Funding and Research

Donald Gillies
University College London

Science & Philosophy Colloquia
ROARS – Returns On Academic ReSearch

room x – villa mirafiori – via Carlo Fea 2 – rome
20 May 2015 – 15:30-18:00

open to the public

organisation
Emiliano Ippoliti Filosofia – Sapienza
Francesco Sylos-Labini Enrico Fermi Center & ISC-CNR

WEB: HTTP://WEB.UNIROMA1.IT/LOGIC/S&P
Programme

Wednesday 20 May 2015

15:35-15:45 Models of discovery as policies
Emiliano Ippoliti Filosofa – Sapienza;

15:45-16:45 Funding and Research
Selecting Applications for Funding: Why Random
Selection is better than Peer Review
Donald Gillies University College London

16:45-17:00 Break

17:00-17:10 Testing the excellence dogma: some recent
discoveries in physics and mathematics
Francesco Sylos-Labini Enrico Fermi Center & ISC-CNR

17:10-18:00 Debate
Chair Francesco Sylos-Labini

Outline

How should research be organized?
This question can be broken down into at least two issues:
how to evaluate the outputs of research and how to fund
potentially innovative research. Donald Gillies (UCL),
author of the book How should research be organized?
(2008, College Publications), argues that a widely-used
method of research funding is through competitive grants,
where the selection of which of the applications to fund is
made using anonymous peer review. He will argue that
the system would work more efficiently if the selection
were made by random choice rather than peer review.
The peer review system has defects which have been
revealed by recent criticisms, and the paper gives one such
criticism due to the Nobel prize winner Sir James Black.
It is then shown, in support of Sir James’ position, that
the use of anonymous peer review leads to a systemic bias in favour of mainstream research
programmes and against minority research programmes. This in turn leads to the stifling
of new ideas and of innovation. This thesis is illustrated by the example of the recent
discovery of the cause of cervical cancer – a discovery which has generated substantial
profits for pharmaceutical companies. It is then shown that selection by random choice
eliminates this systemic bias, and consequently would encourage new ideas and innovation.