JOB DESCRIPTION

Job Title: PhD “The implementation of biomedical databases for public research: an economic analysis of the incentives to contribute”

Job Summary:
(English, max 1000 characters)

The objective of the PhD is to analyze the economic incentives to contribute to the implementation of databases for biomedical research. Biomedical databases may contain individual biological, clinical, medical, but also economic or sociological information. Their use in medical research is critical in order to identify new treatments, customize care, accelerate clinical testing processes, etc. However, the constitution of such databases raises a certain number of technical (data security), ethical, legal (protection of personal data, etc.) or economic issues. The objective of the thesis project is to mobilize the literature in behavioural economics in order to analyse the constitution of biomedical databases through the prism of the economic theory of incentives. The main questions studied will be: how to encourage agents (companies, patients, etc.) to share their data? What types of data are most likely to be shared? Via what types of incentive mechanisms (monetary or otherwise)? Etc.

Job Description:
(English, detailed information – max 3000 characters)

WARNING: Please indicate the name of the research lab, group leader and supervisor.

BETA, University of Strasbourg, is a laboratory specialized in economics and management. ICube, University of Strasbourg, is a laboratory specialized in medical engineering. Members of BETA and ICube are engaged in a joint project that studies the role and impact of big data in biomedical research. The research group would like to strengthen its team by establishing a PhD position dedicated to the economic analysis of the incentives to contribute to biomedical databases for public research. The PhD position will start on September 1st, 2019 and the funding will cover 36 months.

The issue of building up biomedical databases to accelerate research in health is becoming increasingly important with the rise of IT and big data. These databases may contain individual biological, clinical, medical, but also economic or sociological information. Their use in medical research is critical in order to identify new treatments, customize care, accelerate clinical testing processes, etc. However, the constitution of such databases raises a certain number of technical (data security), ethical, legal (protection of personal data, etc.) or economic issues.

The objective of the thesis project is to analyse the constitution of biomedical databases through the prism of the economic theory of incentives. The main questions studied will be:

- how to encourage agents (companies, patients, etc.) to share their data?
- What types of data are most likely to be shared?
- Via what types of incentive mechanisms (monetary or otherwise)? etc.
More precisely, the thesis project proposes to mobilize the abundant work in behavioral economics on public games. The constitution of databases in health is indeed akin to a standard problem of contribution to a public good. In particular, in the case of the constitution of medical databases, questions related to non-monetary incentives (pro-social behavior), social justice, conditional contribution, the dynamics of repeated contributions, communities, etc., are interesting tracks to explore, precisely because of the nature of the context studied.

This thesis project is thus fully part of an interdisciplinary research at the intersection between economics and health. To carry it out, we will put in place a co-direction between two researchers, one professor in economics (Julien Pénin, BETA) and one professor in health (biostatistics) (Erik Sauleau, ICube). On a daily basis, the PhD student will be present in both laboratories (BETA and ICube).

The applicant holds a Master Degree in economics and exhibits good knowledge of behavioural and experimental economics. Since an important part of the PhD will be to carry out empirical research, we expect the applicant to have minimum skills in econometrics. In addition, we expect the applicant to demonstrate a strong interest in issues related to biomedical research and, ideally, to legal issues related to intellectual property.

Main research field: Economics

WARNING: Please select, trying to be specific, using 'Other' or 'All' will decrease your Job Vacancy visibility

Agricultural sciences / Anthropology / Architecture / Arts / Astronomy / Biological sciences / Chemistry / Communication sciences / Computer science / Criminology / Cultural studies / Demography / Economics / Educational sciences / Engineering / Geosciences / Environmental science / Ethics in health sciences / Ethics in natural sciences / Geography / History / Information science / Juridical sciences / Language sciences / literature / Mathematics / Medical sciences / Neurosciences / Pharmacological sciences / Philosophy / Physics / Political sciences / Religious sciences / Sociology / Technology / Other / All

Offer Requirements: Good knowledge in behavioral economics / interest in economics of health

Eligibility criteria: Master in economics

JOB DETAIL

Type of contract: PhD contract / 3 years
Status:
Company / Institute: University of Strasbourg
Country: France
City: Strasbourg
Postal Code: 67000
Street:

APPLICATION DETAILS (mandatory)

Provisional start date: 01/09/2019
Application deadline: 07/06/2019
Application e-mail: penin@unistra.fr
WARNING: This is the contact e-mail for applicants
Call for Applications

PhD position

« The implementation of biomedical databases for public research: an economic analysis of the incentives to contribute »

Position to be filled as of September 1st, 2019

Context

BETA, University of Strasbourg, is a laboratory specialized in economics and management. ICube, University of Strasbourg, is a laboratory specialized in medical engineering. Members of BETA and ICube are engaged in a joint project that studies the role and impact of big data in biomedical research. The research group would like to strengthen its team by establishing a PhD position dedicated to the economic analysis of the incentives to contribute to biomedical databases for public research. The PhD position will start on September 1st, 2019 and the funding will cover 36 months.

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The objective of the thesis project is to analyse the constitution of biomedical databases through the prism of the economic theory of incentives. The main questions studied will be:
how to encourage agents (companies, patients, etc.) to share their data? What types of data are most likely to be shared? Via what types of incentive mechanisms (monetary or otherwise)? etc. More precisely the thesis project proposes to mobilize the abundant work in behavioural economics on public good games. The constitution of databases in health is indeed akin to a standard problem of contribution to a public good. In particular, in the case of the constitution of medical databases questions related to non-monetary incentives (pro-social behaviour), social justice, conditional contribution, the dynamics of repeated contributions, communities, etc., are interesting tracks to explore, precisely because of the nature of the context studied.

This thesis project is thus fully part of an interdisciplinary research at the intersection between economics and health. To carry it out, we will put in place a co-direction between two researchers, one professor in economics and one professor in health (biostatistics). On a daily basis, the PhD student will be present in both laboratories (BETA and ICube).

### Missions

- The PhD student carries out high level scientific research. He/she publishes in scientific journals and takes part in colloquia and conferences.

- The PhD student works in collaboration with the other members of the team.

- Opportunities to teach economics and management at the undergraduate level will be available (but not compulsory).

### Profile

The applicant holds a Master Degree in economics and exhibit good knowledge of behavioural economics. Since an important part of the PhD will be to carry on empirical research we expect the applicant to have minimum skills in econometrics. In addition we
expect the applicant to demonstrate a strong interest to issues related to biomedical research and, ideally, to legal issues related to intellectual property.

Languages
English required, French desirable.

Application procedure
Applications (letter of motivation + CV) are to be sent to both Julien Pénin and Erik Sauleau as soon as possible and no later than Friday, June 7, 2019. Earlier applications have higher chances of success since we terminate the application process as soon as we find the right candidate.

Julien Pénin
penin@unistra.fr
BETA

Erik Sauleau
ea.sauleau@unistra.fr
ICube