

# TRANS FORMA TION NW

A DOCTORAL PROGRAMME IN  
DESIGN & CREATIVITY

**Transformation NW is a fully-funded doctoral training programme that applies design and creative techniques to maximise new product and service opportunities for business in the North West. Registered in one of seven academic institutions in the North West, students co-create a programme of applied research in collaboration with large and small businesses. Transformation NW aims to enhance growth and prosperity in the region in support of the industrial strategy.**

Building on the research expertise in design, digital technologies and the creative sector across four core NWCDTP partner institutions (Lancaster, Manchester Metropolitan, Liverpool and Salford Universities), innovative cooperation and collaboration across the consortium will help to deliver new product and service opportunities for businesses in the North West. Our approach draws upon the NWCDTP's research excellence in design and the creative sector, and the consortium's experience in innovative in doctoral training.

Through interdisciplinary collaboration linking large and small-scale businesses together, students will undertake an applied PhD typically comprising three or four thematically linked projects with industry partners. Adopting an open and cross-industry approach, students will fuse science and technology with creative techniques, integrating place- and thematic-based responses to foster conditions for a sustainable, resilient and inclusive economy.

In response to the Industrial Strategy, research themes to which design and creative practice can be applied include:

- Transformative digital technologies
- Technologies for the Creative Industries
- Manufacturing processes and materials of the future
- Bioscience and biotechnology
- Leading edge healthcare and medicine
- Smart, flexible and clean energy technologies
- Quantum technologies
- Robotics and artificial intelligence
- Satellites and space technologies

Transformation NW aims to further grow and scale up the creative sector in the North West whilst enhancing and contributing to the wider industry, recognising the value of combining science and technology with design and creativity, upon which much of the economy increasingly relies.

Transformation NW is funded by the AHRC as part of the National Productivity Investment Fund (NPIF).

## **Background to the Programme**

NESTA has found that North West hosts the largest creative cluster outside London comprising five key areas of high growth, and underscored the importance of universities as anchor institutions in emergent creative clusters, particularly in the North of England. Design is the fastest growing of the creative sector and cuts across the whole economy. It has a vital role to play in accelerating ideas from lab to market, using the horizontal nature of design, and it clearly has the potential to work across multiple sectors to introduce new technologies that are of relevance to a number of supply chains. We also know that place based strategies rely on investment in skills and talent for local and regional growth and firms wish to work with the Devolved Administrations such as those in Greater Manchester and Merseyside. Graduate retention is also a critical issue as employers surveyed by the DBA and BIDA identified a shortage of industry-ready designers, and a need to improve the retention of talented researchers by SMEs and microbusinesses. This programme aims to address all of these issues.

We are recruiting 12 students in the areas of design (architecture, product, interaction, service, UX) and digital and creative technology. These will comprise a unique cohort within the DTP. Students will be registered at one of the NWCDTP institutions and the cohort will benefit from with co-operation and collaboration across the rest of the NWCDTP. The organisation and delivery of the cohort is built on the experience of the AHRC CX Hub<sup>1</sup> (<http://www.thecreativexchange.org>) that developed an innovative model for PhDs by building novel partnerships of academic, industry, public sector and third sector expertise.

A specific advisory body will support the recruitments and operation of the Transformation NW cohort, with representatives from the creative and digital sector.

## **Organisation of the Transformation North West Cohort**

### ***PhD Recruitment***

1. We are recruiting and selecting candidates on the basis of academic track record, professional experience and research interest. Successful students will be matched to supervisor teams and institutions on the basis of research fit and potential for industrial impact.
2. Supervisory teams will comprise one home supervisor and up to two others from across the consortium depending on the needs of the collaborative projects undertaken.
3. PhD candidate selection will be conducted through interview panels (consisting of representatives from host and partner institutions in July/August 2017).

### ***PhD process***

In parallel to recruitment, we will be working with our existing network of industry collaborators (e.g. BBC, ITV, Manchester Digital, Creative Lancashire, MadLab, etc.), our science parks (Manchester), Health Innovation Campus (Lancaster), university spin-out organisations (such as UMI<sup>3</sup> and Relative Insight), to plan four industry focused transformation labs that will be used to explore research projects around themes identified

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<sup>1</sup> This successfully delivered 100 concepts and prototype for new products and services from 21 PhDs working with the public and private sector.

in the Industrial Strategy Challenge Fund. These will take place in October 2017 in parallel with Design Manchester (11–22 October 2017) to provide traction for at least two transformation labs and generate a wider participation by hosting two more linked complementary events in Lancaster and Liverpool.

Within the PhD model, students work on a number of mini-projects with industry, each 3-6 months long. The PhD model developed has the following attributes:

- i) Real world research jointly owned by the researchers, industry and communities;
- ii) A hybrid approach that marries elements of the traditional theory driven thesis with the practice based approach; however a key distinction is the use of multiple innovation-orientated, practice-based projects with industry over the life of the PhD, and the technique of interrogating projects from multiple theoretical perspectives;
- iii) Experiential learning embedded throughout the PhD period that produces people with a diversity of skills that enable mobility across academic and industry boundaries;
- iv) A platform to enable PhD students to reach and work with a mix of creative firms, who would not normally have the experience and resources to work with academia.

### ***Enhanced Knowledge Exchange***

Transformation NW will facilitate enhanced knowledge exchange between the PhD candidates, supervisors and industry partners through three key mechanisms:

- 1) an annual Summer School that brings together all PhD candidates and supervisors and external stakeholders to share experiences and research insights (peer learning),
- 2) use of social media platforms to provide PhD candidates with a forum for showcasing their PhD journey, key insights and projects,
- 3) publishing a series of 'Stimulus Papers' co-authored between PhD candidates, supervisors and project partners (as appropriate) to disseminate meta-learning and key insights generated across the range of projects undertaken.

### ***Supervision***

We have substantial supervisory capacity across all our institutions. The four universities which lead this initiative all have deep expertise in supervising design and creative PhDs and support an extensive network of existing research partners:

- *ImaginationLancaster* (<http://imagination.lancs.ac.uk/research>) is a leading multidisciplinary design-led research centres in the UK with 17 research active staff with PhD supervisory experience, over £20m in research grants in the past 10 years over 50 PhDs. It was the lead institution in the AHRC Knowledge Hub The Creative Exchange that pioneered an innovative PhD model.
- *Manchester School of Art Research Centre* (MSARC, <http://www.art.mmu.ac.uk/research/>) is one of the largest art and design research centres in in the UK and was rated sixth for its research power in REF2014. It hosts the largest art and design doctoral cohort in the North West and has been recognised for over 20 years as a pioneer of models of practice-as-research.
- *The Centre of Architecture and the Visual Arts* (CAVA, [www.cava-research.org](http://www.cava-research.org)) has 20 staff and post-/doctoral researchers who work on architectural, arts and design practices/phenomena at the intersections between analogue and digital culture in the context of cities. CAVA is known for its practice-based PhD research with technology, creative industry, cultural, and civic partners, often funded by AHRC collaborative doctoral studentships (CDA) and Innovate UK partnerships.
- *Studio for International Media & Technology, Salford University*. (<http://www.salford.ac.uk/simt>) The Studio is a creative technology centre that connects

the School of Arts & Media with the School of Computer Sciences & Engineering to conduct research into new technologies and methods of production, and produces both digital tools and creative outputs. Drawing on expertise in digital media, design, computing, software development and human-media interaction.

**Table of example supervision and themes**, this is by no means exhaustive and we would encourage applicants to enquire further for guidance on the themes and opportunities, as many opportunities will arise when working with industry.

Research Group	PhD Supervisory Experience	Industrial Strategy Themes 'plus' additional/potential research themes
Imagination Lancaster, Lancaster University; Academic Lead: <i>Prof Nick Dunn</i>	Cooper (Design Management and Policy), Dunn (Architecture and Urban Design), Richards (Digital Prototyping and Manufacturing, Rodgers (Product Design & AHRC Leadership Fellow in Design), Coulton (Digital and Speculative Design) Walker (Sustainable Design), Tseklevs (Design and Healthcare), Hands (Design Management and Business), Cruickshank (Design and Innovation)	<ul style="list-style-type: none"> <li>- Manufacturing processes and materials of the future</li> <li>- Transformative digital technologies (plus robotics and artificial intelligence)</li> <li>- Technologies for the Creative Industries</li> <li>- Leading edge healthcare and medicine</li> <li>- Cross sector design management, policy and strategy expertise</li> <li>- Design (product, architecture, visualisation)</li> <li>- Design fiction and IOT</li> </ul>
Manchester School of Art Research Centre, Manchester Metropolitan University; Academic Lead: <i>Prof Martyn Evans</i>	Evans (Design-Driven Innovation), Shaw (Mass-Customisation); Heys (Digital Media & Graphene 3D Printing), Jefferies (Contemporary Urbanism), White (Spatial Inclusion & Age Friendly Cities), Sengupta (Advanced Digital Design & Complex Systems), Dixon (Design & Craft Narratives), Parkinson (Arts for Health)	<ul style="list-style-type: none"> <li>- Transformative digital technologies</li> <li>- Manufacturing processes and materials of the future</li> <li>- Technologies for the Creative Industries</li> <li>- Design strategy, design futures and design-driven innovation</li> <li>- Leading edge healthcare, ageing friendly cities and arts for health</li> </ul>
Centre of Architecture and the Visual Arts, Liverpool University; Academic Lead: <i>Prof Richard Koeck</i>	Koeck (Architecture, Locative & Immersive Media); Iuliano (Architecture/Urbanism & Photography), Kocaturk (Digital Design Informatics & Computation; Smart Cities), Kronenburg (Mobile Architecture & Performance Spaces), Roberts (Media, Heritage & Cultural Memory); Sener-Pedgley (Digital Design Tools & Workflow), Pedgley (Design Interfaces & Interaction Design).	<ul style="list-style-type: none"> <li>- Transformative digital technologies</li> <li>- Technologies for the Creative Industries</li> <li>- Cross sector design expertise</li> <li>- Trans disciplinary design innovation/system thinking</li> <li>- Embedding data &amp; intelligence for integrated urban design ecosystems.</li> <li>- Material Experiences and UX design</li> </ul>
Studio for International Media & Technology, Salford University; Academic Lead: <i>Prof Robin Bargar</i>	Bargar (Creative Technology, Software Design and Development for Interactive Media), Choi (Interaction Design for creative performance applications, Auditory Interfaces and Data Sonification, IoT applications,	<ul style="list-style-type: none"> <li>- Transformative digital technologies</li> <li>- Technologies for the Creative Industries</li> <li>- Interactive device and platform integration</li> <li>- Design framework and methodology for installation and performance technology</li> </ul>

	Creative applications of Nonlinear Dynamics Simulation)	<ul style="list-style-type: none"> <li>- Procedural and generative media</li> <li>- Cloud-based media production and distribution</li> <li>- IoT and ambient assistive interfaces</li> </ul>
University of Manchester <i>Prof Albena Yaneva</i>	Yaneva (Architecture/Science & Technology Studies), Lucas (Architectural design), Doucet (Architectural theory/transdisciplinary), Lewis (Architecture & health care)	<ul style="list-style-type: none"> <li>- Transformative digital technologies</li> <li>- Technologies for the Creative Industries</li> <li>- Leading edge healthcare &amp; medicine</li> </ul>
Keele & RNCM	Some capacity for co-supervision	

The list below give examples of the potential industry partners we will be working with.

- Creative Lancashire
- BBC R&D
- BBC Design and Engineering
- CBBC
- BBC Philharmonic
- Red Ninja
- FACT
- Ultimaker
- UMI<sup>3</sup>
- FutureEverything
- Co-Op
- Cisco
- Tyrell Systems
- Havas
- Hero Cycles
- MadLab
- Manchester Digital
- Republic of the Things
- Factory
- The Lowry
- HOME
- Magnetic North
- Dock10
- Four Seasons Healthcare
- OMA/the Factory
- Arup International
- McCann Manchester
- PLP Architecture
- RIBA North
- Signature Living
- Draw & Code
- Kinicho

## **Funding**

Eligible students will be offered a Postgraduate award consisting of tuition fees, a maintenance payment of £14,553 (at 2017/2018 rate) and a support fund of £550 per year. Please note that these awards are AHRC funded and therefore are restricted to UK and EU residents only. EU students who have not resided in the UK for the full three years prior to the start of their PhD will only be eligible for a fee-only award. Please check our application guidance for more information.

## **How to apply**

Please complete and send the relevant application form (together with two references, transcripts and a CV) by Monday 3<sup>rd</sup> July to [nwcdtp@manchester.ac.uk](mailto:nwcdtp@manchester.ac.uk)

Please see application guidance for more information.

## **Contacts**

If you are interested in this programme and applying for a studentship please contact one of the following lead:

- Professor Rachel Cooper, Lancaster University, [r.cooper@lancaster.ac.uk](mailto:r.cooper@lancaster.ac.uk)
- Professor Nick Dunn, Lancaster University, [n.dunn@lancaster.ac.uk](mailto:n.dunn@lancaster.ac.uk)
- Professor Martyn Evans, Manchester Metropolitan University, [Martyn.Evans@mmu.ac.uk](mailto:Martyn.Evans@mmu.ac.uk)
- Professor Richard Koeck, University of Liverpool, [r.koeck@liverpool.ac.uk](mailto:r.koeck@liverpool.ac.uk)
- Professor Robin Bargar, Salford University, [R.L.Bargar@salford.ac.uk](mailto:R.L.Bargar@salford.ac.uk)
- Professor Albena Yaneva, Manchester University, [Albena.Yaneva@Manchester.ac.uk](mailto:Albena.Yaneva@Manchester.ac.uk)

## **Timetable**

<b>Monday 3<sup>rd</sup> July 2017</b>	Deadline for Funding applications to be submitted to NWCDTP Office
<b>12<sup>th</sup> July 2017</b>	Shortlisting panel
<b>14<sup>th</sup> July 2017</b>	Shortlisted candidates to be invited for interviews
<b>26<sup>th</sup>, 27<sup>th</sup> &amp; 28th July 2017</b>	Interviews.
<b>1<sup>st</sup> August 2017</b>	Successful candidates to be notified
<b>11<sup>th</sup> August 2017</b>	Deadline for acceptance of an award
<b>From 18 September 2017</b>	Start of the programme under the NWCDTP