



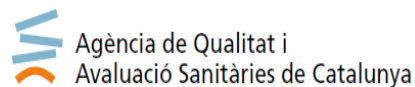
Doha, Qatar
**The International School
on Research Impact Assessment**

“Learning to assess research with
the aim to optimise returns”

RESEARCH IMPACT ASSESSMENT AN OVERVIEW

**PROF JONATHAN GRANT
THE POLICY INSTITUTE, KING’S COLLEGE
LONDON**

NOVEMBER 9- 2015



LEARNING OUTCOME

- Be able to describe the rationale and value of research impact assessment



CAN THE BOFFINS SAVE US?

Vince Cable thinks it's time to borrow. David Cameron insists there is no alternative to austerity. But have our universities found the way to secure long-term growth? Karl West reports



on to spin out their own businesses.

Britain's top universities are more than capable of producing the next big thing, Pitchford insists.

developed a close relationship with Jaguar Land Rover. It has about 500 of the Midlands car-maker's staff on the Warwick campus, developing products with the university.

For example, the rivet and glue technique used to bond the aluminium body of the new Range Rover model was developed at WMG.

"You have to have strategic relationships with companies,"

DAVID CLARK, principal fellow at WMG, believes that the best barometer of how industry views the importance of universities is the amount of cash companies are prepared to invest in research facilities. Glowing references and donations of old bits of equipment are fine, but cash is still king.

By this measure, Jaguar Land Rover must be ecstatic with the work WMG has done. The car maker is partnering the university to open the £90m National Automotive Innovation Campus in March 2015. The centre is being funded by Tata Group, the Indian conglomerate that owns Jaguar Land Rover, and the Higher Education Funding Council for England (Hefce).

Since announcing the venture, WMG has received inquiries from Bosch, which makes car components; the engine maker FEV; and Intel, the computing giant, about setting up their own research facilities there.

"That's what growth is," says Bhattacharyya. "You have to be able to tell companies your idea and let them try it out for themselves. That is really important. That is real technology transfer."

directly funded further education colleges for the academic year 2012-13.

Of this sum, £3.2bn is for teaching and £1.6bn is based on an assessment of the quality of an institution's academic research. The impact of this research on jobs and the economy accounts for just 20% of the evaluation process.

As a result, Britain's academic institutions have become hard-wired to produce research papers. Their ultimate aim is to have highbrow research published in an esteemed academic journal.

Publication in a high-profile journal, coupled with multiple citations, is likely to give the university a better chance of grabbing a bigger slice of the research budget.

Bhattacharyya has called for the system to be revamped. He wants 50% of this evaluation process to be based on impact rather than the number of citations a piece of academic research receives.

A clearer commercial focus could also stop the brain drain from engineering into the City that has blighted British industry for the past 20 years — the chemists, engineers and rocket scientists who were lured into financial trading by the promise of multimillion-pound bonuses. But now investment banks are slashing jobs and cutting bonuses — just as Britain's workshops are stirring from their slumber.

Manufacturing in China and India is no longer as cheap as it was and companies are moving production from east to west.

Domestic factories have a golden opportunity to grab work back from overseas, where

ADVOCACY – MAKING THE CASE FOR RESEARCH

Medical Research:
What's it worth?
from medical research in the UK

“Used as evidence as part of the preparation for the spending review and will be in the foreseeable future” – Science Minister

“few studies that have made a genuine attempt to objectively assess the economic returns of research” –Nature Editorial

Health Economics Research Group (HERG)
Brunel University
Office of Health Economics (OHE)
RAND Europe

For the Medical Research Council,
the Wellcome Trust and the
Academy of Medical Sciences
November 2008

BIS | Department for Business
Innovation & Skills

The Rt Hon David Willetts MP
Minister for Universities and Science

Our ref: 2010/0080799PODW

Mr Jonathan Grant
President
Rand Europe
Westbrook Centre
Milton Road
Cambridge
CB4 1YG

23 October 2010

Dear Jonathan,

Thank you for your letter of 21 September, updating me about some of your recent work relevant to science research, it provided some very helpful and interesting analysis.

The report on "Medical Research, What's it Worth?" is regarded by BIS Analysis teams as very comprehensive and rigorous. It was used as evidence as part of the preparations for the Spending Review and it will continue to be cited in the foreseeable future. Other research areas would no doubt benefit from a similar approach and analysis.

in published papers — the Nature journals are at present considering urgently necessary ones.

Unknown quantities

It is in researchers' interests to help funding agencies quantify the economic benefits of their work.

When research agencies are pressed by politicians to quantify the economic value of scientific research, it is only natural that they reach for whatever numbers they can find and then repeat them as well-established fact. Natural, but wrong. The reality is that few of those numbers — typically, assertions that each unit of research investment will yield a certain amount of additional

research plays a substantial role in fostering innovation — by which they mean new technologies, services and business methods. They also have good evidence that innovation is essential for strong economic growth, especially when society faces constraints on key inputs such as labour, capital and materials.

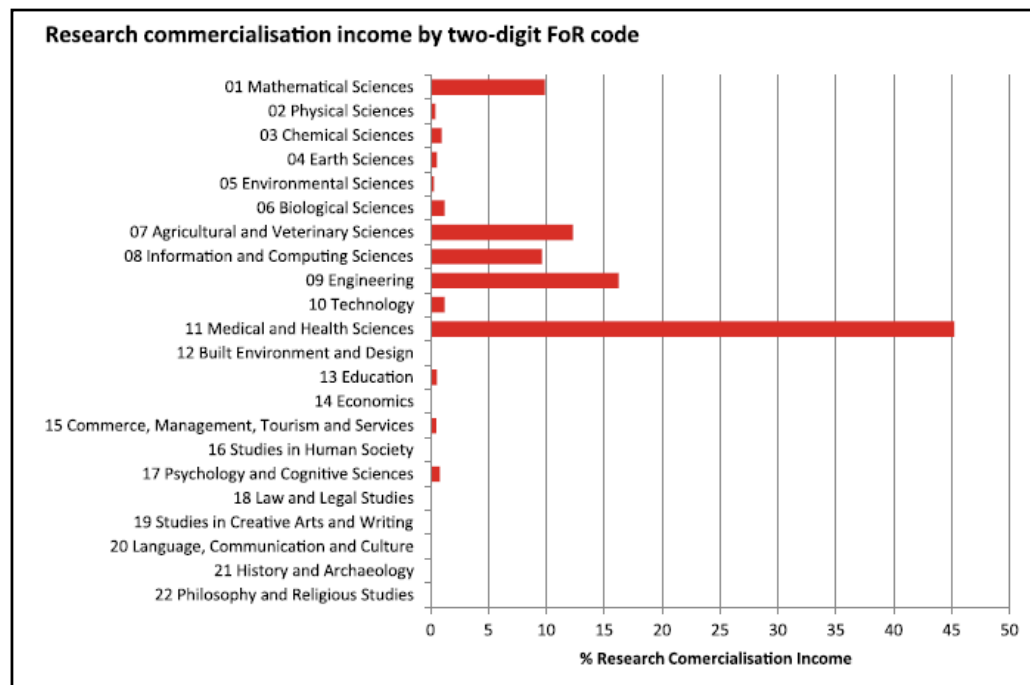
Beyond that, they can't predict which disciplines of scientific research will lead to future innovation — that would require a time machine. Nor, thus far, can they trace how additional research investment will influence a society's ability to innovate.

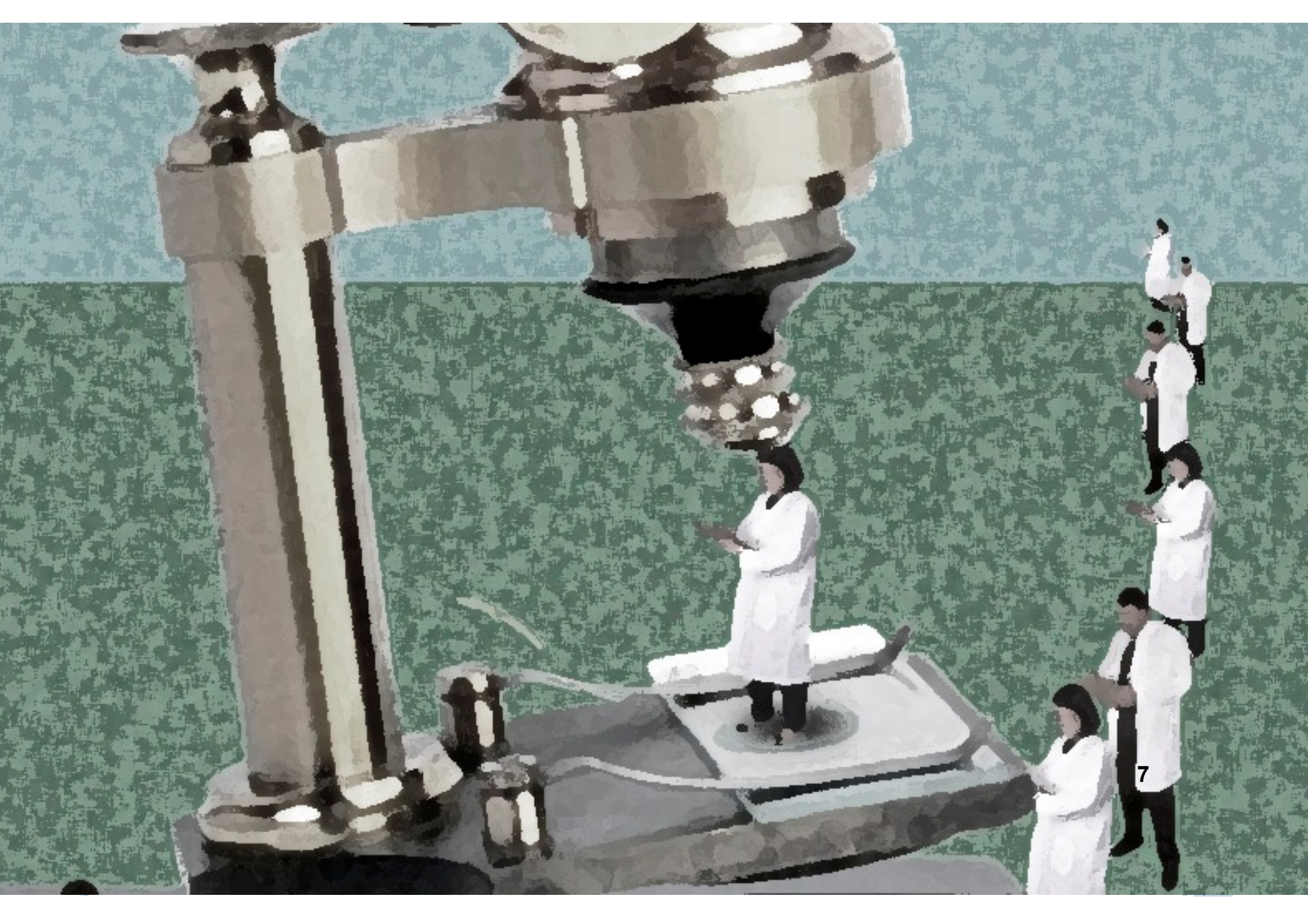
The problem is that innovation is not a simple, linear system in which basic research begets technology, and technology begets innovation — although that has always been the easiest model for





ACCOUNTABILITY – TO TAXPAYERS & DONORS





ANALYSIS – UNDERSTANDING WHAT WORKS



Researchers that show interests in other field(s) have a higher impact and those focused on a single topic have a lower wider social impact

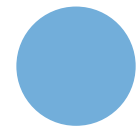
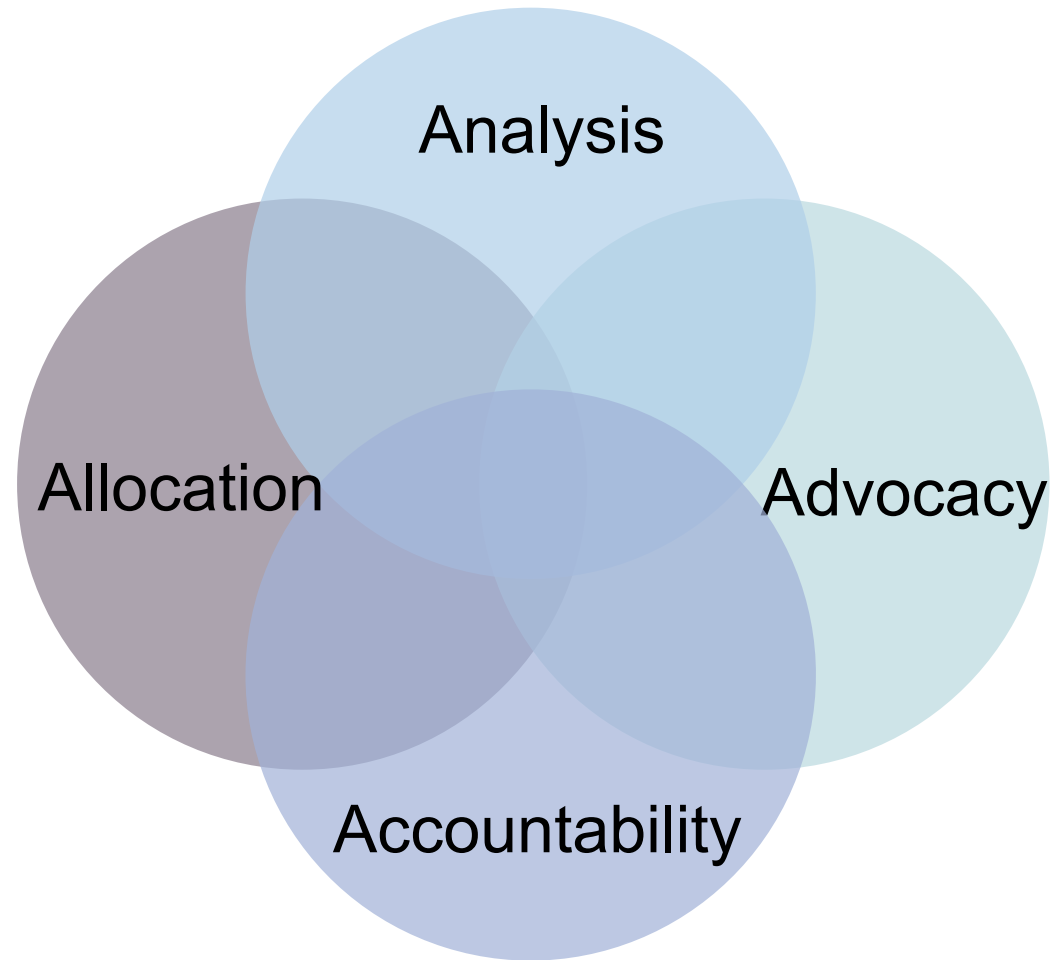




ALLOCATION – REWARDING RESEARCH IMPACT



BE CLEAR ON THE PRIMARY PURPOSE OF YOUR RESEARCH IMPACT ASSESSMENT



LEARNING ACTIVITY

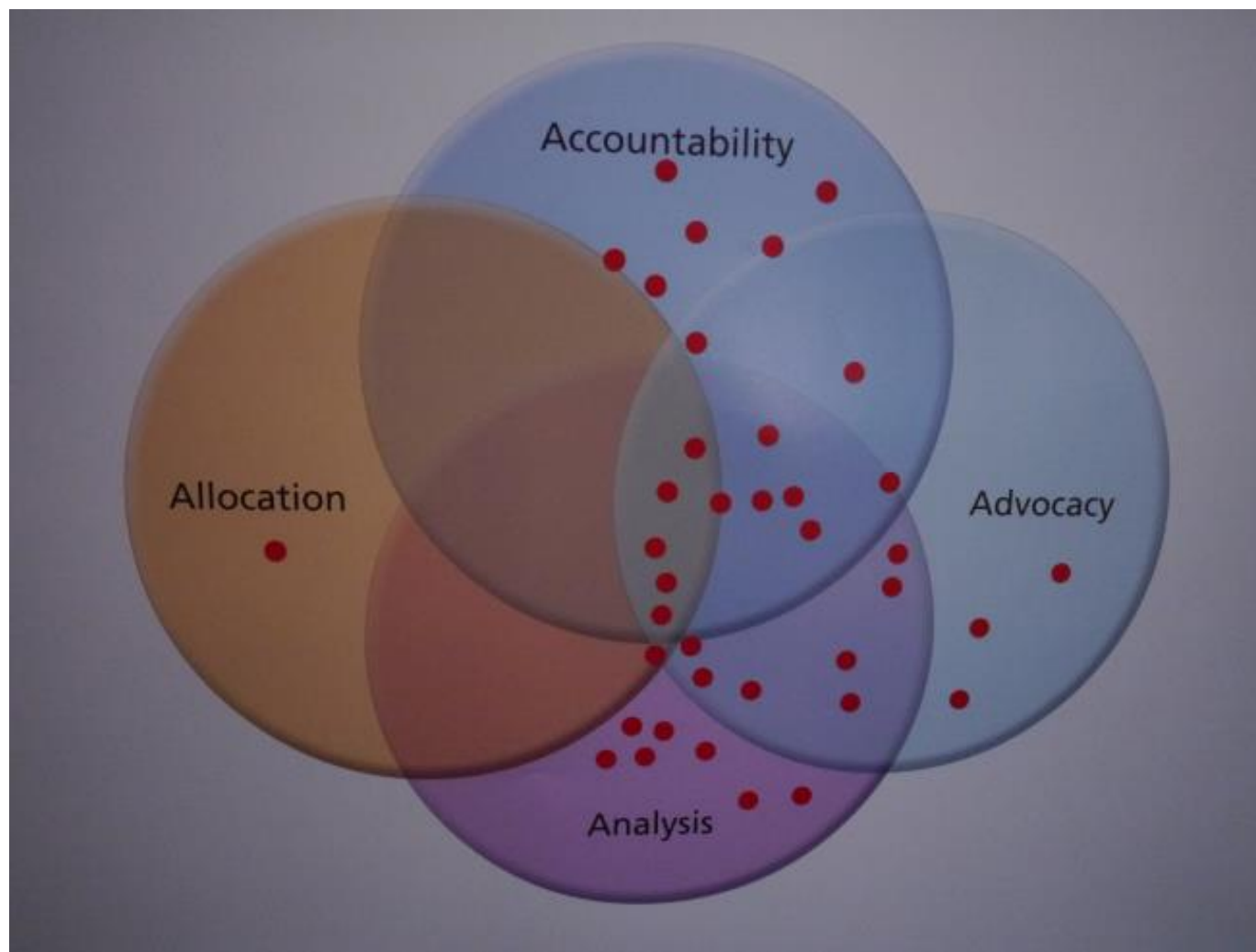


In small groups

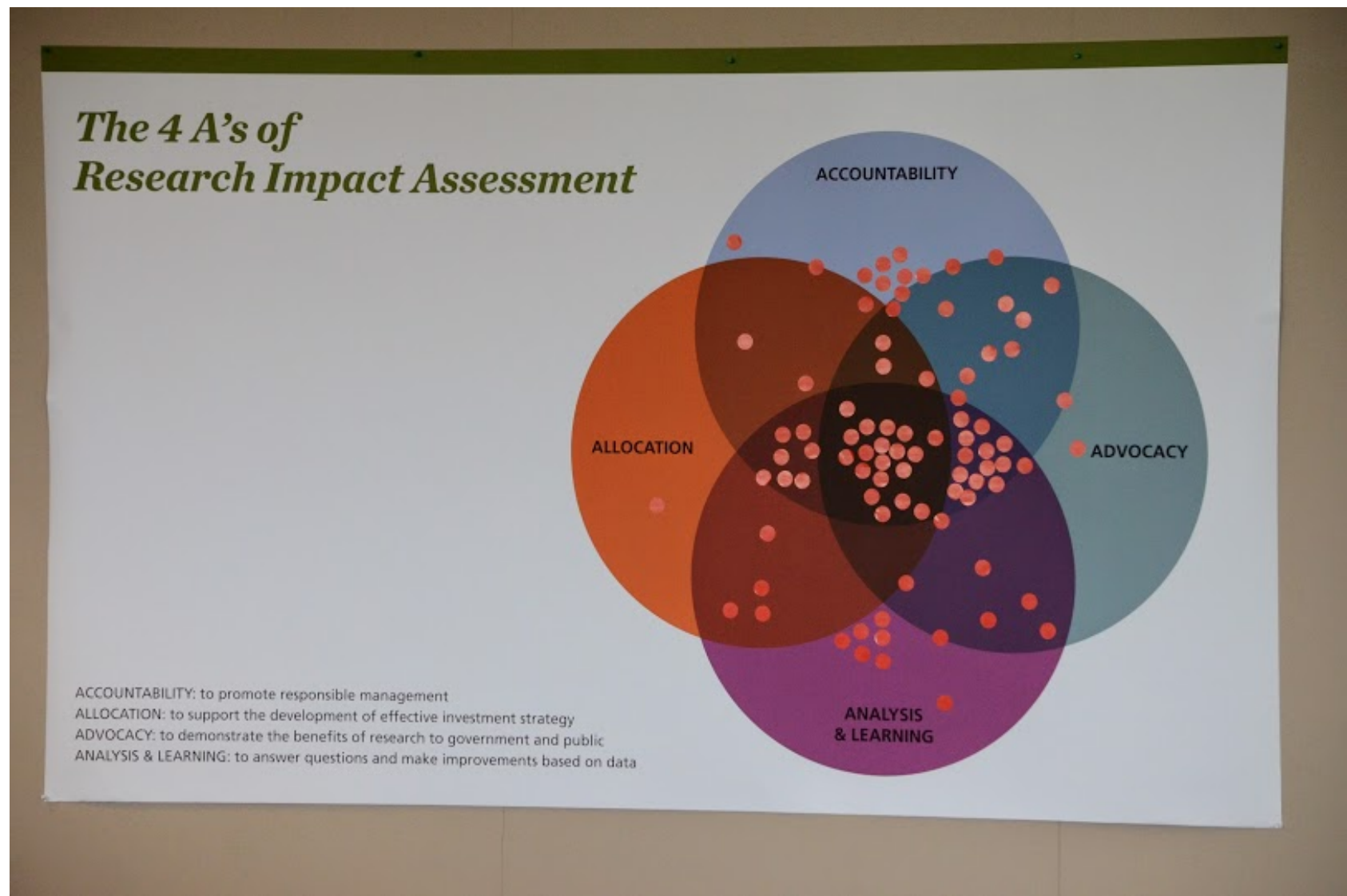
1. Briefly describe what RIA (or issue) you want to work on this week
 2. Think through the primary objective
 3. Think through the secondary objective
 4. Mark your programme or proposed RIA on the Venn diagram
- 15 minutes



BARCELONA 2013 ...

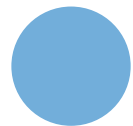


BANFF 2014 ...



KEY MESSAGES

- Know why you are assessing research impact
 - What is the objective of the research evaluation?
- Use a multi-method, multi-dimensional approach
 - Don't rely on one method (e.g., bibliometrics)
- (Research) impact assessment is not easy
 - No (research) funder has the answer



KEY MESSAGES (*CONTINUED*)

- Need to move from advocacy to accountability
 - Need “science of science” to understand what works
 - Need a practical evidence base for science policy
 - Need to “walk the talk”—ensure that funders of research apply same approaches to themselves as they do to the researchers they fund



RECOMMENDED READING

Morgan Jones, M and Grant J (2013). *Making the Grade. Methodologies for Assessing and Evidencing Research Impact*. 7 Essays on Impact. DESCRIBE Project Report for Jisc. University of Exeter / Dean et al. (eds.) (Exeter, UK : University of Exeter, 2013), p. 25-43. [http://www.exeter.ac.uk/media/universityofexeter/research/ourresearchexcellence/describeproject/pdfs/2013_06_04_7_Essays_on_Impact_FINAL.pdf]

Buxton M, Hanney S, Morris S, Sundmacher L, Mestre-Ferrandiz J, Garau Garau M, Sussex J, Grant J, Ismail S, Nason E, Wooding S, Kapur S (2008). *Medical Research: What's It Worth?: Estimating the Economic Benefits from Medical Research in the UK*. Wellcome Trust/AMS/MRC. [<http://www.wellcome.ac.uk/About-us/Publications/Reports/Biomedical-science/WTX052113.htm>]

Glover M, Buxton M, Guthrie S, Hanney S, Pollitt A and Grant J (2014). Estimating the returns to UK publicly funded cancer-related research in terms of the net value of improved health outcomes. *BMC Medicine* 2014, 12:99 (doi:10.1186/1741-7015-12-99). [<http://www.biomedcentral.com/1741-7015/12/99>]



RECOMMENDED READING

ARC (2010) *Excellence in Research for Australia: ERA 2010 Evaluation Guidelines*, Australian Research Council. [http://www.arc.gov.au/era/era_2012/outcomes_2012.htm]

Wooding S, Pollitt A, Castle-Clarke, S, et al. and Grant, J (2013). *Mental Health Retrosight. Understanding the returns from research. (lessons from schizophrenia). Policy Report*. RAND Europe, Cambridge (RR-325-GBF). [<http://www.rand.org/randeurope/research/projects/mental-health-retrosight.html>]

HEFCE (2011) *Assessment Framework and Guidance on Submissions*, REF 02.2011, Higher Education Funding Council for England, Scottish Funding Council, Higher Education Funding Council for Wales and Department for Employment and Learning, Northern Ireland. [<http://www.ref.ac.uk/>]

