



## MEMO 1: DEVELOPING EXPERTISE IN AND ON OPEN SCIENCE

This is the first two-page memo that Utrecht University's [Open Science Intervision and Advice Team](#) (OSIAT) issues. This memo is meant for those who may be new at Utrecht University (UU) and everybody who wants to get a brief picture on how UU has become an Open Science University. This memo is also for those who may seek advice on how to make transition to Open Science at their own universities, research groups, and other relevant bodies like research and consultancy centres. In this first memo, we would like to: (1) introduce you to OSIAT, (2) give a brief overview of the stages of the transition to Open Science at UU, and thus also of the steps leading to OSIAT's creation, and (3) give special attention to the first topic OSIAT's members have discussed – expert advising and expert biases. This topic has been selected to allow an intense self-reflection within the newly created team on its advisory role, and to stimulate discussions about researchers' roles when they connect with the society.

### (1) Open Science Intervision and Advice Team (OSIAT)

OSIAT is there to reflect upon the ideas and steps taken so far, and to further support the implementation and internationalisation processes at UU. It contributes to the process of embedding [Open Science](#) in the daily practices within UU: in teaching, research, and administration. It does this by focusing upon the following three tasks: 1. advising upon request, but also without request within the University; 2. serving as discussion forum for its members, and via them for their respective constituencies; and 3. guiding the transition and implementation processes, including via its memos.

OSIAT is a team of dedicated experts in specific disciplinary and inter- and multidisciplinary fields relevant for developing and promoting the Open Science ideals. The team consists of colleagues from all [UU Faculties](#), [Strategic Themes](#), relevant departments (Human Resources, IT, Library, Centre for Scientific Communication), and special bodies ([Utrecht Young Academy](#), a PhD representative, and representatives of the Open Science Community ([OSCU](#))). These members meet four times a year and discuss key issues relevant for the implementation. The agenda typically includes: updates from the Open Science Chief and Office; a thematic agenda point, which leads to the memo from that meeting; and an agenda point for its advisory and/or intervision function. While some of the thematic topics result from previous discussions within the UU's Open Science movement, the agenda is also open for discussion of issues brought ad hoc and upon request by the UU community.

### (2) Transition to Open Science: three stages of the UU's implementation process

OSIAT is part of the fourth and final stage in the transition of Utrecht University to an Open Science University. The previous three stages were centered around these key issues:

- I. *Identification of the problems and challenges within our academic community*, which included, among others, unhealthy competition, giving preferences to numerical instead of qualitative criteria, treating teaching as 'side work', 'tunnel view' on career paths and development, overworking of staff, losing talented academics due to an unsafe and unhealthy work environment. Discussions of these issues were started by individual members of staff in app. 2010-2012 leading to subsequent institutionalization in 2013 ('Science in Transition group'; read F. Miedema ['Open Science: the Very Idea'](#), 2022, on this development).
- II. *Elaboration of a plan, by setting up a working group, as to how to address the identified problems* and challenges. This working group was established in 2017 and proposed a plan for action in 2019: establishing the Open Science programme with human and financial resources.
- III. *Executing the Open Science programme* which had a team of 6 people and a considerable budget to accomplish the transition to Open Science. The Open Science programme team, led by Vice Rector Research prof. F. Miedema, has identified the 5 core tracks as the points for action: [open access \(OA\)](#), [FAIR data and software sharing](#), [public engagement \(PE\)](#), [open education \(OE\)](#), and [the system of recognition and rewards \(R&R\)](#). The whole University has been working via networked structures on these topics – fellow networks of staff members from all faculties per theme, faculty based teams focusing upon these topics (FOSTs), and a supporting team representing all faculties and special organs, like PhD representation and Utrecht Young Academy, in an Open Science (the platform which is OSIAT's predecessor). The programme streamlined and structured relevant processes (e.g. giving the library and HR



the central place to ensure open access of publications and adjust development and promotion policies respectively), defined relevant terms (e.g. what do we mean with public engagement or open education?), and discussed the scope of the development (what policy/financial choices will we make to bring focus in developing all five themes?). The programme was successfully executed in four years and resulted in a number of internal and also external reforms, such as adjusting promotion criteria, annual assessment talks' forms and promotion procedures, and publications, including an online book, on behalf of the university board, '[De Universiteit in Transitie](#)'.

### **(3) Expert advice and bias**

The first discussion of OSIAT that took place after an insightful guest lecture by dr. Johan Christensen (Leiden University), based on his recent co-edited open access book '[Expertise, Policy-making and Democracy](#)', has identified two contexts in which the topic of expert advice and bias is of crucial importance. Firstly, when starting up an advisory organ, one should ask oneself if and how advice can be given. What is the basis for giving advice? Why would one give advice in one way or the other? Secondly, OSIAT is part of the implementation step transforming UU into an Open Science university, which in turn opens up and stimulates the interaction between academic world and society ([public engagement track](#)). Research findings are there to be shared and at times are intended for, or at least relevant for, giving advice to other parties – academics, policy makers, and societal groups and partners alike. This requires being cautious of the role, limits and challenges that researchers, who are often experts in their specific disciplinary domains, can have.

Our discussions and take-aways can be summarized as follows. As regards the first question – roughly put, are we (OSIAT) well placed to advice on Open Science? – we have discussed how OSIAT can provide experience- and practice-based advice on (hurdles and opportunities) aiming at stimulating and supporting the meaningful, sensible and feasible implementation of Open Science principles and policies (and to prevent or adjust prospectless implementation strategies and activities). The wide adoption of Open Science practices is a recent development. Building expertise in the field of Open Science requires time, effort, discussions, and experience. OSIAT members have been selected based on the fact that they are experts by experience (in Dutch: ervaringsdeskundigen), being experienced in trying to put Open Science into practice, and/or thinking about how to do so and/or being expected/required to do so. Expertise by experience is particularly relevant when identifying the values at work in different academic contexts and practices. And it is not so much an individual asset, but a collective endeavor – expertise has no value without use, i.e. without the involvement of its users.

On the second question – roughly put, is a researcher well placed to advice the society? – it emerged from our discussion that it is important to engage with society, including in an advisory capacity, but also to be aware of, and be as explicit as possible, about the reasons and limits of our advice. As our guest speaker explained, experts can "[identify cause-and-effect relationships, give advice on the likely results of different policy responses, frame an issue and define policy alternatives, formulate concrete policy solutions](#)". Experts can be biased and make mistakes, but so can (and will) politicians, civil servants, etc. And this does not make experts less qualified for advice. Understanding your possible biases and taking precautionary measures are part of the solution. Giving advice by diverse teams can decrease the chances of disciplinary, cultural, political and other types of individual biases. Identifying self-interest with respect to the subject matter of advice, 'daring to speak truth to power', or advising differently than what the client wants to hear are also among the ways to ensure high quality and ethical advice. Finally, our discussion was also about if one should give advice on morals and values, where Open Science is in fact one of those. Whereas the discussion went about the proposition that 'there are no moral experts', OSIAT clearly advocates certain values, but in a way that aims at being open and critical. The team is diverse in all aspects – disciplinary backgrounds of its members, work experiences, cultural and linguistic origins – and is an independent expert group advising on the questions of 'how', rather than 'whether' as regards to Open Science. The 'whether' stage has passed already at UU: Open Science is our value.