



Public-Private Partnerships Program 2025 – FORESIGHT.

1. Summary

The Dutch Ministry of Economic Affairs and Climate Policy stimulates public-private partnerships (PPP) via the PPP-Programs 2025 for Research and Innovation made available by the Top Sector Life Sciences & Health (LSH) and managed by the communication portal <u>Health~Holland</u>. With these programs, consortiums of researchers and companies are encouraged to invest in joint research and development.

The UMCG is the main Coordinator of the <u>FORESIGHT Program 2025</u>, to support collaborations with private partners. The program falls under the framework of the <u>PPP Allowance Regulation</u> of the Dutch Ministry of Economic Affairs and Climate Policy and the National Regulation Economic Affairs Subsidies (Ch. 3 Innovation and Entrepreneurship, Title 3.2 PPP-allowance and innovation).

FORESIGHT: A Public-Private Partnership for Drug Development

The FORESIGHT Service and Innovation Center and Program bring together the expertise and infrastructure of UMCG, AUMC, NKI/AVL, and TU/e, in collaboration with (inter)national partners. By combining strengths in tracer development, bioengineering, imaging, and AI-driven data analysis, FORESIGHT aims to transform drug development and precision medicine. This will lead to the strengthening of the collaboration and the future realization of a FORESIGHT Service and Innovation Center.

The Urgent Need for Innovation in Healthcare

Chronic and severe diseases pose an increasing burden on society. The number of patients is expected to rise sharply, overwhelming healthcare systems and driving costs to unsustainable levels. Despite the urgent need for new treatments, drug development remains highly inefficient—taking an average of 10 years and costing at least €1 billion per drug, with a high failure rate. Even among approved medicines, 90% do not work for all patients. Additionally, diagnostic imaging—which could help predict drug efficacy and personalize treatments—is rarely used in development or clinical practice.

Transforming Drug Development with Advanced Imaging

FORESIGHT addresses these challenges by applying molecular nuclear and optical imaging to develop imaging biomarkers—providing tools for cell-level tissue mapping till real-time drug tracking in the body.

Improve early-stage (preclinical) testing, reducing failure rates.

This is achieved by identifying the right patients for specific treatments and increasing drug effectiveness, optimizing clinical trial design, making development faster and more cost-effective. By integrating these technologies, FORESIGHT enhances precision medicine, ensuring patients receive the most effective treatments.

The aim of the FORESIGHT-PPS program is to carry out development projects on the use of molecular imaging for informed drug development and choice in oncological, autoimmune, cardiovascular, and neurodegenerative diseases, using one or more modules for tracer production, imaging, and data analysis/AI. This is to demonstrate the added value of the FORESIGHT proposition for those disease areas in projects with future customers. The FORESIGHT PPP program makes it possible to create these showcases with (inter)national partners and with the strong participation of Dutch SMEs/start-ups.

Deliverables and Impact

The FORESIGHT-PPS program will deliver:

- Cutting-edge imaging solutions for drug evaluation and patient selection.
- Collaborative R&D projects with industry partners.
- Preclinical and clinical imaging studies for major diseases.
- AI-powered data analysis to improve healthcare decision-making.

The PPP subsidy available for the FORESIGHT program is 9 M EUR, divided into three program periods starting between 1st January 2025 and running until 30th December 2032. Proposals will be assessed in two stages, based on a preapplication and a full application. The expectation is that about 20 innovative projects will be realized evenly distributed across the four disease areas. Through these innovations, FORESIGHT will demonstrate the power of molecular imaging, in drug development or choice, driving long-term growth in precision medicine.





2. Call requirements: eligibility & evaluation criteria

General Health Holland requirements for PPPs

- The research fits within the social theme 'Health & Care,' the Central Mission, and one of the five focused Missions, as described in the <u>Knowledge and Innovation Agenda (KIA) 2024-2027</u> of Top Sector LSH. (see Appendix 1).
- The consortium must consist of at least one research organization and a private partner.
- The project has a maximum duration of 4 years.
- The project consists of industrial research, experimental development, or a combination thereof (TRL 4 7). Projects at lower TRL levels (TRL<4, fundamental research) can apply but have a lower chance of being awarded.
- Effective collaboration takes place.¹ The project is executed with joint efforts, costs, and risks all consortium partners contribute substantially.
- All consortium partners should make an in-kind contribution. This means, for example, but not limited to, all consortium partners must incur payroll costs and that these costs are visible in the budget form.
- A collaboration agreement using the template approved by Health~Holland and the consortium partners should be signed by the start of the project.

FORESIGHT specific criteria/advices

- A link with a member of the FORESIGHT core module or disease area teams and at least a private and a public partner.
- Collaboration with companies in the Netherlands or internationally, SMEs², and public partners, such as healthcare providers, patients, and insurers.
- The project should be carried out within the FORESIGHT Innovation and Service Center.
- Contribution to FORESIGHT objectives and appropriate output. We aim to have most of awarded project proposals with TRL ≥4. Technology readiness level: The Development phase (TRL 4, 5, 6), The Demonstration phase (TRL 7 & 8)
- An innovative public-private R&D project in drug development or choice with molecular imaging in one of the four disease areas, using one or more modules.
- Duration preferably 3 to a maximum of 4 years.
- Dissemination to the scientific community and the wider public.
- Social impact well substantiated.
- Economic impact well substantiated.
- Good quality, partly in view of feasibility and mitigation plan.
- Maximum project budget of ~€1,500,000, of which €750,000 is a subsidy, 50% contribution by public-private parties, of which cash contribution is at least 10% for large companies.
- Collaborations with Dutch SMEs² are encouraged.

¹ Definition of 'effective collaboration' according to the <u>Framework for State aid for research and development and</u> <u>innovation</u>: 'effective collaboration' means collaboration between at least two independent parties to exchange knowledge or technology, or to achieve a common objective based on the division of labor where the parties jointly define the scope of the collaborative project, contribute to its implementation and share its risks, as well as its results. One or several parties may bear the full costs of the project and thus relieve other parties of its financial risks. Contract research and provision of research services are not considered forms of collaboration.

² Definition of SMEs: please consult the definition provided in the application template





3. Financial terms.

Health~Holland encourages consortia to jointly design the activities and budget within the project, with both research organisation(s) and companies contributing equal content to the project. In addition, Dutch SMEs are given the opportunity to apply for PPP subsidies for their R&D activities.

A project can consist of a combination of the three types of research: fundamental, industrial, and experimental (See Appendix 1 for definitions). Please note that FORESIGHT aims to have most of the awarded project proposals with TRL \geq 4 (see evaluation criteria at page 2).

Different funding rules apply: Table 1A shows the maximum amount of funding eligible for the project per type of research at the partner level. Table 1B presents the minimal contribution required per partner to the project.

Financial conditions

- Research organizations may finance a maximum of 70% of their costs (e.g., man hours, consumables, and the use of
 equipment etc.) with PPP subsidy in the case of fundamental/industrial research and a maximum of 60% of their
 costs in the case of experimental development.
- Dutch SMEs may finance a maximum of 60% of their costs (e.g., man hours, consumables, and the use of equipment, etc.) with PPP subsidy in the case of fundamental/industrial research and a maximum of 40% of their costs in the case of experimental development.
- All consortium partners should at least incur payroll costs.
- All consortium partners should make an in-kind contribution.
- A company that receives a PPP subsidy **cannot** contribute in cash to the project.
- The research organization must contribute at least 10% of the total project costs.
- Depending on the type of research, the enterprise(s) must contribute at least 15% to 30% of the total project costs.
- The budgeted, subsidized costs are directly related to the **R&D activities** and do not include non-eligible costs. (See Appendix 4)

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Max % PPP subsidy based on eligible	Fundamental and	Experimental development
costs partner	industrial research	
Research organization	70%	60%
Dutch SME	60%	40%
Large enterprises, non-Dutch SME,	0%	0%
Dutch and non-Dutch other parties		

Table 1.A: Funding by type of research at partner level

The percentages listed in Table 1.A are percentages taken over the total costs of the organization in question.

Minimal contribution based on total	Fundamental and industrial research	Experimental development			
project cost					
Research organization(s)	min. 10%	min. 10%			
For-profit and not-for-profit enterprise(s)	min. 15%	min. 30%			

Table 1.B: Minimal contributions at project level

The percentages listed in Table 1.B are percentages taken over total project costs.

Instructions Budget Form

A specific budget form is mandatory to use within the 2025 FORESIGHT. The budget form uses multiple built-in functions and redirects. Therefore, it is important to follow the instructions included (see the "Instructies" tab of the budget form). Please consult with the department financial officer for guidance on completing the budget. Given the financial conditions presented above, project budgets may not be finalized without additional negotiations among project partners. A Business Developer from the Innovation Center will be available to support the development of the proposal and the negotiations with the partners, when necessary.

NL Health~Holland SHARED CHALLENGES, SMART SOLUTIONS



3. Application procedure

The application procedure is set out in two phases. Using the application template forms provided by the FORESIGHT Program Management team is mandatory. All templates are available for download at the FORESIGHT website.

Phase	Timeline of funding schemes 2025 (2 rounds)		Description
Contact and intake	Open,	anytime	Visit the website of <u>Foresight</u> . Contact <u>foresight@umcg.nl</u> to receive information, have an intake meeting to discuss your idea, and receive the application documents.
Pre- application phase	17/03 – 01/06/2025	01/09-01/12/2025	If the project idea fits and is feasible, the applicant is invited to apply. The applicant must fill out a <u>pre-application form</u> and <u>a preliminary</u> <u>budge</u> t, as well as indicate the <u>status of contractual discussions</u> with the company. The complete pre-proposal can be submitted at any time before the deadlines indicated.
Evaluation and feedback	By 1/07/ 2025	By 20 /12/2025	The FORESIGHT assessment committee sets up consistent evaluation meetings where the submitted pre-application is evaluated based on eligibility Call criteria (see Appendix 2).
Full application phase (II)	01/07 – 1/10/2025	01/01 – 1/03/2026	The pre-applications that are positively assessed will be invited to submit a full application form, the definitive budget form, and a draft collaboration agreement (at least). Contracts must be finalized before the start of the project.
Final Decision	By 1/11/2025	By 1 /04/2026	The FORESIGHT evaluation committee will assess full applications and advise the Program Group. The Program Group will communicate the awarded proposals.
Finalization documents	By 1 st May 2026		All application documents for awarded proposals are finalized Draft agreement in place at least (Preferably full agreement signed)

The applicant will be required to submit the pre-application form and subsequently, the full application form, with the respective project information. Please note that the same template applies for the pre-application and the full application. However, for the pre-proposal only certain sections of the document will be required to be filled. The table below provides an overview of the sections and information to be filled out in the respective phases. Detailed instructions and guidelines on these sections are available in the form. More information are also available in the Appendixes to this document.

Pre-Application Form	Full ap
Registration: title, acronym, applicants, timeline.	Detailed project descri and milestones, project
Project overview: project summary, impact summary, type of research.	Data Management Plan
Budget: draft version.	Budget: specification &
Project background, state-of-the-art, objectives.	Patient/end-user partic principles for diversity a
Impact: Scientific, societal, economic impact; TRL level. Adherence to the LSH Missions and to Key Enabling Technologies (KET's) and Key Enabling Methodologies (KEMs).	Evaluation of trajectory
Potential conflict of interest; status of agreement negotiations.	Plans for dissemination
Feasibility: Collaboration setup, roles and responsibilities partners.	Description of huma biological hazards.

Full application Form		
De	tailed project description: work packages, deliverables	
an	and milestones, project risks	
Da	ta Management Plan and FAIR principles	
Bu	dget: specification & final version	
Patient/end-user participation & Inclusivity: Alignment to		
principles for diversity and inclusion.		
Evaluation of trajectory health and care innovations		
Pla	ns for dissemination of results	
De	scription of human subjects, laboratory animals,	
bic	ological hazards.	





4. Evaluation criteria.

Evaluation of the pre-application and full application.

Eligible applications in both stages will be assessed by the FORESIGHT assessment committee. The detailed description of the evaluation committee, time of evaluation, and notes of the process will be accounted in the evaluation checklist, which can be made available to the applicant upon request. Applications will be assessed for content and quality of the research based on the evaluation criteria layout in Appendix 2.

Information available in the appendixes.

- Appendix 1: Definitions Social theme, Missions and documents to consult related to Dutch strategies for Life Sciences and Health sector, growth markets and priority key technologies.
- Appendix 2: Evaluation criteria.
- Appendix 3: Information on type of research, TRL levels, Publications, Open access, Data management, FAIR principles, User participation, Reducing inequalities HI-NL roundtable service
- Appendix 4: Examples of ineligible costs and third party costs

For questions, please contact: foresight@umcg.nl

For general information, please visit the website of <u>Foresight</u>.





Appendix 1: Definitions of Social theme, Missions, and documents to consult related to Dutch strategies for Life Sciences and Health sector, growth markets and priority key technologies.

Social theme 'Health & Care'

In the spring of 2019, the Ministry of Health, Welfare, and Sport (VWS) established five missions for the social theme of Health & Care. One central mission and four focused missions. The central mission focuses on living in good health longer while reducing health disparities between people of high and low socioeconomic status. The other four missions contribute to this central mission through changes in the living environment, providing more care in the right place, and better prospects for people with chronic diseases and dementia. The missions have a time horizon extending to 2040. In the fall of 2023, a fifth focused mission was added, aimed at societally disruptive health threats. The Knowledge and Innovation Agenda 2024-2027 (KIA) describes the ambitions and goals of the health and care missions within the field of public-private partnerships. As the lead party, the Top Sector LSH has prepared this KIA together with many public and private stakeholders. The process involves building on a powerful ecosystem of public-private partnerships that has been established in recent years. Many of these stakeholders have committed themselves to the objectives of the KIA by means of in mind, in kind, and in cash contributions to the Knowledge and Innovation Covenant (KIC).

Missions of the Top Sector LSH

- <u>Central Mission</u>: By 2040, everyone in the Netherlands will live at least five years longer in good health, while the health inequalities between the lowest and highest socio-economic groups will have decreased by 30%.
- <u>Mission I</u>: By 2040, the disease burden resulting from an unhealthy lifestyle and living environment will have decreased by 30%.
- <u>Mission II</u>: By 2030, the extent of care provided to people within their own living environment will be 50% more than today, or such care will be provided 50% more frequently than at present.
- <u>Mission III</u>: By 2030, the proportion of people with a chronic disease or lifelong disability who can play an active role in society according to their wishes and capabilities will have increased by 25%.
- <u>Mission IV</u>: By 2030, the quality of life for people with dementia will have improved by 25%.
- <u>Mission V</u>: By 2035, the population is better protected from socially disruptive health threats.

Specific Growth Markets identified: Medical technology and Innovative and high-quality molecules in the biotech sector. Specific key technologies of attention are: 1) Biomolecular and cell technologies; 2) Imaging Technologies; 3) Artificial intelligence and data science

Guidance documents

- Missions Health & Care document 2024-2027: <u>Missies Gezondheid & Zorg 2024 2027 (health-holland.com)</u>
- Health~Holland publication on Health & Care 2030: <u>Van toekomstbeelden naar toekomstgerichte actie voor</u> <u>noodzakelijke impact | Health~Holland (health-holland.com)</u>
- Knowledge and Innovation Agenda 2024-2027: <u>Kennis- en Innovatieagenda Gezondheid & Zorg 2024-2027</u> (fliphtml5.com)
- Knowledge and Innovation Convenant 2024-2027 <u>Knowledge and Innovation Covenant 2024-2027</u> <u>Covenant |</u>
 <u>Rijksoverheid.nl</u>
- Overview Growth Markets LSH Sector Netherlands promising growth markets
- Ten priority key technologies where the Dutch knowledge field and industry can make a positive impact and which are essential for the future. <u>Knowledge and Innovation Agenda for Key Enabling Technologies</u> (KIA-ST) and <u>Key Methodologies research agenda</u> is part of the KIA-ST.
- Key methodologies (KEM) toolbox for the realisation of social innovation in the form of models, strategies, processes and tools. <u>KEM website</u>
- HI-NL Round table service, provided by Health~Holland: <u>About | Health Innovation Netherlands</u>





Appendix 2: Evaluation criteria.

Evaluation Criteria Pre-application:

- Administrative and registration information is complete.
- The project's schedule is realistic.
- The research is well described, and the project's goals are clear.
- The intended methods concerning feasibility have been properly chosen and substantiated.
- The consortium has the appropriate expertise, network, manpower, facilities, and resources to ensure a successful outcome of the project. The different roles of the consortium partners are complementary and well-defined, and effective collaboration takes place.
- The project is innovative and provides new scientific insights.
- The projects fit with the aims and objectives of the FORESIGHT program and contribute to one or more of the expected FORESIGHT outputs.
- The project meets societal needs, and the societal importance is well-substantiated.
- The economic impact and importance of the project are well described, and this impact is of value to the (northern) Netherlands.
- The economic added value of the project for each consortium partner is well substantiated.
- If applicable, the number of subjects and/or laboratory animals is realistic and adequate.
- Budget aspects are realistically achievable.

Evaluation Criteria for full application:

- The work plan is worked out sufficiently, including timeline, milestones, and deliverables. The work packages are clearly linked and well-aligned with each other.
- The project's risks have been properly assessed, and adequate consideration has been given to how these risks will be dealt with.
- The project's budget is realistic (including the number of man-hours per organization, realistic costs of materials and equipment, and realistic "costs due to third parties").
- It is clear when the project can be labeled "successful" and what criteria are used to define this.
- The planned activities to further develop, disseminate, and implement the results from the proposed research (TRL9) are well thought out and described for the partners.
- Data are properly handled within the project.
- The project aligns well with the Knowledge and Innovation Agenda 2024-2027 of the Top Sector Life Sciences & Health, and herewith, the contributions to the missions are well substantiated.
- The projects well aligns with the aims and objectives of the FORESIGHT program and contributes to one of more of the expected FORESIGHT outputs.

The evaluation dates for the submitted full applications will be communicated to the positively assessed proposals later.

For questions, please contact: foresight@umcg.nl

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Appendix 3: Information on type of research, TRL levels, Publications, Open access, Data management, FAIR principles, User participation, HI-NL roundtable service

Definitions of type of research

Fundamental research means experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts without any direct commercial application or use.

Industrial research means the planned research or critical investigation aimed at acquiring new knowledge and skills for developing new products, processes, or services or bringing about a significant improvement in existing products, processes, or services. It comprises the creation of components and parts of complex systems. It may include the construction of prototypes in a laboratory environment or in an environment with simulated interfaces to existing systems as well as pilot lines, when necessary for the industrial research and notably for generic technology validation.

Experimental development means acquiring, combining, shaping, and using existing scientific, technological, business, and other relevant knowledge and skills to develop new or improved products, processes, or services. This may also include, for example, activities aiming at the conceptual definition, planning, and documentation of new products, processes, or services. Experimental development may comprise prototyping, demonstrating, piloting, testing, and validation of new or improved products, processes, or services in environments representative of real-life operating conditions where the primary objective is to make further technical improvements on products, processes, or services that are not substantially set. This may include the development of a commercially usable prototype or pilot, which is necessarily the final commercial product and which is too expensive to produce for it to be used only for demonstration and validation purposes. Experimental development does not include routine or periodic changes to existing products, products, production lines, manufacturing processes, services, and other operations in progress, even if those changes may represent improvements.

Please note that in the case of drug development, pre-clinical research in animals falls within the research category 'industrial research'. In principle, the clinical phases 1 and 2 fall within the research category 'experimental development'. Phase 3 clinical trials (and beyond) are seen as competitive development and fall outside the scope of the PPP Subsidy Regulation.

TRL	Definition	Type of research
TRL 1	Basic principles observed	Fundamental
TRL 2	Technology concept formulated	Fundamental
TRL 3	Experimental proof of concept	Fundamental
TRL 4	Technology validated in lab	Fundamental
TRL 5	Technology validated in relevant environment (industrially relevant environment	Industrial
TRE 3	in the case of key enabling technologies)	
TRL 6	Technology demonstrated in relevant environment (industrially relevant	Industrial
TILE 0	environment in the case of key enabling technologies)	
TRL 7	System prototype demonstration in operational environment	Industrial/ Experimental
TRL 8	System complete and qualified	Experimental
TRL 9	Actual system proven in operational environment (competitive manufacturing in	Experimental
IRL 9	the case of key enabling technologies; or in space)	

Technology Readiness Levels

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Additional requirements for full application

In case of a positive assessment, the applicant will be asked to complete full application form to describe scientific plans more in detail and describe activities regarding dissemination of results, data management, adherence to the LSH Missions, patient participation, diversity and inclusion and innovation trajectories. In the following paragraphs, the mandatory requirements are provided.

Publication requirements.

It is mandatory to acknowledge the FORESIGHT program and Health Holland in all external communication about the project, as well as all publications (i.e. papers, webpages, posters, presentations, reports.). During the course of the project, it is recommended that in every publication or deliverable that comes from an activity which is partly financed by the PPP subsidy, the following words (or similar) should be mentioned: *"The collaboration project is financed by Ministry of Economic Affairs and Climate Policy by means of the PPP subsidy made available by the Top Sector Life Sciences and Health to stimulate public-private partnerships."*

Open access.

In accordance with the Health~Holland guidelines, the research results that are (partially) funded with PPP subsidy should be freely accessible worldwide. All scientific publications of research funded by PPP subsidy should, therefore, immediately (at the time of publication) be freely accessible worldwide (open access).

FAIR principles.

Data should be stored according to the FAIR principles: findable, accessible, interoperable, and reusable. This means that the data generated in the projects can be found, understood, and used by both humans and machines.

Data Management Plan.

Applicants should answer several questions on Data Management in the application form. Once a project is awarded, applicants need to prepare a data management plan in accordance with the respective research organisation's guidelines on Data Management. This is a mandatory requirement for the project.

Patient/end-user participation & Inclusivity

Inclusivity entails paying attention to diversity and differentiation of the target groups concerned, including characteristics as sex, age, socio-economic status (SES), level of education, migration, cultural background, and sexual orientation, to the extent these are relevant for the theme of the project.

The applicant will be asked to provide a description of plans and activities on how the project takes into account relevant differences between people and how citizens in their role as patients, end users, clients, and/or loved ones are involved in the design, execution, and dissemination/implementation of the project.

Impact on health inequalities

The central mission of the social theme Health and Care is therefore that "by 2040, all people in the Netherlands will live at least five years longer in good health and the health differences between the lowest and highest socio-economic groups will have decreased by 30%. It is important to focus research and innovation efforts on what makes innovations effective for people in vulnerable situations and with a health disadvantage. It is essential to involve the experiences and/or knowledge of people with a lower socio-economic position in the projects from the start. The ROCKET principles have been drawn up to promote active interaction with people in a low socio-economic position tackling health inequalities. It is therefore allowed to hire an external center of expertise in the field of reducing health inequalities. These costs are eligible for subsidy within the duration of the project and can be financed with a PPP subsidy.

Innovation guidance – HI-NL Roundtable service

Health~Holland provides guidance for innovation trajectories and MDR/IVDR certification through the HI-NL Round Table Services. The applicant will be asked to answer questions about this trajectory and whether the consortium plans to engage with the provided services during the course of the project.





Appendix 4: Examples of ineligible costs and third party costs

The following are examples of ineligible costs. Therefore, these costs should not be entered on the budget form.

- Applying for and maintaining patents (costs for patents purchased on arm's length terms from or licensed from outside sources are eligible);
- Audit, Auditor's statement;
- Bench fee (note: costs for consumables/material costs are eligible);
- Travel within the Netherlands (domestic travels);
- Support staff not directly related to the R&D activities, such as project controller, business developer, and administrative officer;
- Preparation of a business case;
- Costs related to implementation of the developed innovation;
- Carrying out effectiveness studies (Health Technology Assessment, HTA);
- Non-scientific dissemination. However, scientific dissemination, including attending a scientific congress or publishing a scientific article, is eligible.
- Project management tasks not directly related to the specific R&D activities, such as escalation to a steering committee, preparing a risk management model, preparing reports to meet funding obligations, and administrative accountability. Project management tasks related directly to the R&D activities (e.g., discussions with staff, analyzing technical risks, preparing research reports, and preparing specifications) are eligible.

Costs due to third parties

If part of the activities are outsourced, these costs due to third parties can be allocated to the project and entered on the budget form. It must be ensured that the costs owed to third parties are in proportion to the rest of the budget. If this cost item is very high, this can have an impact and be included in the assessment of the project.