

# The Ups and Downs of Peer Review

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# My Presentation

- ▶ **My background**
- ▶ **Peer Review's Purposes**
- ▶ **Ups and Downs - A Brief History**
- ▶ **Some Reflections on the Issues**
- ▶ **Lessons from Practical Experience**
- ▶ **Quality and Risk**
- ▶ **Some Options for Foundations**

# A bit about me

- ▶ **Director of Research, ESRC, 1988–2003**
- ▶ **Committee and Board Secretary**
- ▶ **Including Grants and Priorities Boards**
- ▶ **EU FP Management Committees**
- ▶ **Adviser to NORFACE ERA–NET**
- ▶ **Academic activities 2004 +**

# Promise, Progress and Performance

- **Assessing research potential**
- **Assessing research process & output**
- **Assessing publications**
- **Assessing individuals**

# Peer Review Purposes

- ▶ **Identifying and controlling quality**
- ▶ **Promoting New Knowledge**
- ▶ **Reducing risk**
- ▶ **Building reputation**
- ▶ **Sustaining the system**

# Peer Review over Time

- ▶ Peer review dates (at least) from the Royal Society in London, 1665 (*Philosophical Transactions*)
- ▶ Scientific evaluation required by journals
- ▶ Taken up in funding processes in 19<sup>th</sup> and 20<sup>th</sup> Centuries
- ▶ Taken for granted till the 1970s

# Critical Voices

- ▶ Cole & Cole (1973) [random element]
- ▶ Peters & Ceci *Behavioral and Brain Sciences* 1982 – [resubmitted articles+ debate – 68 pages]
- ▶ Chubin & Hackett (1990) [bias, conservatism, fallibility]
- ▶ ABRC (1990) [peer review is the best that we have – but ‘literature free’]
- ▶ Travis & Collins (1991) [cognitive cronyism]
- ▶ Wennerås & Wold (1997) [gender bias]
- ▶ Langfeldt (2001, 2004, 2006) [criteria not negotiated, variety of practices, gatekeeper impact]

# Reflections

- ▶ Bias
- ▶ Conservatism
- ▶ Incompetence
- ▶ Conflicts of Interest
- ▶ Cognitive Cronyism
- ▶ Interdisciplinarity
- ▶ Lack of Transparency
- ▶ Human frailty
- ▶ Inadequacy (the Merit question)
- ▶ Replicability
- ▶ Chance
- ▶ Systemic failure

# Some practical experience

- ▶ Variations over time
- ▶ Variations across organisations
- ▶ Variations across fields
- ▶ Coping with pressures
- *Who chooses?*
- *Decision processes?*
- *Application processes (forms)?*
- ❖ **Reflecting on the Lack of Reflection**
- ❖ **Peer review *is* the funding organisation**

# Quality and Risk

- ▶ **The Elusive Pursuit of Quality**
- ▶ **Management of Risk**

# Some Options for Foundations – 1

- ▶ Be Aware of history and issues
- ▶ And of Your Path and Your Dependencies
- ▶ Start from Objectives
- ▶ Manage the Risks
  
- ▶ **Locate the goal of *‘Keeping researchers in mind’* in these contexts**

# Some Options for Foundations – 2

- ▶ Innovation is possible (*but not essential*)
- ▶ Measure options against the lottery
- ▶ Specify clearly
- ▶ Look at the whole process – including Applications and Decisions
- ▶ Monitor and Review from time to time
- ▶ **And** if you can (dare?) – allow *external* review

# Some publications

- ▶ ABRC (1990) “Peer Review”, London
- ▶ Chubin, D. and Hackett E. (1990) “Peerless Science. Peer Review and US Science Policy”, Albany, N.Y. State University of New York Press.
- ▶ Cole, J.R. and Cole, S. (1973) “Social Stratification in Science”, University of Chicago Press, Chicago
- ▶ Langfeldt, L. (2006) “The Policy Challenges of Peer Review: Managing Bias, Conflicts of Interest and Interdisciplinary Assessments”, *Research Evaluation*, Vol. 15, No. 1, April, pp. 31–41
- ▶ Peters, D.P. and Ceci, S.J. (1982) “Peer-Review Practices of Psychological Journals : The Fate of Articles Submitted Again”, *The Behavioral and Brain Sciences*, vol. 5 pp. 187–255
- ▶ Travis, G.D. and Collins, H.M. (1991) “New Light on Old Boys: Cognitive and Institutional Particularism in the Peer Review system”, *Science, Technology and Human Values*, Vol. 16, No. 3, pp. 322–341.
- ▶ Wennerås, C. and Wold, A. (1997) “Nepotism and Sexism in Peer Review”, *Nature* (387), pp. 341–343

Thanks for your attention

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