

Miles Padgett

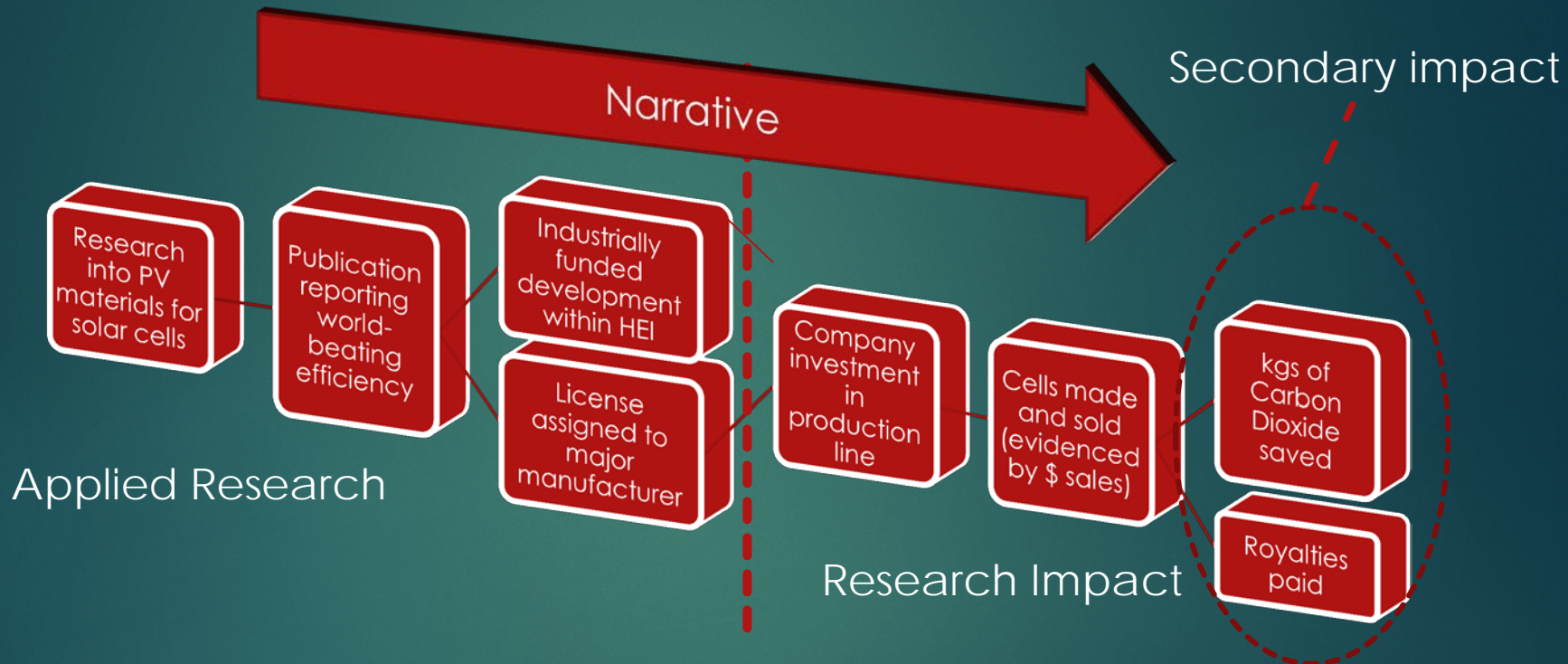
- ▶ Research Physicist
 - ▶ PI of one of 4 UK Quantum Technology Hubs \approx £40M
 - ▶ \approx 35,000 citations, H-index 97 (Google)
 - ▶ Fellow of the Royal Society
- ▶ RAE/REF experience
 - ▶ Member of REF 2014 sub-panel for Physics and Astronomy
 - ▶ Chair of REF 2021 sub-panel for Physics and Astronomy
- ▶ PVC (Research) University of Glasgow
 - ▶ Reviewed EACH UoA to analyse and learn from REF 2014 results, using panellists drawn from REF 2014 and RAE 2008 assessors.



A reminder

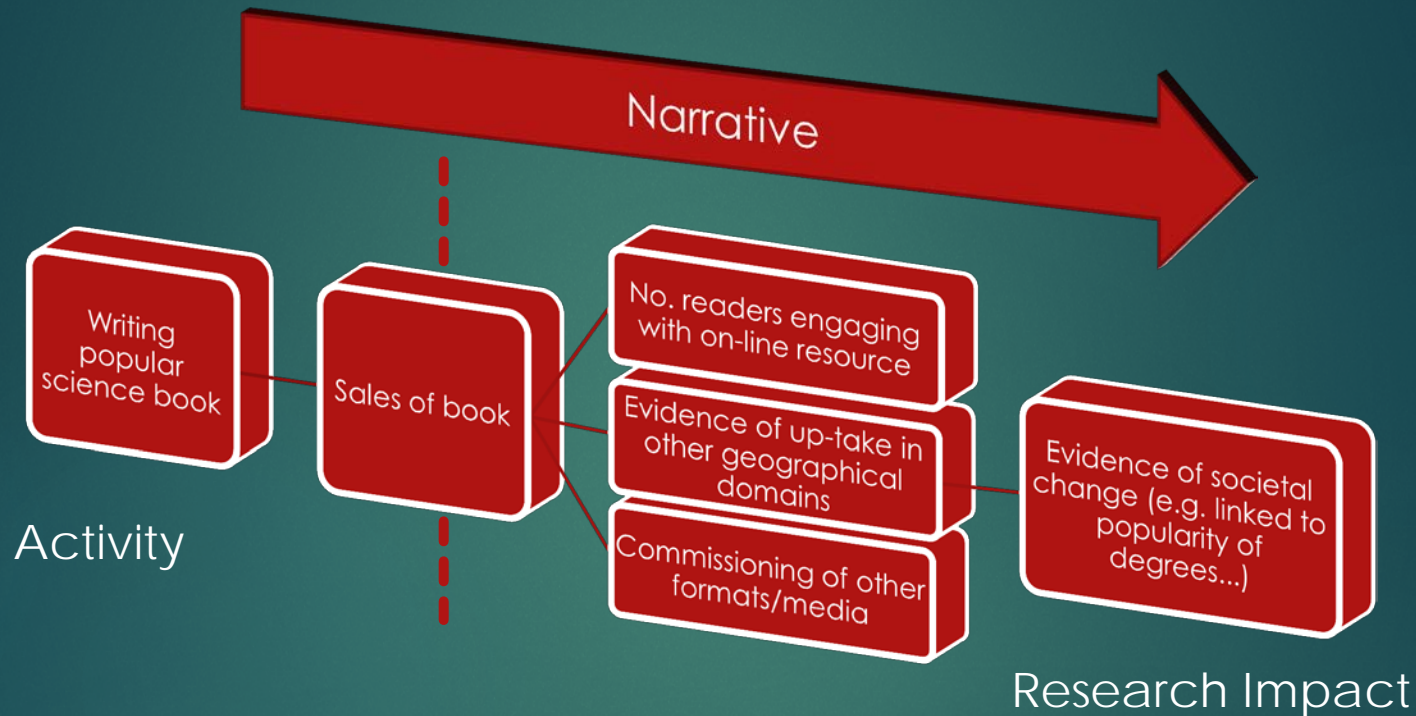
- ▶ Research IMPACT is defined as evidenced change outside the discipline, derived from research
- ▶ The change might be (one is enough)
 - ▶ Commercial/financial
 - ▶ Health and public well-being
 - ▶ Policy or legislative
 - ▶ Societal benefit
- ▶ Quality of underpinning research need only be 2*
 - ▶ But must fall in time window (i.e. publication date)
- ▶ Change must be within assessment period

From Applied Research to Research Impact



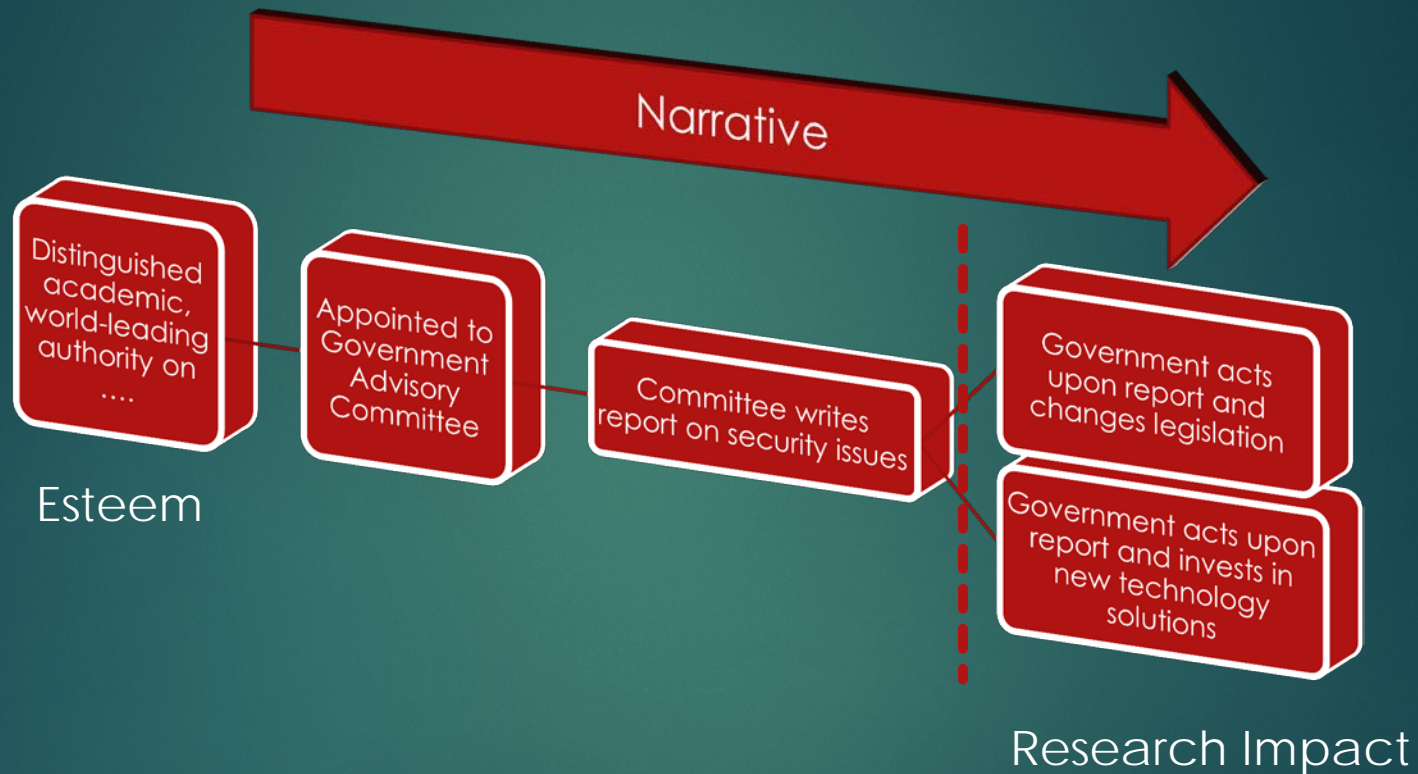
- Such impacts often derive from many different applied research programmes/ people.
- Don't need to claim sole credit.
 - Only need to explain why this underpinning research in particular was essential part of pathway to the success.
- Don't overlook secondary impacts

From Impact Generating Activity to Research Impact



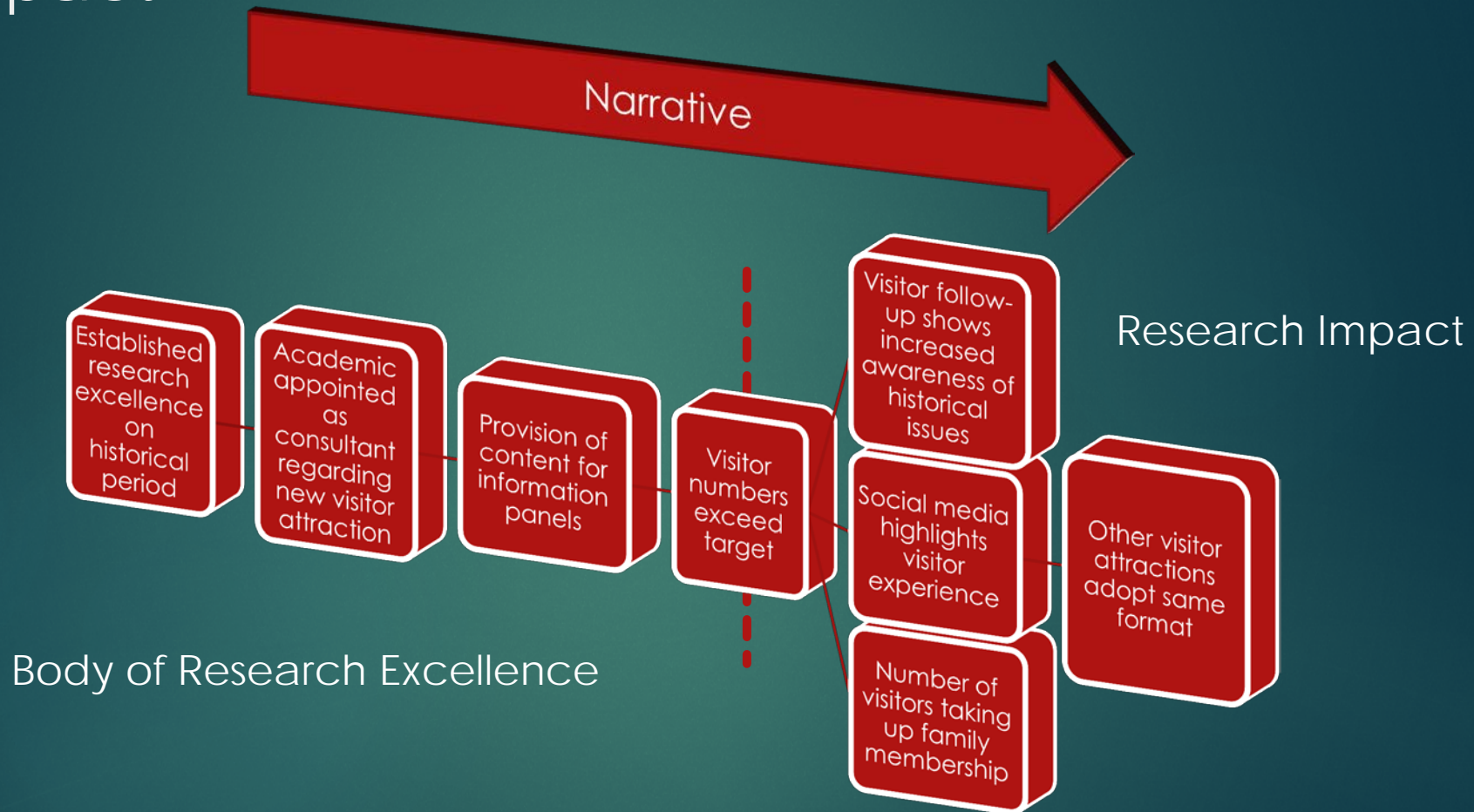
- Societal change results from multifactorial drivers.
- Correlation is not (necessarily) sole causation!
- Need to make a plausible argument for causation using both quantitative and qualitative evidence.
- The RAE panel takes a view based on balance of probabilities.

From Esteem of Academic to Research Impact



- Esteem is not impact.
- Challenge is to link specific research (output) to the specific impact.
- Need to evidence the specific role/contribution of academic.
- The panel takes a view based on balance of probabilities.

From Working in Partnership to Research Impact



- Challenge is to link specific research output to content of experience
- Need to evidence the specific role/contribution of the academic.
- Impacts are both financial and societal

RAE assesses impact of research, not of researchers....

Impact of research

Academic responsible for many seminal papers on short-pulse lasers.

Concepts taken up by numerous companies, launching successful products which acknowledge ground-breaking work of academic.

Impact based on research but achieved independently of academic



Impact of research driven by researchers

Academic responsible for many seminal papers on OPO lasers.

Academic leads creation of spin out company based on their research. Spin out company creates employment, and products

The active role of the academic does not make the impact better but probably illustrates a good impact environment



Impact of researchers

Academic co-ordinates club for disadvantaged youths. Club transforms the number of students from minority backgrounds applying to University.

Societal impact, but not based upon research



Start at the beginning

- ▶ The impact summary is a vital summary of the impact, NOT of the underpinning research, e.g.
 - ▶ Research into new form of XXX led to formation of a spin-out company, “YYY”, which now employs ZZZ people with annual sales of \$XXX. One key market is YYY surgery, where these products have been used in over ZZZ procedures.
 - ▶ XXX chairs the governmental advisory board for YYY. XXX’s research on YYY fed directly to the board’s recommendation of YYY leading to new best-practice guidelines on ZZZ. Adoption of these guidelines are now calculated to have saved \$XXX in the cost of YYY within ZZZ alone.
 - ▶ Based on their research in XXX, YYY has now given over ZZZ lectures in schools to over XXX pupils. In associated follow-up, XXX of these pupils have sought additional information on University courses, showing a XX% increase in application rates.

Dos and don'ts

DO

- ▶ Ensure that the impact summary is a summary of the impact, not of the research!
- ▶ Check the eligibility of dates for output and for the research impact
- ▶ Design evidence collection into the impact delivery programme
- ▶ Evidence, evidence, evidence the impact claims made
- ▶ Narrate a clear story

DON'T

- ▶ Confuse impact-generating activity with research impact (ie the change itself, outside academia)
- ▶ Confuse academic esteem with research or research impact
- ▶ Assume that research output automatically links to research impact
- ▶ Waste space explaining the research itself

Useful links

- ▶ Annex A of "Consultation on the draft panel criteria and working methods REF 2021"
 - ▶ Examples of Impacts and Indicators
 - ▶ See ref.ac.uk

Perhaps the most useful few pages of the whole UK REF literature!

And another

- ▶ https://www.research-strategy.admin.cam.ac.uk/files/collecting_research_impact_evidence_best_practice_guidance.pdf

and finally.....

- ▶ In 2013 I was as nervous, doubtful and skeptical as, no doubt, many of you are now!
- ▶ In 2015 I was proud to be part of a UK academic research community that contributes so much to our society
- ▶ The post REF 2014 analysis of Impact Case Studies by RCUK (now UKRI) was pivotal in persuading UK Government to continue their investment in our research