function	Deliverable
International thought leadership on future cities	<ul style="list-style-type: none"> <li>- Capabilities produced and kept up to date that can be used to grow wider UK reputation and capability;</li> <li>- For the post-holder, and the organisation, to be internationally recognised experts on urban innovation;</li> <li>- The Cities Lab to be attracting the world's leading businesses, cities and innovators to work with the Catapult;</li> <li>- 25 high-quality academic collaborations;</li> <li>- Proof that participating cities have greater confidence to invest in integrated city solutions;</li> <li>- The organisation to win and deliver, £2.5m in CR&amp;D projects in FY 2016-2017 jointly with Chief Business Officer and Chief Financial Officer;</li> <li>- Publish thought leadership, innovation methodology pieces, prototypes and project outcomes to inspire urban innovation;</li> </ul>
The innovation processes	<ul style="list-style-type: none"> <li>- Six new prototypes that achieve stakeholder recognition;</li> <li>- 2 new trademarks or licenses registered;</li> <li>- A total of 5 demonstrators running, effectively supporting testing and scaling of technology;</li> <li>- 2 new PAS standards developed;</li> </ul>
Applying technology and innovation to our practical projects	<ul style="list-style-type: none"> <li>- Support the delivery of a portfolio of ~40 projects, worth ~£8m to us, across the UK and in 4-5 international locations, scoping and overseeing the Cities Lab component (including technologies, urban planning, economics);</li> <li>- The Cities Lab contribution to our projects is consistently delivered on time and budget;</li> <li>- Performance in use measured on 10 projects and database/library established;</li> <li>- 2 new spin-out companies created (jointly with Chief Operating Officer);</li> </ul>
Management of the team and contribution to organisation strategy	<ul style="list-style-type: none"> <li>- Develop and consolidate a high performing team with circa 5 head-of level managers plus respective teams underneath them (a total of approximately 40 people);</li> </ul>

	<ul style="list-style-type: none"> <li>- The Cities Lab to be earning income for the Catapult, both indirectly, and directly through hiring and development of the capabilities;</li> <li>- Lead by example in driving an innovation mind-set across the organisation, engaging the wider team to support your efforts - as recognised by at least 75% of your peers in the Staff Survey;</li> <li>- Meet all Innovate UK project delivery reporting requirements.</li> </ul>
--	---

**ii) Three-year outcomes**

<b>Function</b>	<b>Deliverable</b>
International thought leadership on future cities	<ul style="list-style-type: none"> <li>- Future Cities Catapult seen as one of the top 3 urban innovation centres in the world;</li> <li>- The Cities Lab to be attracting the world’s leading businesses, cities and innovators to work with the Future Cities Catapult;</li> <li>- In partnership with our CR&amp;D Funding Team, to achieve annual CR&amp;D income (i.e. delivery in-year) of £5.5m by March 2019;</li> </ul>
The innovation processes	<ul style="list-style-type: none"> <li>- 8 demonstrators in place, effectively supporting testing and scaling of technology;</li> <li>- 7 new patents, trademarks or licences registered by Future Cities Catapult and partners (academic and companies);</li> <li>- Two further PAS standards launched; influence ISO and international agenda;</li> </ul>
Applying technology and innovation to our practical projects	<ul style="list-style-type: none"> <li>- Consistently support the delivery a portfolio of ~50 projects, worth ~£15m to us, across the UK and in 4-5 international locations;</li> <li>- The Cities Lab contribution to our projects is consistently delivered on time and in the budget;</li> <li>- 8 new spin out companies (jointly with Chief Operating Officer);</li> </ul>
Management of the team and contribution to organisation strategy	<ul style="list-style-type: none"> <li>- Lead and develop a world-class team of around 40;</li> <li>- The Cities Lab to be earning income for the Catapult, both indirectly, and directly – through hiring of the capabilities;</li> <li>- The organisation to be achieving its income targets;</li> <li>- Reach high levels of happiness in the team, as recognised by the staff survey results: overall 66% happiness; happiness with line management 75%;</li> </ul>

## Person specification

### Required Competencies

- Leadership
- Creativity
- People management skills
- Analytical skills
- Relationship-building and solid senior stakeholder management
- Organisation and planning
- Efficiency
- Follow-through on commitments and persistence
- Listening and learning
- Proactivity
- Strategic thinking and ability to see the big picture

### Skills and Experience

- 10+ years' experience of working at a senior level within a similar position, ideally in an innovative technology-led environment applied to business;
- Demonstrable senior experience in innovation, thought leadership and practice, preferably in the urban arena or related fields; experience in the process of idea generation, testing and implementation;
- Highly competent relationship builder with outstanding collaborative skills and a track record of relevant partnerships and collaborations with Academia, and ideally businesses and cities;
- Experience providing cutting-edge solutions to significant project budgets within complex matrix environments;
- Sufficient technical understanding in areas such as data science, technology, design, insights, digital strategy or economics in order to oversee the development of the Cities Lab and steer the expert input required; personal credibility and thought leadership in at least one of these areas;
- Experience of multiple projects in an urban context, with particular experience of spatial/infrastructure or digital projects an advantage;
- Understanding of commercialisation strategies in product or service innovation and of the role of digital strategy and economics for market creation and development;
- Extensive experience working with Board level stakeholders and running Board level presentations;
- Ability and track record to build, guide and motivate a team, and participate fully in the Management team;
- Excellent written and verbal communications and influencing skills;
- Ability to initiate and manage a number of projects and work strands simultaneously.

## Our culture

The Future Cities Catapult is a rapidly growing organisation with a mission to make urban innovation happen. We are all deeply committed to our mission, and you will need to share that commitment. And you will have to be happy working in a fast-moving and cross-disciplinary environment with lots of change. Things change as we learn, and you'll need a degree of adaptability. Our culture is open, collaborative and relatively non-hierarchical. We've tried to capture our way of working in three principles:

**(i) Break new ground** – we're transformative, imaginative and intelligent

**(ii) Play nicely** – we're collaborative, approachable and fair

**(iii) Make it a reality** – we're down to earth, tangible and we get stuck in.

You'll thrive in an environment that sits between public and private, between cities and tech, between art and science, between research and practice. If you are excited by the possibility of working in one of the world's leading urban innovation centres, a place stuffed with a diverse group of talents and perspectives, we would encourage you to send your application.

## Timetable

We know how busy you are, so we want to outline key milestones of the selection process in advance. In order to help you plan your schedule, these are the provisional dates to keep in mind regarding the appointment process:

<b>Date</b>	<b>Stage</b>
16 <sup>th</sup> of November, 10am	<ul style="list-style-type: none"><li>• Deadline for applications</li></ul>
By the 20 <sup>th</sup> of November	<ul style="list-style-type: none"><li>• Feedback on your application</li></ul>
Week of the 23 <sup>rd</sup> of November	<ul style="list-style-type: none"><li>• Phone interview</li></ul>
Week of the 30 <sup>th</sup> of November	<ul style="list-style-type: none"><li>• First interview in person</li></ul>
Weeks of the 07 <sup>th</sup> and 14 <sup>th</sup> of December	<ul style="list-style-type: none"><li>• Final panel interview</li></ul>

## Application and contacts

If you meet the requirements please send your CV and covering letter outlining your motivation and how you meet the key elements of the job specification [here](#).

For more informations on the opportunity visit our [microsite](#). For further questions about the role and selection process please contact:

---

Tiago Ivo Martinho

Talent Acquisiton Manager

[tmartinho@futurecities.catapult.org.uk](mailto:tmartinho@futurecities.catapult.org.uk)

+44 (0) 7702 262611 | [@tiago\\_ontalent](#)



---

## Equal opportunities

We strive to be an equal opportunities employer and commitment to this process will be expected. We will be proactive in all matters relating to equality of opportunity and diversity.

If you have a disability of any kind, or your mobility is reduced, please let us know. The necessary adjustments to the recruitment process and respective arrangements will be put in place by our team.

## Our location

Our Urban Innovation Centre is in Clerkenwell Green, London. This 25,000 ft<sup>2</sup> building houses the Future Cities Catapult, our Cities Lab, project and event space, as well as providing a home for other organisations and initiatives that advance our agenda. More information on the Urban Innovation Centre can be found [here](#).

For more information visit our [microsite](#) and website [www.futurecities.catapult.org.uk](http://www.futurecities.catapult.org.uk) and follow us on Twitter @FutureCitiesCat.