

Journal of Technology Transfer
Call for papers

The growing role of PIs as science, technology and market shapers

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Despite the rise in the importance of research programs as a way to perform and orient research and to set up research agendas, little attention has been given to studying the lead researchers who coordinate and direct extensive research projects and indeed programs. These lead researchers, usually referred to as principal investigators, have long been agents for both research management and policy. However, in recent years, with the sharper focus on the knowledge economy, principal investigators have also become agents of economic development and preside over the expenditure of significant public monies.

This call for papers considers the sundry roles of the principal investigator, the changed environment in which they operate, and the managerial challenges they face. Of particular interest is work focusing on principal investigators' management innovations and strategies.

Fundamental changes are underway in the governance of public sector research. Universities, national and government laboratories have gone through a period of major changes. These changes have seen research increasingly organized as part of major strategic research programs with an increasingly diverse base of participants and funding structures. In many cases, the allocation of public funding has changed, from recurrent funding to project based funding and the academic sector witnesses a growing reliance on R&D outsourced by industry. Much of this development has been accelerated by the strong adherence by policy makers to multi-stakeholder models for research and economic development and models emphasizing problem-focused, interdisciplinary and collaborative research.

This institutional evolution blurs the boundaries between the traditional spheres of government, industry, academe — with the emergence, for example, of joint research projects bringing together the public/university and private/industry spheres, supported by public authorities.

Principal investigators, play a specific role in the new governance of research as they are the ones who design research projects and manage their implementation. Doing so, they forge goals, define research programs and plan research. While these are traditional principal investigators roles, the new roles related to coordinating with multiple organizations, including industry, makes the job of the principal investigator more important and policy relevant.

Among the roles played by the principal investigator (PI), some contain tensions:

- As they are required to provide the *bridge between science and industry*, PIs become brokers, playing a role not common in decades past. There is typically no formal training for PIs playing such inter-organizational political roles.
- In the new governance of science and universities, principal investigators have increased responsibility as scientific fiduciaries. The legal and the informal responsibilities entailed in the financial management of research pose new challenges for the PI.
- As most project funding sources require the anticipation of linkages between research and its application, principal investigators are *market shapers*. At the outset of their research principal investigators form expectations about future markets. How do scientists form these projections and expectations? What mechanisms do they use?
- Through training and experience a scientist is domain or discipline grounded. However principal investigators are often required to *manage a multidisciplinary project organization*. How do principal investigators deal with the tension between disciplines? How can they simultaneously match discipline-based assessment criteria and project requirements for problem-based achievements?
- Finally, if a project is a temporary organization structure, the principal investigator is charged with *shaping this temporary organization structure and planning for funding beyond the defined lifetime of the structure*. How do principal investigators simultaneously shape and lead the temporary organization and achieve long term research resources objectives?

We are inviting contributions dealing with the principal investigators new roles and their strategies for implementing them.

Deadlines

August 31st, 2010: Submission of 5-7 pages abstracts.

November 30th, 2010: First comments on abstracts.

January 30th, 2011: Submission of full papers.

April 30th, 2011: End of first review process to improve papers. Seminar organized in Ireland for short listed papers.

June,30th 2011: Second version of papers to be submitted.

October 30th, 2011: Final version of the paper.

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