Universities: No more exploring and navigating
Marieke Adriaanse, Paul Boselie, Henk Kummeling and Frank Miedema

The universities have expressed their aim of rewarding and appreciating all their employees. That is wonderful, but the phase of exploring and navigating has passed. Now is the time to take concrete steps forward, and that will require courage from administrators and supervisors.

We live in interesting times. The world around us demands scientific insights and solutions to major social issues in the areas of climate change, increasing inequality, aging populations, deforestation, political instability and far-reaching digitisation. COVID-19 has shown that by practising science in an Open Science manner, researchers from a variety of disciplines can help find solutions to urgent problems. The first fields to react were molecular virology and mathematical models of infection and death, followed by economists, sociologists, political scientists, and even historians working to formulate a path forward for individuals and society. They were soon accompanied by the psychologists, psychiatrists and general practitioners sounding the alarm. We went from what we’ve always referred to as the ‘hard’ sciences to the ‘soft’ ones, but those terms are misleading, because the so-called ‘soft’ science has had enormous value to society.

COVID-19 confronted us with the hierarchy in our thinking on excellence in science. A few years ago, the Health Council named that as one of the causes for the slow pace of research that is vital to public health. The ministry of Education, NWO and universities have also recognised that the pecking order in academia hinders the normal day-to-day practise of science. It short-changes excellent researchers, especially those closest to real-world practise. In this hierarchy, research is systematically elevated above teaching, impact and academic leadership. That was made painfully visible during the coronavirus pandemic: the vast majority of assistant and associate professors made a herculean effort in the abrupt transition to teaching online. Although higher education is considered to be a crucial profession in our current crisis, in our current system the efforts and successes made in the field of education can count on anything but equal appreciation from supervisors as that given to writing scientific articles and applying for grants.

We can only solve major social issues such as the coronavirus pandemic when we all work together. The time of the ‘ivory tower’ is definitively behind us: we are now in the process of transitioning from closed scientific practise to open science. We have come to the consensus that a single-minded and individual focus on research, as measured by numbers of publications, impact factors and grants received, is no longer appropriate to the age of Open Science. The VSNU et. al. position paper on rewards and incentives (2019) rightly addresses this issue. The current system of rewarding and appreciating science and academic work is no longer appropriate to the way we are asked to work today. The university is embedded within society, and where possible our education and research work are conducted in co-creation with social partners to make the world a bit better and to gain a more complete understanding of it. Those partners also deserve a say in what we do and how we do it, as much
of our work is financed with public resources. Research, education, social impact, team science and leadership all deserve more attention in how we acknowledge and appreciate scientists’ work.

Team Science, not Jack-of-all-trades
Science is a multi-event team sport, where you have to focus on social impact as well as research and education. Not every member of the team needs to excel in every event. There is plenty of room for differentiation in functions, with different accents; concrete opportunities for a palette of functions and their tasks. The existing system, with its emphasis on research and one-dimensional performance indicators, encourages one-trick ponies to compete with one another. The demand for multiple competencies presents the danger of replacing the one-trick pony with the Jack-of-all-trades, who is of course the master of none. But there is another problem with these metaphors; they both focus on a single individual. Society has long recognised, and the scientific community has realised as well, that excellent individuals do not make the difference; excellent teams do. People who grew up playing team sports know that diversity and team spirit, with respect and room for each team member’s talent, can make the team a champion. Carlijn Welten, who is currently training in child- and youth psychiatry following a long career as a member of the Dutch women’s field hockey team, has expressed her astonishment at the individualism and lack of team spirit in the academic community. She has recently begun a campaign of improvement, where she discovered that Acknowledgement and Appreciation is a major problem (Carlijn Welten: Hoe de GGZ verandert).

Good examples
Change is almost always accompanied by resistance due to fear, insecurity and personal interests - even at the university and among highly educated people. And there are indeed things at stake. Colleagues who have built a career based on their number of publications in leading periodicals and high impact scores may now be evaluated differently. It therefore seems as if we have to get back to the drawing board and re-invent ourselves. And that may well be the case, at least to a certain degree. But is it even possible to tear down such a durable system? It is, and it appears that there is enough space to do so within the frameworks that Utrecht University has been using for the past few years. Utrecht University and UMC Utrecht work on Open Science as part of their promise to make science more open, more reliable and more relevant to society. That also requires a different way of rewarding and appreciating science. We are already hard at work doing just that, in word and in deed. UMCU has been using a new method for evaluation for several years now, sparked by recent social developments and the Science in Transition movement. Since 2016, the Utrecht University School of Governance (USBO) has applied the principles of the MERIT model (Management, Education, Research, Impact and Team spirit) in individual development, annual Assessment & Development interviews, and promotions. The Faculty of Geosciences is now also working on implementing MERIT. Utrecht University and UMC Utrecht still have a long way to go, but these concrete examples show that we are moving forward, and there is plenty we can learn from one another’s experiments currently taking place with regard to alternative forms of rewards and incentives.

Leadership is an essential element in changing the system. Leaders, especially professors when it comes to academics, are the designers of human resources
policy, so they also shape employee development, motivation, assessment and compensation. Rewards and incentives are more than just an organisational system or instrument; it is above all the personal efforts of all the stakeholders (supervisors, colleagues, students, clients, etc.). The example set by leaders at every level is crucial to realise the changes that we have in mind. So, do what you say, apply the new principles in your own surroundings, and share your experiences. We are on the cusp of a cultural change, where all stakeholders - not just supervisors - can and must play an active role; from policymakers, administrators and staff to the support personnel on the shop floor.

**Actions, not words**

Good intentions are a good starting point. Communicating about our intentions is essential, especially if administrators explicitly communicate to set the right tone for the discussion and direct the change. Rector Rianne Letschert at Maastricht University is one of the administrative pioneers working to realise change. Together with other prominent academic administrators, such as Rector Frank Baaijens at Eindhoven University of Technology, she sets the tone. We face a necessary cultural change that requires a new perspective on science. Changing the stakeholders’ attitude and behaviour is perhaps the greatest challenge to the implementation and internalisation of the new model for rewards and incentives. We face the challenge of putting the new rewarding and appreciation into practise. Supervisors and a collective approach - what we refer to as 'Team Science' - will play an essential role in realising this change. We ask supervisors to join with the teams they lead to develop a vision based on Open Science, where education, research, impact and academic leadership are all taken into consideration. The recognition and appreciation of individual employees must support this vision and the goals of the team, the diversity of tasks, the variety of research and be based on quality. That will give Rewards and Incentives added value, but it is not an easy challenge. Such an integrated approach will require us to conduct difficult conversations and partnerships across the domains, but the UMCU-wide pilots and those at the faculties and departments show that it is definitely possible. It will require daring and concrete action by universities, especially by the leadership at every level: rectors, deans and department heads, down to professors: it is time to turn our words into deeds.

Marieke Adriaanse and Paul Boselie are the programme leaders for the UU Open Science programme track Rewards and Incentives; Henk Kummeling is Rector Magnificus of Utrecht University, and Frank Miedema is the Chairman of the UU Open Science programme.