WWTF
WIENER WISSENSCHAFTS-,
FORSCHUNGS- UND TECHNOLOGIEFONDS

Guide for Writing a
Full Proposal

LS 2016 Call
PRECISION MEDICINE

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About WWTF

The Vienna Science and Technology Fund (WWTF) is the only larger Austrian private non-profit organization established to promote science and research. WWTF started its funding activities in 2003. According to its statutes, WWTF aims to fund excellent scientific research(ers) following the highest international standards in order to promote Vienna as a city of science and research.

WWTF provides substantial funding for larger multi-annual research projects at home institutions located in Vienna ("Project Funding"), as well as striving to attract excellent researchers from abroad to Vienna ("Science Chairs", "Vienna Research Groups for Young Investigators"). WWTF runs calls resulting in a tough competition for funding with an average success rate of less than 20% (a rate that varies, however, from call to call).

Currently, WWTF runs the following thematic programmes: "Life Sciences" (*2003), "Mathematics *and* ..." (*2004), "Information and Communication Technology" (*2008), and "Cognitive Sciences" (*2011). The financial resources of WWTF originate from the "*Privatstiftung zur Verwaltung von Anteilsrechten*" from which WWTF receives about seven to nine million € annually.

In addition, WWTF runs the following funding programs for the City of Vienna: The "University Infrastructure Program" (*2006), "Social Sciences and Humanities in Vienna" (*2008), and "Vienna Research Groups for Young Investigators" (*2010) with a total annual funding volume of about 5 million €.

While the thematic funding programs are established in close coordination with Viennese RTD policy and initiatives, the review and selection process lies strictly in the hands of international scientists not employed in Austria. The main selection criterion for funding is excellent scientific quality according to the highest international standards. For each call, an appropriate international expert jury is established. Additionally, for each proposal a number of written peer reviews are obtained. In a two-day meeting in Vienna the juries formulate a funding recommendation based on the reviews and on their own expertise. This recommendation is then formally accepted by the WWTF Board of Directors.

The governing body is the WWTF Board of Directors. It is complemented by the WWTF Advisory Board composed of Viennese scientists and economic, societal and political representatives. The WWTF Office manages all funding activities and is the contact point for all applicants.

Important Issues

The **Call Fiche,** including the contact information of the WWTF call managers, is available at www.wwtf.at. The formal criteria for a WWTF Precision Medicine project include a minimum funding volume of 200.000 € with an upper range of up to 1.000.000 €, and a planned duration of 2-4 years. Please note that within this range, the upper limit of a full proposal can only deviate up to 10% from that requested in the short proposal.

The **Coordinator** of a WWTF project must be affiliated to a Viennese home institution. This includes researchers moving to Vienna with a Viennese affiliation and work place in case of funding. Project **partners** outside of Vienna may receive funding of up to 30% of the total funding applied for. Partners outside Vienna are an option; they are neither obligatory nor a formal criterion for acceptance.

At **universities**, WWTF projects are carried out according to §27 of the "Universitätsgesetz 2002"; authorized signatures from the university / scientific institution acting as the home institution are therefore mandatory at the submission stage. In case of funding, the institution will be the formal contract partner for WWTF with the **coordinator** taking full scientific and financial responsibility.

WWTF funding may be used for all project-related costs; however, the main focus should be on funding scientific personnel. Everybody employed in a WWTF-funded project should get a fair contract with a *wage* according to the "Kollektivvertrag" (collective agreement) of the Austrian Universities and/or according to the standards of the Austrian Science Fund (FWF) available at https://www.fwf.ac.at/fileadmin/files/Dokumente/Personalkostensaetze/pek-2015.pdf A *maximum total employment* is set at 100%. The personnel categories are:

• *Senior Personnel:* highly qualified scientists, usually already in permanent employment
• *Post Doc:* or equivalent qualification, including Senior Postdocs
• *PhD Student:* or equivalent qualification
• *Diploma Student:* Bachelor or Master students
• *Office/Technician:* office staff or technical staff (proportional funding only)

The funding by WWTF under this scheme is not intended to cover investment in general infrastructure, however, pro rata depreciation rates for the project duration are fundable for **equipment** necessary for the project. WWTF funding also covers **materials** (consumables and small devices), **travelling costs** (incurred for attending project related scientific events and invitations), **publication costs** (including cost for patent filing and open access publication), **workshops / conferences** (costs incurred by own scientific events), and **other project related costs** (for example third party services, bench fees, sequencing, computational clusters etc.).

WWTF pays a **maximum of 20% overhead**. Overhead ("indirect costs") is calculated as 20% of the direct costs of the project. The total funding volume is calculated as direct + indirect costs. A separate project account / SAP number for bookkeeping is necessary for each

project and the direct costs must be reported to WWTF. The overhead is paid as a flat rate with no strings attached. Kindly adhere to the overhead regulations of the involved institutions.

Compliance with the rules for good scientific practice is mandatory even at the proposal stage.

Precision Medicine

This call targets cutting-edge research projects in precision medicine to improve diagnoses and/or prognoses of diseases as well as stratified therapeutic strategies in humans. High quality Omics data (e.g. genomics, epigenomics, proteomics, metabolomics, microbiomics), disease- or therapeutic-oriented functional data, and/or imaging data should be integrated to answer relevant clinical questions. All projects should be complemented by a research concept considering system medicine approaches for a better understanding of disease and therapeutic response.

Collaboration between different scientific disciplines such as biology, medicine and systems biology is mandatory. The project team should be headed by experts from the respective areas. A project team can include up to three principal investigators, one of which must be designated as coordinator. The roles of the principal investigators should be clearly defined in the application as well as the contributions from different areas of expertise which will be used in the review process. The way the collaboration is formulated is critical. Collaboration between all team members must be absolutely necessary to achieve the aims of the project. Concerted actions, in which each team member performs a self-contained project under a general theme without extensive interaction with other team members, are not considered to be collaborative.

The key selection criterion for this call is outstanding **scientific quality** under the **scope** of the call, which includes the objectives of the project as well as the scientific expertise of the applicants. **Innovation** and **clinical relevance** of the project is one major criterion in the review process. Projects missing an appropriate **concept** to cover a **system medicine/biology** approach will not be considered for funding. For the assessment and evaluation of the proposed project the above points need to be clearly outlined within the proposal.

Funding Criteria

Your proposal will be reviewed by international scientists (peers & jury). For this call an independent jury has been composed already assessing your short proposal. Jury members and peers providing written reports must not hold employment in Austria. The evaluation criteria to be considered by peers and jury are:

• **Excellence of the project, methods and theoretically led approach:** The proposal must demonstrate that it is of internationally competitive quality.

- **Innovative nature of the project**: The innovative aspects of the proposed project and the clinical relevance must be highlighted.
- **Scope of the research**: The relevance to precision medicine must be evident. The proposal must describe how the patients will benefit. Furthermore, a systems medicine approach should be used to improve the understanding of human diseases and corresponding therapeutic responses.
- **Collaboration**: The need for the expertise of the team members and their role in the project must be clearly outlined.
- **Potential of the applicant:** Accomplishments and potential of the applicants to conduct the research needs to be stated. Previously published work relevant to the application should be included in the role of the participating project leaders section.
- **Data Management**: What data is used and how it is curated must be clearly outlined. To this end, a data management plan must be included.
- **Quality of the cohort**: It is essential to describe how the patient cohort is relevant to the application and how the quality of the data is assured. This also includes sample storage information. Preliminary data showing the feasibility of the project is a plus.
- **Ethics**: Please clarify your freedom to operate using the patient cohorts you have described. In addition, please provide details on whether there are legal obstacles or ethical issues that could hinder the progress of your project. If an ethical vote is necessary, it must be made available to WWTF by September 2, 2016.
- **Implementation**: In order to prove the proposal's relevance to the call, the translational implementation must be clearly outlined. The proposal should detail how the results will lead to better diagnoses and/or prognoses of human diseases, as well as stratified therapeutic strategies.

In order to assess and evaluate if the proposed research project meets the required criteria, the above points need to be clearly outlined within the proposal.

Evaluation Process

In this call a **two-stage submission process** is used. Full proposals have to be submitted upon invitation by **13-05-2016, 2 pm.**

Evaluation procedure in detail: The evaluation of full proposals is carried out through a combination of remote assessment and panels of international experts that convene in Vienna. Two **jury members** are assigned to each proposal, which at first undergo **written peer review** by at least three international reviewers. The objectives of the full proposal must be consistent and in accordance with the successful short proposal, extending it by providing full details of the approach, state of the art, etc.

Jury meeting in Vienna: the most significant step in the assessment. A comprehensive evaluation of all proposals takes place on the basis of written peer reviews and the jury's own

expertise resulting in a recommendation "to be funded" or "not to be funded" for each proposal.

Formal funding decision (confirmation of jury recommendation) by WWTF Board of Directors.

Applicants will receive anonymized full text reviews and a summary of the jury discussion after the formal funding decision has been made.

How to use WWTF's Online Submission System

1. Go to https://funding.wwtf.at
2. **Log in**, choose the call and short proposal
3. **Full proposal**: fill in requested information in *online forms* and *upload requested files* (in PDF format). You can save the current status of your proposal at any time and access the system multiple times and modify provided information.
4. **Submit proposal**: the submit button becomes active only after all requested information has been filled in and uploaded; after submission, no changes are possible anymore.
   Note: The submission system closes at 2 pm on the day of the deadline. The full proposal has a size limit of maximum 5 MB.

Required Structure of a WWTF Full Proposal

Applications to WWTF undergo an assessment by international scientists, thus all proposals must be written in **English**. Please write precisely and to the point! Note that the appendix is comprised only of the CVs of the project team, which you are allowed to update if needed.

The short proposal to WWTF comprised twelve parts: Basic Information, Information about the principal investigators, Project Summary, Objectives and Hypotheses, Innovativeness and Clinical Relevance, Ultimate Goal of the project, Research Methods and Feasibility, Role of the participating Project Leaders, Ethical Aspects, Key References, Affirmations and Authorizations, and Appendix.

A full proposal to WWTF extends the short proposal with the following:

Some parts of the full proposal must be written offline and then uploaded (as a PDF file to allow images, tables, etc.) into the WWTF submission system. Please be concise but go into enough detail to allow an evaluation by international peers. You may use the word-processing software of your choice, but we kindly ask you to use a **font type such as Arial and a font size of 11pt. Line spacing should be 1.5**. Please do not add any header or footer since these (page numbering, proposal number, title of proposal) will be added automatically in the WWTF submission system once the proposal is completed and a single PDF file is generated. You may include images, drawings, tables, etc. to improve the scientific presentation (size limit for the overall proposal is 5 MB). Maximum information has been au-

tomatically transferred from your short proposal. You should check this. Keep in mind that the full proposal is an extension of the short proposal you have already submitted.

1. Project Summary

1.1. Basic information of the project such as the title is already filled-out. Information is transferred from the short proposal. The project duration can be changed, however, major deviations from the short proposal must be thoroughly justified.

1.2. A general description (max. 1000 characters, online) in German language is mandatory and will be used by WWTF for public relations work in case of funding, but will not be visible in the final electronic proposal and print-out. We ask you to use a public style abstract and not simply translate the scientific abstract into German.

1.3. The scientific abstract in English (max. 1500 characters, online) will be used to address potential peer reviewers.

Applicants may **exclude** up to three peers without indicating any reasons. The names will be stored in the WWTF database and will not be visible in the electronic proposal and print-out. Applicants shall **suggest** up to five peers from a field of competence that enables them to review the proposal. No previous publication activity or research cooperation with the suggested reviewer should be evident. Please provide up to five keywords or phrases that describe the reviewers' fields of competence to enable a balanced set of reviewers to be chosen.

1.4. Project Summary (max. 2 pages, PDF upload)

Give a concise review of the state of the art in international research and the scientific challenges the project wants to address in the chosen field(s). Please state clearly why, in your opinion, this research idea is particularly fitting to the WWTF Precision Medicine call.

2. Research Project

2.1. Objectives and hypotheses (max. 1 page, PDF upload)

Formulate the concrete research question(s) you would like to address in your research project. Provide an outline of the objectives and hypotheses. The objectives should be achievable within the duration of your project. Remember that the funding criteria address international quality standards and visibility. Please note that projects based solely on screening are not funded, thus make sure that you emphasize the hypotheses included in your project.

2.2. Innovativeness and clinical relevance (max. 1 page, PDF upload)

Describe the innovative aspects of your proposal and the clinical relevance of the proposed work for the field of precision medicine. In particular, the translational implementation must be clearly outlined. State how the results will lead to better diagnoses and/or prognoses of human diseases, as well as stratified therapeutic strategies. Note that the strategy of the

proposal is important, not just the experts involved. Please indicate how your project is going to contribute to better treatments for illnesses. Stating the expected impact of the successful completion of the project will help the jury understand its significance.

2.3. Workplan (max 2 pages, 1 PDF Gantt chart)

Please upload and describe a Gantt chart to indicate an overview of milestones to be achieved during the project period. Specify the time periods and the respective PIs responsible for each milestone. State the results and output you finally want to be assessed by after having finished your project. Describe your planned dissemination strategies.

2.4. Description of the project: research methods, content and feasibility (max. 6 pages, PDF upload)

Describe the detailed research plan including the methodology you want to use in order to answer your research questions and to test your hypotheses. Include an assessment of the feasibility and possible pitfalls of the project. A comment on whether projects are co-financed by other sources in order to achieve feasibility within the funding range should be added. Power calculations should be included to assess whether available sample numbers are sufficient to reach relevant statistical conclusions in terms of the patient collective. Please include background information and preliminary data including existing patient cohorts. The quality of biobanks, how they are stored and their link to clinical information needs to be described in detail. Explain how your patient cohort is relevant to the application and how the quality of your data and material is assured. If applicable describe, how you will obtain access to research subjects and other essential but not easily available means of research (e.g. imaging facilities, NGS).

2.5. Data Management Plan (max. 1 page)

First, a data set description is required detailing what types and amount of data the project will generate/collect. Additionally, the proposal should delineate how the data will be exploited and/or shared/made accessible for verification and re-use (standards and metadata). Finally, please provide details on a sustainability plan in relation to the data you generate.

2.6. References (max. 2 pages, PDF upload)

List the most relevant references for the proposal and highlight (e.g. in bold face) among these a maximum of ten key publications representing the state of the art in the respective research area(s). References should include: author(s), title, journal or publisher and place, year, page numbers and any other necessary data.

2.7. Role of the participating project leaders within the consortium (max. 2500 characters, online)

Each team member should describe his/her role in achieving the goal of the team as a whole. List the different disciplines that are working together within your research and describe the benefit of the participants to achieve the ultimate goal of the project. Here appli-

cants are encouraged to include articles or other scientific work authored by the project team members, in order to highlight the relevance of their expertise relevant to the application. Particular information is required with regard to clinical scientists and their availability for the project. Make explicit the time commitment (in percentage) for each team member.

2.8. Ethical aspects

Information should be given with respect to the ethical approval required for the patient cohort. If an ethical vote is necessary, which covers the prospective use of data and the planned analysis, it needs to be made available to WWTF by September 2, 2016.

3. Project Team (extends Coordinator, online)

People cannot be added and changes to the initial short proposal project team setup are not allowed.

3.1 Gender Management Policy (max. 750 characters, online)
Please describe how your project deals with gender equality issues during job announcements, recruitment of staff and in the working environment.

3.2 Plans for Human Resources Development (max. 750 characters, online)
Please describe how your project contributes to human resource development in science (e.g. providing opportunities for research, staff exchange, teaching and mentoring).

4. Project Budget (online form)

WWTF provides substantial funding for scientific projects covering all project related direct costs plus a maximum of 20% overhead (i.e. "indirect costs"). Thus WWTF requires an explanation of your cost planning principles (about one page, 3000 characters), and a detailed planning of personnel costs (which should comprise the major part of the project related costs), as well as planning of project related costs for equipment, materials, travelling, publications, organization of workshops/ conferences/ …, and other project related costs.

For cost planning, an offline "WWTF Cost Planning Tool" (Excel file) is available, however, only the numbers provided in Tables 1, 2, and 3 will be considered as requested WWTF funding. Costs are calculated in **thousands of Euro (one decimal position)**.

In **Table 1 (Planning of personnel costs)** the names and staff category of all persons listed in part "3. Project Team" are automatically included. Please first choose the funding source (WWTF, in-kind, WWTF & in-kind) and then add the average yearly time commitment for each project year. Finally, for those persons for whom WWTF funding is requested, fill in the salary corresponding to a 100% employment in the first project year. The total funding applied for each person will then automatically be computed including a 3% annual salary increase. At the end of Table 1 you will see the total personnel costs applied for from WWTF.

In **Table 2** (**Planning of project related costs for equipment, materials, travelling, publications, organization of workshops/ conferences/ …, and other costs)** please provide a concise description of costs per cost category/ institution as well as the funding applied for.

In **Table 3 (Total funding applied for per institution)** the direct costs will be automatically filled in using the information provided in Tables 1 and 2. Kindly add the overhead percentage (i.e. indirect costs) per involved institution as a numeric value between 0.0 and 0.2. Finally, Table 3 will give you an overview of the total funding applied for from WWTF per involved institution. *Note: the minimum funding volume is 200.000 €. Upper range is 1.000.000 €. Within this range the upper limit of a full proposal can only deviate up to 10% from that requested in the short proposal.*

You are also asked to *describe the overhead policy* of each involved institution.

Last but not least you must *disclose other applications for funding* of the same project: Is this project (or parts of it) already subject to ongoing requests for funding?

5. Affirmations and Authorization

WWTF requires the Coordinator and Principal Investigators to sign a print-out of the affirmation form. In addition, WWTF requires that the print-out contains the signatures of the authorized person(s) of all participating institutions to which the persons signing the "Authorization" are affiliated in case of funding. The institution agrees hereby to the use of space, equipment, personnel and other resources as stated in the application. The institution agrees to provide its own contribution as described in the application. In addition, by signing the application, the institution is willing to co-operate with WWTF, in an appropriate way, and its chosen partners regarding the application and protection of intellectual property arising from the project to be funded.

Note that, by signing this proposal, the employers and/or institution heads agree to allow the Coordinator and Principle Investigators to allocate sufficient time, as stipulated in their project plan, to the project in case of funding.

All signatures are required only on the proposal print-out. Multiple copies might be used for signing. Faxed or scanned and printed pages are accepted.

Note: Hard copy version submission (including signatures) via mail service allowed-post stamp counts and is accepted up to May 13, 2016.

6. Appendix

The appendix stays the same as the one you have already submitted for the short proposal. You are allowed to update the individual CV files, either to include recent developments or to provide additional contextual information, such as employment intensity or educational/maternity leave accounting for gaps in publication, etc. Please include a summary of your citation index. Provide the impact factor of the ten most important publications.

In Case of Funding

The **Formal Funding Contract** will be made between WWTF and the Home Institution of the Coordinator (for universities according to §27 of the University Law 2002), the Coordinator thus has full scientific and financial responsibility. Projects may start shortly (and **not later than 6 months**) after the formal funding decision has been made. Throughout the project duration, WWTF pays funding rates half a year in advance to the Coordinator's Home Institution, which is then responsible for distribution to other institutions (if applicable).

WWTF monitoring during the runtime of projects includes annual short reports delivered by the Coordinator to WWTF with an overview of the scientific results achieved, personnel employment and funding spent. WWTF office also makes site-visits to learn about the project progress and working environment of the personnel employed. WWTF offers the possibility to adopt the work plan according to project needs.

After the project has ended a comprehensive final report must be submitted and WWTF organizes an **ex-post evaluation** by international peers („Evaluation Day") for all projects funded within a specific call.