

VRG PROGRAM EVALUATION 2021

wwtf.at

Vienna Science and Technology Fund

REPORT BY THE
INTERNATIONAL REVIEW PANEL

Björn Ottersten
Lejla Batina
Matthias Egger
Katharina Kromholz
Maria Leptin
Dirk Schübeler

W|W|T|F

Imprint

Wiener Wissenschafts-, Forschungs- und Technologiefonds WWTF

Vienna Science and Technology Fund

Schlickgasse 3/12, 1090 Wien, Austria

T +43 1/402 31 43 19

office@wwtf.at, wwtf.at



© WWTF 2022, Layout: WWTF



First version, 01/2022

Report by International Review Panel

VRG Program Evaluation 2021

Table of Content

I. Executive Summary	3
II. Introduction.....	6
III. Evaluation approach	7
3.1 Methods and data sources.....	7
IV. Evaluation results	9
4.1 Attractiveness of the programme.....	9
4.2 Selection procedures and programme management.....	10
4.3 Performance of the VRG group leaders.....	11
4.4 Embedding of VRG group leaders in the host institution.....	11
4.5 Impact of the programme on the research environment in Vienna .	12
V. Recommendations regarding future of the programme	13
5.1 Continuation of the programme	13
5.2 Continuation of the excellent programme management & support	13
5.3 Gender balance in applications.....	13
5.4 Transparent career perspectives.....	13
5.5 Topic selection and sufficient size of candidate pool.....	13
5.6 Extension of the eligibility period.....	14
5.7 Structured onboarding and training programme.....	14
5.8 Limiting teaching commitments	14
5.9 Relocation package.....	14
5.10 Habilitation equivalence.....	14
VI. Annex	15

I. Executive Summary

This report presents the international review panel's findings from the evaluation of the funding programme Vienna Research Groups for Young Investigators (VRG) by the Vienna Science and Technology Fund (Wiener Wissenschafts-, Forschungs- und Technologiefonds, WWTF).

As laid out in the terms of references of the external evaluation of the VRG programme, this report focuses on the question whether the programme has reached its overarching goal of strengthening Vienna as research location, and to provide recommendations as to the future evolution of the VRG programme.

Following the specific evaluation questions by the WWTF, the report addresses

- (1) the attractiveness of the programme for young researchers,
- (2) the quality of the selection procedures and programme management,
- (3) the academic and professional performance of the VRG group leaders,
- (4) the embedding of the group leaders in the host institutions,
- (5) the impact of the programme on the research environment in Vienna, and, based on evidence from the input received,
- (6) concrete recommendations regarding the future of the programme.

This report is authored by an international panel of six scientists with backgrounds in disciplines matching the research areas of the VRG programme. The panel was supported by the Austrian Institute of Technology.

The report draws on multiple data sources, including

- (1) in-depth group interviews with the majority of current VRG grantees, WWTF board members, and university representatives,

(2) comparative bibliometric analyses and a study conducted by Katholieke Universiteit Leuven and the Austrian Institute of Technology¹, and

(3) a self-evaluation report provided by the WWTF².

With regard to the qualitative and quantitative results from interviews, the survey, and the bibliometric analyses, this evaluation encompasses the 21 VRG projects funded between 2010 and 2019 of the total 23 projects funded until 2020.

The panel concludes that, by all accounts, the VRG programme has fully met the goals set forth by the WWTF. Indeed, the programme appears to be a highly attractive source of funding for high-potential researchers and is considered a very valuable and attractive opportunity for them to establish an independent research group in Vienna.

VRG leaders appear well established and embedded in Viennese host institutions, with most VRG leaders having remained at Vienna institutions at the end of the VRG grant.



¹ Hawlik R., Zieser M., Dinges M., Schiebel E., Thijs, B. and Glänzel W. *VRG Program Evaluation: Accompanying Research*. WWTF, 2022.




² Lasinger D., Stampfer M., Steinkogler P., Strassnig M. *VRG Program Evaluation: Self-Evaluation Report by WWTF Office*. WWTF, 2022.

As a result, VRG leaders showed considerable performance in their research output and in acquiring additional funding. Moreover, the programme represents a structural impulse that supported universities in implementing and improving a tenure track system and raising their evaluation and hiring standards.

Selection procedures and programme management were unanimously described as excellent. The selection of VRG proposals appears to meet the highest international standards. All stakeholders and particularly the VRG leaders expressed the highest appreciation of the programme management and the support and personal care provided by the WWTF office.

The panel emphasizes the unique and important function that the VRG programme appears to fulfil in the context of university-based research in Vienna, which dominates the Austrian research landscape. Based on the detailed evaluation results, i.e., evidence from interviews, the accompanying research, and in-depth discussions among the panel, the panel sets forth the following recommendations for the future of the VRG programme:

<h2>Recommendations</h2> 	
Continuation of the programme	Extension of the eligibility period
Continuation of the excellent programme management and support	Structured onboarding and training programme
Gender balance in applications	Limiting teaching commitments
Transparent career perspectives	Relocation package
Topic selection and sufficient size of candidate pool	Habilitation equivalence

(1) Continuation of the programme

The panel recommends that the programme be continued and, ideally, expanded.

(2) Continuation of the excellent programme management and support

Given the high satisfaction with the application process, administrative requirements, and the programme management and support by the WWTF, the panel suggests keeping the main processes as they are and continuing with the high level of support activities.

(3) Gender balance in applications

Given the overall low number of female applicants and grantees (about 20 %), the panel recommends that the WWTF set hard targets on the gender balance of application interviews and VRG awards, such as a 30 % ratio of female applicants or grantees. In addition, the panel strongly encourages a review of the application and selection process by an external gender expert.

(4) Transparent career perspectives

Transparency for the VRG leaders about the rules for career negotiations within the host institutions appear to be lacking. The panel thus recommends that rules be made transparent for VRG leaders in the onboarding phase. Universities should be encouraged to further develop mechanisms to retain VRG grantees. A structured and transparent process for their career perspective as associate professor, including promotional opportunities, endowment of resources, and expectations of the research institution could be set up.

(5) Topic selection and sufficient size of candidate pool

The panel recommends that the WWTF should continue to consult the research community in Vienna to select topics in a mixed mode of top-down prioritisation and bottom-up feedback but consider a more

structured approach collecting input from international and external experts to ensure that the strategic objectives are met. In topic selection, WWTF should ensure a sufficiently large pool of suitable candidates and appropriate diversity within fields and grantees.

(6) Extension of the eligibility period

To ensure that talented young researchers from all disciplines are targeted by the calls, the eligibility period for applications should be set to a range of zero to eight years after acquiring a PhD. The evaluation process should be calibrated accordingly.

(7) Structured onboarding and training programme

The WWTF could facilitate a more structured onboarding and offer a leadership training programme to VRG leaders across institutions.

(8) Limiting teaching commitments

While teaching commitments by VRG grantees appear to be reasonably limited in most cases, the WWTF should specify a maximum level of teaching commitments for VRG leaders and arrange for financial compensation to the WWTF in case of excessive teaching loads.

(9) Relocation package

While the support by the WWTF with administrative hurdles, relocation, and dual career issues was deemed excellent by interview and survey participants, a relocation package offered by WWTF could help to further facilitate the process of relocating to Vienna and increase the overall attractiveness of the programme.

(10) Habilitation equivalence

The panel welcomed the positive impact of the programme regarding supervision rights for candidates. VRG grantees passing the mid-term evaluation should be considered to have habilitation equivalence at all institutions.

II. Introduction

The Vienna Science and Technology Fund (Wiener Wissenschafts-, Forschungs- und Technologiefonds, WWTF) is a private, non-profit research funding organisation founded in 2001 with the goal to fund top-level research and to increase the attractiveness of Vienna as a research location.

It is financed by a private banking foundation (Privatstiftung zur Verwaltung von Anteilsrechten) and the City of Vienna. Having begun operations in 2002, the WWTF has supported research with overall 206 million Euro until 2020, of which 144 million were provided by the banking foundation and 62 million by the city of Vienna. The WWTF is governed by a six-person Board of Directors receiving advice from 26 members of the Advisory Board (Kuratorium). Operative management is conducted in the WWTF office by a team of nine employees.

Since 2010, a major instrument of the WWTF's funding portfolio, the programme Vienna Research Groups for Young Investigators (VRG), aims to attract promising young researchers from abroad in their early career (2–8 years after the PhD) and provide them with the means to conduct excellent research in Vienna. Funded by the city of Vienna, the programme endows grantees with up to 1.6 million Euro, aiming to anchor them to Vienna and enable them to establish high-performing research groups and pursue successful careers at Vienna host institutions within the project duration of typically seven to eight years. Until 2020, the VRG programme has funded 23 candidates with a total sum of 34.3 million Euro.

The VRG programme and its thematic focus has been developed in collaboration with Vienna research institutions and aims to offer a unique opportunity for grantees to establish long-term careers in Vienna in the form of a

tenure track model specified in the grant agreement. The tenure track, formally established in the Austrian University Law and universities' wage agreements, is a relatively recent addition to the career models at Austrian universities. It allows assistant professors in tenure track positions to acquire tenure as associated professors after evaluation based on performance benchmarks for research and teaching specified in the qualifying agreement (Qualifizierungsvereinbarung). Promotion to a full professorship, however, are managed differently depending on the university. The university of Vienna, for example, has established an "internal competitive procedure" for this purpose³.

³<https://personalwesen.univie.ac.at/jobs-recruiting/tenure-track-professuren>

III. Evaluation approach

Subject of this evaluation is the WWTF's funding programme Vienna Research Groups for Young Investigators that started operations in 2010.

Subject of this evaluation is the WWTF's funding programme Vienna Research Groups for Young Investigators that started operations in 2010. This evaluation report by the international review panel sets out to provide an independent assessment of the programme's accomplishments and the fulfilment of its goals, and to provide recommendations as to the future orientation and set-up of the VRG programme. Findings from the evaluation will serve as the basis for subsequent negotiations with the City of Vienna on the continuation, expansion, or adaptation of the programme.

Given the overall strategy of the WWTF and the VRG programme, the central evaluation questions are:

(1) Attractiveness of the programme:

- Is the programme able to attract excellent young researchers (in terms of career models, budget, other conditions)?

(2) Selection procedures and programme management:

- Are WWTF selection procedures conducive to facilitate the programme goals?
- Did WWTF select outstanding candidates according to the programme's benchmark?

(3) Performance of the VRG group leaders:

- What is the performance and quality of the outputs of the group leaders in terms of scientific publications, supervising and teaching?
- Were the group leaders successful in pursuing their career (career steps, new grants, etc.) in Vienna or elsewhere?

(4) Embedding of group leaders in the host institution:

- What is the interplay between the set-up of the Vienna host institution (in particular, the faculties / departments) and the ability to attract excellent candidates for VRG leaders?
- How well are the group leaders integrated in the host institution (careers, collaborations and roles at the faculty) and in the Vienna research landscape?

(5) Impact of the programme on the research environment in Vienna:

- Which structural effects did the programme have on the local research environment and its institutions such as career models, growth of fields, establishment of new topics, bridging disciplines, or other spill-overs?

(6) Recommendations regarding the future of the programme:

- Should the programme in its current set-up be continued or are there better suited alternatives to reach the goals? What should be changed/ could be improved?

3.1 Methods and data sources

The international review panel authoring this report consists of six experts with backgrounds in disciplines matching the research areas of the VRG programme, namely mathematics, life sciences, and computer science.

The six members of the panel are:

- Professor Björn Ottersten (Chair), Université du Luxembourg and KTH Royal Institute of Technology

- Professor Lejla Batina, Radboud University
- Professor Matthias Egger, University of Bern / President SNF
- Dr. Katharina Krombholz, CISPA Helmholtz Center for Information Security
- Professor Maria Leptin, University of Cologne / Director EMBO / President ERC
- Professor Dirk Schübeler, Director Friedrich Miescher Institute for Biomedical Research (FMI) and University of Basel

The assessment by the panel builds on a variety of methods and data sources, namely:

- A Self-Evaluation Report on the VRG programme (conducted in-house by the WWTF⁴)
- An Accompanying Research Report presenting findings from comparative bibliometric analyses on the publication impact of VRG leaders, an online survey with the VRG leaders and a focus group with seven VRG leaders (conducted by researchers from the Katholieke Universiteit Leuven and the Austrian Institute of Technology)⁵
- Interviews with relevant stakeholders

Interviews were conducted by five panel members at the premises of WWTF on 13 and 14 October 2021, with most interviewees being present in person and some joining online via video call. Interviews were organised in six sessions with questions tailored to the respective stakeholder group, each lasting ca. 60 minutes. Participants included VRG leaders, VRG proponents, WWTF Advisory Board Members (university representatives and policy experts), the WWTF board of directors.

Overall, 31 participants joined the group interview sessions (14 VRG leaders, 9 proponents, 5 WWTF Advisory Board members and 3 policy experts and other stakeholders, and 3 members of the WWTF Board of Directors). While the interviews were based on an interview guide (see Annex), the interview sessions provided ample opportunity for spontaneous statements and open discussion. Except for interviewees from the WWTF Advisory Board, no WWTF staff was present during the interviews. Moreover, participants were guaranteed anonymity, and no video or audio recordings were made during the sessions.

The Self-Evaluation Report by the WWTF provides an overview on the WWTF's operations, the background and strategic goals of the VRG programme, and statistics on the programme's features and accomplishments, such as the thematic calls, funding, and gender aspects.

The Accompanying Research Report presents findings from bibliometric analyses, contrasting the publication impact of 20 VRG leaders (years 2010–2019) with ERC Starting Grant recipients and the general population of Austrian researchers and illustrating the establishment of VRG research fields in Vienna. It also details results from an online survey with 19 VRG leaders conducted in May 2021 that focused on the evaluation questions from the perspective of the grantees, with a focus on the attractiveness of the programme, its selection procedures and management, achievements and career development of VRG leaders, and their embedding in the host institutions. Survey results were then validated and discussed in a focus group with seven VRG leaders conducted in June 2021.

⁴ Lasinger D., Stampfer M., Steinkogler P., Strassnig M. *VRG Program Evaluation: Self-Evaluation Report by WWTF Office*. WWTF, 2022.

⁵ Hawlik R., Zieser M., Dinges M., Schiebel E., Thijs, B. and Glänzel W. *VRG Program Evaluation: Accompanying Research*. WWTF, 2022.

IV. Evaluation results

The VRG programme pursues the strategic goal to strengthen Vienna as a research location and the instrument places a special emphasis on attracting and promoting young researchers in fields that are important for Vienna⁶.

Feedback from all stakeholders has been very positive and there is strong consensus that the VRG programme is excellent.

The evaluation results indicate that the strategic and operational objectives of the programme have been fully met as it

- (1) attracts outstanding young talent to Vienna and facilitates long-term integration,
- (2) advances models for career development and promotion at Viennese universities and research institutions and
- (3) strengthens central research fields in Vienna.

Indeed, the programme appears to have found a gap in the Viennese research support system and a good focus on areas with particular importance for Vienna.

The programme is highly competitive and has a large impact on the quality of science, advancement of research careers, and the structure on institutions well beyond the small size of the programme. It succeeded in retaining a substantial number of funded researchers and their groups in Vienna. With regard to the programme management, all stakeholder groups agreed that the WWTF office provided excellent support to VRG leaders.

The subsequent subsections follow the evaluation questions as described in Section 3 and present detailed evaluation results and observations by the international review panel. As outlined in Section 3.1, evaluation results are based on the interviews conducted by the

panel, the WWTF's self-evaluation, as well as the bibliometric analyses, survey, and focus group detailed in the Accompanying Research Report. Specific recommendations based on the panel's findings are presented in Section 5.

4.1 Attractiveness of the programme

Overall, the programme is very well perceived by all stakeholders. The interviewees described the programme as unique within the Austrian Research System and stated that it fills a significant gap in the funding landscape. Furthermore, the programme was referred to as a structural impulse that supported universities in implementing and improving a tenure track system and that attracted high potential researchers.

Especially the VRG leaders perceived it is the best (and sometimes only) opportunity to build their own group and have a long-term career perspective in Vienna. The interviewees mentioned that the programme is special in the way it provides grant holders with an endowment of resources that are generally not offered in the Austrian tenure-track system. The survey and focus group with VRG leaders confirm these impressions, indicating that the grant's features are well suited to attract talented researchers and allow independent, top-level research.

In the interviews and the survey, VRG leaders stated that the perspective of a permanent position (and, if possible, a full professorship) made the programme particularly attractive. However, some interviewees also reported that VRG leaders at the point of being offered

⁶ For strategic and operational goals of the programme, see Lasinger et al., Self-Evaluation Report, 19.

tenure have no option to negotiate for additional support or funding with the university, unlike directly hired professors. The impression of the committee is that the exact path towards improving their position was not transparent to many VRG leaders.

The panel concludes that the VRG programme indeed fulfils a unique function in the Austrian funding landscape and acknowledges the positive view all interviewees as well as survey and focus-group participants had of the programme. The panel appreciates the focus on scientific excellence and the scientific freedom that the VRG grants provide. The programme makes a significant investment into people and provides a long-term perspective in academia.

4.2 Selection procedures and programme management

Due to its attractiveness, the VRG programme is recognized as extremely competitive. Host institutions commit to offering tenure track positions to successful candidates and proposals are submitted jointly between the host institution and candidate. Based on the survey and interviews with the different stakeholders, the panel concludes that the evaluation and assessment of VRG proposals meets the highest international standards. Internationally recognized scientists conduct the scientific evaluation and participate in the evaluation panels. Moreover, all stakeholders agreed that the programme management is exceptional. It is particularly satisfying to hear how well the VRG leaders felt treated; some stated that they even felt privileged within their institutions and that the WWTF supported them whenever they needed it.

Scope of calls

The scope of the calls was raised by several of the stakeholders. Arguments were made for both broadening the thematical scope (mostly by the proponents) versus keeping the calls focussed. At the Board and Advisory Board

levels, it was recognized that the size of the VRG programme requires focussed calls to strengthen and ensure impact in fields of strategic importance to the region. Too focussed calls, however, may lead to a small number of applications which in turn could make it more difficult to find high-potential candidates and achieve a good gender balance.

Interdisciplinary calls were mentioned as creating unique opportunities and filling gaps. WWTF engages in a mixture of bottom-up/top-down processes in determining the scope of calls. The Advisory Board, consisting of university representatives and policy experts, plays a crucial role in preparing and selecting the scope. The interaction between the Boards appears to work very well in this respect, with all potential host institutions being represented. However, the panel observed some indications that few large institutions may dominate the process and may exert disproportionate influence on the programme development.

Lastly, the panel notes that the programme is only open for candidates two years after completion of their PhD. In particular in the area of computer science, however, two years are too long, as talented researchers may already be on the job market during this time.

Selection process

In the interviews, the proponents stated that the high scientific standard in the selection process is comparable to those at the European Research Council (ERC) or Max Planck Institutes and thus superior to most other funding programmes in Austria. Overall, there were no negative comments but only praise for the application and selection process in the interviews. In the survey, VRG leaders expressed high satisfaction with the application process, particularly with the availability of information, the transparency of application processes and the WWTF's response time.

Management and support

All evidence suggests that the programme is managed in a highly professional manner by the WWTF office with attention to detail and personalized service. In the survey and focus group, VRG leaders reported very high satisfaction with the programme management, with 90 % of participants giving the highest possible rating. In the interviews, several examples were provided where the WWTF staff have gone well beyond what is expected of a funding agency to support VRG grant holders. This includes, for example, stepping in as an interface to the host institution when required, providing support for spouses to find job opportunities in Vienna, and assisting in finding childcare.

The low scientific and financial reporting overhead, the flexibility in spending the resources and the pragmatic and helpful attitude of the funding agency were perceived as positive. The grant holders appreciate the light reporting requirements, both scientifically and financially, and the trust placed in them. Moreover, VRG grant holders expressed appreciation of the network of VRG grant holders and social events (lunch at City Hall, hikes in the Vienna surroundings) organized by the WWTF, which help to build a community of the grantees.

Gender balance and diversity

The panel notes the severe gender imbalance among the grantees, with only 18 % female applicants and 22 % female grantees⁷. Among the grant holders, male individuals from German speaking countries appear to dominate. However, there seems to be no indication that the bias arises in the selection process. Instead, it is already apparent at the stage where the institutions put forward their candidates, and it is at this point that the panel sees a need for action. The panel concludes that, with the right measures, the VRG programme could be an excellent instrument to attract a more diverse talent pool to Vienna institutions.

⁷ See Lasinger et al., *Self-Evaluation Report*, 23.

⁸ See Hawlik et al., *Accompanying Research*, 17-32. The main analyses are based on the publication output of granted VRG projects. Including all publications from VRG leaders that were made during the project duration, including several articles in high-impact journals, resulted in similar or better performance metrics. In the WWTF reporting system, there are two categories of reported publications: a) publications directly stemming from the WWTF funded project; b) other high-level publications by the funded researchers in the same time period. This differentiation is done by few funding agencies but allows for better differentiation of funding effects. It also means that WWTF funded projects may exhibit a relatively lower publication performance due to this method.

4.3 Performance of the VRG group leaders

The bibliometric analyses showed that all VRG leaders had been very productive. While the dataset is not sufficiently large to allow a statistical significance, comparisons of VRG leaders' publication performance to that of other groups (ERC Starting Grant recipients, rejected VRG applicants and the general population of Austrian researchers) raises no concerns⁸.

Moreover, other indicators show that the VRGs have performed extremely well. Most notably, VRG leaders have acquired grants from a wide range of funders, some of which in highly competitive calls, such as the ERC or the FWF Start Grant programme. While most of the VRG leaders remained in research institutions or universities in Vienna, some were recruited away to top international institutes such as Rockefeller University or the EMBL, again testimony to their top-level performance. Self-assessments from the online survey confirm these indications, with most VRG leaders expressing high satisfaction with their own research and teaching activities.

The panel enjoyed the interviews with the VRG leaders. All participants came across as mature and thoughtful scientists, with a balanced view of their roles. They had a realistic and positive view of what the programme had done for them, and where they stood in their current career. All had achieved good positions and had made significant contributions in their fields. Several of the grantees have initiated research collaborations with companies in Vienna, thereby contributing to the development of the wider research system in the region.

4.4 Embedding of VRG group leaders in the host institution

Onboarding

Judging by results from interviews, the panel observes large variation in the ways institutions approach the onboarding process. Some institutions offer support and mentoring with recruiting and hiring, getting familiar with the

academic and general culture in Vienna, and with requirements of German language. At some institutions, leadership trainings and other “soft skill” programmes were available for VRG leaders.

Teaching requirements and supervision

The grantees have the same teaching requirements as other researchers within the framework of tenure track positions, which is important for their evaluation and promotion. As indicated in the interviews and the survey, most VRG leaders find the teaching requirements reasonable. However, some interviewees noted that there appears to be a lack of transparency on the expectations from the host institution and especially on conditions following a promotion.

Regarding the supervision of PhD students, in Austria, faculty members are not allowed to supervise PhD students without habilitation. In practice, however, VRG grantees are exempted from this. This brings up the question of the relevance of the habilitation still pervasive in the Austrian academic system, both for VRG leaders and in general.

Promotion opportunities

The path to a professorship is not always clear at some of the host institutions and there are different ways this is handled. The possibility for VRG grantees to negotiate and secure resources at the host institution upon successful promotion was an issue raised by several grantees. It appears that negotiation is only possible once a competing offer from another institution is presented.

Both in the interviews, the focus group, and the survey, several grantees noted that the current tenure-track model leads to an associate professorship position that comes with no additional resources besides their personal salary. As mentioned, negotiations for additional resources or a full professorship appear to require a competing offer by another institution. This strategy appears counterproductive for retaining good researchers, as it incentivizes very promising scientists to apply at other institutions abroad.

4.5 Impact of the programme on the research environment in Vienna

The documentation and responses in interviews provided to the panel revealed that the VRG programme had clear and noticeable impact not only the quality of research but also on the local research organization and structures. Most importantly, the high quality of the recruits (see Section 4.3) and their research productivity strengthen the research quality and competitiveness of the Vienna research area. The independence of the WWTF allows it to target trans-disciplinary topics, gaps in the funding landscape and to strengthen critical mass in several areas of importance to Vienna.

Due to the coordinated focus of each call and the presence of all main institutions in the Advisory Board, impact on the research environment across all academic institutions can be created that goes well beyond the small size of the VRG programme. University representatives praised how the programme had set an example on recruitment procedures and performance reviews by using international review boards consisting of leaders in the respective fields.

In the interviews, it was particularly evident that the VRG programme was critical in catalysing the establishment and review procedures for tenure track. Young investigators with competitive, independent funding are less dependent on senior investigators and departments and thus help to dismantle the traditionally rigid university hierarchies. Several grantees also noted that the engagement by the WWTF supported them in addressing issues with their host institutions.

The panel concludes that, as an external player, the WWTF is in a position to challenge the status quo and be an agent of structural changes, a function that continues to be critical in the coming years. By all accounts, the VRG programme and its management have done an excellent job in this regard. In summary the panel is of the opinion that the VRG programme, particular in light of its modest overall size and number of recruits, has had a highly positive and noticeable impact on the Viennese landscape with respect to research excellence and structural changes.

V. Recommendations regarding the future of the programme

5.1 Continuation of the programme

Given the high satisfaction with the VRG programme among all stakeholders and the evident success of the programme in fulfilling its goals, the evaluation panel recommends that the programme be continued and, ideally, expanded.

5.2 Continuation of the excellent programme management and support

The satisfaction with the application processes, the administrative requirements, the structural support of WWTF as well as the personal engagement of the VRG programme manager and the WWTF director has been exceptional. The programme selection process meets international criteria for peer review, the handling by the office is excellent, light reporting is appreciated, and there is enough flexibility with regard to spending of resources.

The panel thus suggests keeping the main processes as they are and continuing with the high level of support activities that have been established. In accordance with Sections 5.3 and 5.5, WWTF should review the search processes at the host institutions and the selection process to improve diversity.

5.3 Gender balance in applications

Gender balance and diversity were frequently mentioned as a challenge during the interviews. With only 18 % female applicants and 22 % female grantees⁹, the overall number of female applicants and grantees is clearly not satisfying. While the panel found no evidence of a selection bias in the peer review process, a bias in the search and synchronisation process of applicants may exist.

The WWTF needs to develop and take measures that achieve a better balance in applications. Measures that could increase diversity could focus on 1) the scope/topic of calls (see Section 5.5), and 2) the search and synchronisation process at host institutions. The panel recommends that the WWTF set hard targets on the gender balance of application interviews and VRG awards, such as a 30 % ratio of female applicants or grantees. Moreover, the panel strongly encourages a review of the application and selection process by an external gender expert.

5.4 Transparent career perspectives

WWTF puts a large investment into talent and care needs to be taken that these scientists are retained and nurtured. While VRG funding provides grantees with significant resources, the panel was surprised that VRG leaders perceived no opportunity to negotiate their endowment as associate professors. There is an apparent lack of transparency for the VRG leaders about the rules for such negotiations (e.g., at least at one university, a competing outside offer is considered necessary). This should be made transparent for VRG leaders in the onboarding phase.

Universities should be encouraged to further develop mechanisms to retain VRG grantees. A structured and transparent process for their career perspective as associate professor, including promotional opportunities, endowment of resources, and expectations of the research institution could be set up.

5.5 Topic selection and sufficient size of candidate pool

The programme provides VRG leaders with substantial resources to build up research groups at Viennese institutions in

⁹ See Lasinger et al., *Self-Evaluation Report*, 23.

specifically defined topic areas. There were opposing views on the question whether the calls should be broader than they currently are or remain focussed on specifically identified fields. This poses a challenge to programme management that needs to be considered.

Because the resources of WWTF are limited, focused calls are important. However, WWTF needs to ensure that topics are chosen in a manner that a sufficiently large pool of suitable candidates can apply, and that diversity of topics within specific priority fields and grantees is ensured. WWTF should continue to consult the research community in Vienna to select topics in a mixed mode of top-down prioritisation and bottom-up feedback but consider a more structured approach collecting input from international and external experts to ensure that the strategic objectives are met.

5.6 Extension of the eligibility period

The current period of two to eight years is too late to target young, talented researchers, particularly in the area of computer science. To ensure that talented young researchers from all disciplines are targeted by the calls, the eligibility period for applications should be set to a range of zero to eight years after acquiring a PhD. The evaluation process should be calibrated accordingly.

5.7 Structured onboarding and training programme

The additional activities for grantees by WWTF appear to be fit for their purpose, and current social activities provided by WWTF already incentivise network building among VRG grantees.

However, the WWTF could consider facilitating more structured onboarding and offer a leadership training programme across institutions among the network of VRG grantees. Complementary training in addition to the training provided by host institutions could facilitate a cross-institutional network that is beneficial for potential future leaders of the university system in Vienna.

5.8 Limiting teaching commitments

Teaching commitments of VRG grantees are reasonably limited but, in some cases, the teaching load is significant and comprises development of new courses etc. WWTF should specify a maximum level of teaching commitments for VRG grantees in the grant agreement. In the case of excessive teaching load, a financial compensation to the WWTF should be provided by universities.

5.9 Relocation package

While the support by the WWTF with administrative hurdles, relocation, and dual career issues was deemed excellent by interview and survey participants, a relocation package offered by WWTF could help to further facilitate the process of relocating to Vienna and increase the overall attractiveness of the programme.

5.10 Habilitation equivalence

The panel welcomed the positive impact of the programme regarding supervision rights for candidates. VRG grantees passing the mid-term evaluation should be considered to have habilitation equivalence at all institutions.

VI. Annex

6.1 Interview guides

General introduction and information to participants

Welcome! Thank you for coming to Vienna and taking the time today to answer our questions about the VRG programme. The purpose of today's interviews is to collect further information on the evaluation questions and to give you the opportunity to speak about topics that may not yet have been covered in sufficient detail in the evaluation process. We would like to encourage everyone to provide answers to each question, including specific examples, if possible, and to feel free to chime in if you would like to add something to someone else's answer.

Today's interviews are accompanied by employees of the AIT, who will take notes. The interviews will not be recorded and no one except the Evaluation Panel and the note takers from AIT will have access to the notes. Your answers will remain anonymous with respect to the WWTF and the host institutions, and in any published material. We would like to encourage everyone to speak freely. There is no risk of any negative consequences because of critical responses; we are not here to evaluate you, but the VRG programme.

Questions to the VRG leaders

- (1) How would you summarise the impact of the VRG programme on your research and career?
 - a. How did the VRG programme affect your research and publication activity?
 - b. How did the VRG programme affect your long-term career prospects?
- (2) What were the biggest benefits of the VRG programme?
- (3) What were the biggest obstacles during the VRG programme?

- a. Which administrative hurdles did you have to overcome during the application and the grant period?

- (4) If you could change whatever you wanted about the programme, how would you improve it?

- a. What changes at your host institution would be needed to maximize the impact of the VRG programme?

- i. What specific types of support would be needed from the host institution?

- b. What changes at the WWTF would be needed to maximize the impact of the VRG programme?

Questions to the VRG proponents

- (1) In your experience, what are the most important differences between the VRG programme and other (international) funding programmes?
 - a. What are the VRG programme's biggest advantages compared to other funding programmes?
 - b. What are the VRG programme's biggest shortcomings compared to other funding programmes?
- (2) What were the biggest challenges you had to overcome in your role as VRG proponent?
- (3) What **measures** were in place at your host institution to **promote the careers** of VRG leaders?
 - a. What are long-term plans to promote the careers?
 - b. What other measures do you believe could be beneficial?
- (4) How would you describe the **impact of the VRG programme** on your **host institution**?

a. What was the **impact** of the VRG programme **on the research field** at the host institution?

b. What role did the VRG programme play for the overall **strategic goals** at your host institution?

c. How did the VRG programme interact with the **career models** at your host institution?

d. What role did the VRG programme play in **the recruitment strategy** of your host institution?

e. How did the VRG programme interact with **administrative procedures** at your host institution, and vice versa?

(5) If you could **change whatever you wanted** about the programme, how would you improve it?

a. What **changes at your host institution** would be needed to maximize the impact of the VRG programme?

i. What specific **types of support** would be needed from the host institution?

b. What **changes at the WWTF** would be needed to maximize the impact of the VRG programme?

WWTF advisory board – university representatives and local policy experts

(1) In your experience, what are the most important **differences between the VRG programme** and other (international) funding programmes?

a. What are the VRG programme's **biggest advantages** compared to other funding programmes?

b. What are the VRG programme's **biggest shortcomings** compared to other funding programmes?

(2) How does the VRG programme **affect the Viennese research environment**?

a. What role did the VRG programme play for the **strategic goals** of the Viennese research environment and its overall **R&I strategy**?

b. What role did the VRG programme play for the **image of Vienna** as a research location?

(3) If you could **change whatever you wanted** about the programme, how would you improve it?

a. What **changes at the host institutions** would be needed to maximize the impact of the VRG programme?

b. What **changes at the WWTF** would be needed to maximize the impact of the VRG programme?

Additional questions for university representatives:

(4) What **measures** were in place at your host institution to **promote the careers** of VRG leaders?

a. What are **long-term plans** to promote the careers?

(5) How would you describe the **impact of the VRG programme** on your **host institution**?

a. What was the **impact** of the VRG programme **on the research field** at the host institution?

b. What role did the VRG programme play for the overall **strategic goals** at your host institution?

c. How did the VRG programme interact with the **career models** at your host institution?

d. What role did the VRG programme play in **the recruitment strategy** of your host institution?

e. How did the VRG programme interact with **administrative procedures** at your host institution, and vice versa?

Questions to the WWTF Board of Directors

(1) In your experience, what are the most important **differences between the VRG programme** and other (international) funding programmes?

a. What are the VRG programme's **biggest advantages** compared to other funding programmes?

b. What are the VRG programme's **biggest shortcomings** compared to other funding programmes?

(2) How does the VRG programme **affect the Viennese research environment**?

a. What role did the VRG programme play for the **strategic goals** of the Viennese research environment and its overall **R&I strategy**?

b. What role did the VRG programme play for the **image of Vienna** as a research location?

(3) If you could **change whatever you wanted** about the programme, how would you improve it?

a. What **changes at the WWTF** would be needed to maximize the impact of the VRG programme?

b. What **changes at the host institutions** would be needed to maximize the impact of the VRG programme?

Probes

– Please give us an example of ...

– You mentioned ... please elaborate on this aspect.

– What would you say are the reasons for ... ?

– What do you mean by ... ?

– Please explain the significance of ...



W|W|T|F

Vienna Science
and Technology Fund

Schlickgasse 3/12
1090 Wien, Austria
T +43 1/402 31 43 19
office@wwtf.at
wwtf.at



Vienna Science and Technology Fund wwtf.at