

**Assessment of the
Vienna Science and Technology Fund
endowed chair program.
The example of Bioinformatics**

EXECUTIVE SUMMARY

Prof. Dr. Jakob Edler
Manchester Institute of Innovation Research
Manchester Business School, University of Manchester

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Aim and major specificity of the Science Chair Programme

It is the objective of the WWTF's Science Chair program to attract mainly young scientists in clearly defined scientific fields to Universities and Research Organisations in Vienna. Those scientists shall further advance an already leading position of the scientific location Vienna in their field or accelerate the development in a field by closing existing gaps. The scientists are enabled to build up teams and shall integrate into the institutional context of the University or the Research Institutes in Vienna. With such a starting position they then shall further develop their research teams and contribute to the visibility and integration of the science location Vienna. The Science Chairs are regularly supported for five years, and this support is supposed to lead into a self-supporting, fully integrated chair after this period.

The science chair scheme of the WWTF has a specific decision making rationale, which is new to the Austrian context. Traditionally, when appointing a new chair, the University is fully autonomous in the search and decision making process, with final decisions taken by a collective body of the University (Senate). Many endowed chair schemes allocate money to a University for a certain field or issue area, and the Universities stay autonomous in evaluating, selecting and deciding. In contrast, the endowed chair scheme of the WWTF is characterised by an external evaluation process with the final decision taken by the WWTF based on external, international evaluators. The Universities and research organisations have to find a candidate prior to the application, which is then designed and handed in jointly by the consortium and the candidate.

The Assessment

The subject-matter of this assessment are the two first chairs of the WWTF, which were funded in the area of bioinformatics in 2005 for a period of five years:

- a consortium consisting of 3 Vienna Universities (University Vienna, Medical University Vienna and University of Veterinary Medicine Vienna, altogether 7 Departments and Institutes) as principal proposer, with a set of renowned institutes as further partners¹ and the individual candidate Professor Arndt von Haeseler. This grant aims at the build up of the "*Center for Integrative Bioinformatics Vienna*" (CIBIV), in order to support further the strength of molecular biology and Biomedicine in Vienna. Mr. von Haeseler has received the title of a professor.
- the University of Bodenkultur (University of Natural Resources and Applied Life Sciences, BOKU) as principal proposer together with the Austrian Research Center Seibersdorf (ARCS), Baxter Bioscience AG, Vienna and the Competence Centre Kind ACBT, Vienna, with the Candidate Dr. David Kreil. Dr. Kreil was supported as team leader Bioinformatics.

¹ Institut für Molekulare Pathologie (IMP), Institut für Molekulare Biotechnologie (IMBA), Gregor Mendel Institut für Molekulare Pflanzenbiologie (GMI)

This assessment is no evaluation of the scientific achievements of the two chairs, but serves as basis of a learning exercise in order to better understand the instrument ‘science chair’ as such and its further development in general. It is based on an interview program and document analysis.

The two cases

After its first two years the chair of Prof. von Haeseler appears to be a success story. The group of the three participating Universities was able to attract a high level professor from Germany, who had held the title of a C4² chair. Based on his seniority and experience, Prof. von Haeseler could successfully launch the build up of a complex, integrative institute on the spot. The build up of the scientific team runs largely according to plan, concrete scientific co-operations have been established, teaching is developing and is in the process of being broadened. The conditions for Prof. von Haeseler accord more or less to his expectations – with a caveat concerning the office space, which for Prof. von Haeseler appears to be rather small and not central enough in the institution. The CIBIV is a cornerstone of the newly established Max F. Perutz Laboratories (MFPL³), in fact, the creation of the chair has been a catalyst for the establishment of these integrative, inter-University laboratories.

For the chair of Dr. Kreil, an internationally renowned high-potential, who has come from Cambridge to Vienna, the development appears to be on a fruitful trajectory in the meantime. However, there have been a set of problems in the initiation and implementation phase and the learning and adaptation costs have obviously been higher than in the case of Prof. von Haeseler. For a considerable time the candidate and the partner organisations had different interpretations about the concrete scientific function of the chair and about the autonomy of Dr. Kreil in terms of the selection and assignment of personnel. In addition, there were problems in finding and making available space for Dr. Kreil and his group in time, and it took a while to sort out some of the technicalities of the financial administration. All this contributed to the delay in the build up of the scientific team and in establishing a teaching program, and aggravated mutual uncertainty. However, all this now appears to improve, and the integration within the department and the University more general as well as the cooperation with partners of the consortium and some external partners intensify.

² ‘C4’ is the highest possible category of a professor in Germany (since 2005 replaced by ‘W3’).

³ The Max F. Perutz Laboratories at the Campus Vienna Biocenter were established to form a new research institute in the field of biotechnology with groups from the University of Vienna and the Medical University of Vienna. Created to pool the expertise of more than 50 research groups in Molecular Biology (across seven thematic fields) the MFPL represent a new and innovative approach to strengthen research and training at the university. (<http://www.mfpl.ac.at/index.php?cid=6>).

Conclusions and lessons from the two cases

- The science chair of the WWTF is an institutional innovation in Austria, which fits very well the international developments of Universities in general and the recruiting of scientists in particular given the intensifying international competition of Universities. In light of the conditions, which internationally mobile, highly talented scientists can find in many countries (e.g. tenure track), the instrument contributes to improving the international attractiveness of Vienna as a scientific location in the selected fields. The instrument has triggered intensive discussion within Universities and in the scientific and policy community in Austria. These discussions themselves could in fact be catalysts for a further modernisation of the Austrian University system.
- The initiative of the WWTF is widely supported by the various stakeholders. All those directly involved regard the management and the entire implementation through the WWTF, including the process of external evaluating, as very good and helpful.
- The Universities benefit from a high degree of flexibility, the targeted and strategically embedded search for suitable candidates and the combination of internal decision making and external quality assurance which is organised through the WWTF evaluation process (see below). In that respect, the science chair can be a sensible instrument of the strategic research planning in Universities.
- For various reasons the model is attractive for international candidates: the endowment is generous; the candidates have the opportunity to co-define their position during the initiation phase (pre-proposal phase) already; they can build up a group, get some long-term perspective and are embedded in dynamic contexts (which through the very support of the WWTF is further upgraded in the specific scientific field).
- Some of the University representatives criticise individual aspects of the design of the instrument, as it does not fully fit to the traditional process of appointing a chair as it is also laid down in the University law. As stated above, the final decision on the team of organisations *and* candidate lies – based on the external evaluation – *with the founder*. After the successful joint application the University (or Universities) are linked to their candidate. Moreover, the Universities commit themselves to establish the new post permanently once the funding is finished, provided an external evaluation after five years is positive. However, the University is still free to conduct a normal internal appointment procedure prior to the joint application with a candidate, which fully fits the internal criteria and institutionalised processes and thus ensures the selection of a candidate that is approved by the university colleagues who also would take the decision in the regular decision process.
- The attractiveness of the instruments in the international context is somewhat limited through the fact that it does not establish a full tenure track procedure. After five years, the candidate not only has to convince in an evaluation (which is true for tenure track as well), but he has to go through a full regular appointment procedure of the University⁴. Further, due to the Austrian University Law the title of a professor can only be conferred through a University, the very fact of receiving the grant thus does

⁴ Such a procedure has its own imponderables, and the long term perspective is thus less clear than in a tenure track which is entirely built on indicators and external evaluation.

not automatically imply the title of a professor. Finally, the proposal procedure puts a lot of burden on the candidates, as they have to be involved very early on in the proposal process and are thus exposed as being interested in some new position long before they have an official offer for this position. In conjunction with the somewhat limited tenure perspective this causes a problem especially for established scientists who already have tenure elsewhere.

- In order to confer the title professor to an endowed WWTF chair even without the traditional process of appointments (which normally are decided by the University Senate), the rectors of the three Universities jointly supporting Prof. von Haeseler have applied §99 of the University Law. This paragraph allows each rector to confer the title Professor to a scientist without asking the Senate for approval for the duration of two years. The three Universities did this in a chain model agreement, so that they apply the legal possibility subsequently. This complex construction hardly is more than a not fully satisfying ‘workaround’. The second alternative, employment of a chair without the title – as done for Dr. Kreil – means that the position is less prestigious and thus less attractive in the international competition for ‘high potentials’.
- One remedy for the science chair instrument could be to entitle the Rector of a University to appoint a Professor (including the title) without the regular appointment procedure up to a period of five years instead of two. This way the Rector could confer the Professor title to a WWTF chair after the WWTF has decided for the full period of the grant. Such a procedure could still be accompanied by an internal process of decision making that equals the normal appointment procedure, but *precedes* the WWTF decision and leads to the selection of a candidate for the joint application. In doing so, the University bodies that are normally responsible could still – de facto – decide.
- Finally, the two case studies make us conclude that there are a range of pre-conditions, which should be met in order to make the instrument fully effective in the context of University strategies and individual careers:⁵
 - A broad and visible *participation of the entire hierarchy* of the applying institutions, especially ensuring that the engagement of the interested scientific colleagues in the applying institutes is not based on punctual co-operation, but on a strategic and long-term interest.
 - A systematic *expectation management* of all participating parties *during the initiating, pre-proposal stage*, with discursive elements before applying. Such early intensive discourses of all relevant stakeholders should ensure full transparency, converging perceptions of the new role that is created, build up of mutual trust with *all* stakeholders and definition of priorities and foci within the very broad catalogues of targets which characterizes the instrument. The very fact that all parties commit themselves to strong partnerships and are interested in

⁵ These principles are all to be applied within the existing framework. While adaptations in the legal framework might be desirable (e.g. tenure track, more autonomous University leaderships), pragmatic recommendations to the WWTF – not the Austrian legislative – have to take the existing legal framework as a basis.

creating a permanent position and group at the University imposes the need that the conditions are clear for all participants *before* applying. Tiresome negotiations after the chair has been granted should in principle not be necessary. This also requires sufficient time between the publication of the call for the chair and its deadline.

- A more conscious *integration management*, with commonly agreed, but sufficiently flexible steps towards the build up of co-operations and a high profile within the host institution and partner institutions. This could, where appropriate, be supported through an integration mentor or a small, flexible supporting group. This mentor or groups could, if necessary, provide precautionary conflict management.
- Even more rigorous *check of all the commitments* given by the institutions in the proposal as relates rooms, infrastructure and financial modalities.
- *Support of the chair in terms of administration*, which should – as needed – be clearly formulated within the proposal already.

The Interview Programme

14.05. 2007

15:00 16:00 Rector Prof. Georg Winckler, University Vienna
17:00 18:00 Vice-Rector Prof. Barbara Sporn, Vienna University of Economics and
Business Administration (WU)
18:30 19:30 Mag. Harald Hochreiter, Max F. Perutz Laboratories,

15.05. 2007

09:00 11:00 Science Chair Prof. Arndt von Haeseler
11:00 11:45 Prof. Andrea Barta, Medical University Vienna (MUW)
11:45 12:30 Prof. Karl Kuchler, Medical University Vienna (MUW)

14:30 16:30 Science Chair David Kreil (with follow up 25.06.07, telephone)

16.05.2007

09:00 10:00 Interview Prof. Arnold Schmidt
10:30 11:30 Roundup with Dr. Michael Stampfer and Klaus Zinöcker, WWTF
12:00 13:00 Interview Vice-Rector Prof. Martin Gerzabek and Rector Prof.
Hubert Dürstein, University of Natural Resources and Applied Life
Sciences (BOKU)

22.06.2007

09:30 10:30 Telephone Interview Dr. Anja Fliess, VW Foundation

05.07.2007

12:00 13:15 Telephone Interview Prof. Karl Bayer, University of Natural Resources
and Applied Life Sciences (BOKU)