

The UK Neuroscience Dual-Use Education Network 2012-2013

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Overview

- Why Neuroscience?
- What has been done?
- What has been produced?
- What comes next?



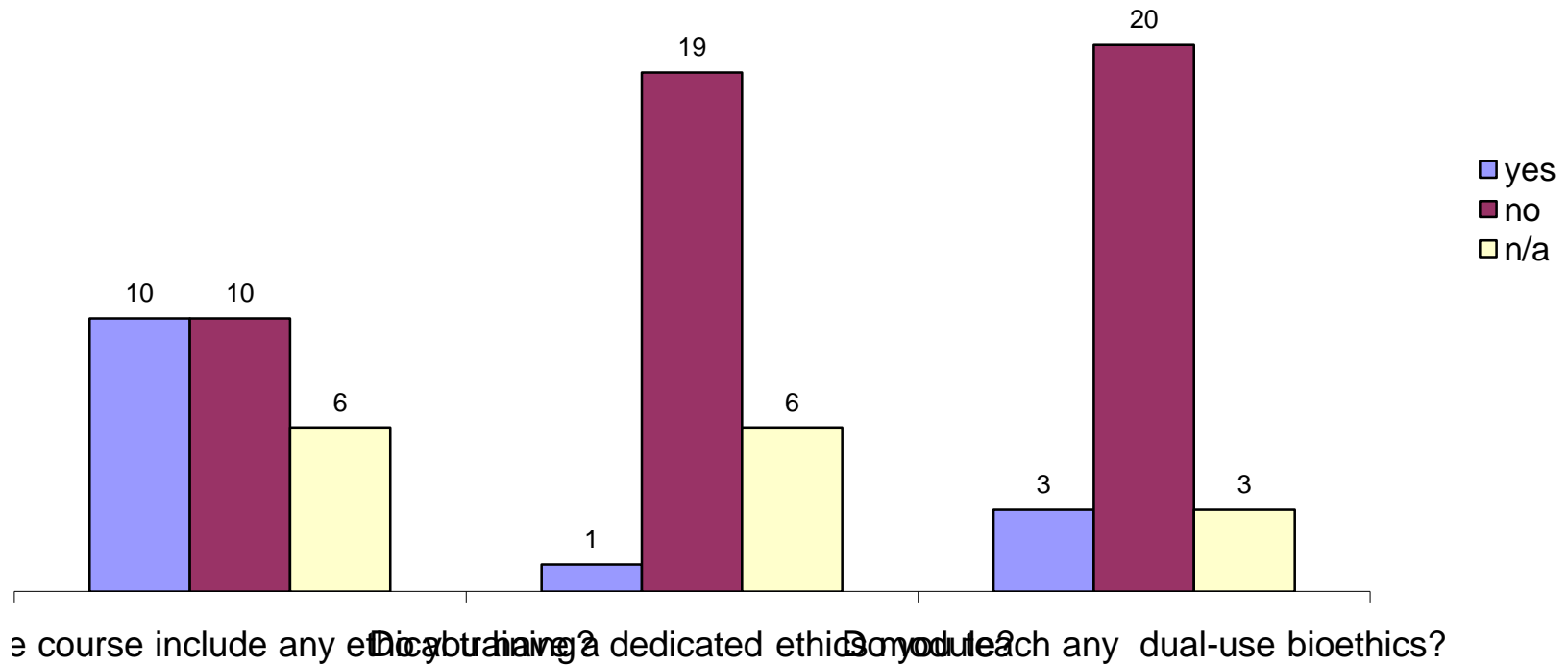
Why Neuroscience?

- Bradford Approach to Education:
 - Survey what is feasible
 - Produce material to help
 - Test material and make it available online
- Thus far only Microbiology & Immunology targeted:
 - Other fields could be of concern (e.g. Neuroscience)
 - Incapacitants
 - Human enhancement
 - Brain-Computer Interfaces
- What material could be useful?

What has been done?

- Obtained a grant together with University of Manchester from the Arts & Humanities Research Council
- Held 3 meetings with Neuroscientists, Ethicists, and Security Experts:
 - Survey what is available in terms of general ethics and dual-use ethics education in neuroscience curricula: very little
 - Discussion of what might help lecturers
 - Produced draft Neuroscience Education Module (NEM)
- NEM will be finalised at the 4th meeting in September 2013

Ethics training in UK Neuroscience curricula?





What has been produced?

- 12 Lectures that consist of 20 slides each with additional lecture notes; similar to Bradford's Educational Module Resource
- The first 7 lectures deal with non-security related Neuroscience ethics issues
- Final 5 lectures cover biosecurity:
 - Introduction to Biosecurity and Dual-Use
 - Novel Neuroweapons
 - Chemical Weapons
 - Biological Weapons
 - The CBW Non-Proliferation Regime



What comes next?

- Application for a Wellcome Trust Grant to test implementation in 2013-14:
 - Deliver security lectures to students; get feedback
 - Develop these lectures into team based learning exercises
 - Develop series of real-world case studies to be used in a Train-the-Trainer Online Programme
 - Write and deliver Briefing Papers to BWC and CWC
- Project website:
<http://www.lab.ls.manchester.ac.uk/neuroethicseducation/>