

Interactions between Science, Innovation, and Society **(ISIS)**

IDEX Paris-Saclay

APPEL A PROJET RECHERCHE IDEX 2013

Project Name : *Interactions between Science, Innovation, and Society (ISIS)*

Project Type : Social Sciences Project

ISIS Coordinators :

Christian BESSY (Chargé de recherche CNRS en économie, directeur adjoint de l'IDHE-Cachan)

christian.bessy@idhe.ens-cachan.fr

Christian LICOPPE (Professeur de sociologie des technologies d'information et de communication, directeur adjoint du LTCI)

christian.licoppe@telecom-paristech.fr

Jérôme PÉLISSE (Maître de conférences en sociologie, chaire d'excellence CNRS 2010-2015, Directeur du PRINTEMPS)

jerome.pelisse@uvsq.fr

Table of contents

1. Origins of the project	2
2. Partners of the project.....	2
3. Positionning.....	2
3.1. Summary of the project.....	2
3.2. ISIS's National and International Ambition	2
3.3. Established Partnerships and Existing Links to National and International Actors.....	3
3.4. ISIS's impact on teaching.....	3
3.5. Governance: « Executive Committee » and « Scientific Committee ».....	4
4. Presentation of the scientific project	4
INTRODUCTION.....	4
WP 1: Quantification, modeling and metrology.....	6
WP 2: Innovation, entrepreneurship and market development	12
WP 3: Norms and Regulations of scientific work.....	16
WP4: Law and Justice, Science and Technology	24
ANNEXES	28
Funding Justification	29
References.....	30
Partners	37
CESDIP (Centre de Recherches Sociologiques sur le Droit et les Institutions Pénales)	37
CRG (Centre de recherche en gestion)	39
DANTE (Laboratoire de Droit des Affaires et Nouvelles Technologies).....	41
EST (équipe GHDSO)	43
GREGHEC (Innovation & Entrepreneurship - Society and Organizations)	44
IDHE-Cachan (Institutions et dynamiques historiques de l'économie).....	48
ISP-CACHAN (Institut des Sciences Sociales du Politique)	50
LSQ (laboratoire de sociologie quantitative)	52
LTCI (Laboratoire Traitement et Communication de l'Information)	54
PESOR (Pilotage Économique et Social des Organisations).....	56
PRINTEMPS (Laboratoire "Professions, Institutions, Temporalités")	58
STEF (ENS Cachan).....	61
Summary partners, staff and financial contributions.....	62

1. Origins of the project

The ISIS (Interactions Science, Innovation, Society) is the result of a merger between two Labex projects in social sciences (6S and LISI). Even though these projects were well evaluated, they were not funded. Given the evolution of the IDEX partnerships, a new perimeter is suggested. Indeed, 4 new research centers joined the preexisting teams: GHDSO-EST and PESOR from Université Paris Sud, DANTE from UVSQ, and IDHE from Université d'Évry (Histoire Economique Sociale et des Techniques). These teams will considerably enhance the interdisciplinary aspect of the project through their expertise in history, law and business administration.

2. Partners of the project

CESDIP (UVSQ-CNRS-Ministère de la Justice)

CRG (Polytechnique – CNRS)

DANTE (UVSQ)

GHDSO (équipe de EST - Université Paris Sud)

IDHE Cachan and Evry (ENS Cachan – Université d'Évry-CNRS)

ISP Cachan (ENS Cachan-CNRS)

LSQ (équipe du CREST-GENES)

LTCI (Télécom ParisTech - CNRS)

PESOR (Université Paris Sud)

PRINTEMPS (UVSQ-CNRS)

GREGHEC (HEC – CNRS)

STEF (ENS Cachan/IFE)

3. Positioning

3.1. Summary of the project

Knowledge production is the complex result of a combination of scientific activities, social constraints and law that in turn orients the organization and government of activities, as well as the regulation of social life. By combining the approaches and competencies of researchers from different disciplines: sociology, economics, business administration, law, education and history, the consortium's goal is to examine the way measurements, organizational models, scientific results, norms and regulations circulate, are debated in public arenas, are interpreted and implemented in different areas, and also to shed light on their social and economic implications. In this attempt, objects such as the construction of socio-economic categories and indicators, clusters, open innovation, interactions between laboratory life, education and industry, as well as the use of science in the judicial sphere will be examined.

3.2. ISIS's National and International Ambition

ISIS's ambition is to develop and structure social sciences' research and education in Saclay by relying on researchers' domains of excellence and on the exceptional scientific environment of the area. By integrating different disciplines in common research operations (sociology, history, law, education, business administration and economics), the project aims to structure a cluster of research and education in social sciences that will have both a national and an international attractiveness in the following domains:

- Use of quantification in social sciences but also in firms and public administrations. Here our research operations will be complementary to those of Labex ECODEC.
- Processes of innovation and entrepreneurship relying on scientific developments.
- Analysis of scientific work as well as its norms and regulations.
- Interactions between « law and justice » and « sciences and technologies ».

The project will be developed in two phases until 2019:

During the 2013-2016 phase, the goal is to structure research in the social sciences. More precisely, Saclay partners will be gathered to work together on complementary objects with the aim of renewing the domains of science, innovation, technology and knowledge. As such, the research operations presented in this project rely on well recognized competencies (awarded ANR funding, European Coordination action or other types of institutional grants) that are extended and articulated in a way that gives coherence to the collective goal. Our interaction with national partners (such as IFRIS- *Institut Francilien recherche, Innovation, Société* located in Marne-la-Vallée) will ensure that our research orientations have by 2016 a real added value both for involved organizations and for national partners.

During the 2016-2019 phase, international reputation will be our main goal. We intend to transform Université de Saclay's social sciences into a world class program. Internal and external funding will be applied for in order to attract competitive international researchers in our domains but also to develop international research and educational programs and partnerships.

3.3. Established Partnerships and Existing Links to National and International Actors

Our project will benefit from universities and schools' facilities and grants as well as from the national initiatives to which some of the involved researchers participate. Île-de-France's *Domaines d'Intérêt Majeur* (DIM) will be one of them. Indeed, the IS²IT (*Innovation, sciences, techniques, société* directed by P.B. Joly) and GESTES (*Groupe d'Étude sur le Travail et la Souffrance au Travail*, co-directed by M. Gollac and J. Péliasse) are DIMs with consequent budgets (700 to 800k Euros per year) that offer access to PhD, Post-doctoral or Scientific event funding. Besides, they give access to a network of researchers on which our group can rely to have fruitful scientific discussions and enhance its attractiveness. A partnership is also being negotiated with the IFRIS. The goal is to develop an internationally renowned Ile-de-France based scientific group specialized in questions related to interactions between science, innovation and society.

ISIS also intends to further develop partnerships with the private sector. Here, we can already rely on the existing network of some of the teams involved in this project (GREGHEC, SnO, PESOR...). Indeed, our exchanges include research contracts as well as training and educational funding partnerships. These will be further deepened in order to expand the existing network.

Last but not least, researchers involved in this project have different research networks on the international academic scene. By merging seminars, and organizing international joint conferences, our goal is to strengthen and widen our networks.

3.4. ISIS's impact on teaching

Our efforts to structure the research milieu will be coupled with the inception of two new Masters Programs -- the Master of Quantitative Methods in Social Sciences, and the Master of Science and Society Studies -- that involve a large number of partner research centers. Research will moreover

influence educational goals through different channels. First, a wide range of case studies will be developed in this project. These can become supports for teaching. Second, our continuous efforts towards research complementarities will help define a coherent educational and training strategy.

Furthermore, two summer schools will be organized. First, an annual summer school on Innovation and Entrepreneurship is planned in this project (WP2). Second, partners involved in this project will participate in an international summer school that will be hosted at Saclay in 2015.

Finally, the numerous seminars, workshops and conferences that will be organized by the involved partners in this project will be open to Saclay's students, researchers, professors as well as private actors and public administrations. They will constitute an occasion to develop knowledge, discuss and debate various topics ranging from quantification to the use of science in the judicial sphere.

Thus the knowledge developed in this project will also allow for providing training for firms (in management, for instance) or public administrations (policy-makers, police or judicial bodies, for instance).

3.5. Governance: « Executive Committee » and « Scientific Committee »

The ISIS light governance will rely on a single, wide coverage (one member per contributing organization), decision committee, called the ISIS Scientific Committee (ISC) which will convene at least three times a year. The day-to-day operations, supervision, and ISIS outside representation, will be managed by a three-member ISIS Executive Committee, representing ENS Cachan, UVSQ and Télécom ParisTech (*i.e.* the actual coordinators of the project). The ISIS Executive Committee will prepare issues to be decided upon by the ISC, such as budget allocation, expenses, new project kick-offs, former projects closures, workshops, PhD & post-doc financing, etc. The ISC will also collect the inputs from ISIS members about potential projects to be launched, and will evaluate ongoing projects once a year.

4. Presentation of the scientific project

INTRODUCTION

Knowledge production is the complex result of a combination of scientific activities, social constraints and law that in turn orientates the organization and government of activities, as well as the regulation of social life. Scientists, experts, public organizations and others participate to this endeavor in a deliberative or in an involuntary way. They thereby introduce new indicators and categories thought as democratic, organizational forms deemed as efficient, regulation systems designed to bring cohesion in social activities, or scientific results that can be transformed into facts in decision making. Recently, a large set of artifacts has been introduced and this project aims to examine some of them. The selection of the following topics reflects the areas of research in which the consortium is recognized as or aims to become a leading actor on a longer term both on the national and international level.

The consortium's goal is to examine the way measurements, organizational models, scientific results and regulations circulate, are debated in public arenas (Chateauraynaud 2011), interpreted and implemented in different areas, and to shed light on their social and performance implications. Quantifying and categorizing the social and economic activities or "governing with numbers"

(Desrosières 2008) and benchmarks have probably become the main concern of policy-makers. In parallel, organizational models such as “clusters” (Porter 1998) or “open innovation” (Chesbrough 2003) are believed to bring efficiency to the business world. In the scientific sphere, new funding schemes and law (Silbey, Husing, 2011), performance indicators, mergers and partnerships are introduced to regulate knowledge production. The knowledge hereby produced is itself mobilized by experts in the judicial sphere (Dumoulin, 2007; Péliasse, 2012). However, the construction, circulation and reception of these artifacts as well as their appropriateness to reach their goals, that is, a more democratic, efficient or integrated system is still to be examined.

Each of the four axis of research presented in this project aims to contribute to the debate on the circulation, the social reception, the effectiveness, and the implications of a range of artifacts. In particular, the first axis will contribute to developing quantitative research while proposing a reflection about the way metrologies and categorizations are used in different disciplines, organizations and countries. The second axis examines organizational models that aim to enhance innovation in the business sphere. In extension, the third axis focuses on the way new forms of regulating and norming science affect knowledge production and circulation in academic, industrial and educational spheres. Last but not least, the fourth axis aims to shed light on the way experts use scientific results in the judicial system and the way justice but also the definition of human being can be reshaped by science. These axes will be examined by combining approaches and competencies of researchers from different disciplines: sociology, economics, business administration, law, education and history. A common concern is the focus on mechanisms of artifacts’ creation and circulation. These can include mediations (norms, cognitive artifacts, technical equipment) or intermediaries (go-between) enabling coordination among different logics of action and communities.

This WP primarily brings together CESDIP, the IDHE at Cachan, the LSQ, PRINTEMPS and the SnO, but also involves researchers from LCTI and the CRG. Drawing on a tradition of research on quantification, both from the viewpoint of its construction, and from that of its social uses, ISIS will promote the use of databases, will open new fronts in quantitative research, seeking to spread a reflexive data culture in the social sciences (Desrosières, 2008), thus encouraging a confrontation between scientists who study the same social processes and realities using different methodologies. ISIS will benefit from cutting-edge equipment such as **EQUIPEX CASD** (a secured remote data center, permitting access to individual or sensitive data to which several partners participate and contribute funds), and **DIM-SHS** (social surveys center). ISIS will also rely on the on-going creation of a specialized Master **on** Quantification in social sciences at Paris Saclay. It will moreover also seek a rapprochement with other sciences that use quantification for the problematization and causal inference, such as the sciences and technologies analyzed below in WPs 2 and 3.

Three research projects will be conducted during the 2013-2016 period. The first two will be completed in 2016, whereas the third one is meant to be deployed over the entire period. The years 2013-2016 constitute boot years to establish the conditions for the completion of these studies. The first project will be devoted to the *Comparison of strategies of quantification in the social sciences*. The second project deals with the *categorizations of the occupational space in Europe*. The third project focuses on *metrology and governance*, in cooperation with the three other streams or axis of the overall project.

WP 1.1: Comparing measurement and quantification strategies in the social sciences

A growing number of researchers routinely resort to increasingly sophisticated quantitative methods. This, as expected, has raised several criticisms (on compositional effects, on the use of causality concepts, on the influence of unobserved variables...). Refusing to view statistics as a mere tool for social sciences, Michael Sobel (2000) rightly described “an interplay between statistics and social sciences”, and pointed out that it was a fruitful phenomenon, simultaneously urging researchers in social sciences to take advantage of the latest research in statistics and econometrics.

In Saclay, there is a confrontation between observational and statistical techniques *versus* simulation techniques. Indeed, while social scientists most often use census or survey data, experts in complex systems modeling favor simulation or agent-based modeling (on the usefulness of the combination of both methods, see Bruch and Mare, 2006). We therefore plan to investigate the construction of variables and nomenclatures, and the development of devices to collect information (e.g., surveys or experiments) that help to bridge the gap between learned conceptions and ordinary judgments. Some devices, especially large-scale ones, are formatted not only by the scientific debate, but also by political and societal issues (Monso and Thévenot, 2010). Variables are seldom comparable to concepts, and many methods have difficulty addressing this issue. This is the moment when the issue of interpretation – and of the gap between what figures suggest and what we say about them – really emerges. We wish therefore to create “modeling experiments” by using a combination of various methods to explore common objects or data, which will lead us to compare not only the results, but also their potential interpretations, as well as researchers’ activities. We will

particularly focus on the intrinsic capabilities of different types of modeling in order to describe regularities and structures, or to support causal analysis (Goldthorpe, 2001; Spirtes, Glymour and Scheines, 2000; Durand and Vaara, 2009).

To make circulation and discussion possible between the different projects, teams and research centers mobilized on this axis, we will **merge the three research seminars in quantitative studies** (CREST's sociology seminar, the seminar on reflexive Quantitativism at ENS Cachan, and PRINTEMPS's seminar on quantitative sociology and the sociology of quantification). A specific attention will be devoted to the reception of regression analysis' methods in French social sciences, through the constitution of **a database collecting methods used** in the articles published in the main academic social sciences journals since 1960. Our project will then consist in **one international seminar** on this question of quantification at the level of Saclay. SnO already received the first workshop organized with ASQ's editorial board (June 2010), and has been part of European initiatives such as OTREG seminars and European Theory Development Workshops in cooperation with the Academy of Management Review. Furthermore, a **Summer school** for PhD students will be organized in 2013-2015 by CESDIP (F. Vesentini), together with PRINTEMPS, 2 Belgian research units (Louvain, Liège) and one Canadian center (Univ. of Montreal). A third year will take place in UVSQ (25 to 30 PhD Students for 5 days).

Aim: Making Saclay a renowned national and international cluster for research and education on quantification in the social sciences.

Operations: a common seminar (2013-2016); an international Conference (2014); a Summer School.

Involved researchers: J. Deauvieu (PRINTEMPS), C. Dumoulin (PRINTEMPS), I. Fréchon (PRINTEMPS), N. Robette (PRINTEMPS), O. Samuel (PRINTEMPS), C. Bessy (IDHE), H. Harari-Kermadec (IDHE), A. Perdoncin (IDHE), T. de Saint-Pol (IDHE), R. Durand (SnO), D. Goux (LSQ), M. Gollac (LSQ), L. Wolff (LSQ).

Funding granted until now:

Summer School (2013-2015): **30 000 €** (different partners, incl. 3 x 3 000 € CESDIP).

Requested Funding: 50 000 €

- A 6 months post-doc position for the organization of the international conference (25 000 €).

- Travel expenses, invitations, accommodation... (15 000 €)

- Summer School: 10 000 € for the year 2015 in UVSQ.

Scientific results: learning actions (seminars + Summer School) + 1 edited book on soc. sc. jnls in France.

WP1.2: Categorizations of the occupational space in Europe

This project deals with the categorizations of the occupational space at the European level. It will continue several comparative researches on statistical institutions such as Eurostat, financed so far by an ANR (2010-2013).

The first question deals with ordinary categorizations of social space (Boltanski and Thévenot, 1983). 30 years ago in France, and at the end of 2000 in Europe, studies on ordinary categorizations were conducted, relying on an imaginative empirical procedure: subjects were invited to comment on and sort cards depicting individuals according to their putative social similarity. A project aiming at generalizing this card game study has been submitted by the LSQ (Cécile Brousse) for the 2013-2015 period, based on a sample of 1500 individuals – an unprecedented sample size for this type of experimental surveys. In a second phase, the links between scientific and lay practices of categorization will be studied in different new domains (categorizations related to gender, delinquency, suspicion regarding past or present criminal activities...).

The second question is concerned with the statistical categorizations of the occupational space. The goal here is to study the history and uses of occupational classifications in various countries: Belgium, Germany, France and Great-Britain. National classifications are based on different social experiences and on histories of labor. We want to understand the modes of description of the occupational world through the prism of statistical production in the countries mentioned. Is there a specific classification? What are the uses of these classifications? How have they evolved since statistical harmonization has been required at the European level? What are the links between the statistization of the occupational world and the institutional forms of work?

The third question aims at a study using statistical data from European surveys (in particular the SILC-EUROSTAT survey). The point here is to use the statistical harmonization as a resource for the study of the European social space. Most social stratification theories are framed within national spaces (Wright, Goldthorpe, Esping-Andersen, Bourdieu). Our goal is to study how much the different regions of the European social space (defined by income-diploma proximity) are organized around socio-occupational groups.

Our goal is thus to articulate a sociology of the quantification of the European occupational space (projects 1 and 2) with a quantitative sociology dealing with the same question (projet 3).

Aim: To deal with the current discussions on common occupational classifications at the European level. This is a contribution to the proper way to describe social structures in Europe and to sketch the relationships between lay and professional categorizations.

Involved Researchers: C. Brousse (LSQ), J. Deauvieu (PRINTEMPS), C. Dumoulin (PRINTEMPS), M. Gollac (LSQ), C. Ollivier (PRINTEMPS – Girséf, Belgique), I. Petev (LSQ), T. Razafindranovona (LSQ), L. Thévenot (LSQ), L. de Verdalle (PRINTEMPS), F. Jobard (CESDIP), F. Vesentini (CESDIP).

Funding granted until now: ANR (2010-2013): **95 000 €**

Requested funding and grants (2013-2016):

1/ DIME-SHS: access to DIME-SHS' resources devoted to the 1500 units' sample.

2/ **IDEX Paris Saclay: 60 000 €:**

Travel expenses: 8 000 €

Card games, tablet computers and documentation: 5 000 €

Research engineer (12 months full job): 47 000 €

Scientific results (until 2016): Submission to different French and non-French academic journals.

WP 1.3: Metrology and governance

Today rating agencies, professional reviewers and evaluators, or NGOs that establish rankings driven by environmental or social practices, strongly contribute to classify, evaluate, and allocate resources and power. “Governance through norms” (Thévenot, 2009) has emerged as a new method for managing state-related issues. Further, standardized indicators have become available in various fields such as cultural industries, service provision or security (Chiapello, 2009; Zauberman, 2009). Current governance modes are based on the worship of “transparency” and accountability (Guthrie and Durand, 2008; Espeland and Sauder, 2007). Capitalizing on Salais's work (2010), we will investigate indicator-based policies in such fields as social rights, psychosocial risks, and crime. We will also conduct further research on the roles played by quantification experts in corporate or public management, by studying the constraints associated with the professionalization of their trade, along with associated ethical aspects (link with axe 3 about the norms of scientific work).

WP 1.3.1: The metrology of work via the studies of psychosocial risks

In the field of labor research, two project members have, at the request of France's Ministry of Labor, set up and led a group of experts tasked with monitoring workplace psycho-social risks. This project is a unique opportunity to observe (1) how the issue of health at the workplace is construed by different actors, (2) how arguments justifying or criticizing quantification and indicators are being built and deployed (Clot, 2010; Dejours, 2010), (3) and various conflicting outlooks on the way they should be used and on the relations between quantification, management, and criticisms. One original research on this topic will be conducted by analyzing how the “psychosocial risks” are measured, and with what sort of tools, by consulting firms, by union’s observatories, by the government or by other actors. It will analyze the interests and skills of the “encoders”, and of users – how the figures are used by companies or branches, how policies might be built on them, how they might help the judges to make their decisions? This research will be based on a large regional network (more than 200 scholars in Ile de France – GESTES, *Groupe d’études sur le travail et la souffrance au travail*, directed by two scholars involved in this project – see www.gestes.net), which gives postdoctoral and PhD grants and other fundings on this topic. Moreover, parts of the questions submitted to the sampled population in the Ile-de-France penal metrology surveys (WP 1.3.2) are related to feelings of insecurity, and will give us a larger base to contextualise the data on perceived vulnerability (Robert and Pottier, 1997). Also, IDHE’s research members (Mias *et al.*, 2013) participate in a research on women’s exposition to reprotoxic substances and prevention issues (ANSES research).

Aim: Analyzing how the “psychosocial risks” are measured, and on what sort of tools these measures are based.

Involved Researchers: L. Wolff (LSQ), M. Gollac (LSQ, co-director of GESTES), J. Péglise (PRINTEMPS, co-director of GESTES), J. Kubiak (PRINTEMPS), A. Mias (IDHE).

Funding granted until now: ANSES (2013-2014): 70 000 €.

Requested funding in 2013-2016:

1/ Request submitted to GESTES: a postdoctoral (50 000 €) or a PhD (120 000 €) position

2/ Request submitted to IDEX Paris Saclay : 10 000 €

Travel expenses: 8 000 €

Documentation: 2 000 €

WP 1.3.2: Penal metrology

In this field, a variety of quantification tools are now available: statistics of criminal justice agencies, other public statistics, specific population surveys (victimisation) or conducted in intersecting domains (public health...). For analysing such a complex field, our strategy is to organise – within an Academic Observatory – a confrontation between the major quantification tools and time series in use at LSQ or accessible through CASD (public transportation, household budgets, employment, national population census, national accounting).

Through a dedicated project financed (ANR-CRIMINSEC-07-BLANC-0026) and the coordination of a European Coordination action from the FP6 (CRIMPREV-028300), the CESDIP has already conducted secondary analysis of all the insecurity and victimisation surveys (national, regional, local) available in France at the time. Our Observatory would be operated along two principles: i) long term observation of crime data ii) comparison of crime data from a variety of sources: institutional data and surveys, and sensitive nominative databases like the criminal records database and samples from the national census (*échantillon démographique permanent* - EDP). A long-term cooperation between CESDIP, LSQ and PRINTEMPS will serve this aim. In a first step, the Observatory structure would make its products available to a wider academic community, in particular by way of a web site. In a second step, at junction of projects 2 & 3, we will develop a CESDIP-LSQ's common project on the consequence of a criminal record for the employment outcomes of males in France. Two research designs could be implemented, each one based on what has been suggested so far in project 1 and project 2. We will either work on longitudinal survey data (samples from INSEE's national census (EDP) and samples from the criminal records database hold by the Ministry of Justice. This project would bring together researchers from CESDIP and LSQ. Criminal records are sensitive statistics, but apart from the fact that CESDIP is part of the Ministry of Justice, discussions are currently conducted in order to locate this database at CASD. We will choose an audit methodology or a testing methodology, in which the employment audit involves sending matched pairs of individuals ("testers") to apply for real job openings in order to see whether employers respond differently to applicants on a basis of selected characteristics, including information on a criminal curriculum. This methodology builds a bridge to the next action (1.3.3).

Aim: This operation, linked with the operations presented in axis 4, will contribute to make Saclay a large pole of sociology of law and justice, dedicated notably to quantitative research.

Involved Researchers: J. Deauviau (LSQ), M. Gollac (LSQ), F. Jobard (CESDIP, and CASD scientific board's member), Ph. Robert (CESDIP), F. Vesentini (CESDIP), R. Zauberman (CESDIP).

Funding granted until now:

ANR 2007-2010 : **190 000 €**

CESDIP 2012-14: 1) The salary of one full-time engineer in statistics (F. Jouwahri) – 128K€ / 3 years.
2) 50% of the salary of one half-time assistant-engineer in documentation and web (J.-Ch. Le Pellec) – 9K€/yr.

Requested Funding (2013-2016): 135 000€: Two post-doctoral positions (2 x 50 000€); setting up and maintenance of an Internet observatory (30 000€); computer equipment (5 000€)

Expected Scientific Results: Creation of an academic observatory of quantification of crime (2013-2016), a website...

WP 1.3.3: The assessment of organizations and the use of performance indicators

Research on the role of performance quantification *within* public or corporate organizations, and the ways in which actors produce it or use it will be conducted during the period (2016-2019). This type of research has for instance been examined by SnO's researchers (Durand, Rao and Monin, 2007; Durand and Jourdan 2012) who investigated how market structures and macro-level institutions influence organizational efficiency, particularly on strategic decision-making using quantitative sociology (like the uses of panels at the micro-economic level). In the future, a cross-referenced database about the evaluations of international corporations carried out by rating agencies with various rationales (*i.e.* financial, humanitarian, or professional rationales) will be built. Research will also be conducted on the impact of the assessments made by rating agencies on the behavior of the actors, in particular in R&D activities or in the academic field (link with axe 3), through a collaboration between HEC, IDHE, DANTE, CESDIP and PRINTEMPS.

Another object of study is the role of categorization in international contexts in mediated markets, *i.e.* markets in which intermediaries evaluate market players. For instance, when multiple guides or raters evaluate the same firms across territories, do these ratings converge? What is the impact of this convergence or divergence on their performance and their decisions? The first steps of a study on these questions have been undertaken at SnO, with a joint work by R. Durand and L. Paoletta. The topic is corporate lawyers and how professional guides class and rank firms depending on their practices (*i.e.* categories of service). This project will be pursued by cross fertilization with the work of Christian Bessy on new organizational forms of corporate lawyers in France (Bessy, 2012).

The research on raters and ratings will further be extend through reviving research designs in criminal justice, in which judges are asked to analyze fictitious criminal cases, and to give sentences on cases for which the variables of the defendant, the victim or the situation are changed. Marie-Emma Boursier (legal scholar, DANTE) and Anthony Amicelle (political scientist, CESDIP) would work on it in order to shed light on how crucial players in the criminal justice system (public players like judges and magistrates or private ones like compliance officers) have, or don't have, ratings on individuals, curricula, etc (Amicelle, Favarel-Garrigues, 2012). Carole Gayet-Viaud (CESDIP) will deploy this method in order to trace the difference between a misdemeanor and a crime, an 'anti-social behavior' and a criminal action. This method is similar to one of the methodologies evoked in the penal metrology action (3.2) which also makes use of tests.

Aim: Contribution to Saclay's pole of sociology of law and economic sociology, together with quantitative research.

Involved Researchers: A. Amicelle (CESDIP), Marie-Emma Boursier (DANTE), Christian Bessy (IDHE), R. Durand (SnO), Carole Gayet-Viaud (CESDIP).

Requested funding (2016-2019): 10 000 € for the organization of interdisciplinary seminars on rating and indicators.

Innovation has always been a key driver to business development but the last decades have witnessed an abrupt break with the past: from what was basically a weapon for growth, limited to the most enterprising, innovation has become a condition of survival in saturated global markets, providing a strategic alternative to price wars. Contemporary forms of innovation are getting more and more complex, mixing up technological, economic, social, organisational aspects in an attempt to meet contemporary challenges (Benghozi et al. 2010; Midler et al. 2012). The objective of this axe is to support an interdisciplinary perspective focusing on the variety of collaborative practices involving a large number of potential actors (engineers, marketing departments, architects, artists, users, etc.), with different languages, tools and organizational forms. The challenge for these groups is to transform fuzzy concepts into objects and services adding value and values.

This WP will take advantage of its location to develop research on and within the innovation processes in a close relationship with other involved actors. It takes advantage of existing research and educating collaborations in the past on the theme of innovation and entrepreneurship (PIMREP, 2010) (master program involving Ecole Polytechnique, HEC and TelecomParisTech, Chairs Ecole Polytechnique-HEC and Ecole Polytechnique-TelecomParis, etc). Specific efforts will be devoted to the promotion of cross-discipline research. Such initiative will help to foster the dialogue with all the Saclay's actors of innovation: innovators, firms, public authorities, civil society.

The research program focuses on the relations between innovation management, entrepreneurship and market development, in both mature industries and high technology start-ups: it renews classical approaches by taking seriously the collective nature of innovation and the specificity of entrepreneurship in high technology contexts.

The perspective mainly focuses on issues related to the traditional definition of innovation and entrepreneurship, i.e. economic and firms' growth and market development thanks to the development of new products or service provisions. It approaches the question of innovation and entrepreneurship (I&E) within the firm, i.e. the micro-dynamics of activities (organisational design, management of creation processes and entrepreneurship, users practices) on the one hand, and the innovation in/as the firm's strategy (business models, structuring of markets and value chain), on the other. Besides, the project will also focus on others forms of entrepreneurial and organizational creativity that make society and markets evolve (megaprojects, financing, new forms of contracts, hierarchy, etc.). Innovation issues have generally been studied by distinct disciplines (strategic management, theory of organization, sociology and entrepreneurship). To understand the new forms of innovation requires a dialogue between them.

More specifically, the program will focus on three main research operations and a pedagogical one.

WP2.1: Innovation and coordination in high technology environments

The first perspective is about R&D ecosystems in high technology environments (clustering, geographical externalities, open innovation, platforms structure) (Chesbrough, 2003; Iansiti et al. 2004; Gawer, 2009; Adner et al. 2010; Dougherty et al., 2011; Brousseau et al. 2011). This part of the program will study the deployment of I&E in a global business, confronted with market contexts

characterized by radically different usage and regulatory conditions. Actually, open innovation based strategies target specific organizational structure able to support a large number of contributors; to implement new forms of contracts and partnerships, to design new form of local proximity. Such dynamics have been, moreover, reinforced by the development of Information and communication technologies providing radically new means for innovation and market developments (Abecassis & Benghozi 2011). The following research actions will be undertaken to address these issues: (i) Characterization of industrial partnerships in open innovation ecosystems, (ii) Architecture of production and distribution platforms, (iii) New cooperative practices in the management of open innovation, (iv) The management of mega technological projects and the risks they present (v) Design and role of management tools in innovation project and (vi) The legal infrastructure of such cooperation, specifically as regards competition and intellectual property law requirements.

These actions have already been launched through researches using different methodologies. One is the) characterization of the emerging digital ecosystems specificities through the identification of new forms of partnerships and of innovative processes overlapping on the infrastructures, the devices and the content (PJ Benghozi and E. Salvador). A second methodology consists in the exploitation of spatial data (Marie Le Pellec, CNES, CRG; Arnaud Saint Martin, Printemps). A third one is based on the measurement of innovation in territories by focusing on the characteristics of intangibles assets (Bounfour, Edvinsson, 2005).

Five Phd students are examining these issues within different industries: three PhDs in electric mobility and new associated services (Felix von Pechmann, Renault, CRG ; VEDECOM, Telecom Paristech) and two PhDs on alternative mobility projects and European rail transport (Julia Heildermeier and Hervé Champin, IDHE Cachan)

A seminar will be organized in 2014-2015 addressing these issues across these fields and others. Indeed, each of these fields represents a very specific landscape. A PhD will be launched.

Aim: exploring new forms of R&D organization using different empirical methodologies

Involved researchers: This operation will involve the following members among others of the network: K. Dahlin, A. Masini and S. Jouini (HEC); P.J. Benghozi, F. Charue-Duboc, S. Lenfle, C. Midler and H. Dumez (Ecole Polytechnique); Tommaso Pardi, Isabel da Costa (IDHE), R. Maniak and V. Fernandez (LTCI); Ahmed Bounfour, Sandra Charreire-Petit and Florence Durieux (PESOR); M. Chagny, V.L. Benabou, M. Clément-Fontaine (DANTE); M. Le Pellec (CRG); A. Saint Martin (Printemps).

Funding granted until now: several PhDs initiated

Requested funding: a third of a post doc (each year) + 10K€ for the seminar + 10K€ for fieldwork missions

Expected Scientific Results: publications, a workshop to debate on the researches engaged in the first perspective and a seminar "innovation and society"

WP2.2: Entrepreneurship and start-ups

In the innovation networks that emerge in high technology environment, entrepreneurship and start-ups play a crucial role and present specificities. For instance, academic spin-offs, acting as mediators between science and industry, engage in a wide range of partnerships with established firms and improve the innovative performance of their partners (Mindruta, 2008; Phelps et al. 2010; 2011). Therefore, a second line of research will investigate key issues relating to new ventures' founding, development and growth, collaborations between incumbents and start-ups, specificities of entrepreneurship. The objective is to enhance our understanding of the factors that foster the

founding of new ventures (Astebro 2011; Yong et al. 2010), to study the development of a learning dynamics within innovative start-ups (Ben Mahmoud-Jouini et al. 2010), to investigate the factors that hamper growth dynamics in start-ups and innovative ventures, to examine how collaborations with high-tech start-ups impact the innovative performance of partner firms. The following research actions will be undertaken to address these issues: (i) Dynamic cartography of high technology start up and research spin off, (ii) Economic of start up: strategy, organization, life circle, growth, (iii) Venture capitalist and incumbent strategies vis à vis high tech start up, (iv) Specificities of social entrepreneurship, (v) Evaluation of business plans and management of performance through indicators and (vi) Repartition of value and ownership of intellectual innovation.

These issues will be addressed through the database formed by startups hosted within the incubators of Saclay cluster: HEC Challenge plus¹, Ecole Polytechnique, Telecom-Paris and Incuballiance. Hence, raw data exists but needs further modelization in order to be exploitable. A quantitative and a qualitative methodology will be adopted to analyze trajectories of launch and growth of these start-ups as well as collaborations with incumbents through corporate venturing. Another field of research is the project that has been undertaken by the centre of entrepreneurship of HEC (Invivo start-up, <http://www.hec.fr/Start-up/Start-up-In-Vitro>) since 2011 matching innovators (researchers, etc) with HEC alumni that bring managerial and entrepreneurship competencies. This represents a rich field of experimentation and research. Some actions have already been launched through PhDs (Julie Fabbri, CRG; Isabelle Micaelli, HEC; Navid Bazzazian, HEC; Anisa Shyti, HEC) and other PhDs will be launched in the period 2016-2019.

Besides, IDHE launched a study on Optics Valley's entrepreneurs and start-ups. The study aims at understanding entrepreneurs' trajectories and work as well as their relationship to the territory's actors (Andrey Indukaev, PhD), while trying to analyze indicators of their performance from different perspectives (Sabine Sépari and Hugo Harari-Kermadec, IDHE).

Aim: a better understanding of the factors that foster the founding of new ventures and the dynamics of collective learning anchored in territories
Involved researchers: F. Hoos, G. Di Stefano, D. Mindruta, K. Yong, S. Sommers, C. Phelps and E. Krieger (HEC), R. Maniak (LTCI), C. Midler, R. Beaume, F. Charue-Duboc (CRG), and Sabine Sépari, Andrey Indukaev, Hugo Harari-Kermadec (IDHE); V.L. Benabou, M. Clément-Fontaine (DANTE).
Funding granted until now: several PhDs initiated, the study of Optics Valley and the experimentations launched at HEC entrepreneurship center
Requested Funding: a third of a post doc (each year) + 10 K€ for fieldwork
Expected Scientific results: publications, a database of the startups on the cluster, PhDs

WP2.3: Industrial organizations from a historical perspective

The third operation follows a historical perspective of industrial innovation. The Study of industrial and techno-scientists innovations during the 19th and 20th centuries needs to be revisited from a usage perspective. In fact, technical objects have been examined as inventions and innovations shedding light on periods that start with their adoption and end with their diffusion. The aim here is to examine their use starting from the "prescription" (conception and production) phase to their

¹ HEC Challenge+ program (25 years old) is dedicated to innovative entrepreneurial projects with substantial growth potential. It welcomes 30 projects per year. It has trained over 380 projects with a success rate (company set up and crossing the 5-year market) of over 70%. 4 companies are listed in the stock market and twenty have been sold.

appropriation by users in a workspace. The objective is to examine specifically, hydraulic and machinery technologies. Documents produced by study desks inside firms offer a promising historical material for the study of both design (projection, calculations, prescribed organization procedures) and implementation phases. This study will rely on archives identified by researchers in a set of firms. Restitution through the 3D modeling technology will be developed during the 2016- 2019 period of this project.

Aim: Understanding organization and use of technical objects with 3D modeling methodology and historical work.

Involved researchers: Jean-Louis Loubet, Nicolas Hatzfeld, Serge Benoît, Alain P. Michel, Florent Le Bot (IDHE Cachan and Evry).

Required funding: 5K€ for documentations and archival missions

Expected results: publications. A 3D video

WP 2.4: Valorization

The research program will be associated with the development of an educational operation. Its objective is to create a teaching platform on innovation and entrepreneurship, which will elaborate best practices for curricula on innovation through international comparisons, and to increase, therefore the scale of I&E activities on the Saclay Campus. The three following actions will be undertaken.

A seminar in 2015 will gather instructors, incubators staff and start-ups and researchers in order to produce a kit for coaches and evaluators of innovative ventures targeting incubators and venture capitalists. It will rely on the network of Saclay Cluster incubators such as HEC, Ecole Polytechnique, Incuballiance, TelecomParisTech.

An international summer school on entrepreneurship involving researchers and Phd Students will be organized in 2015. A previous edition was organized in 2011 by T. Astebro and C. Phelps (HEC). This edition will involve all Saclay Cluster and beyond.

Involved Research fellows: Among other members of the network, the following researchers will be involved: P. Détrie, F. Iselin and S. Jouini (HEC); C. Midler and R. Beaume (Ecole Polytechnique).

Obtained grants and funding: Funding of the PIMREP initiative by ParisTech

Required funding: a third of post doc (each year) and 15K€ for the summer school organization

Expected scientific results: a teaching program on entrepreneurship

The aim of this work package is to bring together different disciplines with diverse approaches in order to understand how norms and regulations emerge and how they influence scientific work, practices, contents and their circulation, by examining the interaction among different spheres (educational, research, industrial). More specifically, the aim here is to combine approaches coming from the disciplines of sociology, history, economics and education encompassing studies on objects such as policy, work, law, laboratories, curricula, journals, schools, careers or professional networks in a way that will allow us to understand the emergence, evolution, deviance from or contestation of the norms and regulations of scientific contents and practices, while acknowledging that different spheres of knowledge do interact.

Our starting point is thus the shared belief that science and technology studies artificially split studied objects. First, a separation between levels of analysis can be observed. While some STS studies have dealt with the organizational and institutional mutations that have deeply altered the way in which science is regulated and linked to social and economic issues (Gibbons *et al.*, 1994; Jasanoff, 2007; Etzkowitz and Leydesdorff, 1997 and 2000), others have focused on scientific practice *per se*, that is, on the experiments conducted by researchers who are grappling with objects and instruments whose characteristics govern the knowledge produced (Latour, 1989). Surprisingly enough, this micro-sociological point of view has only marginally contributed to the debate on changing regimes of knowledge production (Gibbons, 1994; Pestre, 2003). Second, micro-level studies did not take into account the results streaming from other approaches. In particular, they have been constructed without any sound dialogue with the sociology of law, work, labor and professional identities. As J. Wajcman (2006) and Doing (2004 and 2008) recently emphasized, this is the reason why, to a large extent, the joint work conducted by researchers interested in labor and researchers interested in science is a promising perspective, but has not yet come of age. Third, by separating public policy studies, academic laboratory studies, curricula studies and industrial research, scholars have underestimated the links among these spheres. Indeed, evidence from our previous studies shows that the transformation of academic researchers' practices and work cannot be perceived independently from their educational activity or their interaction with industrial partners (Fages and Albe, 2007), and that transformations in laboratory life can't be seized without reference to public policies (Jouvenet, 2011), or that transformations in industrial researchers' work cannot be understood without understanding transformations in academic researchers' work and vice-versa (Younès 2013). Moreover, the recent intervention of labor unions in the area of R&D in large firms and public research policies is likely to change existing laboratory arrangements (Béthoux, da Costa, Didry, *ongoing study*). Taken altogether, these results show that studies on the emergence, transgression or evolution of norms should be revisited in a way that takes into account the interactions between the different spheres.

We therefore intend to examine norms and regulations by shedding light on their characteristics, the deviance of local norms from those prescribed by policy-makers, their contestation, as well as their emergence and evolution, when interactions among education, industry, academic research, policy tools, law and labor relations are taken into account.

WP 3.1.: The evolution of norms and regulations of industrial research in perspective

The goal of this operation is to understand the way in which the organization of knowledge production in firms has evolved during the recent years and to compare these changes with the transformations that occurred in other scientific spheres. We intend to confront our results with the studies of research teams that can increase our knowledge about the topic. While studies on industrial researchers' work have mainly been examined at the IDHE and the CRG, academic researchers' work has mostly been studied at the PRINTEMPS. The goal here is to combine these different competencies.

WP 3.1.1.: Understanding change in large firms

Two sets of studies have recently contributed to the understanding of change in enterprises. First, the contribution of the project funded by an ANR and hosted at the IDHE-Cachan (TRAVCHER), "The work of scientists", has helped to understand the current conditions of knowledge production in large firms by showing that the science-industry relations, as well as the increasing externalization of research towards suppliers, have considerably shifted the activities of some researchers towards network management. Also, a large range of functions inside the firm seem to influence researchers work (marketing, sales, production, development...) in a context of restructuring. Secondly, studies on managerial processes conducted on a longer time span show that these processes have evolved during the past decades. Marketing functions increasingly influence research orientations (Charue-Duboc and Midler, 2002) even if the balance between market and science concerns has shifted over time (Gastaldi and Midler, 2005). How have these changes affected research in industrial laboratories? In order to answer this question, **we will organize a conference on the theme**, and complete our knowledge by a future operation to be explored.

WP 3.1.2.: Capturing the transformation of scientific work in firms

Indeed, given that both organizational and community belonging affect the professional opportunities of researchers (David and Foray, 2002; Bessy, 2009), we consider that **the study of researchers' careers** can be a good indicator of the way the industrial and the academic organization of research has recently evolved. Empirically, we will use a combination of quantitative data (bibliometric and contracts) and biographic interviews. Starting with **large French firms** located in Saclay and belonging to research-intensive industries (such as telecommunications' equipment, automobile and pharmaceutical industries), we aim to construct a **database** that will include researchers' publications and patents. The analysis of this data will enable an identification of the way researchers expand their domains of expertise, change the position of authorship (from first to last author for instance), or stop publishing at one point of their careers. **Biographic interviews** help explain the factors and mechanisms of these changes. Are they due to commercial pressures, shifts in the interest of the scientific community of reference, financial pressures, or other factors? In order to construct a database and conduct interviews in at least one firm, a post-doctoral fellow will be recruited.

WP 3.1.3.: Capturing the transformation of scientific work in academic research centers

In parallel, the PRINTEMPS team will conduct a comparable operation in **academic laboratories**. Based on its experience in laboratory studies, the goal here is to compare the work of industrial

researchers to that of the technical staff of academic laboratories. While researchers' work has been studied during the last years by Morgan Jouvenet (*cf.* bibliography), the aim here is to include a new "invisible category" in laboratories: the technical staff that surrounds, supports and accompanies the research and the researchers (Doing, 2004). Bridges could be built to a further UVSQ research centre in management (LAREQUOI), specifically regarding works done by Pascal Corbel (Corbel 2011).

WP 3.1.4.: How law affects scientific work

Interviews in both of these domains will also be the occasion to gather work contracts in order to construct a database similar to the one developed by Bessy (2009) and examine **how law affects mobility of researchers** and the distribution of property rights. In addition, a joint operation between the IDHE and CECOGL (a team that will join the École Normale Supérieure de Cachan) will focus on the emergence of property right conventions in different branches of the economy.

On the longer run (2016-2019), the aim is to conduct international comparisons in firms, curricula and academic laboratories in order to shed light on the way institutions in different countries affected scientific work in these organizations.

Aims: The goal of this operation is to understand the way the organization of knowledge production in firms evolved through the last years and to compare these changes with transformations that occurred in other scientific spheres.

Involved Researchers: IDHE (C. Didry, A. Mias, P. Boisard, A. Jobert, D. Younès, Z. Yi, Ch. Bessy and É. Béthoux), PRINTEMPS (J. Pélisse, M. Jouvenet, V. Tocut and A. Saint-Martin). Partnering team: CECOGL which particularly works on intellectual property issue in emergent sciences and technologies, P. Corbel (LAREQUOI, UVSQ).

Funding granted untill now: ANR TRAVCHER (2009-2013): 160 000 €. One PhD (ENS-Cachan): 120 000 €. One PhD (UVSQ): 120 000 €.

Requested funding 2013-2016 (95,000 €): One post-doctoral position (50 000 €) to assist the IDHE team in the study of careers, and the organization of a seminar (5 000 €) and an international conference (10 000 €). The PRINTEMPS laboratory will ask for the mutation (*détachement*) of an *Ingénieur de recherche* (V. Tocut, a technical staff specialized in microelectronic, working currently in the Linear Accelerator Laboratory – LAL – and finalizing a process of conversion in the sociology of professions) in order to conduct the research on academic researchers (30,000 €).

Expected scientific results: Case studies on scientific work. Organization of seminars and an international conference. Publications.

WP 3.2.: Emergence and evolution of norms and regulations and the impact of "clusterization" on science

Clusterization is here understood as the process of increasing proximities between research education and industry. It takes two forms: the decrease of geographical distances as well as the convergence of practices around instruments, projects, trainings and professionalization paths. When resulting from public policy initiatives, this process is coupled with a facilitation effort for technological transfers towards industry. If the plateau de Saclay is not yet the most cited case in this domain, the current endeavors are meant to bring the desired convergence. This part of the work package aims at analyzing the social conditions of this evolution and at comparing them with international cases using a reflexive quantitative as well as a qualitative method. It will thus both

contribute to the first axis on the construction of categories, and to the science-education-industry debate that will be captured in this work package. While the **STEF laboratory has already gathered quantitative data on recent evolutions** on the topic, partners now intend to focus on **case studies** in order to shed light on the process of clusterization in a way that will allow an analysis of the mechanisms of change, reorganization, transformation or reproduction of research and teaching practices induced by the geographical, institutional, economic, social and cognitive reorganization of academic and industrial territories. These case studies are all related: the **first is the École Normale Supérieure de Cachan taken as a hub of education-research-industry relations**, the second, is **joint research structures** that include laboratories from this school and the third is **joint Masters programs** in which the school participates. We argue that nanosciences and nanotechnologies, because of their particular national and transnational governance in the organization of this domain, as well as because of their weight in Saclay, constitute a particularly interesting case when the impact of clusterization on research and teaching practices is to be examined (Marcovich and Shinn, 2011; Sa, 2010; Thurs, 2007). The study will include a historical approach, and a “change in progress” approach.

WP 3.2.1.: Studying the evolution of norms and regulation at the ENS-Cachan

First, an exploratory study conducted by an ENS-Cachan team (that includes members of IDHE and STEF) on the history (starting 1912) and protohistory of the school (going back to its origins in 1880) showed the relevance of this case in order to examine the **evolution of the concept of “applied science”** with its implications on the dynamics between education, research and science-industry relations. Deepening this study will then allow us to explicit the mechanisms of the emergence and evolution of the norms and regulations of scientific content and practices that led to the transformation of the ENS de Cachan from a technical school to a Saclay partner on three domains: science-industry relations, academic research and education. In our forthcoming study, we intend to put a special emphasis on the evolution of nanosciences in comparison to other disciplines. Here, we will study the evolution of science-industry relations (through **contracts and interviews**), the **evolution of practices and contents of research and curricula as well as the circulation of knowledge among the three spheres**. In addition to researchers’ participation, this first part of the study will also rely on the participation of students from the Social Sciences Department at the ENS Cachan. This operation will be coordinated by Caroline Vincensini (IDHE), head of the social sciences department, Florent Le Bot (IDHE Evry), Elisabeth Chatel (IDHE Cachan) and Virginie Albe (STEF).

WP 3.2.2.: Ethnographic studies of joint Masters Programs and of joint technological platforms

Taking into account the results of the first operation, and following the approach of Fages and Albe’s study on the curricula strategies in the creation of specific Masters’ degrees in « nano », as well as Morgan Jouvenet’s claim on the necessity to examine the impact of policy tools supporting new organizational forms of research that include multidisciplinary research, laboratory mergers or public-private partnerships (Matthieu, Jouvenet and Vinck, 2013), the STEF and the PRINTEMPS teams will conduct **ethnographic studies** in order to shed light on the mechanisms of knowledge circulation during the ongoing clusterization phase at Saclay. We will examine **platforms of experimental teaching as well as technological platforms** (such as NanoInnov and NanoMed) linking

researchers to local industrial actors. In particular, we will follow actors from different institutions intervening in the new Masters programs in order to describe the kind of interactions they have with each other, with their research colleagues, and with industrial actors, and in order to examine the way in which these interactions shape their teaching and research practices and contents. In addition, a PhD candidate has started a research on the **professional integration of graduates** from ENS-Cachan, CELSA, and an engineering school from the Saclay plateau. This PhD will allow a better understanding of the job market characteristics and the links between education and industry.

Working sessions assembling researchers working on this topic in France and in other countries (for instance, A. Rip's team at the University of Twente), as well as a conference on "scientific clusters" will be organized. On the long-run (**2016- 2019**), we would like to compare this case with other initiatives implemented in France with similar organizational forms (in particular Grenoble) or introduced in other countries in nanosciences and nanotechnology. We also intend to conduct comparisons with other disciplines going through similar initiatives in the Saclay area.

Aims: Capture the emergence and evolution of norms and regulations in changing environments. A particular attention to the process of clusterization will be given.

Involved Researchers: from STEF laboratory (V. Albe and V. Fages), the IDHE Cachan and Évry (F. Le Bot, C. Vincensini, E. Chatel, Ch. Bessy), and PRINTEMPS (A. Saint-Martin, M. Jouvenet).

Funding granted until now: The ENS-Cachan funded 80 000 € to conduct research, organize a conference and a publication on its history. It will also contribute through its students to the field work.

Requested funding 2013-2016 (135 000 €.): Two post-doctoral positions (50 000 € x 2) to work jointly with the PRINTEMPS team and the STEF team on ethnographies. They will also contribute to the coordination of joint seminars that gathers all the teams implied in this part of the work package (IDHE, STEF, PRINTEMPS), and to the organization of an international conference on the theme. Missions (documentations, travel...): 20 000 €. Organization of seminars and a conference: 15 000€.

Expected Scientific results: case studies on technology platforms and joint Masters' program. Case study on ENS Cachan. Organization of seminars and an international conference. Publications.

WP 3.3.: When norms and regulations are bypassed, controversial or contested

The norms and regulations of scientific work can be bypassed, controversial or contested. This part of the project examines both contemporary and historical deviant cases, ongoing controversies around existing norms and regulations, and forms of organized contestation in this domain.

WP 3.3.1.: Transgressing norms in education

Indeed, long term historical and sociohistorical studies have criticized the birth of science and scientific work's "mode 2" regime that supposedly arose in the years 1950 (Shinn, 2002; Gingras, 2003; Pestre, 2003a). According to the tenants of the "mode 2" regime, this scheme replaced a system in which a split between the academic world and society meant that no interactions between science and industry existed. Instead, scholars who examined the circulation and transmission of scientific knowledge in France showed that this classical historiographical construction depended on objects, and sometimes, implicit methodological choices: a top-level history that examines policies and national prescriptions and that is limited to mostly Parisian academic and scientific elites and their institutions. By changing the perspective, these studies focused on mechanisms of circulation and transmission of scientific knowledge in the academic milieus as well as in a larger sphere that

encompasses the split in the history of sciences between, on the one side, a traditional academic sphere and, on the other, technical and professional spheres (for studies on scientific and technical education see Grossetti, 1994; Grelon and Grossetti, 1996; Rollet, 2007; d’Enfert and Fonteneau, 2011; for the study of scientific and technical journals see Bret, Chatzis and Pérez, 2008; Nabonnand and Rollet, 2011; d’Enfert, 2008). They could therefore show that deviant cases existed. In this part of the work package, we will first contribute to these history studies by examining deviant cases of local supply and local systems of scientific and technical education during the 19th and 20th centuries, examine the circulation of sciences by and through scientific journals during the same period, and analyze recent fraud cases both in the industry and academic worlds.

The interest of **studying local supply and local systems of scientific and technical education** has been underlined by Michel Grossetti (1994) and Jean-Michel Chapoulie (2010) and has been reviewed by Laurent Rollet (2009). It will be reinvested in order to study the realities of local configurations when it comes to scientific and technical education in the 19th and 20th centuries. Starting from our study on national prescriptions on curricula and practices during the 19th and 20th centuries (Gispert, Hulin and Robic, 2007), we have shown that the norm was to separate educational *filières* by attributing to them differentiated scientific curricula. We now intend to select a number of local case studies in order to evaluate the effectiveness of these prescriptions and analyze transgressions. These cases will be further compared to the Ecole Normal Supérieure de Cachan case mentioned in WP 3.2. This operation will rely on archival work in regions, once the selected cases will have been defined.

Since this operation is of common interest to researchers working on the history of ENS-Cachan and the GHDSO, the national seminar “Local supply and local systems of scientific and technical education” launched by the GHDSO in 2013 will be open to this consortium.

WP 3.3.2.: The circulation of sciences by and through scientific journals

The second operation will focus on **the circulation of sciences by and through scientific journals** with the aim to show mechanisms of specialization and characterize norms and publics (19th and 20th centuries). An emerging field of research on scientific and technical periodicals – beyond the most famous academic journals which have already been studied – pays particular attention to long term journals’ specialization processes and their scientific and technical readership (Bret, Chatzis and Pérez, 2008; Gispert, 2011). Our goal is to analyze the norms of scientific production and activity that these publications promote, depending on their editorial project and targeted readership. In this attempt, we will construct corpuses of scholarly press, scientific and technical journals as well as industrial and commercial local press. The construction of different categories of actors and readerships will precede the realization of databases that will reveal the diversity of scientists’ productions and activities and the diversity of competing or coexisting norms, depending on the periodicals and their specialization. A special attention could be devoted here to the non-institutionalization process of ‘criminology’ in France (a government order was taken in Feb. 2012 and deleted six months later).

WP 3.3.3.: Discourses of Scientific Deviance

The third research perspective that allows for capturing deviance and for characterizing dominant scientific norms, focus on the issue of **scientific deviance**. Problems linked to scientific **fraud** are regularly debated and they may give rise to heated exchanges between scientists (Goodstein, 2010). Both in the industry and in the academic fields these issues have taken an increasingly important place. Recently, Diederik Stapel, a social psychologist at the University of Tübingen recognized falsifying the results of his experiments for 20 years, in order to fit the expectations of the system. By focusing on conflicts, deviances, transgressions, controversies and scandals, it becomes possible to elicit the norms of a social world and the role played by law and legal professionals (Bessy and Chateauraynaud, 1995). Our goal is to construct a database with the coverage of all these cases. While the media extensively covers industrial cases, we also intend to develop a partnership with the observatory of fraud located in HEC Switzerland². A textual analysis will be conducted in order to extract different registers structuring the discourses. The study will be carried out both by Jérôme Péliasse (PRINTEMPS) and Christian Bessy (IDHE). The École Normale Supérieure de Cachan will fund a PhD candidate to work on this topic.

WP 3.3.4.: Controversies on norms and regulations of scientific work

Studies on changing regimes of scientific production have recently focused on either explaining the rationale behind the transformations or on their expected effects on scientific production. However, in the social sphere, these changes are not to be taken for granted. Rather, they are leading to **public controversies** on what the role of science should be and how it should be organized, funded and evaluated (Vinck *et al.*, 2007). It is then particularly interesting to explore these controversies in order to shed light on the different logics at play. In this attempt, we will construct a database to gather media coverage, union press releases, research associations' communications on the topic, etc... A textual analysis will be conducted in order to extract competing argumentations. Depending on the results, further research operations could be conducted. These can include the constitution of social movements opposing changes, for instance. The research will be conducted by Morgan Jouvenet (PRINTEMPS) in collaboration with Matthieu Hubert (affiliated researcher to PACTE, Grenoble). While studies of controversies usually focus on argumentation, we intend to compare argumentative logics to changes that we observe in laboratories (in previous WPs).

WP 3.3.5.: Contestation of scientific norms and regulations

Moreover, Elodie Béthoux, Isabel da Costa, Annette Jobert, Pierre Boisard and Claude Didry (IDHE) have been following the evolution of **labor union debates** and activities in the domain of industrial research, especially in multinational firms. Indeed, during the last years, trade unions have been concerned with R&D and investment decreasing budgets, particularly in times of restructuring. Finding ways to reverse this trend has therefore become one of their targets. Understanding how trade unions decided to intervene in this domain, what types of actions they are developing to reach their goals, and how these affect or not the firms' decisions should therefore be examined. This will be done through the analysis of trade union documents, transnational negotiations, and interviews in order to understand the repertoires of trade union arguments and how they change.

² Link to their webpage : <http://responsable.unige.ch/index.php>

Aim of WP 3.3: to examine contemporary and historical cases that allow capturing the characteristics of norms and regulations, their justification, deviance, bypassing, and forms of contestation around them.

Involved researchers: from the GHDSO-EST (R. d'Enfert, V. Fonteneau, H. Gispert, L. Alfonsi, D. Berdah, A. Jacq, J. Robinet, N. Verdier), PRINTEMPS (J. Pélisse, M. Jouvenet), and IDHE (Ch. Bessy, É. Béthoux, I. da Costa, A. Jobert, P. Boisard and C. Didry). Partner: M. Hubert (affiliated researcher to PACTE, Grenoble).

Funding granted till now: Two ongoing PhDs (ENS-Cachan and Université Paris-Sud): 240 000 €. The ENS Cachan will fund a PhD on the theme of scientific deviance.

Requested funding (2013-2016): One post-doctoral position to work on contestation issues (50 000 €). Missions (transport, hotels for regional archives...), documentation... : 3 x 15 000 € (45 000 €). Organization of a national seminar ("Local supply and local systems of scientific and technical education"): 5 000 € x 3. **Total: 110 000 €.**

Expected Scientific Results: case studies and Publications.

Last but not least, this work project, will not only facilitate cooperation among researchers of this subgroup, it will also contribute to other WP through a wide number of results. As such, studies on industrial research and clusterization will contribute to WP2, research on norms and regulations that include metrics and categories can be discussed with scholars working in WP1, analysis of intellectual property rights, researchers' contracts and inter-organizational contracts will contribute to the studies on law in WP4.

Science and law are two dominant forms of truth discourse in contemporaneous societies. Social sciences have put the stress on these two objects with a strong interest for their crossings. In particular, Science & Technology Studies have launched and developed a research program at the crossroads of sociology of science and sociology of law. The chapter wrote by Sheila Jasanoff in *The Handbook of Science and Technology Studies* clearly shows the perspectives opened by the idea of coproduction between science and society when it is applied to the analysis of science and law (also Jasanoff, 2004 and 2011).

Expertise in courts has been one of the favorite domains of research. The question of the role of sciences and technology, and more specifically of varied kinds of expertise in judicial practices and sentencing has generated many different types of groundbreaking research. Some researchers focus on a single case (Jasanoff, 1998), others deal with matters such as forensic activities (Timmermans, 2007) or laboratories in genetics (Renard, 2008; Dufresne and Robert, 2012). The history of the uses of DNA in criminal justice has been written by sociologists of science (Lynch, Cole, McNally and Jordan, 2008), but we do not know so much about the uses of neurosciences in law and justice though some studies exist (Rafter, 2008; Freeman and Goodenough, 2010; Larrieu, 2011). The reception of science in/by courts puts into play more general issues concerning the reliance on mundane understandings of science (Lynch and McNally, 2005). Researches on judicial expertise are an important part of STS research, but socio-historical studies (Dumoulin, 2007) and the sociology of professions (Dumoulin, 2007; Pélisse, 2012) have brought many kinds of “technical experts” to the fore, like architects, economists, psychiatrists, interpreters or translators.

Apart from this, law and justice are also relying on the extensive use of various technologies (and particularly information and communication technologies or ICT), to get the (judicial) job done at different levels of the civil and criminal processes (police work, making of the judicial file, legal reasoning, administration of proof, sentencing – s. Dumoulin and Licoppe, 2011; Kaminski *et al.*, in press 2013). Our partners cooperate to the program « Cyberjustice », an international research that has been launched by the University of Montreal (<http://www.laboratoiredecyberjustice.org/fr/Home/Home>), and on virtual hearings and video-recording of police interrogations to the Digital Society Institute’ project. Moreover, a network has been created by some researchers who are involved in these hybrid objects (Law, Sciences & Techniques Network, <http://www.rdst.org>), which the DANTE is member of.

Four main actions are proposed over the period 2013-2016. They are chosen for their likelihood to cross-fertilize different research experiences and to allow the development of bilateral collaborations. While the program for 2013-2016 focuses on what science and technology do to law and justice, the perspectives for 2016-2019 should be more oriented toward what law and justice do to science and technology – an aspect which would have been partly addressed in the third project (for example with the action on scientific fraud or the other one on patents).

WP 4.1: Research on CCTV as a new method of production of proofs

The state of the art (Dumoulin, Germain and Douillet, 2010) has shown that some “unexpected” uses of CCTV have not been sufficiently investigated. If studies successfully describe the practical activities of the CCTV operators in concrete settings (Le Goff and Malochet, 2011) or CCTV’s broader influence on police work (Neyland, 2011), the use of CCTV as a source for admissible evidence is still a blind spot in the literature (Jobard and Schulze Icking, 2004). This form of CCTV is able to provide an empirical basis to assess and discuss surveillance studies core assumptions. A specific research will focus on the way CCTV pictures may be relied on, or contested, as evidence in criminal process and courtrooms. Our first goal is to produce data documenting the actual uses of CCTV: how are pictures available? Under what conditions are they deemed good enough to be used as evidence? Are they really used or not? To charge and convict a defendant or to discharge him? As a sole element of proof, or as a complement to more receivable forms of proof. These questions have seldom been raised in the literature although they could reshape the direction of the research on CCTV, and more empirical and well-documented inquiries are clearly required. One aim of this action is to contribute to the theoretical and empirical displacement of surveillance studies’ debates from the administration of surveillance to the discussion of the ways in which CCTV’s images are used as evidence in judicial settings context of making evidence is at stake. To study these new uses of CCTV and its consequences on criminal process, we request the funding for a postdoctoral position for 18 months (75 000 €). The postdoctoral student would be hosted by ISP with a monitoring committee including researchers from CESDIP and LCTI.

Aims: analyzing the use of images as proofs and evaluating the impact of this technology on penal processes.
Involved researchers: L. Dumoulin (ISP), T. Le Goff (CESDIP), C. Licoppe (LCTI)
Funding granted till now: a grant by the INHES (2005-2008) ; a regional grant (Région Rhône-Alpes) for a seminar on the state-of-art of CCTV issues.
Requested funding 2013-2016: 75 000 €.
Expected scientific results (2019): publications and case studies.

WP 4.2: Exploratory research on electronic monitoring: a micro-sociological approach

Electronic monitoring or tracking is linked to the transfer of the penalty from the prison to everyday social spaces. It involves non-professional agents and institutions in the surveillance at a distance. In this perspective, ethnographic approaches are particularly relevant to understand how penalty is transformed, who are the new actors involved, how space and sociality in everyday spaces are reshaped by electronic monitoring, and become contested sites. Space, place and proximity are experienced and used for action in a different way, which become empirically available to fine grained ethnographic approaches, while offenders’ representations of this kind of sanction are researchable with interviews and focus groups (Troshynski, Lee and Dourish, 2011). Researchers from ISP and CESDIP have produced research on electronic monitoring, specifically the reshaping of some judicial decisions with respect to the availability of this type of control (as a control measure –“*mesure de sûreté*”- for parole offenders for example – s. Pitoun and Lévy, 2004 at CESDIP, Dumoulin, 2011, and more broadly Devresse, 2011; Nellis, Beyens and Kaminski, 2012) This work could be articulated to the existing competences existing in LTCL regarding micro-sociological approaches (involving distributed cognition, activity theory and ethnomethodology).

Two actions will be undertaken within this frame. We plan first to realize a one year long ethnographic research concerning the implementation of electronic monitoring/tracking. A group of electronic monitored offenders would be followed by a researcher from the installation of the bracelet to the ending of the monitoring. The research design also includes ethnographic observations in the relevant sites (parole officers, prison warders, offenders) but above all in the 'coordination centers' where the operators monitor offenders' location and may act upon that basis. We also aim to describe the interactions and mutual accountability of participants at this nexus of devices and software, watchers and offenders, place and sociality. For this operation, we need a funding for a post-doc position for one year. In parallel, we propose to launch a multi-disciplinary workshop (or colloquium) on electronic monitoring, which will give the opportunity to valorize our project as an important site of excellence for the SHS research on technology and penal justice.

Aims: Analyzing the electronic bracelet using a new approach.

Involved researchers: A. Kensey (CESDIP), R. Lévy (CESDIP), L. Dumoulin (ISP), Ch. Licoppe (LCTI).

Granted funding until now: a grant from GIP *Mission de recherche Droit et justice* ; a grant for the Rhône-Alpes Région to facilitate franco-brasilian academic events on supervision and new technologies.

Requested funding 2013-2016: 65 000 €: one year post-doc (50 000 €) and the organization of an international conference (15 000 €)

Expected scientific results (2019): articles and a multidisciplinary conference.

WP 4.3: Research on neurosciences and law

To fuel the debate on the ethical questions relating to the societal impact of the discoveries made by neurosciences and of their technical spin-offs, we propose to pay special attention to the growing reception of neuroscience in criminal law and criminal justice. Neurosciences impinge questions of law in two main domains: the ability of neurosciences to predict criminal behaviour (and then, to regulate it); the ability of neurosciences to give an accurate picture of the moral or ethical abilities of the persons, and from there to re-structure or re-define core notions such as individual responsibility. The contribution is relevant to what is now coming to be called 'neurojustice' or 'neurolaw'. Neurosciences in law is a thorny theme in France today (CAS, 2009; RFS, 2010). CESDIP's involvement in societal debates on the possible introduction of criminology in France (Mucchielli, 2009), as well as its researches on the history of forensic sciences, like phrenology (a proto-neuroscience), or of criminology (Piazza, 2011), provide a strong base to explore the contested links between neurosciences and law.

Our project combines here in a distinctive way the sociology of law and the sociology of science and technology. CESDIP has an easy access to the bureau and agencies that participate in producing prospective for the ministry of Justice. Moreover, the existence and the proximity of the Saclay's NeuroSpin platform (5 laboratories) offer an easy access to the scientists in the field. We plan to launch later a qualitative research about their positioning in this field and the relationship between them and "end users" such as the ministry of Interior, the ministry of Justice, the customs services, the prison services, etc. The research would also explore more deeply the new tensions which occur in this field with respect to the « science/society », and try to understand the conditions of emergence of a networked assemblage between neurosciences researchers and judicial administrations and scientists, as well as to identify all the translations and *intéressement* processes involved, within a STS perspective. It will be based on the detachment of Pierre Piazza (a political

scientist who devote his works to the history of forensics and criminology) to the CNRS (*“Accueil en délégation”*) for two years and will require a budget only for research expenses (5 000 € per year).

Aims: Creating the first scientific location for the study of a possible introduction of neurojustice/neurolaw in France

Involved researchers: Fabien Jobard (CESDIP), Morgan Jouvenet (PRINTEMPS), Pierre Piazza (CESDIP).

Requested funding 2013-2016: 10 000 € (travel expenses on the field, international workshop)

WP 4.4: Around expertise in courts

The last domain of research deals more generally with the issue of the use of expert knowledge in courts, an activity which is by definition at the juncture between scientific knowledge and judicial process. Expertise is part of many controversies: concerning psychiatrists; economists; scientists specialized in the climate, the agro-alimentary, health and safety or the nuclear issues. But it takes a specific dimension when it is referred to in the courtroom, and is a key site with respect to the interactions between sciences, societies and law.

Our purpose here is to capitalize on the multiple competences of our laboratories to build a network of excellence associating the researchers who have already done significant researches on this topic. This aim could be achieved by launching a seminar drawn to define where are the main gaps in the existing research, on which researchers in Saclay could develop a larger scale collaborative project (for instance for funding by the ANR). This exploratory seminar would bring together doctoral students who are actually working on expertise (R. Juston on forensic expertise, PRINTEMPS; J. Boirot on psychiatric expertise in Europe, CESDIP; A. Leroy on psychiatric expertise, ISP); researchers who have already developed extensive studies of expertise in judicial settings (L. Dumoulin, A. Gozhia, J. Pélisse); foreign colleagues with a recognized expertise (notably B. Renard, researcher in Louvain - Belgium). This seminar (requested budget 5 000 €) could give birth to both to intermediate collaborative operations (collective academic book, seminar of research) and to the construction of a large scale collaborative project on expertise in the courtroom before 2016. Based on a 6 months postdoc (25 000 euros), a special focus will be made on the question of the «cost » of the expertise as a potential threat on the independance of the expert and, moreover as a potential criterion to choose private litigation proceedings (mediation, arbitration) versus public service of justice.

Aims: develop knowledge on judicial expertise as a heuristic activity where science and law meet.

Involved researchers: J. Boirot (CESDIP), L. Dumoulin (ISP), F. Jobard (CESDIP), R. Juston (PRINTEMPS), A. Leroy (ISP), C. Licoppe (LCTI), J. Pélisse (PRINTEMPS), A. Gozhia (DANTE), N. Reboul-Maupin (DANTE), M. Court de Fontmichel (DANTE).

Granted funding untill now: PhD grants (R. Juston, DIM IS²IT 2012-2014 – A. Leroy, allocation ENAP 2010-2012)

Requested funding 2013-2016: 30 000 € (6 months postdoc + missions and organizations of the seminar).

In summary, this fourth axis which emerged from the fusion of the Labex 6S and LISI is particularly rich in perspectives. It promises the realization of excellent research and the development and reinforcement of cooperation between researchers belonging to constituent laboratories (CESDIP, DANTE, ISP, LTCI and PRINTEMPS) from different institutions within the Saclay perimeter. This is the reason why the presented operations aim to capitalize several well-established traditions of research

but also to go forward and to create synergies in order to build new collaborative projects. This is an ongoing process, open to the adjunction of colleagues from these other laboratories or other disciplines, especially legal scholars from Paris Sud in a near future. A transverse action which exemplifies its collective force and its potential impact on public policies and professionals will be the launching of a test formation seminar for magistrates and police officers on the social implications of science in police and judicial process (**budget: 5 000 €**).

ANNEXES

Funding Justification

By Working Project, the funding Justification could be presenting in the following table :

	Postdoc/ingenieur	Missions, documentation and equipment	Sum
WP 1 – Quantification, modeling and metrology	172 000	73 000	245 000
WP2 – Innovation, Entrepreneurship and Market Development	150 000	50 000	200 000
WP3 – Norms and regulations of scientific work	230 000	110 000	340 000
WP4 – Law and Justice, Science and Technology	150 000	135 000	185 000
	702 000	268 000	970 000

To fund all its activities, ISIS needs approximatively 323 330 € per year. During 3 years :

- ISIS will provide funding to initiate **four research programs, including postdoc, missions and equipment**. Additional funding could be secured from ANR, ERC, PCRD programs, DIM IS²IT, DIM GESTES, etc.
- ISIS supports two **Master's degree programs** and organizes two **international Summer school** (WP 1.1 and WP 2.4 both in 2015).

	2013	2014	2015
Postdoc	50 000 (2.1)	25 000 (1.1.) 50 000 (1.3.2) 50 000 (2.2) 50 000 (3.1) 50 000 (3.2) 50 000 (4.1) 50 000 (4.2)	50 000 (1.3.2) 50 000 (2.4) 50 000 (3.3) 25 000 (4.1) 25 000 (4.4)
Research ingénieur	47 000 (1.2) 15 000 (1.3.2) 10 000 (3.1)	7 500 (1.3.2) 20 000 (3.1)	7 500 (1.3.2)
Missions (seminar, field research, documentation, invitation of foreign scholars...)	5000 (1.1) 8000 (1.2) 10 000 (1.3.1) 5000 (1.3.3) 7000 (2.1) 12 000 (3.2) 20 000 (3.3) 3000 (4.4)	5000 (1.1) 5000 (1.3.3) 7000 (2.1) 5000 (2.3) 5000 (3.1) 4000 (3.2) 20 000 (3.3) 5000 (4.3) 2000 (4.4)	5 000 (1.1) 6000 (2.1) 15 000 (2.4) 10 000 (3.1) 4 000 (3.2) 20 000 (3.3) 15 000 (4.2) 5000 (4.3)
Equipment (CASD access, database)	5000 (1.2) 5000 (1.3.2)		
Summer school			10 000 (1.1) 15 000 (2.4)
Valorisation			
Governance / administration			
Total	252 ke	410,5 ke	312,5 ke

References

- Abecassis-Moedas C., Benghozi P.J., 2011, Efficiency and Innovativeness as Determinants of Design Architecture Choices, *Journal of Product Innovation Management*.
- Adner R., Kapoor R., 2010, Value Creation in Innovation Ecosystems: how the Structure of Technological Interdependence Affects Firm Performance in New Technology Generations, *Strategic Management Journal*, 31, 3, 306-333.
- Akrich M., Callon M., Latour B., (dir.), 2006, *Sociologie de la traduction. Textes fondateurs*, Paris, Presses de l'École des Mines.
- Allhoff F., Lin P., (eds.), 2009, *Nanotechnology & Society. Current and Emerging Ethical Issues*, Berlin, Springer.
- Amicelle A., Favarel-Garrigues G., Financial Surveillance: Who cares? The Journal of Cultural Economy, 5, 1, 2012.
- Astebro T., Thompson P., 2011, Entrepreneurs: Jacks of all Trades or Hobos?, *Research Policy*, 40, 5, 637-649.
- Bailenson J.N., et al., 2006, Courtroom Applications of Virtual Environments, Immersive Virtual Environments, and Collaborative Virtual Environments, *Law & Policy*, 28, 2, 249-270.
- Ball K., Haggerty K.D., Lyon D., (eds.), 2012, *Routledge Handbook of Surveillance Studies*, London-New York, Routledge.
- Becker P., Wetzell R., (eds.), 2006, *Criminals and their Scientists: The History of Criminology in International Perspective*, Cambridge, Cambridge University Press.
- Ben Mahmoud-Jouini S., Paris T., Bureau S., 2010, A typology of Knowledge Acquisition Modes within the Entrepreneurial Process, Proceeding of the *European Academy of Management*.
- Benghozi P.J., Charue-Duboc F., Midler C., 2000, *Innovation-Based Competition and Design Systems Dynamics*, Paris, l'Harmattan.
- Bessy C., 2009, L'usage des clauses de non-concurrence dans les contrats de travail, *Revue d'Économie Industrielle*, 125, 9-40.
- Bessy C., 2012, Law, Forms of Organization and the Market for Legal Services, *Economic Sociology*, 14, 1, 21-28.
- Bessy C., Chateraynaud F., 1995, *Experts et faussaires*, Paris, Métailié.
- Boltanski L., Thévenot L., 1983, Finding One's Way in Social Space; a Study based on Games, *Social Science Information*, 22, 4-5, 631-680.
- Bounfour A., Edvinsson L., 2005, *Intellectual Capital for Communities, Nations Regions and Cities*. Elsevier Butterworth Heinemann, Burlington.
- Bowker G., Star S.L., 1999, *Sorting Things Out. Classification and its Consequences*, Cambridge, The MIT Press.
- Bronner G., 2010, Cerveau et socialisation. Quelques éléments de discussion, *Revue Française de Sociologie*, 51, 4.
- Brousseau E., 2011, Regulators as Reflexive Governance Platforms, *Competition and Regulation in Network Industries*, 12, 3, 194-209.
- Brousseau E., Garrouste P., Raynaud E., 2011, Institutional Changes: Alternative Theories and Consequences for Institutional Design, *Journal of Economic Behavior and Organization*, 79, 3-19.
- Bruch E.E., Mare R.D., 2006, Neighborhood Choices and Neighbourhood Change, *American Journal of Sociology*, 112, 3, 667-709.

- Camerer C., Loenstein G.F., Prelec D., 2005, Neuroeconomics : How Neuroscience can Inform Economics, *Journal of Economic Literature*, 43, 9-64.
- CAS (Centre d'analyse stratégique), 2009, *Perspectives scientifiques et légales sur l'utilisation des sciences du cerveau dans le cadre des procédures judiciaires*, Paris, Premier ministre.
- Chan T., Goldthorpe J., 2007, Class and Status: the Conceptual Distinction and its Empirical Relevance, *American Sociological Review*, 72, 4, 512-532.
- Changeux J.P., 2006, Les bases neurales de l'habitus, in Fussman G., *Croyance, raison et déraison*, Paris, Odile Jacob.
- Chapoulie J.M., 2010, *L'École d'État conquiert la France : deux siècles de politique scolaire*, Rennes, Presses Universitaires de Rennes.
- Charue-Duboc F., Midler C., 2002, L'activité d'ingénierie et le modèle de projet concourant, *Sociologie du Travail*, 44, 3, 401-417.
- Chateauraynaud F., 2011, *Argumenter dans un champ de force. Essai de sociologie balistique*, Paris, Petra.
- Chateauraynaud F., Bessy C., 1995, *Experts et faussaires*, Paris, Métailié.
- Chesbrough H.W., 2003, *Open Innovation: the New Imperative for Creating and Profiting from Technology*, Boston, Harvard Business School Press.
- Chesbrough H.W., 2006, *Open Business Models: How to Thrive in the New Innovation Landscape*, Boston, Harvard Business School Press.
- Chiapello E., coll. Berland N., 2009, Criticisms of Capitalism, Budgeting and the Double Enrolment: Budgetary Control Rhetoric and Social Reform in France in the 1930s and 1950s, *Accounting, Organisations and Society*, 34, 1, 28-57.
- Clot Y., 2010, *Le travail à cœur. Pour en finir avec les risques psychosociaux*, Paris, La Découverte.
- Corbel P., Chomienne H., Serfati C., 2011, L'appropriation du savoir entre laboratoires publics et entreprises : la gestion des tensions au sein d'un pôle de compétitivité, *Revue française de gestion*, 37, 210, p. 149-163.
- D'Enfert R., 2008, Une revue « scientifique et industrielle » militante : *L'Enseignement Professionnel*, 1862-1865, in Bret P., Chatzis K., Perez L., (dir.), *La presse et les périodiques techniques en Europe, 1750-1950*, Paris, l'Harmattan, 159-174.
- d'Enfert R., Fonteneau V., 2011, *Espaces de l'enseignement scientifique et technique. Acteurs, savoirs, institutions, XVIIe-XXe siècles*, Paris, Hermann.
- David P., Foray D., 2002, Une introduction à l'économie et à la société du savoir, *Revue Internationale des Sciences Sociales*, 171, 13-28.
- de Saint Pol Th., 2010, *Le poids des apparences. Hommes et femmes face à leur poids*, Paris, Preses Universitaires de France.
- Dechenaux E., Thursby M., Thursby J., 2011, Inventor Moral Hazard in University Licensing: the Role of Contracts, *Research Policy*, 40, 94-104.
- Dehaene S., 2010, *Reading in the Brain: The New Science of How We Read*, London, Penguin Books.
- Dejours C., 2010, *Travail vivant*, Paris, Payot.
- Desrosières A., 2008, *Pour une sociologie historique de la quantification*, Paris, Presses de l'École des Mines.
- Doing P., 2004, « Lab Hands » and the « Scarlet O »: Epistemic Politics and (Scientific) Labor, *Social Studies of Science*, 34, 3, 299-323.
- Doing P., 2008, Give me a Laboratory and I will Raise a Discipline. The Past, Present, and Future of Laboratory Studies in STS, in Hackett E.J., Amsterdamska O., Lynch M., Wajcman J., (eds.), *The Handbook of Science and Technology Studies. Third Edition*, Cambridge-London, The MIT Press, 279-295.

- Dougherty D., Dunne D., 2011, Organizing Ecologies of Complex Innovation, *Organization Science*, 22, 5, 1214-1223.
- Dufresne M., Robert D., 2012, La traduction des échantillons biologiques : une amplification de la vie privée ?, *Réseaux*, 175, 205-229.
- Dumoulin L., 2007, *L'expert dans la justice. De la genèse d'une figure à ses usages*, Paris, Economica.
- Dumoulin L., 2007, *L'expert en justice : de l'invention d'une figure à ses usages*, Paris, Economica.
- Dumoulin L., Licoppe Ch., (dir.), 2011, dossier « Technologies, Droit et Justice », *Droit & Cultures*, 61, 1 (dossier complet).
- Dumoulin L., Licoppe Ch., (dir.), 2011, Technologies, droit et justice : Quelques éléments de mise en perspective », *Droit et Cultures*, 61, <http://droitcultures.revues.org/2387>.
- Dumoulin S.G., Douillet A.C., 2012, Une petite entreprise qui ne connaît pas la crise. Le succès de la vidéosurveillance au regard de la littérature internationale, *Champ Pénal*, VII, <http://champpenal.revues.org/7931>.
- Durand R., 2006, *Organizational Evolution and Strategic Management*, London, Sage Publishers.
- Durand R., Jourdan J., 2012, Jules or Jim: Alternative conformity to minority logics, *Academy of Management Journal* (forthcoming).
- Durand R., McGuire J., 2005, Legitimizing Agencies Facing Selection: the Case of AACSB, *Organization Studies*, 26, 2, 165-196.
- Durand R., Rao H., Monin P., 2007, Code and Conduct in French Cuisine: Impact of Code-Changes on External Evaluations, *Strategic Management Journal*, 28, 5, 455-472.
- Durand R., Vaara E., 2009, Causation, Counterfactuals, and Competitive Advantage, *Strategic Management Journal*, 30, 1264-1284.
- Eloire F., 2010, Une approche sociologique de la concurrence sur un marché, *Revue Française de Sociologie*, 51, 3, 481-517.
- Espeland W., Sauder M., 2007, Rankings and Reactivity. How Public Measures Recreate Social Worlds, *AJS*, 113, 1, 1-40.
- Etzkowitz H., Leydesdorff L., (eds.), 1997, *Universities and the Global Knowledge Economy: a Triple Helix of University-Industry-Government Relations*, London-New York, Pinter.
- Etzkowitz H., Leydesdorff L., 2000, The Dynamics of Innovation : from National System and « Mode 2 » to a Triple Helix of University-Industry-Government Relations, *Research Policy*, 29, 109-123.
- Fabri M., Langbroeck P., (eds.), 2000, *The Challenge of Change for Judicial Systems*, Lansdale, IOS Press.
- Freeman M., Goodenough O.R., (eds.), 2009, *Law, Mind and Brain*, Farnham, Ashgate.
- Froment J.C., 1998, La surveillance électronique à domicile : une nouvelle économie du pouvoir de punir ?, *Les Cahiers de la Sécurité Intérieure*, 34, 149-168.
- Gastaldi L., Midler Ch., 2005, Exploration concourante et pilotage de la recherche. Une entreprise de spécialités chimiques, *Revue Française de Gestion*, 31, 155, 173-189.
- Gayet-Viaud C., La moindre des choses. Enquête sur la civilité urbaine et ses péripéties, in C. Gayet-Viaud (ed.), *Du civil au politique. Ethnographies du vivre-ensemble*. Bruxelles, PIE Peter Lang, 2011
- Gawer A., 2009, *Platforms, Markets and Innovation*, London, Edward Elgar.
- Germain S., Douillet A.C., Dumoulin L., 2012, The Legitimization of CCTV as a Policy Tool. Genesis and Stabilization of a Socio-Technical Device in Three French Cities, *British Journal of Criminology*, 52, 294-308.
- Gibbons M., Limoges C., Nowotny H., Schwartzman S., Scott P., Trow M., 1994, *The New Production of Knowledge: the Dynamics of Science and Research in Contemporary Societies*, London, Sage.

- Goldstein H., 2004, International Comparisons of Student Attainment: some Issues Arising from the PISA Study, *Assessment in Education*, 11, 319-330.
- Goldthorpe J., 2001, Causation, Statistics, and Sociology, *European Sociological Review*, 17, 1, 1-20.
- Gollac M., Volkoff S., 1996, Citius, altius, fortius : l'intensification du travail, *Actes de la Recherche en Sciences Sociales*, 114, 54-67.
- Goodstein D., 2010, *On Fact and Fraud. Cautionary Tales from the Front Lines of Science*, Princeton, Princeton University Press.
- Grelon, Grossetti, 1996, *Villes et institutions scientifiques*, rapport, <http://w3.lisst.univ-tlse2.fr/cv/publis/MG4.pdf>.
- Grossetti, 1994, *Université et territoire. Un système local d'enseignement supérieur. Toulouse et Midi-Pyrénées*, Toulouse, Presses Universitaires du Mirail.
- Guthrie D., Durand R., 2008, Social Issues in the Study of Management, *European Management Review*, 5, 137-149.
- Hannan M.T., Polos L., Carroll G.R., 2007, *Logics of Organization Theory: Audiences, Codes and Ecologies*, Princeton, Princeton University Press.
- Hier S.P., Greenberg J., (eds.), 2007, *Surveillance Studies Reader*, Buckingham, Open University Press.
- Hubert M., Jouvenet M., Vinck D., 2013, Politique « de l'innovation » et transformations des mondes scientifiques. Le pari des nanosciences et nanotechnologies à Grenoble, in Aust J., Crespy C., (dir.), *Les mutations des politiques de recherche : entre État, marché et professions*, Paris, Éditions des Archives Contemporaines (à paraître).
- Hulme, Nellis M., et al., 2000, *Policy Transfer and British Social Policy: Learning from the USA?*, Buckingham, Open University Press, 98-117.
- Iansiti M., Levien R., 2004, *The Keystone Advantage: what the New Dynamics of Business Ecosystems Mean for Strategy, Innovation, and Sustainability*, Boston, Harvard Business School Press.
- Jacqué P., 2010, Pourquoi le plagiat gangrène-t-il l'université ?, *Le Monde*, 11 novembre.
- Jasanoff S., (ed.), 2004, *States of Knowledge: the Co-Production of Science and the Social Order*, London, Routledge.
- Jasanoff S., (ed.), 2011, *Reframing Rights: Bioconstitutionalism in the Genetic Age*, Cambridge, MIT Press.
- Jasanoff S., 1995, *Science at the Bar: Law, Science, and Technology in America*, Cambridge-London, Harvard University Press.
- Jasanoff S., 1998, The Eye of Everyman: Witnessing DNA in the Simpson Trial, *Social Studies of Science*, 28, 713-740.
- Jasanoff S., 2007, Making Order: Law and Science in Action, in Hackett E.J., et al., (eds.), *Handbook of Science and Technology Studies*, 3rd ed., Cambridge, The MIT Press, 761-786.
- Jobard F., Schulze Icking N., 2004, *Preuves hybrides. L'apport de la technique dans l'administration de la preuve et ses conséquences*, Guyancourt, CESDIP, Collection « Études et Données Pénales », 96.
- Jouvenet M., 2007, La culture du « bricolage » instrumental et l'organisation du travail scientifique. Enquête dans un centre de recherche en nanosciences, *Revue d'Anthropologie des Connaissances*, 1, 2, 189-219.
- Jouvenet M., 2007, La culture du « bricolage » instrumental et l'organisation du travail scientifique. Enquête dans un centre de recherches en nanosciences, *Revue d'Anthropologie des Connaissances*, 1, 2, 189-219.
- Jouvenet M., 2011, Profession scientifique et instruments politiques. L'impact du financement « sur projet » dans des laboratoires de nanosciences, *Sociologie du Travail*, 53, 2, 234-252.
- Jouvenet M., 2012, Nanosciences et nanotechnologies : une coopération modèle ? Expériences et sens politique des scientifiques, *Terrain*, 58, 44-63.

- Jouvenet M., 2013, Boundary Work between Research Communities. Culture and Power in a French Nanosciences and Nanotechnology Hub, *Social Science Information*, 52, 1 (forthcoming).
- Jouvenet, M., 2009. Le « nanomonde » vu de l'intérieur. Le travail scientifique, ses évolutions et ses représentations dans le laboratoire, in Appay B., Jefferys S., (dir.), *Restructurations, précarisation et valeurs*, Toulouse, Octarès, 193-205.
- Kaminski D., *et al.*, 2013, dossier « Justice pénale et technologie. Vers une transformation contemporaine de la régulation, des stratégies et des expériences pénales ? », *Déviance & Société* (à paraître).
- Knorr Cetina K., 1981, *The Manufacture of Knowledge. An Essay on the Constructivist and Contextual Nature of Science*, London, Pergamon Press.
- Knorr Cetina K., 1999, *Epistemic Cultures: how the Sciences Make Knowledge*, Cambridge, Harvard University Press.
- Koza M.P., Lewin A.Y., 1998, The Coevolution of Network Alliances: a Longitudinal Analysis of An International Professional Service Network, *Organization Science*, 9, 3, 255-264.
- Lacour S., (dir.), 2009, *La sécurité de l'individu numérisé. Réflexions prospectives et internationales*, Paris, l'Harmattan.
- Lamont M., Molnár V., 2002, The Study of Boundaries in the Social Sciences, *Annual Review of Sociology*, 28, 167-195.
- Larrieu P., 2011, La réception des neurosciences par le droit, *AJ Pénal*, 231.
- Latour B., 1989, *La science en action*, Paris, Gallimard.
- Le Goff T., Malochet V., 2011, *Surveiller à distance. Une ethnographie des opérateurs municipaux de vidéosurveillance*, Paris, Institut d'Aménagement et d'Urbanisme.
- Lévy R., Pitoun A., 2004, L'expérimentation du placement sous surveillance électronique en France et ses enseignements (2001-2004), *Déviance & Société*, 4, 411-437.
- Maniak R., Midler C., Beaume R., von Pechmann F., 2013, Featuring Capability: how Carmakers Organize to Deploy Innovative Features across Products, *Journal of Product Innovation Management* (forthcoming).
- Markovitsch H., (ed.), 2008, Neuroscience and Crime, *Psychology Press*, 200.
- Midler C., Ben Mahmoud-Jouini S., Maniak R., 2012, *Le management des innovations de rupture : nouveaux enjeux, nouvelles pratiques*, Paris, Éditions de l'École polytechnique-Ellipses.
- Midler C., Maniak R., Beaume R., 2012, *Réenchanter l'industrie. Stratégie et management de l'innovation dans l'industrie automobile*, Paris, Dunod.
- Mindruta D., 2008, Value Creation in University-Firm Research Collaborations: a Matching Approach, *Academy of Management Best Papers Proceedings*.
- Monso O., Thévenot L., 2010, Les questionnements sur la société française pendant quarante ans d'enquêtes *Formation et Qualification Professionnelle*, *Économie et Statistique*, 431-432, 13-36.
- Muniesa F., Callon M., 2007, Economic Experiments and the Construction of Markets, in MacKenzie D., Muniesa F., Siu L., (eds.), *Do Economists make Markets? On the Performativity of Economics*, Princeton, Princeton University Press, 163-189.
- Nellis M., 2000, Law and Order: the Electronic Monitoring of Offenders, in David P., Dolowitz R.
- Nellis M., Beyens K., Kaminski D., (eds.), 2012, *Electronically Monitored Punishment. International and Critical Perspectives*, London-New York, Willan Publishing-Routledge.
- Neyland D., 2006, *Privacy, Surveillance and Public Trust*, Basingstoke, Palgrave-MacMillan.
- Neyland D., Kroener I., 2011, Cut to the Chase: Editing Time and Space through Closed-Circuit Television Surveillance, *Droit et Cultures*, 61, <http://droitcultures.revues.org/2478>.

- Pélisse J., (dir.), coll. Charrier E., Larchet K., Protais C., 2009, *Des chiffres, des maux et des lettres. Une sociologie des experts judiciaires*, Paris, La Découverte, Collection « Recherche », Série « Territoires du Politique ».
- Pélisse J., (dir.), Protais C., Larchet K., Charrier E., 2012, *Des Chiffres, des maux et des lettres : une sociologie de l'expertise judiciaire en économie, psychiatrie et traduction*, Paris, Colin.
- Pestre D., 1992, *Physique et physiciens en France, 1918-1940*, Paris, Éditions des Archives Contemporaines-EAC.
- Pestre D., 2003a, *Science, argent et politique*, Paris, Editions Quae.
- Pestre D., 2003b, Regimes of Knowledge Production in Society: Towards a More Political and Social Reading, *Minerva*, 41, 3, 245-261.
- Pestre D., 2006, *Introduction aux science studies*, Paris, La Découverte.
- Phelps C., Basu S., Kotha S., 2011, Towards Understanding who Makes Corporate Venture Capital Investments and Why, *Journal of Business Venturing* (forthcoming).
- Phelps C., Yang H., Steensma K., 2010, Learning from What Others have Learned from You: the Effects of Knowledge Spillovers on Originating Firms, *Academy of Management Journal*, 53, 2, 371-389.
- PIMREP, 2010, *Former à l'innovation à ParisTech, effervescences et perspectives*, <http://ebookbrowse.com/cp-livre-blanc-pimrep-pdf-d71401744>.
- Porter M., 1998, *Competitive Advantage of Nations*, Free Press.
- Rafter N., 2008, *The Criminal Brain: Understanding Biological Theories of Crime*, New York, New York University Press.
- Ramirez C., 2009, Constructing the Governable Small Practitioner: the Changing Nature of Professional Bodies and the Management of Professional Accountants' Identities in the UK, *Accounting Organizations and Society*, 34, 381-408.
- Raynaud D., 2003, *Sociologie des controverses scientifiques*, Paris, Presses Universitaires de France.
- Renard B., 2008, *Ce que l'ADN fait faire à la justice : sociologie des traductions dans l'identification par analyse génétique en justice pénale*, thèse de doctorat en criminologie soutenue à l'Université Catholique de Louvain.
- Rosental C., 2007, *Les capitalistes de la science. Enquête sur les démonstrateurs de la Silicon Valley et de la NASA*, Paris, CNRS Éditions.
- Rothaermel F.T., Deeds D.L., 2004, Exploration and Exploitation Alliances in Biotechnology: a System of New Product Development, *Strategic Management Journal*, 25, 3, 201-221.
- Salais R., 2010, Usages et mésusages de l'argument statistique: le pilotage des politiques publiques par la performance, *Revue Française des Affaires Sociales*, 1-2, 127-147.
- Saxenian A., 1994, *Regional Advantage. Culture and Competition in Silicon Valley and Route 128*, Cambridge-London, Harvard University Press.
- Shinn T., Ragouet P., 2005, *Controverses sur la science. Pour une sociologie transversaliste de l'activité scientifique*, Paris, Raisons d'Agir.
- Silbey S.S., Huising R., 2011, Governing the Gap: Forging Safe Science through Relational Regulation, *Regulation & Governance*, 14-42.
- Sobel M., 2000, Causal Inference in the Social Sciences, *Journal of the American statistical Association*, 95, 450, 647-651.
- Spirtes P., Glymour C., Scheines R., 2000, *Prediction, Causation and Search*, Cambridge, The MIT Press.
- Teece D., 2000, *Managing Intellectual Capital: Organizational, Strategic, and Policy Dimensions*, Oxford, Oxford University Press.

- Teece D., 2008, *The Transfer and Licensing of Know-How and Intellectual Property: Understanding the Multinational Enterprise in the Modern World*, World Scientific Publishing.
- Thévenot L., 2009, Governing Life by Standards. A View from Engagements, *Social Studies of Science*, 39, 5, 793-813.
- Timmermans S., 2007, *Postmortem. How Medical Examiners Explain Suspicious Deaths*, Chicago, University of Chicago Press.
- Tushman M.L., O'Reilly C.A.I., 1996, Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change, *California Management Review*, 38, 4, 8-30.
- Vinck D., 1999, Les objets intermédiaires dans les réseaux de coopération scientifique. Contribution à la prise en compte des objets dans les dynamiques sociales, *Revue Française de Sociologie*, XL, 2, 385-414.
- Vinck D., 2007, *Sciences et société*, Paris, Armand Colin.
- Vinck D., 2009, De l'objet intermédiaire à l'objet-frontière, *Revue d'Anthropologie des Connaissances*, 1, 51-67.
- Vinck D., 2009, *Les Nanotechnologies*, Paris, Le Cavalier Bleu, Collection « Idées Reçues ».
- Vinck D., Gallice P., Jouvenet M., Zarama G., 2007, Dynamique technologique controversée et débat démocratique. Le cas des micro et nanotechnologies, in Goujon P., Lavelle S., (dir.), *Technique, communication et société : à la recherche d'un modèle de gouvernance*, Namur, Presses Universitaires de Namur, 247-266.
- Vinck D., Hubert M., Jouvenet M., Zarama G., 2006, Culture de la différence et pratiques de l'articulation entre chercheurs en micro- et nanotechnologies, in Leresche J.P., Benninghoff M., Crettaz von Roten F., Merz M., (dir.), *La fabrique des sciences. Des institutions aux pratiques*, Lausanne, Presses Polytechniques et Universitaires Romandes, 147-163.
- Wajcman J., 2006, New Connections: Social Studies of Science and Technology and Studies of Work, *Work, Employment and Society*, 20, 4, 773-786.
- Wu L., 2000, Some Comments on « Sequences Analysis and Optimal Matching Methods in Sociology: Review and Prospects », *Sociological Methods and Research*, 29, 1, 41-64.
- Yong K., Pettit N.C., Spataro E., 2010, Holding your Place: Reactions to the Prospect of Status Gains and Losses, *Journal of Experimental Social Psychology*, 46, 2, 396-401.
- Younès D., 2013, Entre concurrence et coopération. La place des équipes de recherche académique dans l'économie locale, in Aust J., Crespy C., (dir.), *Les mutations des politiques de recherche : entre Etat, marché et professions*, Paris, Editions des Archives Contemporaines.
- Zauberman R., 2009, *Les enquêtes de délinquance et de déviance autoreportées en Europe. État des savoirs et bilan des usages*, Paris, l'Harmattan, Collection « Logiques Sociales ».

Partners

CESDIP (Centre de Recherches Sociologiques sur le Droit et les Institutions Pénales)

UMR 8183 – Min. Justice, CNRS and University of Versailles-Saint-Quentin-en-Yvelines

CESDIP was created by government order n°83-926 under the triple supervision of CNRS, the Ministry of Justice and the University of Versailles-Saint-Quentin-en-Yvelines (UVSQ). Its main research area is **the sociology of institution and penal law, of police and gendarmerie, of deviance and crime, and crime prevention**. Thanks to its international structure GERN (European research Group on Normativities), which federates around 40 research centers in 12 countries of the EU, and implemented the “*CrimPrev*” (FP6) program between 2006 and 2009, CESDIP is at the forefront of European academic research in these domains.

In the past years, CESDIP’s members have received **prestigious prizes for excellence** in their publications : the Howard Society Prize was granted to F. Jobard in 2010, the Hermann Diederiks prize to E. Blanchard in 2008, J the second “young author prize” of *Sociologie du Travail* to J. Gauthier. Ph. Robert, an emeritus researcher with CNRS, received two *honoris causa* doctorates (Universities of Liège and Macerata). Further, since 2000, 8 researchers recruited by the CNRS have chosen CESDIP as their laboratory, which is a strong indicator of CESDIP’s excellence in the French academic milieu.

Over the 2009-2012 period, CESDIP published 67 articles in **peer-reviewed scientific journals**, **26 books**, collective books or thematic issues. Numerous CESDIP articles were published in France’s **most prestigious journals of social sciences** (*Genèses, Histoire & Mesure, RFS, RFSP, Politix, Vingtième Siècle...*) and in **major international journals** (*British Journal of Criminology, British Journal of Sociology, Criminologie - Montreal, Déviance & Société – Bern, Howard Journal, International Journal on Violence Schools, International Review of Victimology, Journal of Ethnic and Migration Studies, Journal European Public Policy, Revista de Estudos de Conflito e Control Social, Social Research, Studi Sulla Questione Criminale, Terrorism & Political Violence...*).

CESDIP’s team consists in 10 CNRS research fellows (incl. 1 emer.), 12 university members (incl. 2 emer.), 16 research fellows of other administrations and authorities (Min. Justice, Région Île-de-France, Gendarmerie nationale, post-docs...), 21 PhD students, 6 administrative staff members

(4 CNRS + 2 Min. Justice) = 65 fellows.

Higher Education:

CESDIP is the laboratory of the Master 2 of Political Science Department UVSQ.

CESDIP is partner of 2 Summer Schools:

- one lead by Frédéric Vesentini on quantitative studies (s. Axis 1) (Quantitative Studies, UVSQ, Leuven, Montreal),
- one lead by Jacques de Maillard (GERN Summer School, with Universities of Ghent, Porto, Leeds and Sheffield).

CESDIP contribution to our project consists in:

- 17 involved research fellows:

- o **Axe 1:** Fabien Jobard (CNRS), Renée Zauberman (CNRS), Philippe Robert (CNRS), Frédéric Vesentini (CNRS), Bruno Aubusson de Cavarlay (CNRS), Fadoua Jouwahri

(IE CDD), Kathia Barbier (doctorante UVSQ), Matthieu de Castelbajac (doctorant UVSQ), Bénédicte Féry (doctorante UVSQ), Fadoua Jouwahri (CNRS), Jean-Christophe Le Pellec (CESDIP) **gayet, amicel**

- **Axe 4:** Fabien Jobard (CNRS), René Lévy (CNRS), Pierre Piazza (U. Cergy), Tanguy Le Goff (IAU-IdF), Annie Kensey (Min. Justice), Jennifer Boirot (doctorante UVSQ)
- **The salary of one full-time engineer** in statistics (F. Jouwahri) – 128K€ / 3 years.
- **The salary of one half-time assistant-engineer** in documentation and web (J.-Ch. Le Pellec) – 17K€ / yr.
- **Summer School F. Vesentini** : 9 000 € / 3 yrs.

Table on status and involved researchers (n=17)

CNRS CR	CNRS DR	Univ. Prof	Univ. MdC	Ingénieurs	Post-doc	Doctorants	Autres
3	3	0	2	2	1	4	2

Bibliographie

Aubusson de Cavarlay B., 2009, Comparisons between Victimisation or Self-Reported Crime Surveys and Official Statistics in France, in Robert Ph., (ed.), *Comparing Crime Data in Europe. Official Crime Statistics and Survey Based Data*, Brussels, VUB Press, 51-68

Jobard F., Lévy R., Lamberth J., Névanen S., 2012, Measuring appearance-based discrimination. An analysis of identity checks in Paris, *Population-E*, 67, 3, 349-376.

Lévy R., Mayer M., Haverkamp R., 2003, *Will Electronic Monitoring have a Future in Europe?*, Freiburg-im-Breisgau, Edition Iuscrim, 2003.

Piazza P., Laniel L., 2008, [The INES Biometric Card and the Politics of National Identity Assignment in France, in Benett C., Lyon D., \(eds.\), *Playing the Identity Card. Surveillance, Security and Identification in Global Perspective*, London-New-York, Routledge.](#)

Robert Ph., Zauberman R., et al., 2010, The Victim's Decision to Report Offenses to the Police in France : Stating Losses or Expressing Attitudes, *International Review of Victimology*, 17, 179-207.

CRG (Centre de recherche en gestion)

École Polytechnique-CNRS

Discipline: management, economics, psychology & sociology.

Date of Creation: 1972, 1981 first research unit to be CNRS affiliated in management discipline. Since 2004, CRG is the management component of UMR 7176 PREG (Pole de Recherche en Economie et Gestion).

Staff: 10 Permanent researchers, 14 associated researchers, 25 PhD students, and 1 post doctorate student, 3 research engineers and 5 administrative staff.

Research themes: for 40 years, the CRG has played a leading role in the development of French management academic community as the recognition of management research in professional environment. Its research identity can be defined by (i) a large and deep scope of theoretic investigations in social and human disciplines (from organization theory, economics, clinical psychology to sociology of work or situated action theory), and (ii) a problem oriented and collaborative research approach deeply rooted in the contemporary strategic questions of private as public organizations. This identity is highly recognized in the international academic community of Management Sciences, as an emblematic case of relevant research strategy. Ongoing CRG research is structured through 5 programs: (i) Innovation-based Competition & Design Systems Dynamics; (ii) Business strategies, market structure and regulation policies; (iii) Economic effects and organizational impact of the development of information and communication technologies and Internet. (iv) The Territorial Dynamics and New Organizational Configuration; (v) Multicultural management approaches

Academic publications 2008-2012 and academic developments: CRG researchers published on the period 125 articles in peer-reviewed journals (78 in English), 28 Books, Edited books or special issues of journals, 107 chapters into collective books, 21 doctoral thesis or HDR, 297 communications in academic conferences.

Awards:

2012, best research book (FNEGE – Fondation nationale pour l’enseignement de la gestion et European Foundation for Management Development); 2011: Syntec prize; 2010: the AREA thesis prize was awarded to CRG doctorate; 2008 best research paper, HEC foundation; 2007 Stephan Shrader Best Paper Award Finalist, division technology and innovation management Academy Of Management, and Academy of Management Best Paper Proceedings,

Editorial activities: Researchers serve as reviewers or editors in top international journals and are members of executive committees in many academic associations. PJ Benghozi, H. Dumez and C. Midler are members of AERES evaluation committees. PJ Benghozi is former president of the French Management Society (SFM), former president of the Economics and Management Section (37) of the National Committee for Scientific Research, former member of the Scientific Council, Paris Dauphine University.

Interaction with firms: Interaction with professional environments, applying problem-based approaches, has always been one of the research methodologies favored by the CRG. This explains the density of exchanges with professional milieu (both private and public) in a variety of forms: research partnerships; Cifre grants; teaching and research chairs (3 chairs at present with *Orange, Renault, Valéo, Safran, Seb, Air Liquide*). C. Midler is a *Cercle de l’Entreprise* member, the “think tank” of the French Institut de l’Entreprise. The École de Paris du Management, founded in 1993 by Michel Berry, former CRG director, and supported by the CRG since then, is a forum for discussion

between management researchers and practitioners within the framework of permanent seminars and conferences.

Education: The CRG is responsible for management doctorate training at École Polytechnique. CRG researchers are highly involved in national training programs for the best doctoral candidates in the discipline: CEFAG & CDEG. The CRG has a longstanding involvement in 5 Masters programs, in partnership with universities and major engineering as business schools : *Projet Innovation Conception, Industrie des Réseaux et Économie Numérique, Gestion et Dynamique des Organisations, Management des organisations et politiques publiques, Ingénierie de l'Innovation Technologique*.

CRG contribution to the project 3S: The CRG research programs will be heavily involved in axe 2, but will also contribute to other axes. CRG will bring its expertise on the different themes as its deep and diversified empirical connections in professional environment.

On the methodological side, CRG will bring its deeply rooted expertise in cooperative research within innovation projects and more specifically in emblematic innovative projects as electric mobility or the Innovation Lab that will be developed in the Saclay environment.

Researchers involved in the project

DR CNRS	Pr	MCF	Ingénieur de recherche	Doctorants
5	1	2	1	8

6 Permanent researchers :

Romain Beaume (Fellow Ecole polytechnique)
Pierre-Jean Benghozi (Directeur de Recherche CNRS)
Florence Charue-Duboc (Directeur de Recherche CNRS)
Hervé Dumez (Directeur de Recherche CNRS)
Alain Jeunemaître (Directeur de Recherche CNRS)
Christophe Midler (Directeur de Recherche CNRS)

2 Research Associates

Sylvain Lenfle (maître de Conférence - Université de Cergy-Pontoise)
Rémi Maniak (maître de Conférence - Télécom ParisTech)

8 PhD students

Bo Chen
Julie Fabbri
Julie Hardouin
Nathalie Herberth
Marie Le Pellec
Felix von Pechmann
Romaric Servajean
Thorsten Sobe

DANTE (Laboratoire de Droit des Affaires et Nouvelles Technologies)

EA 4498 (Université de Versailles-Saint-Quentin-en-Yvelines)

The **Research Unit of Business Law and New Technologies** (DANTE) created in 1997 is formed by all the faculty members of private law as well as legal historians. Besides these tenured graduated academics, it includes many researchers. Doctors, PhD students and practitioners with a rich and recognized research and publishing background and who have chosen to join the laboratory because of its influence in France and internationally. With more than a hundred members, the laboratory DANTE leads many projects, either through events and transversal publications or inside the teams that form this structure, in conjunction with an attractive Masters courses offering. The Unit researches as well as the Masters degrees are mainly directed toward the business and the law applicable to it, in France, Europe and internationally.

Alongside the traditional strengths such the new technologies (Team Law and Technology - Intellectual property laws and New technologies of the information and the communication) and the law of contracts and competition (Team Contracts and market), there are two other teams specialized in Law arbitration and Attractiveness of business law. Very active in the collective research programs, the DANTE has obtained several research contracts (in particular contracts ANR Lise and Prosody and contract with the GIP-Justice) in partnership with other french or foreign universities and institutions. Most of them have a multidisciplinary approach, involving, amongst others, computer, sociologists, economists...

CR CNRS	Pr	Maître de conférences	Ingénieur de recherche	Post-Doctorant	Doctorants
	2	4	1	1	

Liste nominative des chercheurs de chaque laboratoire impliqués dans le projet, en indiquant leur discipline, leur statut, l'axe (ou les axes éventuellement) dans lequel ils vont mettre en œuvre le projet :

V.L. Benabou, Professeur, (Intellectual property laws and New technologies of the information and the communication - droit de la propriété intellectuelle et des nouvelles technologies de l'information et de la communication) - **Axis 2**

M. Chagny, Professeur (droit de la concurrence - Competition law) - **Axis 2**

M.E. Boursier, Maître de conférences (droit pénal - Criminal law) – **Axis 1**

M. Clément-Fontaine, Maître de conférences-HDR (Intellectual property laws and New technologies of the information and the communication - droit de la propriété intellectuelle et des nouvelles technologies de l'information et de la communication)- **Axis 2 et 3**

M. de Fontmichel, Maître de conférences (Business law - droit des affaires) - **Axis 4**

N. Reboul Maubin, Maître de conférences-HDR (Private law - droit privé) - **Axis 4**

B. Rutherford Iglesias, Ingénieur de recherche - **Axis 4**

Bibliographie

- **Projet ANR LISE (ANR-07-SESU-007-05) « Dommage et technique » 2008-2012, piloté par l'INRIA, avec Supélec, LORIA, Université de Caen, DANTE.**

- **Projet CCP- Prosodie (ANR-AA-PPPP-00) « Les communautés de pratique en ligne »** 2008-2012, piloté par l'Institut Télécom Bretagne, avec Institut Mines Télécom, Univ. Nice-Sophia Antipolis, UVSQ, Université technologique de Compiègne, INRIA (LORIA), DANTE.
 - **Ouvrage:** *Manuel de Droit pénal des affaires internationales*, contrat d'édition en cours, Lextenso Editions
- Benabou V.L., 2011, The Chase (P2P), in Stamatoudi I., (dir.), *Copyright Enforcement in the Cyberspace*, Brussels, Kluwer.
- Clément-Fontaine M., 2013, Les communautés épistémiques en ligne, *Revue Internationale de Droit d'Auteur (RIDA)* (à paraître).

EST (équipe GHDSO)

Université Paris Sud

EST « Études sur les sciences et les techniques » is a research unit of the University Paris Sud (EA 1610). The researches carried out in the unit are devoted to the transmission and circulation of scientific knowledge from an historical point of view, either didactical or ethical. Within EST, the GHDSO group conducts researches on social and cultural history of sciences and technology. More precisely, the group focuses on Scientific and technical knowledge, Actors, Places and Publics in nineteenth and twentieth century France through three main entries : history of scientific and technical teaching, history of scientific periodicals and their publics, sciences in society since World War Two.

CR CNRS	Pr	MCF	Ingénieur de recherche	Post-doctorant	Doctorants
1	1	5			1

Liste nominative des 7 chercheurs pour l'axe 3 :

Liliane Alfonsi, MCF, histoire des sciences et des techniques
Delphine Berdah, MCF, histoire des sciences et des techniques
Renaud d'Enfert, MCF, histoire des sciences et des techniques
Virginie Fonteneau, MCF, histoire des sciences et des techniques,
Hélène Gispert, PR, histoire des sciences et des techniques
Annick Jacq, CR CNRS, biologie, histoire de la biologie
Jacques Robinet, doctorant contractuel, histoire des sciences
Norbert Verdier, MCF, histoire des sciences et des techniques

Publications GHDSO

d'Enfert R., Fonteneau V., (dir.), 2011, *Espaces de l'enseignement scientifique et technique – Acteurs, savoirs, institutions, XVII^e-XX^e siècles*, Paris, Hermann.

d'Enfert R., 2008, Une revue « scientifique et industrielle » militante : *L'enseignement professionnel*, 1862-1865, in Bret, Chatzis, Perez, 159-174.

Gispert H., (dir.), 2011, Quels publics, pour quelles mathématiques ?, *Rencontre du CIRM* http://www.cirm.univ-mrs.fr/liste_rencontre/programmes/ResumesGISPERT.pdf.

Gispert H., Hulin N., Robic M.C., (dir.), 2007, *Science et enseignement. L'exemple de la grande réforme des programmes du lycée au début du XX^e siècle*, Paris, Vuibert/INRP.

Verdier N., 2013 (accepté à paraître), Éditer puis vendre des mathématiques avec la maison Bachelier (1812-1864), *Revue d'Histoire des Mathématiques*.

Verdier N., 2012, Panthéons, journaux et salons à Berlin, Londres ou Paris : fabriquer des réseaux de sociabilité savante, in Thoizet É., Wanlin N., Weber A.G., *Panthéons littéraires et savants XIX^e-XX^e siècles*, Amiens, Artois Presses Université, 49-64.

GREGHEC (Innovation & Entrepreneurship - Society and Organizations)

HEC-CNRS

GREGHEC, awarded top grades from AERES in March 2009 (the unit's overall rating was A+), was founded in 2004 and was granted UMR (2959) status in 2006. As HEC's academic research center, it is composed of select faculty members (those who are directly involved in research activities) and of PhD students. GREGHEC takes part to the ISIS project through two research teams: Society and Organization (**SnO**) and Innovation and Entrepreneurship (**I&E**)

Innovation & Entrepreneurship team presentation

The I&E team is a multidisciplinary research group (management disciplines, economics, law, psychology) created in 2009. It counts 25 members (assistant, associate and full professor) and 10 doctoral students (25% of GREGHEC resources).

Research themes: (i) management of innovation and entrepreneurship (12 researchers), (ii) growth strategies (5), (iii) corporate ecological and social responsibility (4), (iv) economics and innovation (4), (v) organizational structure, learning and performance (5). More precisely, the subjects addressed are: (i) how particular situations lead to choosing alliances over other modes of growth, complementarity of partners knowledge specifically between firms and university scientist researchers, (ii) creativity and idea generation management, (iii) creative Industries management such as Design, (iv) management of highly uncertain projects, (v) **innovation through** business models especially in emerging economies, (vi) the conditions under which firms form relationships with and learn from external sources of knowledge and how they translate this learning into technical innovations, (vii) exploration management, (viii) technological innovation, (ix) entrepreneurs motivation and the economic effects of entrepreneurship, (x) the strategic logic and the value creation mechanism of Private Equity investments and venture Capital (the provision in a dynamic agency model, the comparison of the VC success in USA and Europe).

Academic publications 2006-2011: Researchers have since 2006 published: (i) 100 articles in peer reviewed journal of which 43 in journals such as *Academy of Management Journal*, *Journal of Marketing*, *Management Sciences*, *Organization Sciences*, *Strategic Management Journal*, *Journal of Management Studies*, *Journal of Product Innovation Management*, *Organization Studies*, *Research Policy*...), (ii) 9 books and (iii) 56 books chapters.

Editorial activity : Researchers serve as reviewers or editors in top international journals and are members of executive committees in many academic associations (*see vitae*). Their work was acknowledged many times through awards (Best conference papers, Best doctoral dissertation, Syntec Management Consulting best article. T. Astebro is listed in top 3.0th percentile of downloaded working papers at Social Science Research Network (www.ssrn.com)).

International Orientation: 60% of GREGHEC members are strongly embedded in international context (education, previous professional experience, citizenship...). 48 PHD degree from HEC work outside of France. GREGHEC members' production is embedded in an international context: 70 articles (on 110) published in peer reviewed journals are with international co-authors. 96 articles are published in international journals. 40 chapters are in international books.

Exploitation of results: 7 chairs and centres associated with innovation are sponsored by companies : (i) **Innovation & Globalization (Orange)**, (ii) **Innovation Management in Aeronautics, Aerospace, Defense and Security (SAFRAN)**, (iii) **New Business Models in Energy Chair (EDF)**, (iv) **Innovation & Entrepreneuriat (Paris Chamber of Commerce)**, (v) **Digital Innovation for**

Business (Free - Meetic - Pixmania Group - PriceMinister - vente-privee.com), (vi) Google@hec, (vii) Private Equity Observatory- Buyout Center.

Researchers working on entrepreneurship can rely on the centre of entrepreneurship and on HEC startup in which two affiliate professors are involved and that represent a rich field for experimentation and research.

Higher education: Several education programs address innovation & entrepreneurship and are taught by team members: electives in master program and MBA, master degree (Project, Innovation and design in collaboration with École Polytechnique and TelecomParistech), specialized master degree (Entrepreneurship, Project management, New Technologies with TelecomParisTech), major in Exec.MBA, lessons at the incubator and tutoring for company creation, certificates (100 hours specialization) in Innovation Management in Aeronautics and in digital business.

HEC offers several programs for entrepreneurs. A program for entrepreneurs on management skills and entrepreneurship (Challenge+) for 36 entrepreneurs on average per year (400 alumni, 250 launched a high tech venture). They created 1 500 jobs (10 staff on average). The average turnover is 2K€. HEC incubator has been hosting 60 ventures since its creation in 2007 (Master degree, MBA and alumni). On top of the permanent faculty, 6 affiliate professors are highly involved in the teaching of entrepreneurship and innovation in various programs. Since 2006, 60 doctoral dissertations were defended. 150 HEC PhDs are currently active in education and research.

Contribution to ISIS: I&E team will bring its skills in strategic management, new product development, entrepreneurship and economics, its strong relationships with firms and its high involvement in the international research community. ISIS will build on the strong relationship with the CRG already consisting of a common seminar in innovation management and a common master degree in innovation. Most importantly, it will bring an innovative field of experimentation through Challenge plus and the Entrepreneurship Center and its involvement in several incubators. I&E team will contribute to axe 2 and to a less extent to axe 3.

Table indicating the status and number of involved professors and researchers in ISIS

CR CNRS	Full Professor	Associate	Assitant professors	Affiliate professors	Doctorants
1 Paris, Thomas	2 Phelps, Corey Détrie, Jean- Pierre	4 Astebro, Thomas Jouini, Sihem Pacheco de Almeida, Gonzalo Sommer, Svenja	5 Dahlin, Kristina Di Stefano, Giada Hoos, Florian Mindruta, Denisa Yong, Kevyn	2 Iselin, Frédéric Krieger, Etienne	3 Bazzazian, Navid Shyti, Anisa Micaelli, Isabelle

Society and Organizations presentation

The Centre for research on Society and Organizations (**SnO**) has been built around various competences, with a view to tackling the challenges posed by society to organizations, and those posed by organizations to society. SnO is an inter-disciplinary research center within the HEC Paris School of Management which aims to examine society-related issues that organizations face,

organizational issues within society, and the recursive relationship between the two. These issues are brought to light within the context of the increasing legitimacy of management as a discipline and the critique that current socio-economic models are inadequate to address these contemporary issues. By focusing on the societal role of management as a discipline, SnO aims to contribute towards a furtherance of our understanding of the socio-economic context in which we are embedded, as well as the organizations that are shaped by and are shaping this context.

Society can be understood as the broad interactional space in which ties between individuals and groups of individuals are formed, developed and disintegrated. This social space is a locus of interactions, exchanges and conflicts within a community of people characterized by shared rules, norms and values. An *Organization*, on the other hand, can be defined as a structured group of actors, whose action is coordinated, interdependent and based on formal and informal rules. The primary purpose of an organization can be oriented towards economic (profit), institutional, moral and political motives, or towards a combination of these. Thus, organizations encompass public and private companies, professional associations, non-governmental organizations, regulatory agencies and even virtual communities, to name some. Given that organizational boundaries appear more and more blurred and fuzzy, the investigation of such provides us with a key research challenge.

The objective of SnO is to develop research projects, to present rigorous empirical results and to promote analytical models designed to further our understanding of various contemporary issues. Our approach combines a broad range of methods (both quantitative and qualitative) tailored to the phenomena under study and uses theoretical lenses coming from various disciplines including: economics, sociology, psychology, philosophy and history in combination with our management focus. SnO is sponsored by the [HEC Foundation](#).

Table indicating the status and number of involved professors and researchers in ISIS

Pr	MCF	Doctorants
2	5	5

Name	Status	Discipline	Fields of Interest
DURAND Rodolphe	Professor	Strategy and Business Policy	Competitive advantage/conformity
QUELIN Bertrand	Professor	Strategy and Business Policy	Economics of Organization, PPP
RAMIREZ Carlos	Associate professor	Accounting and Management Control	Norms and soft laws
ARJALIES Diane-Laure	Assistant professor	Accounting and Management Control	Non-Financial Performance Measurement Systems.
KREMP Pierre-Antoine	Assistant professor	Strategy and Business Policy	Sociology of Organizations
MANI Dalhia	Assistant professor	Strategy and Business Policy	Economic Sociology.
MEHRPOUYA Afshin	Assistant professor	Accounting and Management Control	Socially responsible investments.

CLEMENTE Marco	PhD student	Strategic Management	Institutional Theory
JACQUEMINET Anne	PhD student	Strategic Management	Corporate Social Responsibility
KIVLENIECE Ilze	PhD student	Strategic Management	Public-private interorganizational arrangements
PAOLELLA Lionel	PhD student	Strategic Management	Categories
TOUBOUL SAMUEL	PhD student	Strategic Management	Corporate Social Responsibility

Two foreign affiliate assistant professor, from Bocconi (Italy) and Ivey (Canada), are too involved in the project :

- Julien Jourdan (general management, specialized on management and technology institutional theory)
- Jean-Philippe Vergne (general management, specialized on organizational and industry evolution).

Publications

Astebro T., Thompson P., 2011, Entrepreneurs: Jacks of All Trades or Hobos?, *Research Policy*, 40, 5, 637-649.

Midler C., Ben Mahmoud-Jouini S., Maniak R., 2012, *Le management des innovations de rupture : nouveaux enjeux, nouvelles pratiques*, Paris, Éditions de l'École Polytechnique.

Mindruta D., 2008, *Value Creation in University-Firm Research Collaborations: A Matching Approach*, London, Academy of Management Best Papers Proceedings.

Paris T., Veltz P., 2010, *L'économie de la connaissance et ses territoires*, Paris, Hermann.

Phelps C., Yang H., Steensma K., 2010, Learning from what Others have Learned from You: The Effects of Knowledge Spillovers on Originating Firms, *Academy of Management Journal*, 53, 2, 371-389.

Sommer S., Loch C.H., Dong J., 2009, Managing Complexity and Unforeseeable Uncertainty in Startup Companies: an Empirical Study, *Organization Science*, 20, 1, 118-133.

IDHE-Cachan (Institutions et dynamiques historiques de l'économie)

UMR 8533, École Normale Supérieure de Cachan – Université d'Évry – CNRS

The **IDHE-Cachan** is a mixed unit of the CNRS and the ENS-Cachan. It is directed by Claude Didry (*Directeur de recherche*, CNRS) and was rated A+ by the AERES in November 2008. It gathers researchers from different disciplines: Till 2008, the main themes researched in this laboratory were « work and labor dynamics », « firms, products and territories », « financial institutions and markets » and « knowledge and law of public interventions ». For the forthcoming period, the IDHE will introduce a new theme which it already started developing since its last evaluation: « knowledge, capabilities and innovation ».

IDHE (Institutions and Historical Dynamics of Economics) was set up in 1997. It is a joint research center involving CNRS, ENS Cachan, Université d'Évry and Universities of Paris 1, 8 and 10. It brings together academics and CNRS researchers from different disciplines: economics, sociology, law, history and business administration. It is composed of 64 members and 160 doctoral students. Its scope is interdisciplinary research in Human and Social Sciences. It operates from five sites in Paris and its *région*: Université d'Évry, Université Paris 1 Panthéon-Sorbonne, Université Paris 8-Vincennes Saint-Denis, Université Paris Ouest-Nanterre-La Défense and ENS Cachan.

In this project, only IDHE's ENS Cachan (located on ENS Cachan's campus, please consult <http://www.idhe.ens-cachan.fr>) and Université d'Évry will be involved as partners. The first research team is composed of 13 researchers and professors, 3 post-doctoral researchers, 7 associate researchers, 3 research assistants and engineers, and 10 doctoral students.

IDHE's scientific project mobilizes different disciplines around **five trans-disciplinary research areas**:

1) *Work, wage systems, and employment dynamics* ; 2) *Businesses, products and territories* ; 3) *Institutions and financial markets* ; 4) *Knowledge, law, and public policies*; and 5) *knowledge, capabilities and innovation*. IDHE's ENS Cachan arm focuses on three of the five areas sanctioned by the five-year research program currently under way within IDHE. The Cachan team more particularly specializes in six areas: 1) *Sociology of labor relations*; 2) *Economic sociology*; 3) *Sociology of the entrepreneur*; 4) *Economics of conventions*; 5) *work and innovation*; and 6) *Economic history*.

IDHE, awarded **excellent ratings** by **AERES in 2009** (Overall rating was A+), is a partner of EQUIPEX CASD (Center for Secure Access to Data) which is coordinated by ENSAE in partnership with HEC and the École Polytechnique, and the DIM IS2IT, "*Innovation, sciences, techniques, société*". **Two researchers belonging to IDHE Cachan's arm were awarded the CNRS bronze medal**: Claude Didry in 1997 and Pierre-Paul Zilio in 2003. Besides, Pierre-Paul Zilio was named a member of the **Institut Universitaire de France** (IUF) in 2006.

Concerning **Higher Education**, the members of IDHE are involved in teaching activities in the ENS-Cachan in two departments (Social-Sciences, Economics and Business administration) which are implicated in different Masters. Several members participate to the conception of a new master on "quantification in social-sciences" at the level of Paris Saclay University.

IDHE Cachan leads an **integrated European program that is part of the 6th FP** (Framework Program for Research and Technological Development), entitled CAPRIGHT « *Resources, rights and capabilities: in search of social foundations for Europe* » (2007-2011) and also co-ordinates **two research projects** funded by France's **Agence Nationale pour la Recherche** (ANR, National Agency for Research), entitled « *Social support for entrepreneurship* » and « *Production of knowledge: portrait of the researcher as a salaried worker* ».

IDHE-Cachan's **contribution to the ISIS project** is mainly centered on WP 3 but also on WP 1 and 2. IDHE-Evry's contribution is centered on WP2, but researchers will also contribute to WP3.

Surname	First name	Position	Domain	Partner	Organization or company	Contribution in the project
BESSY	Christian	CR	Economics	IDHE	ENS Cachan	Coordinator, WP1, 3
DIDRY	Claude	DR	Sociology	IDHE	ENS Cachan	WP3
BOISARD	Pierre	CR	Sociology	IDHE	ENS Cachan	WP3
MIAS	Arnaud	MCF	Sociology	IDHE	ENS Cachan	WP1, 3
BETHOUX	Elodie	MCF	Sociologie	IDHE	ENS Cachan	WP3
Da COSTA	Isabel	CR	Economics	IDHE	ENS Cachan	WP2, 3
HARARI	Hugo	MCF	Busin. admin.	IDHE	ENS Cachan	WP1, 2
JOBERT	Annette	DR	Sociology	IDHE	ENS Cachan	WP3
PARDI	Tommaso	CR	Sociology	IDHE	ENS Cachan	WP2, 3
SÉPARI	Sabine	MCF	Busin. admin.	IDHE	ENS Cachan	WP2
VINCENSINI	Caroline	MCF	Economics	IDHE	ENS Cachan	WP3
YOUNES	Dima	Post-doc	Sociology	IDHE	ENS Cachan	WP3
CHAMPIN	Hervé	PhD	Sociology	IDHE	ENS Cachan	WP2
HILDERMEIER	Julia	PhD	Sociology	IDHE	ENS Cachan	WP2
PERDONCIN	Anton	PhD	Sociology	IDHE	ENS Cachan	WP1
INDUKAEV	Andrey	PhD	Sociology	IDHE	ENS Cachan	WP2
VIEGAS	Stéphanie	PhD	Sociology	IDHE	ENS-Cachan	WP3
LOUBET	J.-Louis	PU	Histoire	IDHE	Univ. d'Évry	WP2
LE BOT	Florent	PRAG	Histoire	IDHE	Univ. d'Évry	WP2, 3
HATZFELD	Nicolas	PU	Histoire	IDHE	Univ. d'Évry	WP 2
BENOÎT	Serge	MCF	Histoire	IDHE	Univ. d'Évry	WP 2
MICHEL	Alain P.	MCF	Histoire	IDHE	Univ. d'Évry	WP2

Publications

Bessy C., Brousseau E., 1998, Licensing of Technology: Various Contracts for Diverse Transactions, *International Review of Law and Economics*, 18, 451-489.

Didry C., Jobert A., 2010, *L'entreprise en restructuration*, Rennes, Presses Universitaires de Rennes, Collection « Économie et Société ».

Pardi T., Jullien B., 2012, In the Name of Consumer: The Social Construction of Innovation in the European Automobile Industry and its Political Consequences, *European Review of Industrial Economics and Policy*.

Béthoux E., Didry C., Mias A., 2007, What Codes of Conduct Tell Us: Corporate Social Responsibility and the Nature of the Multinational Corporation, *Corporate Governance: an International Review*, 15, 1, 77-90.

Younès D., 2012, Why is Intersectoral Cooperation Difficult to Maintain? Insights from French Cluster Policy, *Environment and Planning C*, 30, 5, 835-847.

Co-Publications

Bessy C., Delpeuch T., Péglise J., (dir.), 2011, *Droit et régulations des activités économiques : perspectives sociologiques et institutionnalistes*, Paris, LGDJ-Lextenso Éditions.

Number of involved researchers:

DR, CR et MCF: 11 (École Normale Supérieure de Cachan) and 5 (Université d'Évry)

Post-doc: 1

PhD students: 5

ISP-CACHAN (Institut des Sciences Sociales du Politique)

UMR 7220 Ens Cachan - CNRS

ISP, which was evaluated by AERES in 2008 and obtained **an A+ grade**, was created in 2006 through the merging of **LASP** (Paris 10) and of **GAPP** (ENS Cachan). Its main research areas are democracy, public policy and sociology of law. Its staff includes political scientists, sociologists and historians, operating from two sites – University Paris 10 Nanterre, and ENS Cachan. ISP focuses on four main priorities – two of which are included in our research project, and mainly involve ENS Cachan researchers.

ENS Cachan's ISP team is widely acknowledged, both at a national and international level, as a leading research team in the sociology of law and justice, as exemplified by the quality of its publications (in the best journals of social sciences in their field : *British Journal of Criminology*, *Déviance et Société*, *Droit et Cultures*, *Droit et Société*, *L'Année Sociologique*...), by its role as a founding member of several networks (including *Droit et Société Network*), by the intellectual debates it has contributed to launching, as well as by its training programs focusing on the methodology of research. The laboratory includes several leading researchers in the field of the sociology of law and justice such as **Benoit Bastard**, **Jacques Commaille**, **Laurence Dumoulin**, **Patrice Duran** or **Claire de Galember**. Their **research activities** are articulated around two priorities: 1) *Norms and political regulation*; and 2) *Public action and political power*. It contributed to training many researchers who have also become key players in the sociology of law and justice, and with whom it maintains fruitful collaborations (at University Paris 13, EHESS, and ENS-Ulm, for example).

The scientific quality and energy of the **ENS Cachan team** can be appraised by such indicators as (1) the originality and the diversity of obtained results (**over the 2007-2012 period : 30 articles in national and international peer-reviewed scientific journals, 13 books**, collective books or thematic issues), and (2) the fact that, both nationally and internationally, specialists of law as well as specialists of political science and of sociology have shown great interest in these results. These results can be summarized in three subsets: 1) **Production and implementation of legal devices**;

2) **Transformations of the public policies of justice** and 3) **Expertise and new technologies** (Concerning topics that will constitute the core of this project, the ENS Cachan team can boast results dealing with the place of experts in the processes of elaboration of public decisions, as well as with new technologies (Information and Communication Technologies, and monitoring technologies). Besides, together with the **IDHE**, the **ISP** has been involved in the setting up of a specialized technical infrastructure: the Emile Durkheim research library of social sciences, on the site of Cachan. The laboratory supports the quantitative processing of data collected through investigations; it houses in its premises the journal *Droit et Société* – which is acknowledged as one of the top-ranked journals in social sciences. Members of ISP are involved in several masters: Master of Sociology (ENS Cachan) but also Masters of Political Science (IEP Grenoble) and Masters of Law (Paris 2, Grenoble...). They are involved in the training of judges (Ecole Nationale de la Magistrature), lawyers and social workers.

ENS Cachan's ISP research group involved in the project

DR CNRS	CR CNRS	PhD Students
1	1	1

ISP contribution to this project consists in 3 research fellows in **axe 4**: Benoit Bastard (CNRS), Laurence Dumoulin (CNRS), Aude Leroy (doctorante ENAP-ISP, ENS Cachan).

LSQ (laboratoire de sociologie quantitative)

CREST-LSQ, GRECSTA, UMR 2773 - ENSAE-PARISTECH

Research topics at the **LSQ-CREST** include social structures and individual behavior; integration and discrimination; sociology of quantification and methodological issues of quantification. Most research efforts at LSQ make use of quantitative methods, generally combined with qualitative methods. LSQ researchers belong to diverse theoretical schools, such as methodological individualism, constructivistic structuralism and pragmatic sociology of action. They are used to confronting their points of view, their methods and their results, either during the seminars organized by the laboratory, or whilst jointly conducting empirical research. All LSQ researchers value methodological rigour, which makes it possible to share and discuss ideas in a fruitful fashion.

LSQ researchers have published numerous books, along with numerous research articles in **leading French and international journals** such as *Actes de la Recherche en Sciences Sociales*, *American Sociological Review*, *Économie et Statistique*, *European Sociological Review*, *Revue Française de Sociologie*, *Social Studies of Science*, *Sociologie*, *Sociologie du Travail*. LSQ is in charge of CREST's sociology seminar.

LSQ is a partner of the **EQUIPEX DIME-SHS** ("Données, Infrastructures, Méthodes d'Enquêtes en Sciences humaines et sociales" co-ordinated by Sciences-Po) and the **GENES** is a partner of **EQUIPEX CASD**, an infrastructure project that is aimed at developing a center for secure remote access to confidential data (CASD), which will be made available for French researchers in social sciences and economics. CASD will provide secure access to highly detailed individual data, making it possible to process highly detailed data.

Members of the LSQ who are involved in the project

<i>Status</i>	<i>Status at LSQ</i>	<i>Number</i>
DR CNRS	Associate member	1
CR CNRS	Associate member	3
CR Sciences Po	Associate member	1
MCF	Associate member	1
Admin. INSEE	Full time member	3
Admin. INSEE	Associate member	4
Post doc	Associate member	1

<i>Name</i>	<i>Christian name</i>	<i>Status</i>	<i>Status at LSQ</i>	<i>Action</i>
BODIER	Marceline	Admin. INSEE	Associate member	1.3
BUGEJA	Fanny	MCF	Associate member	1.2
BROUSSE	Cécile	Admin. INSEE	Associate member	1.2
COULANGEON	Philippe	DR CNRS	Associate member	1.1
DUVAL	Julien	CR CNRS	Associate member	1.1
GODECHOT	Olivier	CR CNRS	Associate member	1.1
GOLLAC	Michel	Admin. INSEE	Full time member	1.3
GOUX	Dominique	Admin. INSEE	Full time member	1.1
LESNARD	Laurent	CR CNRS	Associate member	1.1
MERON	Monique	Admin. INSEE	Associate member	1.2
PETEV	Ivaylo	Post doc	Associate member	1.1, 1.2
SAFI	Mirna	CR Sc-Po	Associate member	1.1
STEHLÉ	Juliette	Admin. INSEE	Associate member	1.1
THÉVENOT	Laurent	Admin. INSEE	Full time member	2.1

Publications

- Godechot O., 2011, La formation des relations académiques au sein de l'EHESS, *Histoire & Mesure*, 26, 2, 221-260.
- Godechot O., 2011, How did the Neoclassical Paradigm Conquer a Multi-disciplinary Research Institution?, *Revue de la Régulation*, 10.
- Godechot O., Louvet A., 2010, Academic Inbreeding: An Evaluation, *La Vie des Idées*, 24 pages.
- Gollac M., (dir.), 2012, *Mesurer les facteurs psychosociaux de risque au travail pour les maîtriser*, rapport pour le ministre du Travail, de l'Emploi et de la Santé.
- Thevenot L., 2011, Conventions for Measuring and Questioning Policies. The Case of 50 Years of Policies Evaluations through a Statistical Survey, *Historical Social Research*, Special issue edited by Rainer Diaz-Bone & Robert Salais on Conventions and Institutions from a Historical Perspective (translation by Susan Taponier), 36, 4, 192-217.
- Thevenot L., coll. Monso O., 2010, Les questionnements sur la société française pendant quarante ans d'enquêtes, *Formation et Qualification Professionnelle, Économie et Statistique*, 13-36.

LTCI (Laboratoire Traitement et Communication de l'Information)

(UMR 5141 - Telecom Paristech, Département de Sciences Économiques et sociales / CNRS)

Created in the 1994, the **department of Economics and Social Sciences** is part of the LTCI (UMR 5141). It includes 30 permanent researchers (5 belonging to the CNRS), 29 PhD students, 23 post-doctoral fellows and X affiliated professors and associate professors.

It is highly multi-disciplinary - economics, management sciences, sociology, information and communication sciences, cognitive psychology and ergonomics – and focusing on economic and social issues related with the development of ICT, at three levels:

- The link between innovation and regulation (macro level).
- The shifting boundaries between content producers and amateurs/consumers;
- Detailed empirical studies of mediated interactions at the micro level.

The AERES committee noted how the department was « *analyzing with highly complementary perspectives shared issues about innovation, regulation and use of IT, Telecom ParisTech being the most relevant place in the French scientific landscape to tackle this issue* » (AERES report, p. 38), and gave it an A notation.

Academic publications, 2006-2011 : 27 books and edited collections (including 4 in English), 67 articles in international peer-reviewed journals, 115 articles in French peer-reviewed journals, 35 chapters in collective books (including 16 in English)

The total is 234 publications in all, i.e. about 1.5 articles or books per year and per permanent researcher.

Exploitation of results

Annual contractual research budget of 2 M€, and two research chairs “Innovation et regulation”, et “Modelisation of Imaginaries”, with the active participation of several leading industrial partners (Orange, Dassault Systèmes, Alcatel Lucent, Peugeot, Ubisoft). The department is also involved in two joint research laboratories, one with Alcatel Lucent, and the other with Renault under the Paistech frame.

Higher education

1st year courses (economy, human fundamentals) and master courses (finance, project management, strategy, IT management, design...). Several courses are also provided in the formation of the Mines Telecom “Corps” engineers

Several **Master 2 tracks** (M2 Design, medias, technologies with Paris 1 and l'ENSI), M2 IREN (Network Industries & Digital Economy) with Ecole Polytechnique, Supélec, Paris West - Nanterre La Défense, Paris-Sud 11, Pierre et Marie Curie) et **specialized “masteres”** (“Technological Project Management” with ESSEC, “New Technologies and Management” with HEC).

Contribution to the ISIS project

The SES department at Telecom Paristech will bring to the LISI its ICT perspective. It will contribute to the ISIS research axes 2 and 4. The SES department will also bring its specific interdisciplinary

perspective and ability to move from general economic questions to ethnographic studies of actual innovative contexts of use.

Table indicating the status and number of involved researchers

CR CNRS	Pr	MCF	Ingénieur de recherche	Post-doctorant	Doctorants
	2	4		1	

Valérie Beaudouin, MCF, Sociology, axis 2

Jérôme Denis, MCF, Sociology, axis 3

Valérie Fernandez, Prof., Management Sciences, axis 2

Thomas Houy, MCF, Management Sciences, axis 2

Christian Licoppe, Prof., Sociology, axis 4

Rémi Manyak, MCF, Management Sciences, axis 2

Maud Verdier, Post-doc, Anthropology, axis 4

PESOR (Pilotage Économique et Social des Organisations)

EA3546 Université Paris-Sud

Created in 1999, **PESOR** is the academic research center of University Paris-Sud 11. It brings together all the researchers of the University Paris-Sud 11 who work in management, located in different areas: Jean Monnet Faculty (Law, Economics and Management), IUT Sceaux, Sciences Faculty, Polytech' Paris-Sud (engineers).

9 PR, 19 MCF, 1 associate researcher, 14 PhD students and 5 invited professors from several countries, work on management (organization, marketing, finance, human resources and accountability).

The emergence of our research on the theme of innovation is relatively new and is related to recruitment these last years of colleagues working on innovation and the beginning of collaborative researches. Research is organized around four main axes:

- Competitiveness clusters and Ecosystems
- Intangible and knowledge assets
- Open innovation and co-creation
- Venture capital

Academic publications, 2006-2011 (innovation axis)

5 books (including in English), 3 collective books, 26 articles in peer-reviewed journals, 19 book chapters (including 9 in English), 1 HDR defence, 6 PhD defence

The researchers of the team are frequently solicited as reviewers for international journals. They also serve as member of editorial board of the following journals: *Finance Contrôle Stratégie*, *M@n@gement*, *Systèmes d'Information et Management*. They are also members of the executive committees of the following academic associations: Association Internationale de Management Stratégique (AIMS), Association Information et Management (AIM).

Exploitation of results

1 Chair "Intangible Assets Management".

Every year, many communications in national and international conferences (AIMS, AIM, AGRH, EGOS, EURAM).

Higher education

The members of the PESOR are involved in teaching activities in the University Paris-Sud 11 at various levels: formation from BA (L1-L2-L3 generalist in management) to specialized Masters (M1-M2 in management) and PhD program.

Our goal is to develop programs that combine research and teaching and we are responsible of two master programs :

- Master 2 Pro/Research "Strategies and Management" (specialized on cluster management)
- Master M2 Pro "Marketing of Innovation" (specialized on new product/service development)
- Engineers (Polytech' Paris-Sud) : course on Innovation and knowledge management

The members of the PESOR are involved in local PhD program (different courses on methodology) and are engaged in national training program for doctoral candidates in management, Centre Doctoral Européen de Gestion (CDEG).

Contribution to the ISIS project

PESOR will bring to the ISIS project its management perspective on innovation. It will contribute to the ISIS research axe 2.

Table indicating the status and number of involved researchers

Pr	MCF	Doctorants
3	5	3

Julien Anfrun, Doctorant, axis 2

Andres Barreneche, Doctorant, axis 2

Ahmed Bounfour, PR, axis 2

Denis Chabault, MCF, axis 2

Sandra Charreire-Petit, PR, axis 2

Emmanuelle Dubocage, MCF, axis 2

Florence Durieux, PR, axis 2

Serge Edouard, MCF, axis 2

Géraldine Galindo, MCF, axis 2

Elodie Loubaresse, MCF, axis 2

Ahu Ozcan, Doctorante, axis 2

Publications

Bounfour A., 2009, *Organisational Capital, Modelling, Measuring, Contextualising*, London-New York, Routledge.

Bounfour A., Stahle P., 2008, Understanding Dynamics of Intellectual Capital of Nations, *Journal of Intellectual Capital*, 9, 2, 164-177.

Bounfour. A., 2007, Dynamic Capabilities and Finland's New Path, in Stahle P., (ed.), *Five Steps for Finland's Future*, Special Number *Technology Review*, 202, 25-34.

Chabault D., Hulin, 2011, *Talents, innovation et pôles de compétitivité, la gestion des compétences, de nouveaux territoires*, Paris, l'Harmattan.

Charreire-Petit S., Livieratos A., Papoulias B., 2011, An Open Innovation Growth Strategy for Knowledge-Intensive SMEs : The Case of an Advertising Agency, in de Pablos Heredero C., Lopez D., (eds.), *Open Innovation at Firms and Public Administrations: Technologies for Value Creation*.

Loubaresse E., 2008, Influence des caractéristiques des pilotes de réseaux locaux d'organisations sur leurs rôles, *Management International*, 13, 1, 86-95.

Edouard S., 2011, Confiance institutionnelle et pérennité des écosystèmes d'affaires, in Gratacap A., Le Flanchec A., (dir.), *La confiance en gestion*, Paris, De Boeck, Collection « Méthodes et Recherches », 81-99.

PRINTEMPS (Laboratoire “Professions, Institutions, Temporalités”)

UMR 8085, Université de Versailles Saint Quentin en Yvelines - CNRS

The **PRINTEMPS laboratory**, since February 2011 directed by Jérôme Pélisse (maître de conférences en sociology, CNRS chair between 2010 and 2015), was evaluated by AERES in November 2008 and was subsequently awarded an overall **“A” grade**. PRINTEMPS specializes in sociology and demographic studies. It is jointly supervised by the University of Versailles-Saint-Quentin-en-Yvelines and by CNRS. Finally, members of Printemps are involved in 5 masters and notably one specialized on quantitative methods (*Traitement des données quantitatives et démographie*) and an other in research (sociology of profession and policy). Its main areas of research are the **sociology of professions, the study of public involvements and policies, of careers, and of perceptions of time**. Since its foundation in 1995, it has become **one of France's most prestigious laboratories of sociology**, both nationally and internationally.

PRINTEMPS maintains a website and a blog (*“Carnet de recherche du Printemps”*) which describes the activities of its members and science in the making. It hosts three or four scientific events each year in order to promote recent publications. In June 2010, 80 researchers took part in a PRINTEMPS thematic conference entitled “Sociology of Professional Groups: a Blossoming Scientific Field?” The main purpose of this conference was to present three books, which had been published by members of the laboratory. In May 2011, the laboratory organized an international meeting on the work of Andrew Abbott (doctor *honoris causa* of the UVSQ): 120 researchers took part to this important meeting and methodological issues and professional perspectives developed by A. Abbott were notably analyzed. PRINTEMPS organized in 2012 a symposium on the ways in which social scientists grasp of globalization, and the lab will host a major conference in 2014 on Merton (including his sociology of science).

The PRINTEMPS contribution to the social science’s project appears in the very particular engagement of the laboratory in the fields of profession (and notably profession and career of scientific), science and technologies studies, quantification and measure, but also sociology of law.

- 1) sociology of scientific work, profession and career. Grounded in the historical topics developed for the creation of the laboratory (1995), the sociology of profession is the main and well-known area of research which contributes to the international rank of the PRINTEMPS. The renewal of the CNRS members of the laboratory since the end of 2000’s was assured notably with the recruitment of two young researchers specialized in Science and Technology Studies: M. Jouvenet (2007) and Arnaud Saint Martin (2011). They developed research about scientific career and profession of researcher in the domain of nanotechnology or spatial and aim at studying environmental sciences or consciousness as a boundary object between natural sciences (and notably neurosciences) and social sciences. One postdoct (M. Hauchecorne) and a Phd student (R. Juston) are working today with them and a CNRS ingénieur coming from the LAL (Laboratoire d’accélérateur linéaire) and starting a conversion disciplinary (microelectronics to the sociology of scientific professions) would probably join the PRINTEMPS to work on the activities, status and profession of CNRS ingénieur in the scientific laboratory of Saclay. Finally, with other researcher specialized in an other area (cultural or judicial professions) of the PRINTEMPS, the concept of “career by project” proposed by M. Jouvenet is one important track and analyze heuristic for scientific careers.

- 2) Methodology and notably quantitative methodology which take into account the modelisation of time, temporality and longitudinal logic is one other speciality of the PRINTEMPS. Demographs and some sociologists of the laboratory are specialized with this reasoning and technical methods. PRINTEMPS is also one main actor of a research project ending Spring 2013 on quantification of social and professional world through the classification of socio-economic categories in Europe (ANR Eurequa). The extension of this project is notably one important piece of the axe 1 of the project.
- 3) The last topic on which members of PRINTEMPS will contribute to the project will be the axis on law, justice, science and technology, and notably on the activity and identity of judicial forensic. J. Pélisse realized recently a research on these intermediate between science and justice and two PhD (R. Juston and J. Minoc) are beginning on forensic and psychiatric/psychologist forensic in the courts.

Équipe

CR CNRS	Pr	MCF	Ingénieur de recherche	Professeur associé	Post-doctorant	Doctorants
3	2	4	1	1	1	4

Liste nominative des chercheurs de chaque laboratoire impliqués dans le projet :

Philippe Cibois, Pr émérite UVSQ, sociologue, axe 1

Jérôme Deauvieu, MCF UVSQ, sociologue, axe 1

Eric Draï, Maître de conférence associé, sociologue, axe 3

Céline Dumoulin, Ingénieure de recherche UVSQ, sociologue, axe 1

Isabelle Fréchon, CR CNRS, démographe, axe 1

Morgan Jouvenet, CR CNRS, sociologue, axe 3

Jérôme Pélisse, MCF UVSQ (chaire CNRS), sociologue, axe 4 / axe 3 / axe 1

Nicolas Robette, MCF UVSQ, démographe, axe 1

Arnaud Saint Martin, CR CNRS, sociologue, axe 3

Olivia Samuel, MCF UVSQ, démographe, axe 1

Laurent Willemetz, Pr UVSQ, sociologue, axe 4

Mathieu Hauchecorne, postdoctorant UVSQ (région IdF), sociologie, axe 3

Ruggero Iori, doctorant UVSQ (fléchage Labex 6S Printemps - Cesdip), sociologie, axe 1

Romain Juston, doctorant UVSQ (DIM IS²IT), sociologie, axe 4

Julien Kubiak, doctorant UVSQ, sociologie, axe 3

Julie Minoc, doctorante UVSQ (DIM Gestes), sociologie, axe 4

Publications significatives depuis 2011

- Deauvieu J., 2011, Est-il possible et souhaitable de traduire sous forme de probabilités un coefficient logit ?, *Bulletin de Méthodologie Sociologique*, 112, 32-42.
- Jouvenet M., 2013 (à paraître), Boundary Work between Research Communities. Culture and Power in a French Nanosciences and Nanotechnology Hub, *Social Science Information*, 52, 1.
- Jouvenet M., 2012, Nanosciences et nanotechnologies : une coopération modèle ? Expériences et sens politique des scientifiques, *Terrain*, 58, 44-63.
- Jouvenet M., 2011, Profession scientifique et instruments politiques. L'impact du financement « sur projet » dans des laboratoires de nanosciences, *Sociologie du Travail*, 53, 2, 234-252.
- Pélisse J., Bessy Ch., Delpeuch T., 2011, *Droit et régulations des activités économiques*, Paris, LGDJ, Collection « Recherche ».
- Pélisse J., (dir.), Charrier E., Larchet K., Protais C., 2012, *Des chiffres, des maux et des lettres. Une sociologie de l'expertise judiciaire*, Paris, Armand Colin, Collection « Recherche ».
- Saint-Martin A., 2012, Autorité et grandeur savantes à travers les éloges funèbres de l'Académie des sciences à la Belle Époque, *Genèses. Sciences sociales et histoire*, 87, 47-68.
- Saint-Martin A., Lamy J., 2011, Pratiques et collectifs de la science en régimes, *Revue d'Histoire des Sciences*, 64, 2, 375-387.

STEF (ENS Cachan)

The laboratory **STEF** main focus is the study the scientific and technological curriculum, taking into account both the evolution of science and technology, computerization issues and societal problems.

STEF specificity is its ability to analyse issues in science and technology education, mutations of scientific and technical practices (research, development, specialized training and general education) in their relations with politics, economy and culture.

STEF, with its roots in ENS Cachan and participation in the center d'Alembert (Interdisciplinary Center for the Study of the Evolution of Ideas, Science and Technology - UPS) is sensitive to changes in over science and technology and can achieve good coverage of science and technology education and their current changes. Among these mutations, the laboratory places a major issue on computerization in its various dimensions: modifications in content, new forms of instrumentation, modifications frameworks for teachers and students... STEF also gives a prominent place to societal issues which the curricular changes must meet.

Studies are focused on current or foreseeable curricular changes, whether these changes are in relation to changes in context, or likely to occur in a more or less distant horizon. It involves analyzing curriculum construction or design and to explore their conditions and consequences. It is not a simple upgrade or update content to teach, but a mapping between missions that can fulfill education and training in science and technology and changes in science and technology (education of citizens, users education, training specialists to their social responsibilities ...).

Table indicating the status and number of involved professors and researchers in ISIS

Pr	MCF	ATER	Doctorants
1	1	1	2

Liste nominative des chercheurs :

Virginie Albe, Didactique des sciences et des techniques, PU, axe 3

Volny Fages, Histoire des sciences et des techniques, ATER, axe 3

Pascale Hannoun, Didactique des sciences, MCF, axe 3

Bénédicte Hingant, Didactique des sciences, Doctorante, axe 3

Elie Rached, Didactique des sciences, Doctorant, axe 3

Summary partners, staff and financial contributions

Nom du partenaire	Affiliation	Effectifs / Catégorie de personnel	Apports financiers sur 3 ans
CESDIP	UVSQ CNRS	- chercheurs et ens. chercheurs : 8 - ingénieurs : 2 - doctorants, post-doc : 5 - associate members : 2	239 000 € : 128 ke (IE) + 50 ke (mi-tps AI 50%) + 9 ke (Summer School) + 51 ke (moitié doc fléchée UVSQ 2012- 2015)
CRG	Polytechnique CNRS	- chercheurs et ens. chercheurs : 6 - ingénieur : 1 - doctorants, post-doc : 8 - associate member : 2	
DANTE	UVSQ	chercheurs et ens. chercheurs : 6 - ingénieur : 1 - doctorants, post-doc : 1	
EST (équipe GHDSO)	Univ. Paris Sud	- chercheurs et ens. chercheurs : 7	
IDHE / Equipe Cachan et Evry	ENS Cachan CNRS	- Chercheurs et ens. chercheurs : 11 - doctorants, post-doc : 6	273 000 € : 164 ke (ANR Travcher 2010-2014) + 70ke (contrat ANSES 2013-2014) + 24 ke (moitié IE stat ENS Cachan) + 15 ke (moitié Tech gestion ENS Cachan)
ISP Equipe ISP Cachan	ENS Cachan CNRS	- chercheurs et ens. chercheurs : 2 - doctorants et post-doc : 1	40 000 € (projet « Les barreaux face aux questions éthiques et à la communication électronique », GIP Mission de recherche Droit et justice, déposé janvier 2013)
CREST Equipe LSQ	ENSAE-ParisTech	- chercheurs et ens. chercheurs : 3 - doctorants et post-doc : 1 - associate member : 10	4 000 € (contrat INSEE PCS en Europe, 2012-2013)
LTCI	Télécom ParisTech CNRS	- chercheurs et ens. chercheurs : 6 - doctorants, post-doc : 1	
PESOR	Univ. Paris Sud	- chercheurs et ens. chercheurs : 8 - doctorants, post-doc : 3	167 000 € : 102 ke (1 doctorant) + 35ke (AAP UPSud)+ 30ke (Chaire)
PRINTEMPS	UVSQ CNRS	- chercheurs et ens. chercheurs : 9 - ingénieur : 1 - doctorants, post-doc : 5 - associate member : 1	197 000 € : 95 ke (ANR Eurequa 2010-2013) + 102 ke (doc DIM IS ² IT 2012-2015) + 51 ke (moitié doc fleché UVSQ 2012-2015)
GREGHEC Innovation and Entrepreneurship – Society and Organisation	HEC CNRS	- chercheurs et ens. chercheurs : 21 - doctorants, post-doc : 8 - associate member : 2	200 000 € : moitié des chaires GDFSUEZ (40), Safran (60) et FT-Orange (60) + Fondation HEC (40).
STEF	ENS Cachan IFE	- chercheurs et ens. chercheurs : 2 - doctorants, post-doc : 3	
Nombre total de chercheurs impliqués : 154 chercheurs	ISIS Saclay	chercheurs / ens.chercheurs/ing. : 95 postdoc / doc : 42 associés : 17	Total (minimum) des apports des partenaires au projet : 1 120 000 euros