# Project Details

**Project Title**
Interactive Data Forecasting and Modelling for NHS England's 'prevention at scale' initiative

**Project Summary**
Recent growth in open data and digital tools for working with data have led to a surge in the use of data visualisation to communicate about health, but to date there has been little research into practices, tools and techniques that make for effective data storytelling in the area of public health. The aim of this project is to contribute to this knowledge gap and directly improve data storytelling for population health and wellbeing in Dorset through adding interactive forecasting and data modelling functions, working as a researcher on a live public-sector client brief.

The MRes research will be developed in four phases: a literature study, an experimental or hypothesis-testing phase, an evaluation phase and a writing-up phase.

First you will identify and assess existing data forecasting and modelling for public health. Findings from this analysis will then be applied through practice-based case studies. Specifically, the successful candidate will work with data and existing models from Public Health Dorset to help create live tools to support preventative health campaigns targeted at organisational stakeholders and public audiences. The data forecasting and modelling methods used will be documented, analysed and refined over the course of the project. In addition, quantitative and qualitative evaluations of audience reception, including online and offline engagement with these materials, and their capacity to impact behaviour, will be assessed as part of the project.

During your MRes you will:

- Undertake research methods training to develop a comprehensive knowledge of the research methods used within the fields of data storytelling;
- Critically analyse information in the literature within data storytelling and civic media to identify information gaps, and develop and design a research project in conjunction with Public Health Dorset which addresses an issue within this field;
- Carry out your research project;
- Produce a written critical analysis of the research data (expected to be between 15,000 and 30,000, depending on the practice components produced as part of the research);
- Present your research through a thesis and defend it by viva voce (oral) examination, to the satisfaction of examiners.

The successful candidate will work directly with Public Health Dorset, under the supervision of Dr Einar Thorsen, Dr Duncan Golicher and Dr Anna Feigenbaum, founding members of the BU Civic Media Hub and BU Datalabs project.
This project has been co-created with Public Health Dorset with the aim to directly impact their organisational practices, while more broadly contributing to the emergent field of data storytelling in public health communication and education. The specific focus of the research within this broader remit will depend on the successful candidate and be negotiated by them in liaison with Public Health Dorset and the supervisory team.

The student will be based at Bournemouth University’s Talbot Campus, though the successful candidate will also be expected to work from Public Health Dorset’s premises in Dorchester when required for fieldwork purposes.

**Academic Impact**

This project is designed to contribute to knowledge in two distinct ways: firstly, to contribute to a burgeoning field of data storytelling (as distinct from big data analysis and visualisation, where storytelling is often neglected) with a specific emphasis on developing interactive forecasting tools, and secondly, the unique positioning of this project within the field of public health. The MRes is likely to produce sufficient data for one or more high quality journal articles, and also produce technical forecasting models that can be repurposed with other datasets.

**Societal Impact**

The project is funded by a large public-sector organisation (Public Health Dorset), and the expectation is that they will work with data to solve challenges that arise from this organisation. There is therefore an immediate benefit to the institution that will work with the MRes student. The broad remit of the project on preventative health initiatives also means that the solutions and behavioural change that arise from the project can also have broader societal impact on Public Health Dorset’s stakeholders and citizens in Dorset.

**Training Opportunities**

You will be expected to engage with the Postgraduate Researcher Development Framework, which includes research methodology training, in order to develop requisite research skills for the project. You will also be offered in-house training when working with Public Health Dorset should it be required to work with their systems and processes.

**SUPERVISORY TEAM**

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<tr>
<th>First Supervisor</th>
<th>Dr Einar Thorsen</th>
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<tr>
<td>Additional Supervisors</td>
<td>Dr Duncan Golicher</td>
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<td>Dr Anna Feigenbaum</td>
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**Recent publications by supervisors relevant to this project**


Feigenbaum, A. et al. (2016) Use Of Tear Gas On Peaceful Protesters By Council Of Europe Member States: A Report By Bournemouth University’s Civic Media Hub & The Omega Research Foundation, Centre for the Study of Journalism, Culture and Community

The project is also based on extensive professional practice and outreach workshops run by the Civic Media Hub at BU: http://www.civicmedia.io

**INFORMAL ENQUIRIES**
To discuss this opportunity further, please contact Einar Thorsen via email: ethorsen@bournemouth.ac.uk

**ELIGIBILITY CRITERIA**

Studentship candidates must demonstrate outstanding academic potential with preferably a 1st class honours degree and/or a Master’s degree with distinction or equivalent Grade Point Average. An IELTS (Academic) score of 6.5 minimum (with a minimum 5.5 in each component) is essential for candidates for whom English is not their first language. In addition to satisfying basic entry criteria, BU will look closely at the qualities, skills and background of each candidate and what they can bring to their chosen research project in order to ensure successful completion.

**Additional Eligibility**

Candidates must have a degree or relevant professional experience in statistics, computer science, computational modelling.

**HOW TO APPLY**

Please complete the online application form by **2nd January 2018** with interviews to take place on **8-9th January 2018**. Further information on the application process can be found at: [www.bournemouth.ac.uk/studentships](http://www.bournemouth.ac.uk/studentships)