TURBO Programme

Background and objective/aim

Following the partnership agreement between the University of Twente and Radboudumc, in 2017 a new collaborative grant program was launched, named the **T**wente **U**niversity **R**ad**B**oudumc **O**pportunities (TURBO) programme. Based on an evaluation of the past 3 rounds (2017, 2018, 2019), the Boards of both institutions have decided to continue this programme for another 3 years.

Annually, the two institutions will jointly supply four TURBO grants of 80K€ each. These project-based grants will be awarded to four (preferentially) new collaborations between researchers from the University of Twente and Radboudumc. The aim of this pre-seed subsidy is to support a joint grant application of a researcher of the University of Twente with a colleague of the Radboudumc. Typically, this concerns a collaborative grant application for the EU, NWO (e.g. cross over or TTW-grants), NWA routes, EFRO, Interreg etc. The grants can be spent freely, for example to hire (new) scientific personnel, purchase equipment, arrange networking events for the set up of new consortia, or to realize participation of industrial parties/companies for a joint grant application.

Focus: TOPFIT - Concepts for a Healthy Life

A consortium of the University of Twente, Radboudumc, Radboud University and Wageningen University and Research in Overijssel and Gelderland initiated a joint impact programme with the aim to gain two more healthy life years for citizens in Eastern Netherlands. This so called TOPFIT programme, recently expanded with Saxion and Rijnstate as partners and more to come, focusses on personalized medical technology and food technology for the **prevention** of disease and disease burden. In this way the open innovation consortium aims for strong impact on health, technology and science, for bringing out a strong profile on national and European level and increasing economic growth in the region.

The TURBO programme is linked to this TOPFIT impact programme and therefore will have the same focus. Projects should be innovative and can be fundamental, applied or implementation science. It should link to one of the TOPFIT disease-oriented mission programmes(*) and could concern social innovation with technology (in collaboration with the domain of care & wellbeing) or citizens science projects. Given the current situation, this year also COVID-19 proposals are welcome. In all cases, the project brings together health and technology (in the broadest sense). For more information see short TOPFIT movie , website (update soon) and below (*).

Criteria

- The project is a collaboration between a researcher from the University of Twente (scientific staff or tenure track) and a (junior) principal investigator (dd 1-1-2020) from Radboudumc.
- The focus of the project and the envisioned external grant application is in line with the focus of the TOPFIT – Concepts for a Healthy Life programme.
- A researcher is allowed to submit one project, as applicant or team member. Those who received a TURBO grant as main applicant before cannot apply in this round.

- The joint project is of high (scientific) quality. When projects are assessed as of equal excellence, a newly set-up collaboration is favored above a pre-existing one.
- The project represents a value of 80k€ and has to be supported by a clear budget plan according to the TURBO grant budget plan format.
- The project is feasible with the funded subsidy (80k€) and within the proposed time span of max. 1 year. The project plan includes the steps towards a successful external grant application and maximizes the chance of obtaining external funding for continuation of the project idea.
- The proposed external funding body is known and accompanying application deadlines are clear or at least indicated, ultimately March 31th 2022. This can be international, national or regional funding.
- Collaboration between the two parties is evident both in the research proposal and the budget plan. The project's aim cannot be met without the joint expertise from the applicants from both Institutions.
- Collaboration with additional applicants from e.g. Saxion and Rijnstate, WUR and RU is possible (within the scope of TOPFIT), but the TURBO resources remain internally at UT and Radboudumc. Other partners can bring in additional resources for the project.
- Projects should be innovative and can be fundamental, applied or implementation science. It should link to one of the TOPFIT disease-oriented mission programmes(*) and could concern social innovation with technology (in collaboration with the domain of care & wellbeing) or citizens science projects. Given the current situation, this year also COVID-19 proposals are welcome. In all cases, the project brings together health and technology (in the broadest sense).
- Previous applications that were not awarded a TURBO grant, may be resubmitted if the applicant is still (j)PI (Radboudumc) or scientific staff or tenure tracker (University of Twente). The progress that has been made in the intervening period will have to be described.

Evaluation committee

- The evaluation committee is chaired by an external representative working outside of academia
- There are two permanently appointed members; one scientific director from each institution
- There are two scientific experts taking seat on the committee, representing the reviewers.
- The grants advisors of both institutions are represented.

Every proposal is evaluated by at least two independent scientific experts (reviewers) and a grant advisor from each institution according to the criteria: (scientific) quality (50%), feasibility of project and likelihood of obtaining additional funding (20%), innovativeness (15%) and (societal) impact (15%). Projects that do not fulfil the general criteria and required focus will not be taken into consideration by the evaluation committee. The combined scores of both institutions are the basis for a final ranking by the evaluation committee.

The evaluation committee must come to a unanimous agreement. If no consensus can be reached, the chairman will take the final decision.

Time schedule

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April 20th 2020	Announcement TURBO round 2021
May 11th 2020	Afternoon Online Matchmaking event
July 6th 2020, 11.00AM	Deadline full proposal TURBO grant
July-Aug. – Sept. 2020	Applications evaluated by reviewers and the committee
End Sept./early Oct. 2020	Granting meeting in Enschede
Oct 2020, no later than Jan. 1st 2021	Start of projects
December 31th 2021	End of projects
Before April 2022	Submitted grant application at external funding body

For more information

Programme manager University of Twente: Dr. Renske van Wijk (r.m.vanwijk@utwente.nl; but due to maternity leave replacement from 1st May onwards: Miranda Wiehink (m.a.g.wiehink@utwente.nl))
Programme manager at Radboudumc: Dr. Nathalie Bovy (Nathalie.bovy-vanderlugt@radboudumc.nl)

Submit your application documents to techmed@utwente.nl

Attachments

1) Application form TURBO programme
2) Budget plan format TURBO programme

(*) The matrix below indicates the current mission programmes of TOPFIT:
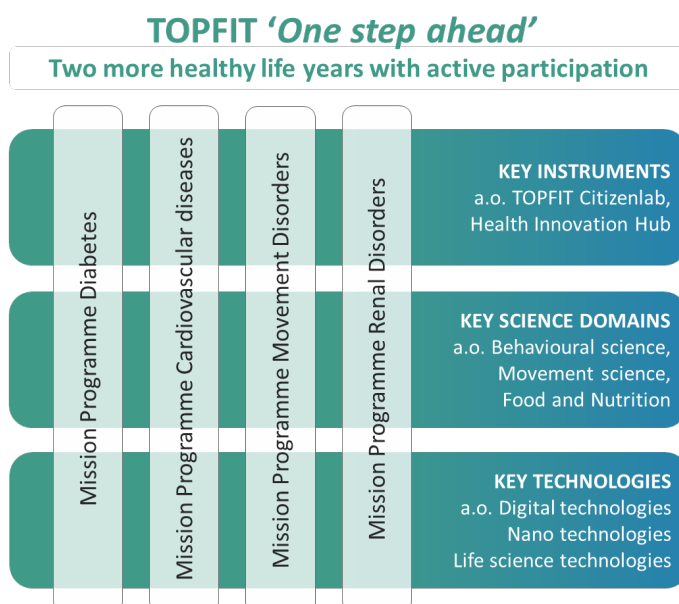
Within the missions/programmes TOPFIT focuses on **prevention,** staying **one step ahead**, of disease and disease burden, resulting in two more healthy life years.

TOPFIT 'One Step Ahead'

Personalized solutions in:

● Prevention,

● Early Detection,

● Targeted Intervention, and

● Self management of disease

Applications can have a scope on one (or more) of the following levels of prevention:

I Primary Prevention: Smart technology and nutrition that focuses on the healthy population (or parts of it) and actively promotes and protects health and a healthy life style. *E.g. eHealth, eCoaching, Healthy Food, Big Data*

II Early Detection of Diseases: Research and innovation in the field of early and/or personalised diagnostics of diseases with the ultimate aim of preventing disease before it manifests itself. The use of innovative technology also offers minimally invasive, accurate diagnostic methods. *E.g. Molecular Diagnostics, Personalized Diagnostics, Medical Imaging, Lab-on-a-chip, Sensing, Microfluidics, Monitoring, Medical Robotics, Genetics – Metabolism - Microbiome (Omics), Neural Networks, Healthy Brain, Data Science.*

III Targeted Treatment: Research and innovation in the field of patient-oriented therapies and techniques to test or predict the effectiveness of (existing) treatments for patients. Developments in the field of organ/tumor-on-a-chip technologies, among others, offer the opportunity to drastically reduce the use of animal testing for biomedical research. *E.g. Gene Therapy/Nanomedicine, Genetics – Metabolism - Microbiome (Omics), Organ-on-a-chip, Molecular Therapeutics, Image-guided Treatment, Drug testing, Big Data/Deep Learning.*

IV Improved Independency: Research and innovation in the field of possibilities for the patient to monitor his/her health independently and to manage it together with the care provider. In addition, the aim is to maintain mobility as a precondition for independent living and social participation**.** *E.g. Maintenance of Mobility, Domotics, Healthy Brain, Personalised eHealth, Serious Gaming, Wearable Technology ((e.g. sensors, robotics, artificial organs).*

V Health Technology Assessment and Ethics: Whereas in the past HTA was seen as risk management and bridging gaps between technology and ethics, it has become a productive factor in technology development and a prerequisite for marketing and rapid market entry. From the integral approach advocated here, HTA is a common thread that the TopFit programme will develop in all projects. Finally, cooperation between technology and ethics is essential for the actual acceptance of new technology in society. *E.g. Health Technology Assessment, Value Based Healthcare, Patient Reported Outcomes, Citizens science, Ethics*