



i3HS Integrated Interdisciplinary Innovations in Healthcare Sciences

About the i3HS Hub

The Integrated Interdisciplinary Innovations in Healthcare Science Hub is a multidisciplinary project to promote teaching and research across disciplines for population health benefit through data sciences.

We collaborate with internal and external colleagues on topics including bio-health informatics, clinical bioinformatics, machine learning, data mining, biostatistics, health economics, public health and primary care.

Our innovative approach allows us to develop high quality, cutting-edge and reusable learning materials, and also to attract high impact interdisciplinary research grants. Find out more about the i3HS Hub on the **website**, where you can explore our current courses and attend CPD events, and keep up-to-date by following us on **Twitter @i3hsH**.

The Hub's objectives are:

- Collaborating to develop reusable, innovative, learner-centric and multidiscipline learning materials
- Working with partners to develop high quality Open, CPD and credit-bearing resources to support all healthcare professionals
- Facilitating multi-disciplinary & high impact research



STUDY WITH US



Undergraduate courses

The University College for Interdisciplinary Learning allows undergraduate students to study units from across the University, which contribute to their degree programme. A new flagship online unit, developed by Dr Iliada Eleftheriou, has launched this semester: *AI: Robot Overlord, Replacement or Colleague?*

Artificial intelligence (AI), the ability of machines to learn from data, make decisions and perform actions, is now creeping into every aspect of our lives. The new unit explores the mechanisms, implications and ethics of an environment where AI plays an increasingly important role.

The unit is based entirely online; it blends video inputs, case studies, and online modules to create a highly interactive and engaging module which will allow graduates to apply Al in an innovative and socially responsible way and ensure that technology is used to improve the way we work and live.

You can find out more about the course at *bit.ly/UoMRobotOverlord* and join in the conversation on Medium at *bit.ly/RobotOverlordMedium*

Postgraduate courses

Two new course units have been created for the *Master of Public Health* programme by i3HS lecturers: *Digital Public Health (bit.ly/ MPH-DPH)*, taught by Dr Julia Mueller; and *Arts and Public Health (bit.ly/MPH-APH),* led by Annie Harrison, ran for the first time in 2018.

Dr Martin Fergie helped deliver a new *Digital Pathology* module as part of the Molecular Pathology MSc. The module focussed on how digital slide scanning can be incorporated into to pathology labs and its impact on clinical practice and research.

In collaboration with the Manchester Centre for Genomic Medicine, a fully online PGCert in *Clinical Bioinformatics* is launching in March 2019. The programme delivers practical and clinically-focused teaching from a team with years of experience training clinical bioinformaticians for the NHS.

Andy Brass, Professor of Bioinformatics, says that...

"Clinical bioinformaticians are making a real difference in understanding disease processes and improving healthcare. This course provides a starting point for a career in this rapidly expanding area of healthcare".



Continuing professional development events

- Appraising the evidence from observational studies (1 March 2019, 10am-1pm)
- Intercultural public health (7 March 2019, 10am-1pm)
- Implementation sciences (14 March 2019, 10am-1pm)
- Assessing the evidence from randomised controlled trials (18 March 2019, 10am-1pm)
- Appraising the evidence from systematic reviews and meta-analyses (26 March 2019, 10am-1pm)

Book onto any of our CPD courses on the website at bit.ly/i3HShub

ACADEMIC DEVELOPMENT

Forthcoming events

Integrated Interdisciplinary Innovations in Healthcare Science Project

This is a session being run as part of the **Pedagogy and Staff Development Programme** run by the **Academy for Education and Professional Development**

This session will provide an update on the i3HS Hub's projects, for example Virtual Reality, Collaborative Authoring tools and open platform. The session will explain how you could get involved and access the multidisciplinary resources for your own use.

When: **Tue, 2 April, 13:00 – 14:00**

Where: Room 2.219, University Place (map)

Speaker: Fran Hooley

Book a place at: bit.ly/2-April-2019

Agile Learning Design Workshops

We run regular workshops where you can learn to apply our Agile Learning Design approach to the design and development of your courses. This is a great opportunity to reflect on your current course design or start the development of a new course.

For dates of the upcoming workshops, email **i3hs@manchester.ac.uk**

What we do

We provide online materials and face to face sessions on all aspects of technology enhanced learning to help support academic staff. Any future new materials or events will be published on the i3HS website - link.



GET INVOLVED WITH THE HUB

User Stories

User stories are short sentences pinpointing the needs of the user or learner, and are vital to the i3HS hub to pinpoint the needs of different users

How user stories can help you

By adding your user stories we can work with you to create learner-centric materials that are designed once but reused for many different formats. We can also find themes and patterns to help us design and create appropriate materials that can be reused across different disciplines and formats.

You can help by **adding your own user stories** to our collection at **bit.ly/AddAUserStory**.

Who

Who the learner or student is

Objective

What they need to develop in

Value

The value derived from the learning

"As an MPH student,

I want to learn how to evaluate clinical trials, so that I can critically evaluate the evidence base to

implement at population level"

"As a Data Science student,

I want to learn how to synthesise clinical trials data so that I can present more robust findings to my colleagues"

"As a Clinical Medicine student,

I want to learn how to evaluate clinical trials so that I can improve patient management and treatment decisions"



Virtual Reality Lab

The i3HS hub are evaluating the use of virtual reality in teaching, research and wellbeing. We have over 60 titles that include anatomy, physiology, coding, robotics, molecular biology, imaging, 360 video and relaxation.

Do you want to walk along a plank 300ft in the air, or swim with turtles and whales? We have four headsets in our VR Lab, including the HTC Vive Pro, so come along and bring your friends to try it out. To book a session, contact us at i3hs@manchester.ac.uk

i3日S Integrated Interdisciplinary Innovations i<u>n Healthcare Sciences</u>

Please get in touch via i3hs@manchester.ac.uk for any questions.