INVITATIONAL CALL IMPULSE PROGRAM 2022

Hersen STICHTING

Dutch CardioVascular Alliance

Dutch Heart Foundation Hartstichting

With the Impulse Program, partners within the Dutch CardioVascular Alliance allow well-performing thematic consortia to follow-up on promising results and bring these results closer to solutions that improve cardiovascular health. An Impulse Consortium is centred around activities that have a maximum impact on reducing the burden of cardiovascular disease. Collaboration is key to a successful national thematic consortium. As founder of this program, the Dutch Heart Foundation strongly believes that working together will have great impact on developing solutions that benefit the lives of patients. For this reason, the Dutch Heart Foundation is partner in the Dutch CardioVascular Alliance. Through prevention, early recognition and finding the best treatments we help everyone to keep a healthy heart.

Consortia within the Dutch CardioVascular Alliance often work on themes that exceed the goals of individual partner organisations, or even exceed cardiovascular goals. For that reason, it is vital to also forge durable alliances with other fields in science and healthcare. For stroke, the Dutch Heart Foundation and the Brain Foundation Netherlands have joined forces to support a national consortium that strives towards maximum impact on neurovascular health. By combining cardiovascular and neurological expertise, together we aim to keep hearts and brains healthy.

An Impulse Consortium is interdisciplinary in nature, has national coverage of excellent expertise and is internationally competitive. A consortium creates a national expert network around their theme that serves as a focal point of knowledge and skills. This allows the consortium to accelerate knowledge growth, contribute to collaboration, enhance consorted effort in the neurovascular and cardiovascular field, and commit to implement their findings in daily healthcare practice. Results that are ready for the next step on the translational research pathway, a good functioning consortium governance, and a high-impact and well-defined theme are conditions to be invited for the Impulse Program.

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1. Background

In the next twenty years the number of people suffering from cardiovascular disease in the Netherlands is estimated to increase by 30%. Specifically, the number of people suffering from a stroke is estimated to increase by 54%. If nothing changes, seven million people will suffer from a chronic disease in 2040 of which more than half a million will be chronically ill due to stroke.

The Dutch Heart Foundation (DHF) and the Brain Foundation Netherlands (BFN) are Dutch-based organisations aiming to reduce the burden of cardiovascular and brain disease, and keeping hearts and brains healthy. The DHF aims that all patients suffering from a stroke get the best possible treatment as soon as possible, adjusted to their specific situation. The BFN wants to minimize the disease burden caused by stroke for all stroke survivors, also on the long term (chronic phase), and maximize quality of life for this group of patients. Together, the DHF and BFH support the entire chain of neurovascular care, ranging from early detection and treatment to rehabilitation and reintegration in society. We do this by stimulating (collaboration in) neurovascular research and enhancing knowledge and awareness regarding stroke. Both DHF and BFN depend largely on donations from the general public. We work together with scientists, doctors, patients, and many volunteers on solutions to detect cardiovascular and brain diseases earlier and to treat them better and faster. Both DHF and BFN stimulate research and innovation, and provide support and information to the (at-risk) population and patients.

In 2014, the first Dutch national cardiovascular research agenda was developed together with the Dutch general public and major stakeholders, including patients, healthcare professionals, scientists, volunteers and donors. This resulted in the following five research priorities:

- Earlier recognition of cardiovascular diseases
- Cardiovascular disease in women
- Better treatment of heart failure and arrhythmias
- Acute treatment of strokes
- New ways to keep up a healthy lifestyle

Based on the research agenda, our (long term) ambitions, and the ambitions of the Dutch CardioVascular Alliance (DCVA), the DHF further strengthens her focus in finding and implementing new solutions for the detection and treatment of cardiovascular diseases at an earlier stage. Preventing damage due to cardiovascular disease as early as possible is essential to reduce the increase in chronic cardiovascular disease and the accompanying loss in quality of life. Therefore, it is important to detect cardiovascular disease earlier and develop better treatments to prevent, lower and/or repair (early) damage.

Dutch CardioVascular Alliance
In 2018, the DHF, together with leading organisations representing patients, academia, healthcare professionals, industry and government, established the DCVA. Partners of the DCVA are committed to reduce the disease burden caused by cardiovascular disease by 25% in 2030.

Currently the DCVA consists of 21 partners:

1. Dutch Heart Foundation (DHF)
2. Netherlands Heart Institute (NL-HI)
3. Netherlands Organisation for Health Research and Development (ZonMw)
4. Netherlands Federation of University Medical Centres (NFU)
5. 4TU.Federation
6. Netherlands Organisation for Scientific Research (NWO)

7. Health~Holland (H~H)
8. Netherlands Society of Cardiology (NVVC)
9. Dutch Network for Cardiovascular Research (WCN)
10. Dutch Heart Registration (NHR)
11. Harteraad (the Dutch patient association for people with cardiovascular diseases)
12. Royal Netherlands Academy of Arts and Sciences (KNAW)
13. Dutch Society of Vascular Medicine (NVIVG)
14. Dutch Society for Vascular Surgery (NVvV)
15. Dutch Society of general practitioners with special interest in cardiovascular diseases (HartVaatHAG)
16. The Netherlands Association for Cardio-Thoracic Surgery (NVT)
17. The Dutch Society of Cardiovascular Nursing (NVHVV)
18. Association Innovative Medicines (VIG)
19. Dutch Society for Neurology (NVN)
20. NeFeMed
21. Dutch Society for Radiology (NVvR)

The DCVA focusses on the early detection of disease, as this will reduce the number of chronic patients, prevent recurrence and counter the growth of healthcare costs by detecting disease before irreversible damage has occurred. Activities that are initiated within the DCVA are centred around five priorities that each have their own pillar within the DCVA governance.

1. Research policy
2. Valorisation
3. Implementation
4. Talent
5. Data infrastructure

Goal of the combined activities in these pillars is the rapid translation of excellent science into health improvement. Therefore, consortia that are funded within the context of the DCVA have to be committed to solve important healthcare problems and are multidisciplinary and translational by nature.

The DCVA builds partially on the 'CardioVasculair Onderzoek Nederland' (CVON) strategy in which the cardiovascular field started with creating long term collaborations between the best cardiovascular researchers at a national level in the most promising research areas in the Netherlands. The DCVA partners encourage and enable well performing consortia to further strengthen existing collaborations and to realise novel sustainable (national) collaborations. In this context, the DHF has committed to reinvest in cardiovascular themes by inviting selected successful (CVON) consortia to submit an application for the Impulse Program. As the newly granted consortium will become part of the DCVA, specific consortium requirements apply. For the latest version of the guidelines, please consult the website of the DCVA. In addition, it is expected that the consortium actively contributes to the aims of the DCVA and is encouraged to make use of its services and support.

2. Initiators

The Impulse Program is by invitation only. At the start of the Impulse Grant trajectory, the DHF and BFN together appoint initiators ('kwartiermakers'). Initiators are either the program leaders of the existing consortium or are appointed based on consultation with the consortium, the research community and the DHF and BFN. Preferably, the initiators have complementary expertise.

2.1 Task of the initiators

Initiators have the following tasks:

- Bring together national expertise on the theme;
- Guide the preparation of a national consortium;
- Together with the DHF and BFN, decide on the scope of the consortium;
- Invite national experts to contribute and participate in a national program;

In addition to these common tasks, theme-specific tasks are defined in a supplement to this brochure.

2.2 Profile of the initiators

An initiator has the following qualities and characteristics:

- Possesses good leadership and unifying qualities;
- Capable of bringing together national expertise on a theme;
- Capable of initiating a consortium that has broad acceptance in the Dutch neurovascular field and is internationally competitive;
- Well-embedded in the neurovascular care system in the Netherlands;
- Motivated to improve the health and care for neurovascular patients;
- Focused on inclusive collaboration and setting an example for others in this area.

3. Purpose and objectives of the Impulse Program

With the Impulse Program, the DHF and the BFN aim to reinvest in well-performing thematic consortia in order to facilitate the consortium to follow-up on promising results and bring them closer to solutions that will reduce the burden of neurovascular disease. Consortia within this program are interdisciplinary in nature, have a national coverage of excellent expertise and are internationally competitive. The consortium creates a national expert network around their theme that serves as a focal point of knowledge and skills. This allows the consortium to accelerate knowledge growth, contribute to collaboration and a consorted effort in the neurovascular field, and commit to implementing their findings in daily healthcare practice. A necessary requirement for this program is that promising results of the consortium will be used as starting point for the new consortium. These results should be sufficiently solid and have the potential to be further developed in solutions that directly benefit the life of patients.

Objective 1: High impact solutions

- The consortium works on both finding solutions for a clearly defined, high impact neurovascular healthcare problem and taking (the first) steps to implement these solutions into healthcare and/or society. The ambitions of the consortium are well-defined for both the short and longer term. The relevance of the project in reducing the described healthcare problem should be evident.
- The consortium has a clear impact plan on how to work towards the described solution(s); which steps will be taken, which stakeholders are essential in this process and what are the underlying assumptions to critical decisions. This process of both valorisation and implementation activities must be well thought out and described.

Objective 2: Excellent science

- The scientific program is an extremely important part of the proposal. The scientific activities should be carried out by an interdisciplinary team of national experts. The proposal is innovative and internationally competitive.

Objective 3: Expert network

- An expert network must be set up or be developed further by the consortium. A national expert network focusing on a specific neurovascular problem or theme should not only benefit the consortium, but the wider community (f.e. research, policy, health care) involved in a specific theme. By creating an inclusive network, across related research consortia and projects, the field exchanges knowledge, ideas and people. An expert network supports an inclusive community and develops a funding strategy without creating competition between groups.

Further details about the envisioned directions for the Impulse application can be found in the supplement to this brochure: Supplement for the Impulse application of CVON2015-01 CONTRAST.

4. Theme and objectives

4.1 Ambition

One of the conditions for projects funded with support of the DCVA is that they maximise societal impact by finding and implementing solutions for significant cardiovascular or neurovascular health care problems. Scope, size and impact of the healthcare problem are important factors that contribute to realizing the ambition of the DCVA, DHF, and BFN and are the starting point of the project.

The consortium clearly indicates which elements of the ambition are addressed in the project proposal and which parts are beyond the scope of the current project. In case additional funding is required, a strategic plan on how to acquire these funds is part of the proposal. It should be explained how the consortium contributes to the Dutch national cardiovascular research agenda, other relevant research agendas of DCVA partners and the goals of the BFN.

4.2 Scientific excellence

Part of the proposal is a clear and solid description of the anticipated scientific impact and the expected contribution of the project to reducing the burden of neurovascular disease. The work packages of the proposal are coherent and synergistic. The aims and the description of work must be feasible in terms of project duration and available budget. For national thematic consortia, it is expected to be internationally competitive.

4.3 Route to societal impact

The aim of the DCVA, DHF, and BFN to significantly reduce the burden of neurovascular disease is ambitious. Solely focussing on defining a clear healthcare problem and the design of a (research) proposal that addresses this problem by finding a solution is not sufficient to realize this ambition. To create real societal impact, results are implemented into healthcare routines and in society. Therefore, the plan includes a strategy to translate research findings into solutions that benefit or improve current clinical practice. This strategy is called an Impact Plan (see appendix 2).

An impact strategy involves both valorisation and implementation activities and includes collaboration with stakeholders. Part of the proposal is a description of the relevance, needs and requirements of (end) users related to the outcome of the project. How will the outcome of this project affect research and healthcare? Explain which parts of the program are based on the achievements of existing well-performing previous and current scientific collaborations.

Short-term ambitions (outputs and outcomes) and a long-term impact ambition (2030-2040) must be included. For the short-term ambition (four to five years), clear objectives, deliverables and milestones need to be formulated. Define objectives, deliverables and milestones as specific as possible and

preferably phrase them as possible solutions. See Appendix 2 for a schematic representation of an Impact Plan. Part of the Impact Plan approach are a valorisation and implementation strategy, an impact coordinator and a user committee.

The consortium can allocate a dedicated budget for impact activities. Depending on the valorisation and implementation activities that are foreseen within the consortium, a maximum of 10% of the total budget can be used. These activities include amongst others the execution of a feasibility study, the development of a business plan, or costs necessary to secure intellectual property that are not covered by the universities Knowledge Transfer Office or other services or funds. Also, activities that benefit a widespread implementation of research results can be funded from this reservation. These activities should focus on implementation goals that stretch beyond the implementation deliverables of this consortium and for which budget has been allocated from the start of the project. We would like to stress that we expect the consortium to first investigate funding opportunities within the universities or the valorisation and implementation pillars of the DCVA.

4.3.1 Valorisation strategy

Valorisation is typically described as the utilization of scientific results in clinical practice. Depending on the specific solution or solutions a consortium is working on, valorisation can have different forms. The consortium should present the steps needed to bring a solution towards clinical practice. This does not necessarily have to take place within the timeframe of the proposal. The applicants describe the envisioned end product(s), the intended target group(s), and the impact of the product(s) on care. In addition, the consortium should indicate which stakeholders are essential to involve in this process and the budget required to guarantee a successful next step.

An assessment whether this strategy for valorisation is realistic and time- and cost-effective will be part of the evaluation of the application. The consortium can allocate a dedicated budget for valorisation activities. We offer the possibility for the consortium to reserve part of the valorisation budget for valorisation activities which are currently unforeseen. One of the aims with the substantial thematic funding within the Impulse Program is to be able to pursue promising opportunities that are not planned beforehand. Plans for the spending of this reserved budget can and have to be discussed with the DHF and BFN at any point in time during the research. It is allowed to use maximally 2.5% of the budget (to be deducted from the Talent Program) for this purpose.
Part of the valorisation strategy is collaborating with a Health Technology Assessment (HTA)-expert to advice on a realistic strategy. The outcome of the consultation/analyses with this HTA-expert are part of the proposal as well as how HTA expertise will be part of the project.

The DCVA can provide extensive valorisation assistance to DCVA consortia. Using support under the '*TTT-regeling'* of the Dutch government the DCVA was able to appoint an Impact Officer who will not only scout for high potential results within the DCVA consortia but can also help to get these results investor-ready. As part of the *TTT-regeling,* the DCVA and RegMed XB also established FIRST, an early-stage investment fund for start-ups in the field of cardiovascular disease and regenerative medicine. The Impact Officer will be your contact person for all valorisation related questions in the preparation phase of the proposal, but also during the execution of the project. The valorisation team of the DCVA can be contacted via email: valorisation@dcvalliance.nl.

4.3.2 Implementation strategy

As part of the impact plan, applicants are asked to develop a strategy on how results will be implemented into daily clinical practice. The DCVA, DHF and BFN stimulate researchers and clinicians to implement new solutions in daily practice at hospitals and other (healthcare) institutions. To find treatment that is less intrusive or stressful and helps lowering healthcare costs, new methods and instruments are needed to help find signs of disease and measure progress. Caregivers have to be trained in working

with them safely. Planning and organising this at an early stage of research helps creating fast tracks in this domain. Expertise and collaboration are key to develop and implement novel preventive and other therapies for neurovascular disease. To increase the chances of your results being adopted into clinical practice as efficient as possible it is essential to involve relevant scientific, clinical and/or societal organisations already early in your project. Describe a strategy how to implement new knowledge in neurovascular healthcare practice. This strategy includes describing who will be involved, how implementation will be executed and how implementation activities will be organized (also by others) and a stakeholder analysis. Please get in touch with the DCVA implementation pillar for support on this subject via
email: implementation@dcvalliance.nl.

4.3.3 Impact Coordinator

Taking responsibility for creating impact requires a specific interest and expertise in valorisation and implementation activities. Depending on the characteristics and the phase of the project, time dedicated to valorisation opportunities and activities may vary. As steering towards impact is key in the project, the consortium is asked to appoint a so-called Impact Coordinator. The Impact Coordinator will be the prime contact person for the DCVA Impact Officer, and the user committee, and will be responsible for updating the impact plan. An example for an impact coordinator profile can be found in Appendix 3.

4.3.4 User committee

Relevant stakeholders are involved via a user committee. This committee advises the consortium on the steps needed to bring results to clinical practice and monitors the use of the acquired knowledge. Describe in the proposal how collaboration with stakeholders will be organized, what expertise is needed and how this expertise is present in the described composition of the committee. It is advised to reach out to the envisioned user committee members already in an early stage (proposal phase). By doing so, they can provide feedback on the proposal and align expectations. Patients are an essential part of a user committee. The consortium can contact patient organisation Harteraad and the patients advisory board of the BFN for more information about patient participation. Furthermore, the Involvement Matrix and the Kickstarter for researchers could be useful tools to incorporate patient participation in research. More information about user committees can be found on the website of the DHF. Please also take note of our user committee guidelines. It is allowed and recommended to reserve budget for the user committee.

4.4 Talent development

Development of talent within the consortium and in collaboration with other consortia is an important objective of the DCVA. For this second phase of work on the theme, redefining the talent program in line with experiences from the first phase is needed. Next to a consortium specific part, the consortium is also required to participate in a collaborative program with the other DCVA consortia organised under the umbrella of the DCVA talent pillar and in collaboration with other talent coordinators. Examples are activities organized by Young@Heart, and the yearly DCVA congress organized by the NL-HI, summer/winter schools or masterclasses organised by consortia which are open to researchers outside their own consortium.
Describe clear goals of the talent program, what (type of) activities you plan to initiate, for whom, and when. Include a description of the criteria used to assess talents and indicate who will be the talent coordinator of your talent program. A talent coordinator profile can be found in Appendix 4. We advise that the most talented PhD students within the consortium will get a postdoc position within the next phase of the consortium and that opportunities are created for talented members of the consortium to progress to leadership positions. We stimulate to include talented postdocs from outside the consortium in the Impulse consortium. To stimulate the appointment of postdocs within the consortia, the ratio of requested postdoc vs. PhD students in the application is at least 1:2. In order to make the development

of talent more apparent, it is expected to monitor the progress of the talents and to self-evaluate the talent program.

4.5 External Collaboration

One of the tasks of the consortium is to create a national expert network. Part of the proposal is therefore a description of the collaboration (opportunities) with other consortia or projects, relevant stakeholder organizations (such as DCVA partners) and end-users.
The proposal includes a description on how the expert network is organized, which stakeholders are involved (including names and their role). It should be clear how the expert network will be visible and accessible for (inter)national professionals from outside the consortium and network. The proposal also describes how support is created and how patient groups and societal stakeholders are involved.

4.6 Excellent leadership and governance

The consortium will be managed by two research leaders. However, if it benefits the consortium, it is possible to arrange the leadership differently e.g., by the addition of a third research leader. The quality of the consortium including the research leaders will be assessed by the combined International Scientific Advisory Committee-Committee Societal Quality (ISAC-CSQ) compiled by the DHF and BFN.
The research leaders are expected to take full responsibility for the governance of the consortium, the engagement and involvement of work package leaders and the organization of consortium meetings. Specific tasks within the consortium such as the user committee, the talent program and the impact plan can be delegated to the talent and impact coordinator(s). A clear schematic overview and the distribution of responsibility of the consortium is part of the application. See Appendix 5 for an example.
Together, the research leaders and work package leaders will represent the whole research area and therefore reflect a good balance on multiple aspects necessary for the consortium. Jointly the consortium partners are dedicated to form the consortium.
Research leaders cannot be affiliated to the same University Medical Centre and they have complementary expertise. Ideally, the consortium has one clinical and one non-clinical research leader. There is a balance in male/female research leadership and work package leaders. The formal criteria for research leaders and work package leaders are listed below.

4.6.1 Criteria research leader

- Is an inspiring leader who unifies the field and is able to oversee all activities of the consortium;
- Is managing the consortium, responsible for the performance of and collaboration within the consortium;
- Represents the research topic on both a national and international level;
- Has a paid position at a knowledge institute throughout the entire duration of the research project;
- Has proven expertise in leading a project of comparable size;
- Has the capability to attract additional funding;
- Has an excellent track record, evident international reputation and has the potential to successfully face European competition (ERC advanced/consolidator level);
- Ensures the consortium will contribute in a sustainable way to the research field, until a minimum of three years after this grant has finished.

4.6.2 Criteria work package leader

- Is leading part of the project i.e., a work package;
- Must be employed throughout the entire duration of the research project. If not, specific details must be supplied of what measures will be taken to deal with this;
- Must be capable of making/guaranteeing agreements on behalf of the institute where she/he is employed (probably in consultation with the head of the department);
- Has a proven track record and reputation (at least eligible for an ERC starting grant).

5. Other conditions

5.1 Diversity

Diversity is an important aspect for every research proposal because it is proven to be relevant in neurovascular diseases. We invite applicants to take elements such as gender, age, ethnicity and socioeconomic status into account in their research proposal. If it is impossible or irrelevant to take diversity issues into account for this specific research proposal, applicants should explain why. For example, the term 'sex' refers to the biological attributes that distinguish male from female and the term 'gender' refers to men and women's socially constructed roles, identities, and behaviours. See the website of Stanford university for tools that can be used to integrate sex and gender aspects in research applications. And check out the Online Training Modules of the CIHR on Integrating Sex & Gender in Health Research.

5.2 Open access & open science

A well-organized data infrastructure is essential for excellent science. The DHF, DCVA and BFN promote this by focussing on the following aspects:

- Sustainable use and re-use of data
- Registry-based research
- Data communities
- Biobanks

Projects funded within the context of the DCVA are strongly encouraged to make use of the services of the DCVA. The data infrastructure team of the DCVA can be contacted via data-infrastructure@dcvalliance.nl.

A project proposal should include a detailed description on how the acquired data will be handled (data stewardship). Therefore, the consortium is strongly advised to involve a data-expert in their consortium and is obliged to allocate resources for data management in the budget. After having been awarded the grant, the consortium will be asked to hand in a Data Management Plan (DMP). The Durrer Center can provide a DMP-format and assistance when needed. A DMP is a dynamic document and will also be used to monitor progress on data management.
In addition to data management, both the DHF and BFN require that all publications funded by the DHF or BFN are published in an open access journal.
More information about data-management policy and support can be found here on the website of the DCVA and DHF.

6. Budget and duration

The maximal available funding will be 4 million euros, 2.5 million euros from the DHF and 1.5 million from the BFN, of which 10% should be allocated to the talent program. In case a reservation of maximal 2.5% for – at this stage – unforeseen impact activities is needed, the reservation for the talent program can be lowered to a minimum of 7.5%. A DCVA consortium has to contribute to and participate in joined activities that will be organized in collaboration with other DCVA consortia. To this end, 25% of the talent program budget should be allocated to this collaborative program. This budget does not have to be specified and is already allocated in the budget sheet.
Make sure budget is allocated to all activities described in the proposal. When no budget is allocated, please motivate in the proposal how the consortium will acquire additional funding.
The duration of the project is a minimum of four to a maximum of five years.

In the coming half year, the BFN and DHF will explore other possible collaborations with the DCVA and other partners to support the consortium. If (part of) the funding is made available by other funders, specific requirements may be applicable.

6.1 Potential extra funding

Both the DHF and the BFN promote valorisation and stimulate the involvement of appropriate stakeholders in the consortium. Thereby, the DHF and BFN aim to maximize the chance for appropriate and fast implementation of new solutions in (clinical) care for neurovascular patients.

With the matching grant program, the DHF makes funds available to match investments from private parties up to € 500.000. In principle, the funds required for the matching grant program are public-private partnership (PPP) allowance funds. Therefore, PPP rules apply for this part of the research proposal. More information about the matching grant can be found on the website of the DHF. The BFN also makes € 500.000 available for extra activities that increase the impact of the consortium.

Whether the funding for additional activities is requested from the DHF or the BFN depends on the subject of the proposed activities. These must match the goals of one of the funders, as described in the supplement to this brochure. The request for extra funding can be part of the current proposal and requested budget, but it can also be submitted during the term of the proposed project. If a proposal for additional funding is submitted in a later stage, the proposal will also be evaluated by committee members assessing the Impulse grant proposal. Please contact the DHF or the BFN if the consortium considers applying for extra funding.

7. Submission of proposal

- Upon submission we expect the following documents:
  - Application form with necessary appendices
  - Budget sheet
- Two weeks before the committee meeting, we expect the submission of the amended Intra-consortium agreement.
- The start of the project should be within 6 months after approval of the proposal.
- The DHF functions as the first point of contact for the application procedure and shares all documentation, communication, and related information with the BFN.

7.1 Agreements

Upon submission we expect that all partners are informed and agree with the conditions laid out in the agreements sent together with this brochure (see below at 10).
We explicitly advise the initiators to carefully read the agreements and discuss them with the consortium partners before submitting the proposal.

8. Review process

8.1 Eligibility check by DHF and BFN

The DHF and BFN will check after submission if:

1. the application is in line with the purpose of the call;
2. the application is in line with the scope that has been agreed with the initiators;

3. the consortium has correctly addressed all elements in the application and the budget;
4. all principles of the DHF, DCVA and BFN are included in the application;
5. the application is eligible in terms of the format used.

If the application is not eligible but can be amended on short notice, the DHF and BFN will invite the applicants to amend the application withing five working days.

8.2 The Committee

The proposal will be assessed by the combined International Scientific Advisory Committee-Committee Societal Quality (ISAC-CSQ) compiled by the DHF and BFN. The ISAC-CSQ consists of scientific evaluation members and end users of research (i.e., patients, citizens, healthcare professionals). This committee is key in the assessment and selection of research proposals and is involved in monitoring the progress of the granted consortia.

After the first check and if the application is eligible, members of the ISAC-CSQ will review the application on the main criteria (Impact, Description of work, Route to Societal Impact, Internal and External collaboration, Talent Program, Budget). If necessary, additional external reviewers will evaluate the proposal on specific aspects.

The applicants will receive a compilation of the reviews of the external reviewers and ISAC-CSQ members. Depending on the reviews, a reaction can be asked from the applicants before the assessment meeting. Applicants are requested to present their proposal during the assessment meeting. More detailed information about the procedure and the meeting will be send after the eligibility check.

8.3 Code of Conduct on Confidentiality and Conflicts of Interest

To ensure a fair assessment and transparency for researchers, the DHF and BFN use a Code of Conduct on Confidentiality and Conflicts of Interest. This code stresses the necessity of confidentiality, identifies possible forms of conflicts of interest and indicates the steps to be taken to avoid conflicts of interest. Parties subject to the code of conduct are referees, jury members, committee members, members of decision-making bodies and DHF and BFN officers. The full text of the code of conduct on conflicts of interest is available as an attachment to this brochure.

9. Decision process

The ISAC-CSQ will advise whether the consortium is eligible for funding. With scores ranging between very good to excellent the consortium will be eligible for funding. With lower scores and/or serious doubts about (parts of) the proposal, the ISAC-CSQ can advise not to fund the proposal. The management boards of the DHF and the BFN decide together on the allocation of funds, based on the advice of the ISAC-CSQ.
When the proposal is eligible for funding but not enough funding is available yet, a possibility is that the consortium will be partly funded, or the funding decision will be postponed.

10. Post decision process

10.1 Complaints procedure

A complaint can be submitted by the applicants after the decision of the DHF and BFN has been communicated. A complaint form should be submitted to the Complaints Committee of DHF. It is not possible to appeal against the outcome of the procedure (funded or not funded). The form can be found

on the DHF website. Complaints should be submitted within four weeks after receiving the notice from the DHF. More information about the complaints procedure can be found on the website of the DHF. Complaints will be jointly handled by BFN and DHF, following the standard DHF procedure.
NB: read BFN and DHF in the procedure where it says 'Hartstichting'.

10.2 Consortium documents

After granting, the consortium partners must sign two legal documents:

- A consortium agreement between the DHF, BNF and the consortium partners in which the legal and financial conditions are stated. This agreement is non-negotiable.
- An Intra-consortium agreement (ICA) containing i.e., paragraphs on IP, organisational and publication arrangements. The ICA becomes part of the consortium agreement. The ICA must be submitted two weeks before the committee meeting. A template is attached, the text is amendable.

The consortium agreement and ICA must be signed and returned to the DHF office within 6 months after receipt of the grant approval letter. The consortium is obliged to deliver signed agreements and start within 6 months after approval.

Appendix 1. General time schedule

4 months before meeting
Invitational call launched online

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Consultation process

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2,5 months before meeting

Submission of proposal

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2 months before meeting

DHF informs whether eligibility requirements have been met

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1-2 months before meeting

Evaluation by external reviewers and ISAC-CSQ

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2-4 weeks before meeting

Compilation of the reviews sent to consortium

↓

meeting
Assessment meeting, including interview with ISAC and CSQ members

↓

one month after meeting

Decision by boards of DHF and BFN

Appendix 2. Impact Plan

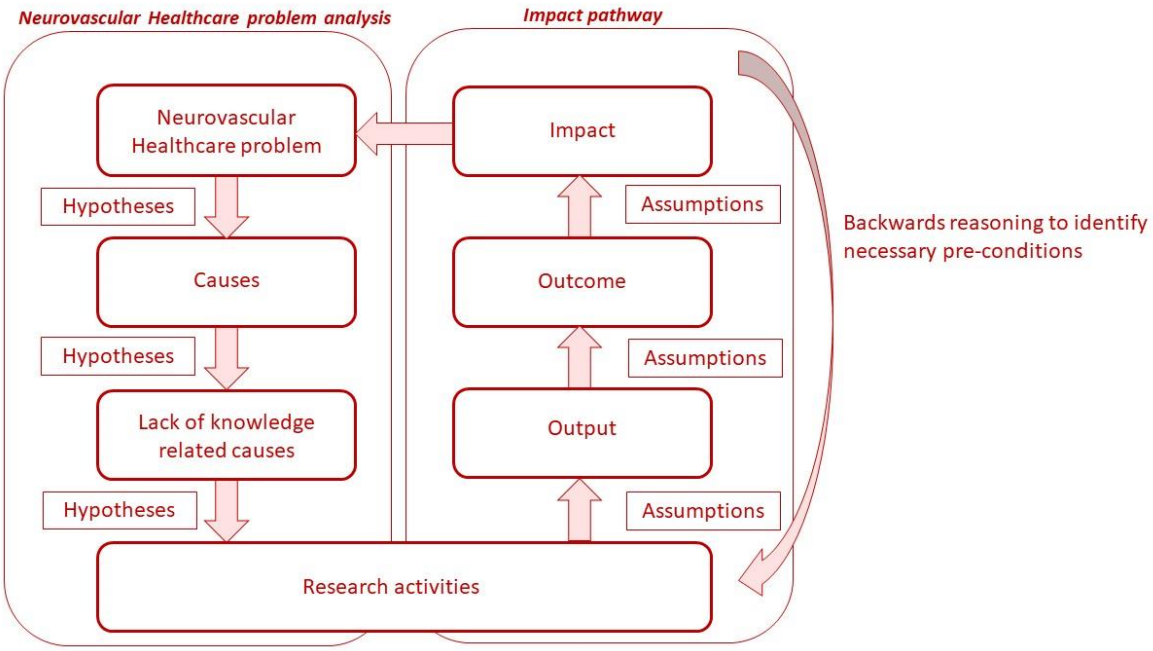
Why an Impact Plan approach?

The DCVA, the DHF and the BFN aim to create societal impact by focusing on finding and implementing solutions for significant neurovascular healthcare problems. Elements such as a description of the clinical problem, the envisioned solution, the role of relevant stakeholders and the route to clinical adoption of the solution are now an integral part of all project proposals. Therefore, an impact-based monitoring strategy is introduced. This *Theory of Change* inspired method, called the *Impact Plan* approach, provides a more structured manner on how to achieve maximal impact with your consortium. This approach helps the consortium and the stakeholders to guide to project towards the envisioned impact goal.

Impact plan and the Theory of Change

With the Impact Plan approach, we ask a consortium to think already in an early stage about the steps that have to be taken in order to work towards the ultimate goal of the project. We call this more specifically the Theory of Change. A Theory of Change describes the problem to be tackled and the desired societal impact. After the ultimate impact of the study is defined, impact pathways are described. Impact pathways are the change paths necessary to reach the defined goal. These impact pathways are based on certain assumptions and actions in order to realize the ultimate change. A Theory of Change offers a consortium the opportunity to start both an internal discussion and a discussion with external stakeholders about how the ultimate desired social effect can be achieved. A Theory of Change and therefore also the Impact Plan is not set in stone, but it facilitates a reflective approach and can be continuously adjusted/updated by the consortium during the course of the project.

Schematic presentation Impact Plan and Theory of Change



The left part of the figure above illustrates the neurovascular problem analysis part of the Impact Plan. In your proposal this part includes the scientific part. It starts with a clear definition of the neurovascular

healthcare problem the consortium is working on, its underlying causes and the lack of knowledge related to these causes. This should result in the research activities of the project.

The part on the right illustrates the impact pathway part of the Impact Plan. Key in this part of the Theory of Change is a well-defined description of the ultimate goal of the study; what is the impact the consortium wants to achieve? Once this ultimate goal is defined, backward reasoning starts; what are the steps that have to be taken to achieve this goal; who are the stakeholders needed in this process, what has to be changed in the current situation to achieve the impact goals? Output and outcome are two important elements of this pathway. The various outputs of the project (direct insights, findings or results obtained through the study) will lead to outcomes (changes in behaviour, relationships and activities of stakeholders in the scientific and policy environment, as a result of knowledge exchange and the use of research output). Assumptions underlying the steps that need to be taken towards impact are essential as these assumptions largely define the chances of success. Assumptions might be adapted during the project and this might change outputs and outcomes of the consortium, making an Impact Plan a living document.
Inspiration on how to set up an implementation strategy can be found on the website of ZonMW.

Example

The healthcare problem: too many people die of neurovascular disease X
The cause: there is no effective therapy available that can be used to treat patients suffering from disease X
The underlying knowledge cause: there is not sufficient knowledge of the pathophysiology, therefore it is not possible to find therapeutic targets

Project proposal

Deliverable 1: protein/gene Y causes the disease
Deliverable 2: a compound targeting protein/gene Y is identified
Objective 1: a company adopted the target and compound and developed a therapy
Objective 2: the treatment is taken up in guidelines
Objective 3: insurance companies reimburse the therapy
Impact: less people die of neurovascular disease X because there are treatment options available

Appendix 3. Profile Impact Coordinator

Tasks

- Primary contact person for the Impact Officer of the DCVA;
- Responsible to safeguard the steps the consortium needs to take in order to create impact and solutions for patients (impact plan);
- Together with the research leaders responsible for reporting on impact, valorisation and implementation.
- Advice the consortium, in conjunction with the impact officer of the DCVA, on valorisation activities such as patent applications;
- Together with the research leaders responsible for contact with external parties and other relevant stakeholder;
- To participate in courses on relevant topics such as valorisation, implementation, impact, business development, etc;

Profile suggestions

- Experience or interest in impact related topics such as valorisation and implementation;
- Capable of relating research findings to the impact goals of the consortium;
- Experience or interest in the various aspects of the valorisation process such as patent applications, business cases and start-ups;
- Sufficient knowledge of the clinical problem the consortium is working on;
- The impact coordinator should be capable of aligning the interests of the stakeholders.

Appendix 4. Profile and tasks Talent Coordinator

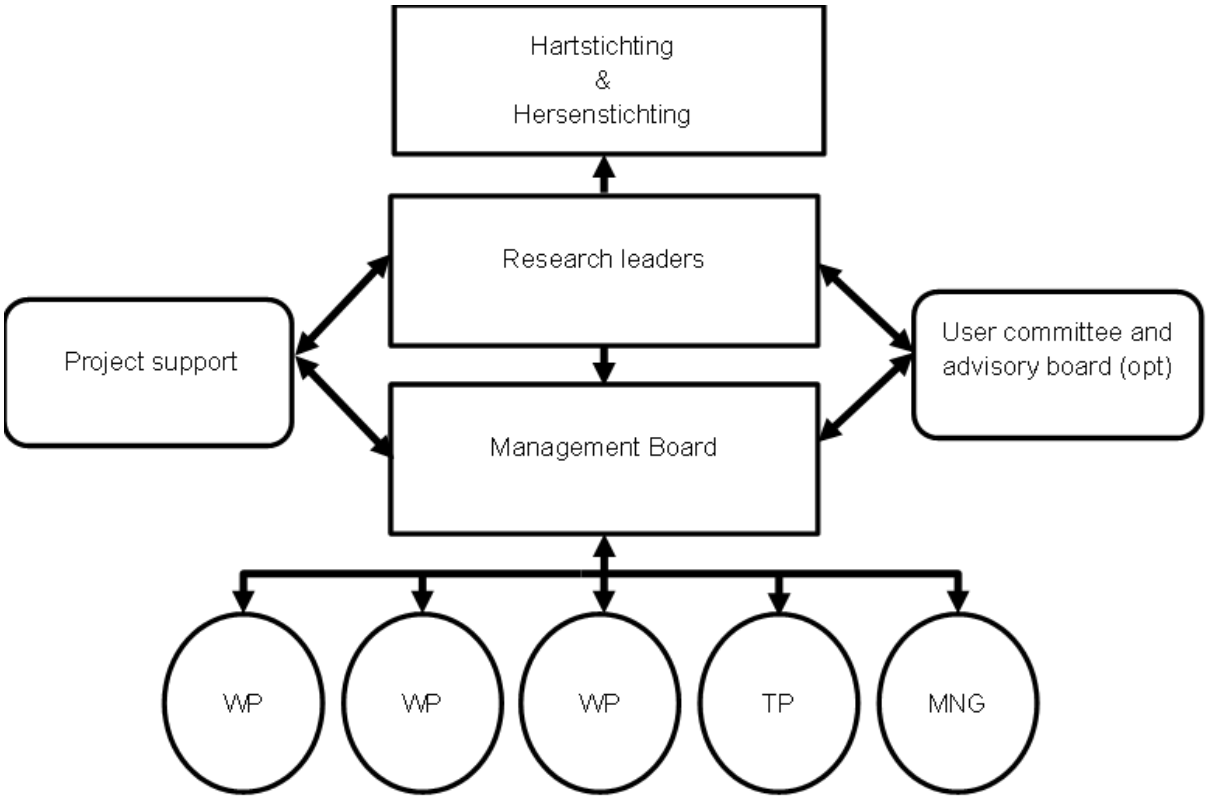
Tasks:

- Primary contact person for the talent development program: responsible for the outline, organization, monitoring and evaluation of the talent program/talent activities.
- To involve (young) talents in the planning of the talent program and to organize talent activities in collaboration with (young) talents.
- To oversee the talent budget and to submit talent-related declarations.
- Responsible for the talent program-related communication within and outside the consortium.
- Responsible for setting up independent review/decision processes and the conditions for (young) talents to participate in (open) talent calls
- To maintain contact with other Talent Coordinators and to participate in Talent Coordinator meetings organized by the DHF, BFN and/or DCVA to exchange ideas and to inform each other about ongoing or future talent activities.

Profile suggestions

- A person that has (young) talents' best interests at heart regarding their career and future prospects in the neurovascular field.
- Experience with or interest in talent development in the neurovascular field, preferably knowledge of existing talent development initiatives.
- Proactive, involved and open attitude towards (young) talents in general and the talent program in particular.
- Excellent communication skills and capable of connecting people and encouraging collaboration.
- Being able to come up with creative and innovative ideas, and to include (young) talents in this.
- Being able to stimulate (young) talents to actively participate in the talent program and to encourage them to broaden their horizon.

Appendix 5. Example of Governance



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