

PhD 12 Involving stakeholders through transdisciplinary cross-risk wildfire research,  
Pau Costa Foundation, Spain

Do you have a genuine interest in landscape fires and resilience? Are you up for an interdisciplinary challenge, looking and learning beyond your own field and assumptions? With an international team that is inclusive, collaborative, creative and open minded? Then we are looking for you!

**15 PhD positions in PyroLife Innovative Training Network on integrated fire management**

The 2018 wildfire season was a glimpse of what to expect in the future: deadly mega-fires in Mediterranean regions and high fire activity in temperate and boreal areas outside the typical Spring fire season. We cannot solve this challenge with the old mono-disciplinary approach of fire suppression: there is a critical need to change fire management from fire resistance to landscape resilience: Living with Fire. This requires a new type of diverse experts, who not only understand fire, but who are also able to communicate risks, deal with uncertainty, and link scientific disciplines as well as science and practice.

The new Innovative Training Network PyroLife will train the new generation of interdisciplinary experts in integrated fire management, acknowledging that 1) knowledge transfer from southern Europe (and worldwide) to temperate Europe can support the new generation of experts; and 2) fire risk planning, communication and management can learn from cross-risk lessons including temperate European expertise in water management. In doing so, this project combines how the North solves community problems with the fire knowledge of the European South.

**15 PhD positions**

We are hiring 15 PhD candidates across Southern and Northwest Europe and across a range of scientific disciplines, from social sciences and policy to environmental sciences and engineering. We are looking for a diverse group of creative and open minded Early Stage Researchers who are able to link innovative science to society, and communicate with media, stakeholders, and policy makers. These 15 positions are open at 6 universities, 2 research institutes, a foundation and a company across Southern and Northwest Europe. For an overview of all positions, please visit <https://pyrolife.lessonsonfire.eu/>

**Topic description**

Objectives of this PhD project:

- 1) Study how transdisciplinary research and approaches can stimulate fire resilient landscape management;
- 2) Assess how adaptive and integrated water management can lead to wildfire management that contributes to create resilient societies;
- 3) Explore how modern digital tools can be used to involve local communities and land owners in implementing wildfire mitigation measures.

This project aims to improve the effectiveness implementation of wildfire mitigation in rapidly changing environments. This approach will require using bottom up approaches taking into account local environmental and socio-economic contexts. The outputs should differ depending on population vulnerabilities, e.g. young vs. elderly, rural vs. urban. The candidate will address the best approach to involve local knowledge to develop fire resilient landscapes and societies. Review of transdisciplinary methods used in integrated and adaptive water management and community-based adaptation will identify promising methods for use in wildfire. This will guide a selection of transdisciplinary approaches to address fire mitigation strategies from a bottom-up perspective aiming to reduce vulnerability while increasing community resilience.

Using traditional methods like interactive workshops and focus group discussions in local communities with committed citizens, local vulnerability will be mapped as a function of both socio-economic and environmental perspectives (addressing vulnerability and risk), addressing the optimal scale of mitigation strategies (local or regional). The candidate will also map, assess and evaluate the potential and limitations of modern tools, such as interactive (smartphone) apps or virtual reality, already used or under development around the world, to engage with people and motivate them to implement fire mitigation strategies. Among the experiences, a special attention should be paid to the Australian use of social media and to the Wageningen University's Waterapps experience (<http://www.waterapps.net/en-us/home/>), assessing the potential for replication to inform people of fire risk.

**We provide**

- A PhD position in the diverse PyroLife training network together with 14 other PhD candidates that study landscape fire using an integrated approach.
- A strong, engaging, collaborative and inclusive network of academics and practitioners.
- The first doctoral training program on integrated fire management worldwide, with research, collaboration and training focused on understanding fire, risk communication, integration across disciplines, scales, sectors, and countries, and personal development.
- Enrolment in a fully-funded PhD program.
- Team up with other PhD students in the network that work in other risk communication topics.
- Research including an applied traineeship that will provide hands-on experience to work with communities located in areas with a high and/or new risk of wildfires.
- Become part of a dynamic team, that works with and for the fire community and society.

**Skills desired****Specific**

- Some experience in community engagement.
- MSc degree in natural sciences (e.g. geography, forestry, ecology, earth sciences) with an interest in social sciences (e.g. anthropology, sociology, humanities).
- Fluent in English; knowledge of Spanish or Catalan is appreciated.

**General**

- A genuine interest in landscape fire and resilience. Experience with (the management of) fire, forests, water, storms or other risks is appreciated.
- Ambition to obtain a PhD degree, and become a scientific expert able to convert knowledge and ideas into products and services, for social and economic benefit.
- Good communication skills and good proficiency in English (both oral and written).
- Willingness to (learn how to) communicate risk, make inter- and transdisciplinary linkages.
- Willingness to travel including moving to another country for the PhD project, completing two 4-month secondments in Europe or abroad, and travel to international training courses and any fieldwork.
- Ability to function as a team member, work independently and take responsibility for own research goals.
- Meet the mobility and early stage researcher requirements defined for the MSCA-ITN projects.

**Mobility and early career requirements**

Applicants should comply to the EU rules regarding ITN projects:

([https://ec.europa.eu/research/participants/data/ref/h2020/other/guides\\_for\\_applicants/h2020-guide-appl-msca-itn\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/other/guides_for_applicants/h2020-guide-appl-msca-itn_en.pdf)). The most important rules are that you should not have a doctoral degree, have obtained your Master degree within the last four years (full-time equivalent research experience) and should not have spent more than 12 months of your time during the last 3 years in **Spain**.

**Employment conditions** (Beneficiary-specific)

We offer a full-time position with PCF, initially for 18 months after which a go/no go decision will be taken on extension with another 18 months. After 36 months, upon satisfactory progress, the student will continue the traineeship at the Wageningen University for 12 months to complete the PhD. Gross salary per month € 2.736 in the first three years, rising to € 2.971, per month in the fourth year, for a fulltime appointment (a plus for family allowance can be added).

**About the employer** (Beneficiary-specific)

Host institution: Pau Costa Foundation. PCF serves as an acknowledged contact point for knowledge exchange in the field of fire ecology research and operational fire management for training and for wildfire management. With a focus on fire operations, including the support of applied research, promoting landscape management planning and certification of landscape quality assisting with landscape management for climate change interventions. All these actions are done under an effective dissemination strategy to transfer expertise and knowledge to the interested actors. <http://paucostafoundation.org/>

Become part of an international team that works in multidisciplinary research. Pau Costa Foundation offers an inspiring work environment, dynamic, multicultural and international as well as multiple opportunities for professional growth and learning new skills.

Pau Costa Foundation is an organization that promotes equal opportunities and encourages the presentation of candidates.

The PhD candidate will be enrolled in the PhD program at Wageningen University, The Netherlands.

Enrolment in a fully-funded four-year PhD program at the University of Wageningen as external student in one of the Wageningen Graduate Schools. The student will spend three years at Pau Costa Foundation and the final year of the PhD traineeship at Wageningen University

Secondment host 1: The Wageningen Institute for Environment and Climate Research (WIMEK) is one of the six Graduate Schools at Wageningen University. WIMEK aims to develop an integrated understanding of environmental change and its impact on the quality of life and sustainability. It is WIMEK's ambition to excel as: School for multidisciplinary PhD training, Network for high-quality environmental research and Bridge for sustainable solutions around the globe. Currently, about 350 PhD candidates have been enrolled in WIMEK. WIMEK actively participates in the Dutch inter-university network of environmental research groups: the Research School of the Socio-Economic and Natural Sciences of the Environment (SENSE). Through SENSE, WIMEK PhD candidates are part of an interdisciplinary community. <https://www.wur.nl/en/Education-Programmes/PhD-Programme/Graduate-Schools/www.wur.nlwimek.htm>.

Secondment host 2: Rural Fire Research Group, Scion (New Zealand Forest Research Institute Ltd.). Scion is New Zealand's Crown Research Institute specialising in research, science and technology development for the forestry and wood products sectors (see [www.scionresearch.com](http://www.scionresearch.com)). Its Rural Fire Research Group delivers science and technology to the rural sector to help protect life and property from wildfires and promote safe and effective use of fire in rural and forest landscapes (<http://www.ruralfireresearch.co.nz/>). Research expertise includes fire behaviour prediction; understanding vegetation fire behaviour, risk and smoke emissions; modelling plume formation; plume transport and dispersion; ergonomics and human factors; fire danger communication and increasing community resilience to wildfire.

#### **More information**

Contact: dr. Núria Prat-Guitart ([nprat@paucostafoundation.org](mailto:nprat@paucostafoundation.org))

#### **How to apply**

- Submit motivation letter and a CV
- Use template for motivation letter at <https://pyrolife.lessonsonfire.eu/> that outlines four topics we expect you to cover, and that also includes a form to show your eligibility for the program in terms of early stage researcher and mobility requirements
- Job announcement open for 28 days – Deadline: 5<sup>th</sup> of December 2019.