























# The role of the doctorate in professional careers

# First interdisciplinary conference on doctoral studies

# Call for proposals

Nowadays, doctoral programmes not only prepare researchers to make contribution to research but also to provide them with the advanced research skills necessary in professional sectors beyond frontier research and education (Technopolis 2007; Bogle, 2010). Beyond scientific knowledge and technical skills, the doctoral training is also considered as a means to develop "transferable skills" fulfilling the needs of research institutions and companies, including in non-research activities (Cryer, 1998; Technopolis 2007; Borrel-Damian 2009; Mowbray and Halse 2010; Durette et al. 2014). The doctoral experience is also acknowledged both as a professional and as a personal experience (Mowbray and Halse 2010; Fisher 2013) and even regarded as a rite of passage from an anthropologist point of view (Gérard 2014). Nevertheless, the outcome of the doctoral training in a career is likely to be influenced by many factors such as the field of research (De Grande 2010; Garner et al. 2007; Borrel-Damian 2009; Durette et al. 2014), the country where the doctoral training takes place (Kehm 2006), the initial professional project of the doctoral researcher (VITAE 2012), the education prior to the doctorate (Durette et al. 2014), the funding mechanisms or whether it take place as initial training or as lifelong learning (Adoc Talent Management 2013, 2014).

The aim of this colloquium is to provide insights on the actual role and added value of the doctoral training in the broader context of a professional career path. To answer this question, we propose three different topics

#### 1) Why and how doing a PhD?

There are multiple reasons and means to enter a doctoral program: as an initial training after a Master or through "lifelong learning" after a significant professional experience, in academics or in collaboration between industry and academia or even completed with another employment. The majority of doctoral candidates in France started their PhD immediately after their Master's degree and are funded through dedicated wages to complete their doctoral project (Technopolis 2007; Adoc Talent Management 2014). Furthermore, most of them are heading towards an academic position (Cereq 2010, Neumann & Tan 2010, Eurodoc 2010). Nevertheless, this should not overshadow other possible means and goals to enter a doctoral training program including entering the private sector as a researcher, or working outside the Higher Education or Research and Development sectors (Cereg, 2010, Eurodoc 2010, Adoc Talent Management 2013, 2014). What are the possible relationships between the reason why entering a doctoral training and the means to do it? Does doctoral education allows different career strategies? These are the main questions we want to explore in this topic.

Communications coming under this section will address the different reasons and means to enter a doctoral program and their implication on the doctoral training experience and career choices.

























### 2) Doctoral education, doctoral training, two faces of a unique experience

Several studies have investigated the competencies that can be developed through doctoral experience (Cryer 1997; Mowbray and Halse 2010; Adoc Talent Management 2013, 2014; Durette et al. 2014). More specifically, Durette et al. (2014) proposed a distinction between competencies that can be developed through courses (such as scientific knowledges) and competencies that are more likely to be developed through professional experience (such as critical thinking, team work, etc.). Indeed, the doctoral experience is both an education and a training and enables developing both types of competencies. Nevertheless, several studies in France showed that many employers still consider PhDs merely as expert trained to work as researchers and lacking the necessary competencies to occupy other positions (Fixari et Pallez, 2005; Olivier et al., 2007; Angelier et al., 2009; Grivillier et al. 2010; Baby, 2010).

Communications coming under this section will address this twofold nature of the doctoral experience and its implications.

#### 3) Career paths of doctorate holders

Right after their defense, 72% of the doctorate holders in France wish to enter an academic research career (Calmand & Giret, 2010). Nevertheless, five years after graduation, only 52% of them actually followed this path, 25% work as researchers in the private sectors and 23% work outside the HE or research sector (Calmand & Recotillet, 2013, p6). Similarly in the international literature, it is usually considered that half of doctorate holders work as researchers in the academic sector. (Neumann & Tan, 2011; Auriol et al. 2013).

More specifically in France, Calmand & Giret (2010, p22) identified nine types of young researchers' career paths (up to three years after graduation):

- 1) « Rapid access to a permanent position in academia
- 2) Keeping up in temporary positions
- 3) Rapid access to a permanent position outside research
- 4) Keeping away from the employment market
- 5) Deferred access to an academic position
- 6) Rapid access to a permanent position in the private R&D sector
- 7) Deferred access to a permanent position outside research
- 8) Keeping up lacking job security
- 9) Deferred access to a permanent position in the private R&D sector»

Other types of career path have been identified, such as a reorientation later in the career to positions outside research or to positions where a doctoral degree is not required (Bonnard 2012).

Communications coming under this section will address the different career paths of doctorate holders with an emphasis on possible unexpected developments during the career in relationship with their possible triggers.

























### This call for proposals is opened to:

- Doctoral candidate and doctorate holders conducting reflexive research on Higher Education and Research practices in doctoral education as well as to researchers conducting studies on the doctoral experience, be it considered as a research training or as a professional experience.
- People engaged in the improvement of doctoral candidate's working conditions and promotion of their research in any field of research.

#### References

Adoc Talent Management (2014) La poursuite de carrière des docteurs récemment diplômés, 2<sup>nd</sup> édition. Paris : Adoc Talent Management.

Adoc Talent Management (2013) La poursuite de carrière des docteurs récemment diplômés. Paris: Adoc Talent Management.

Angelier, C., Biausser, H., Lehmann, J-C, Randet, D. (2009) L'emploi des docteurs et l'évolution du doctorat. Tiré à part de l'ouvrage « Futuris, 2009, la recherche et l'innovation en France », Jacques Lesourne et Denis Randet (Dir.), Editions Odile Jacob.

Auriol, L., M. Misu and R. A. Freeman (2013), "Careers of Doctorate Holders: Analysis of Labour Market and Mobility Indicators", OECD Science, Technology and Industry Working Papers, 2013/04, OECD Publishing.

Baby, M-C. (2010) Internationalisation de la formation doctorale et employabilité des docteurs. Dossier pour le conseil d'orientation du 15 mars 2010.

Bogle, D., M. Dron, J. Eggermont and J. Willem van Henten. (2010). Doctoral degrees beyond 2010: Training talented researchers for society. League of European Research Universities.

Bonnard, C. (2012) Jeunes diplômés en sciences : les déterminants de l'accès à la recherche développement privée. Formation emploi 117.

Borrell-Damian, L. (2009). Collaborative doctoral education. Brussels: European University Association.

Calmand, J. et Giret, J.F. (2010) L'insertion des docteurs, enquête génération 2004, interrogation 2007. Net.doc 64.

Calmand, J. et Recotillet, I. (2013) L'insertion des docteurs, interrogation en 2012 des docteurs diplômés en 2007. Net.doc. 115

Cryer, P. (1998). Transferable skills, marketability and lifelong learning: the particular case of postgraduate research students. Studies in Higher Education, 23:2

De Grande H., K. De Boyser, K. Vandevelde, R. Van Rossem (2010). Transitions from academia to industry: how do doctorate holders fit in? M&SS working paper n°8. https://biblio.ugent.be/publication/1100486

Durette, B. Fournier, M., Lafon, M. (2012) Compétences et employabilité des docteurs, rapport d'enquête. Paris : Adoc Talent Management

























Durette B., Fournier M., Lafon M. (2014) The core competencies of PhDs. Studies in Higher Education, sous presse.

Emploi 2013, La poursuite de carrière des docteurs récemment diplômés. Paris : Adoc Talent Management.

Eurodoc (2011) The first Eurodoc survey on doctoral candidate in twelve countries. Publication of the European Council of Doctoral Candidates and Junior Researchers. Brussels: Eurodoc.

Fischer, S. (2013) La formation doctorale entre indépendance et autonomie : quelle autoformation pour les jeunes chercheurs-es ?, Congrès de l'AREF, Montpellier, France, 27-30 août 2013.

Fixari, D et Pallez, F. (2005) Propositions pour favoriser l'emploi des docteurs. Résultats du groupe de travail Futuris.

Gardner S.K., M.T. Hayes, X.N. Neider (2007) The dispositions and skills of a PhD in education: perspectives of faculty and graduate students in one college of education. Innov. High. Educ., 31:287-299.

Gérard, L. (2014) Le doctorat: un rite de passage" Paris : Edition Téradédre

Grivillers, E. Lesenne, S., Romo, M. (2010) La place des diplômés d'un doctorat dans les entreprises et les organismes non marchands. Rapport d'étude.

Kehm, B.M. 2006. Doctoral education in Europe and North America: a comparative analysis. Wenner Gren International Series, 83, 67–68

Neumann, R. And K. Tan. 2011. From PhD to initial employment: the doctorate in a knowledge economy. Studies in Higher Education, 36(5), 601–614

Mowbray, S. And C. Halse. 2010. The purpose of the PhD: theorising the skills acquired by students. Higher Education Research and Development, 29(6), 653–664

Olivier, F., Cadiou, Y.; Larrue, P., Zapaucha, E., Dahan A. (2007) Compétences professionnelles des doctorants et des docteurs. Etude commandée par la DEPP pour le HCEEE

VITAE (2009) What do researchers do? First destinations of doctoral graduates by subject. The Careers Research and Advisory Centre (CRAC) Limited

VITAE (2012) What do researchers want to do? The career intentions of doctoral researchers. The Careers Research and Advisory Centre (CRAC) Limited

























#### **Practical information:**

Communications will be 20 min talk + 10 min questions

Propositions shall be sent to the scientific committee before the 21st of November 2014 by email at cid@adoc-tm.com

Every proposition will be submitted as a 300 word abstract going along with related references in .doc or .pdf format. Submissions should include the full name and surname of the participant as well as his/her affiliations.

Propositions will be evaluated against the following criteria:

- Relevance to the topic of the conference;
- Conceptual framework and formalization of the problem;
- Methodology;
- Outcomes (results and perspectives).

The final decision of the scientific committee will be notified to the participants through email by the 1<sup>st</sup> of december 2014.

Abstracts will be published on the conference website: http://cid.docteo.net/

#### **Scientific Committee:**

- David Bogle, Chair of the LERU Doctoral Studies Community
- Lidia Borrell-Damian, Director Research and Innovation EUA
- Claire Bonnard, Maître de conférences IREDU Université de Bourgogne
- Jean Chambaz, Président de l'Université Pierre et Marie Curie
- Jean-François Giret, Professeur IREDU Université de Bourgogne
- Isabel Huet, PhD, Centre for Higher Education Research and Practice Kingston University London
- Monique Martinez Thomas, Professeur, Directrice de l'Ecole des docteurs, Collège doctoral de l'Université de Toulouse - LLA/CREATIS – Université de Toulouse II
- Janet Metcalfe, Phd, Head and Chair of Vitae
- Jean Gabin Ntebutse, Professeur adjoint CERTA Université de Sherbrooke (Québec)