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 pubblic

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



SCIENCE & PHILOSOPHY COLLOQUIA | DIPARTIMENTO DI FISICA | DIPARTIMENTO DI FILOSOFIA | DOTTORATO IN FILOSOFIA | ROARS

> ORGANISATION & INFO: EMILIANO IPPOLITI <u>EMI.IPPOLITI@GMAIL.COM</u> FRANCESCO SYLOS-LABINI <u>FRANCESCO.SYLOSLABINI@ROMA1.INFN.IT</u> WEB: <u>HTTP://WEB.UNIROMA1.IT/LOGIC/S&P</u>

Programme

wednesday 20 may 2015

| 15:35-15:45 | Models of discovery as policies Emiliano Ippoliti <i>Filosofa – Sapienza,</i> |
|-------------|--|
| 15:45-16:45 | Funding and Research Selecting Applications for Funding: Why Random Selection is better than Peer Review Donald Gillies <i>University College London</i> |
| 16:45-17:00 | Break |
| 17:00-17:10 | Testing the excellence dogma: some recent discoveries in physics and mathematics Francesco Sylos-Labini <i>Enrico Fermi Center & ISC-CNF</i> |
| 17:10-18:00 | Debate Chair Francesco Sylos-Labini |

Outline



How should research be organized? This question can be broken down into al 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.



SCIENCE & PHILOSOPHY COLLOQUIA | DIPARTIMENTO DI FISICA | DIPARTIMENTO DI FILOSOFIA | DOTTORATO IN FILOSOFIA | ROARS

> ORGANISATION & INFO: EMILIANO IPPOLITI <u>EMI.IPPOLITI@GMAIL.COM</u> FRANCESCO SYLOS-LABINI <u>FRANCESCO.SYLOSLABINI@ROMA1.INFN.IT</u> WEB: <u>HTTP://WEB.UNIROMA1.IT/LOGIC/S&P</u>