

Summary of proposal and training plan¹ (max 1 page)

Research is a team effort. Scholars distribute roles based on the different research activities they perform. These roles shape the academic profile that will define them during their career trajectory. These roles will also change as they acquire experience and seniority. Some scientists coordinate, design and lead research agendas; others develop and produce new tools and software for data collection and processing; others develop conceptual and theoretical frameworks; others engage with non-academic stakeholders and bridge with societal demands. However, most research evaluation schemes consider career paths as homogeneous, promoting 'scientific excellence' and 'academic leadership' as the main and desired profile researchers should aim at, without considering the underlying diversity of roles and activities. **This project seeks to unveil this diversity of academic profiles and career options scientists have, with the aim to provide novel insights into different professional paths and skills necessary in scientific research.** This is an essential step towards developing more nuanced and advanced research evaluation approaches, maximizing researchers' strengths and acknowledging the heterogeneity needed in the scientific workforce to promote a healthy and sustainable research system, compared to the monotonous situation that currently exists.

This project bridges current theoretical frameworks on academic careers and organizational theory with big data analysis and advanced applied statistical techniques. We define roles based on case studies and combine scientometric analyses and sophisticated statistical methods with interviews, curricula analysis and network analysis. This is done through multiple case studies focused on two specific fields: Sociology and Clinical Medicine. These fields are characterized by having a wide range of scholarly practices as well as research team sizes and structures. We aim at defining the main research profiles in these disciplines and to contextualize them in order to understand how they complement each other. Results from cases studies are then applied at a macro scale by matching such roles with the many and varied outputs researchers produce (e.g., articles, datasets, books) and the part they play in them (i.e., contributorship). This is done by combining bibliographic and social media data from the different databases available to us (e.g., Web of Science, Altmetric.com, DataCite) through our long-standing collaboration with the Centre for Science and Technology Studies (CWTS) at Leiden University.

The candidate has a strong background in scientometric methods. Still, he will improve these skills as well as add new ones on statistical and qualitative research methods. Three courses addressing each of these skills have been selected. **Although scientific training is key for the career development of the candidate, two other equally important training objectives have been set: 1) communication and dissemination skills and 2) research management and leadership skills.** Many of these courses are included within the list of courses offered by partners of the LEaDing Fellowship programme, but other options have been included, such as the Oxford Spring School on Advanced Research Methods.

The applicant is not only expected to publish research findings in leading peer-reviewed journals. He will disseminate his work among other stakeholders and develop a statistical package in the R programming language which will be made publicly available. NWO and research managers at Dutch universities have been targeted, and the results of this project will be transfer to firms such as CWTS B.V., an independent contract research organization that provides high-quality research performance and evaluation studies at Leiden University. He will engage with large scientific publishing firms such as Elsevier or Clarivate. The postdoctoral candidate will organize a workshop with a group of stakeholders to which he will present the findings of the project. He will also use social media platforms (e.g., blogs, Twitter) with which he is already well-acquainted, to engage further audiences.

¹ In case the total number of applications exceeds 160, pre-selection will be done based on your summary, CV and motivation letter. A solid summary might be important.