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Recommendations of the "Professors of Practice" KdL working group

Dear Sarah,

The ETH is world renowned for both its research and teaching in science, engineering, architecture, policy development and management. We have a long history of being able to count world leaders in these fields amongst our faculty, and while on staff, having them not only make significant contributions to their fields but also impart their knowledge to the next generation of world leaders. These world leaders have included

- in science individuals whose work has significantly advanced the state-of-knowledge in their fields. Their contributions are typically recognized through academic awards, large research grants, large numbers of citations of their work, and invitations to speak at significant academic events.
- in engineering, architecture, policy development and management individuals whose work has helped to significantly improve society in general. Their contributions are typically recognized through awards for their work, invitations to contribute in high-level societal decision-making, and invitations to speak at significant engineering, architecture, policy and management events.

Although there are exceptions, in general, individuals in the science category would not be considered world class if they were evaluated using engineering, architecture, policy and management metrics, and individuals in the engineering, architecture, policy and management category would not be considered world class if they were evaluated using science metrics.

In the current academic environment, we are increasingly at risk of losing the ability to hire world leaders of the engineering, architecture, policy and management category, because we are increasingly using the metrics of the science category to evaluate them. This is dangerous if we are to continue to be a world leading institution in the fields of engineering, architecture, policy and management, and continue to educate the next generation of world leaders in these fields. To ward off this danger, action is required to ensure that the ETH can hire world leaders in all fields it deems necessary, as professors. Hiring world leaders at a lower level than a professor, e.g. Executive in Residences in the Department of Civil, Environmental and Geomatic Engineering, is inadequate for the following reasons.

Recommendation of the "Professors of Practice" KdL working group

- 1) It diminishes the ability of the ETH to attract world leaders, as they do not give the individuals the recognition they deserve.
- 2) It leads to hiring individuals that have less than full ownership in the ETH, as they often have
 - a. inadequate amounts of their time dedicated to the ETH, resulting in their absence from daily ETH life,
 - b. little decision-making authority, resulting in little influence in the curricula we offer our students, or how they should be developed over time, and
 - c. only short term interests at the ETH, as they are often hired on short term contracts.
- 3) It results in professors being responsible for these positions, and with the current academic award system, means that even the best-intentioned professors will likely not optimally support them.

To deal with this situation and help ensure that the ETH can continue to hire world leaders, as professors, in all fields that it deems necessary to fulfil its mandates in research, in teaching and for society in general, the working group "Professors of practice" of the KdL proposes that

- more emphasis be placed on the departmental specifications of the requirements for new professors, i.e. the professor specific profile papers, in the hiring processes of professors,

as each department has its own metrics in determining who is a world leader. This increased emphasis strengthens the ability of the ETH to have world class professors in the fields of engineering, architecture, policy development and management in the future, as there will be less chance that candidates will be inadvertently measured using metrics that do not fully capture their past contributions or their future potential.

Additionally, to help ensure that departments can hire all individuals they require to ensure they are providing a world class education to the next generation of world leaders, the working group "Professors of practice" proposes

- the development of an ETH wide framework to enable the hiring of individuals that are not professors, but are essential in the area of teaching beyond those that can be obtained through normal teaching contracts.

The establishment of such a framework involves discussions pertaining to possible titles, responsibilities within the departments, and on funding and support mechanisms. Models for this framework are the ones currently in use in DBAUG and DMTEC for "Executives in Residence". The working group takes no position as to the titles given to these individuals, but sees possibilities as "Executives in Residence", "Professors of Practice", and "Adjunct Professors", with each having advantages and disadvantages.

For questions or comments, please do not hesitate to contact me.

Sincerely,

Bryan

Prof. Dr. Bryan T. Adey – DBAUG – Infrastructure Management

on behalf of the members of the "Professor of Practice" working group of the KdL

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