Recognition and rewards: invest in multidisciplinary capacity-building programmes to nourish and uplift talent

At 4TU.DeSIRE we:

- Invest in a development of a vision for collaborative transdisciplinary research in the context of societal challenges;
- In assessments of academic staff, stand strongly for allowing room for individual talent under the umbrella of a common goal;
- Invest in group activities to enable cross-fertilization of ideas and methods.

The 4TU.DeSIRE research program has proved to benefit academic careers of early career researchers. In 2022 alone, 40% of appointed tenure trackers were promoted. In addition, 40% of the associated tenure trackers received awards and public recognition in 2022. In the same year, 15% of the appointed postdocs received a permanent position.

Of key importance for these successes were the vision of doing multidisciplinary research in the field of resilience engineering as promoted since the start of the 4TU.DeSIRE programme, the connection with societal challenges and facilitating encounters. The meetings that 4TU.DeSIRE organized initiated collaborations that in many cases have led to joint writing of research proposals, papers and projects being awarded.

Success factors

- The DeSIRE research program functioned as an umbrella: explicit recognition of teamwork in scientific research, a common goal and shared leadership in the Program's thematic Working Groups;
- The DeSIRE research program had a clear link with societal challenges and acted as a single point of contact for industry and government;
- Working Groups created within the Programme provided flexible opportunities for multidisciplinary research and thus room to develop individual talents;
- The role of senior researchers to initiate projects/collaborations offered room for young researchers, enabling them to gain the right research experience and network.

The foundational philosophy for the 4TU.DeSIRE programme directed activities in open science and in research capacity-building. Some examples that highlight the programme's contribution to academia:

4TU.DeSIRE Open Science activities

- Attention to research methodology by discussing the various roles in it and making datasets accessible
- Sharing of expertise through open seminars and conferences aimed at the widest possible scientific audience
- Giving lectures to external parties and other science communication initiatives. DeSIRE scientists have quite a track record.

4TU.DeSIRE Career development activities in 2021

- Time management course and career guidance for young researchers. Time management leads to new
 insights into time use and thus opportunities for senior researchers to negotiate with the sponsoring
 departments about the allocation of time and money for (junior) researchers
- Smart combinations of activities to save time, for example following courses in DeSIRE context and/or working together on writing research proposals
- Tenure trackers & Senior academics exchanged experiences about the assessment process, focusing on the 2019 Recognition & Reward (R&R) policy. Two members of De Jonge Akademie gave keynotes on their experiences and vision on R&R at our semi-annual conference in June 2020. This was followed up by the discussion on the academic assessments across various groups within 4TU. Besides some shared understanding, the participants also outlined possibilities for further development of the assessment criteria for each university. 4TU.DeSIRE played an important role in raising awareness of a tenure tracker about the scope of the academic field and what that means for an individual scientist to be recognized and rewarded given the R&R values (team science; open science; science communication; societal relevance).

A personal success story:

Robbin Jan van Duijne was appointed as a DeSIRE postdoc in 2021/2022 for 14 months. In this short time he received two important grants: a NWO Embassy Science Fellowship (ESF), which he spent working at the Netherlands Embassy in New Delhi for three months, and a NWO Rubicon. The latter to be spent at Columbia University in New York City, starting in January 2023. What made him so successful was that he had a thorough understanding of what he could offer others in a collaboration and had a vision of how different disciplines can complement each other. Finally, it was the meetings in person, facilitated by 4TU.DeSIRE, that played a decisive role in establishing those alliances.