

Building a robust pipeline of scientists leading climate change research in Africa

# Candidate Profile



#### **Position**

Senior Lecturer, Project Manager

#### Institution

8 Mai 1945 - Guelma University

## Country

Algeria

#### **Education**

PhD, Food Science, Food Safety and Toxicology, University of Burgundy, Dijon, France

#### Mentor

Dr. Aissam Bousbia; Ph.D. in Agronomic Sciences, Higher National Agronomic School, Algiers, Algeria

### Research Area

Transforming the food system through the conservation and redeployment of biodiversity to mitigate global warming, promoting agricultural byproducts, and improving the nutritional qualities of local products (dairy products).

# Sofiane Boudalia

2020 One Planet Laureate Candidate

Sofiane Boudalia comes from a modest family. Nonetheless, his brother is a doctor and his sisters nurses. He grew up in a family where health issues were often a central topic of conversation. In 2004, Sofiane left his hometown, traveled to France, and achieved his dream of becoming an engineer.

He continued his studies in Dijon, where he obtained a Bachelor's degree in Biology and Cell Physiology (2008) from the University of Burgundy.

He then pursued his Master's degree in Food Quality at the National Institute of Agricultural Sciences, Food and Environment (AgroSup) in Dijon.

During his studies, he completed an internship at the National Institute for Agricultural Research (INRA), where he discovered Food Toxicology.

He subsequently completed a thesis on this topic and obtained a Ph.D. in Food Science, Food Safety, and Toxicology at the University of Burgundy in France.

Sofiane initially worked for a short time at a consulting firm where he helped conduct clinical trials in oncology and then joined the Picardy Regional Cancer Network (ONCOPIC), at the University Hospital Centre (CHU) of Amiens to manage clinical trials in oncology.

Returning to his native country in 2014, after ten years in Europe, he has since put his talents to work in higher education and scientific research.

He is a Senior Lecturer at the Department of Ecology and Environmental Engineering at the Mai 1945 University of Guelma.

Additionally, his research has demonstrated that environmental degradation is closely linked to the deterioration of human and animal health and, indirectly, to climate change.

According to Sofiane, livestock breeders and farmers pay the first price for most environmental problems, such as water scarcity.

"I am focused on the objective of working in the field to provide support and find an immediate solution to this problem," he says.

His research work is based on transforming food systems while considering environmental issues, such as the conservation and redeployment of biodiversity to mitigate global warming.

He also specialises in developing innovative solutions to help farmers return to land regeneration (pesticide-free) agriculture, developing sustainable agriculture, promoting the use of agricultural by-products and improving the nutritional properties of dairy products.

In collaboration with his team, Sofiane is managing the COFFEE project for the "Co-development of a training offer to ensure high employability", to create a professional degree in "Agri-food Processes" at 8 Mai 1945 University of Guelma in Algeria. The project is financed by the European Union as part of the ERASMUS + "Capacity-building" initiative, which aims to develop closer ties between the socio-economic sector and universities in Algeria, through the co-development of professional university training programmes.

In line with promoting food security and alleviating poverty, especially in remote areas, he is leading the Arimnet2-Bovisol project (Breeding and Management Practices of Indigenous Bovine Breeds: Solutions Towards a Sustainable Future) in Algeria, an international program co-financed by the European Commission and the Ministry of Higher Education and Scientific Research Algeria.

Sofiane saw an advert for the One Planet Fellowship on the AgroPolis Fondation website.

He views the Fellowship as an opportunity to create a network of researchers from Southern countries. He laments the fact that scientific collaboration and cooperation between African countries is minimal. Sofiane's research focuses on the transformation of the food system by taking into consideration environmental issues, such as the preservation and redeployment of biodiversity to mitigate global warming. "I am focused on working in the field to provide support and find an immediate solution to this problem," he says.

He cites three potential benefits from the Fellowship; the opportunity to develop projects with future fellows, the possible development of an outreach program, and the integration of gender mainstreaming into projects.

Like all African researchers, he highlights data collection as a challenge because livestock breeders are suspicious of researchers in a place where data collection regulations are inadequate. Additionally, the broader context in Algeria complicates this task. It is a large country characterized by vast distances to travel and poor infrastructure.

Sofiane Boudalia is one of the growing number of candidates selected to participate in the One Planet Fellowship. The One Planet Fellowship is a career development initiative that is building a robust pipeline of highly connected, inter-generational scientists equipped to use a gender lens to help Africa's smallholder farmers cope with climate change. The One Planet Fellowship is funded by the Bill &Melinda Gates Foundation, the BNP Paribas Foundation, the European Union and Canada's International Development Research Centre (IDRC). African Women in Agricultural Research and Development (AWARD) and Agropolis Fondation are jointly implementing the Fellowship.