



# Amsterdam Public Health

## APH Strategic Research 2020-2023

### Call for Proposals 2021

November 22, 2021

Amsterdam Public Health



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# 1. Introduction & rationale

In 2021 APH has recalibrated its strategic plans in response to current developments and major challenges ahead that will impact public health (as depicted in box 1). These obviously include the COVID-19 pandemic and its countermeasures that interfere with the resilience of individuals and societies, amplify health inequalities and disrupt our health (care) system. Also, the accelerating role that digital solutions and technological innovations can play in addressing health challenges and the methodological, legal and ethical issues that arise at the same time, are more prominently integrated in our updated plans. The final theme is sustainability, which will be more anchored in the core of our research institute and should be structurally intertwined with how we think and act as both human beings and researchers. Sustainability is of paramount importance to improve the quality of our lives, protect our ecosystem and preserve natural resources for future generations.

These shifts in strategic focus on sustainability, digitalization and resilience in times of health crisis are needed to be more responsive and better equipped to what society and the health system demands of us under certain circumstances. Besides these novel strategic themes, we will also build further on the current strategic plan drawn up in 2019 (for the period 2020-2023) that entailed an increased strategic emphasis on implementation science and seeking partnerships in promoting public health for the citizens of the Amsterdam metropolitan area. The urban context of the research institute continuously provides a large and richly diverse living lab that may not only inspires new research questions and ideas but that will also foster understanding of effective implementation and dissemination with local public health stakeholders.

In line with the shifts in our strategic plan we issue a call for research proposals that addresses at least one of these novel strategic themes:

1. [Sustainability](#)
2. [Digitalization](#)
3. [Resilience in times of health crisis](#)

Current health challenges have to do with major transformations that our health and health care have undergone over the past decade and that are still ongoing, paralleled by changing expectations of citizens, such as:

- an ageing population of increasing diversity in ethnicity, health literacy, and health needs;
- rising chronic, non-communicable diseases, mental illnesses and multimorbidity;
- large health inequalities challenging full societal participation;
- an ongoing shift in responsibility for managing health care that is diffusely assigned to public and private providers as well as citizens themselves;
- increased recognition for the complex interaction between environmental factors and health-related problems;
- increased recognition that timely and accurate data are essential for public health decision-making, as well as providing information with sufficient granularity (e.g. by sex, age, ethnicity, residence, socioeconomic status (SES), comorbidities);
- insufficient capacity of health care systems to respond to surges in demand when faced with unexpected events;
- a need to invest in knowledge that can inform strategic preparedness for new challenges, including pandemics, as a means to increase societal resilience; and
- increased spread of disinformation or ‘fake news’ is a serious threat to management of a health crisis.

*Box 1 - Examples of current health challenges*

The 2021 scheme offers room for three Postdoc fellowships and one PhD candidate embedded at an external partner. Applications should fit within at least one of the novel strategic themes listed above. We call for proposals that make optimal use of APH resources, notably talented researchers, APH data collections from cohorts, registries or other, and expertise related to our research programs and their themes.

The grants within this strategic scheme cover 50% of the costs proposed in the total budget of the application, including salary costs, education costs and bench fee. The remaining 50% should be matched by a non-academic partner, private partner or the applicant’s research department. With this construction we want to stimulate sustainable collaborations of APH researchers with non-

academic partners, such as long-term or public health care organizations, public health authorities, societal stakeholder organizations or private / industry partners.

This is important to APH because we are positioned at the interface between inpatient clinical care, scientific research and the extramural care practice in the Amsterdam metropolitan area, and much of the research that is carried out within the research institute potentially has a direct impact on practice and society. Like other knowledge institutions, APH is expected to produce knowledge in line with societal challenges and to ensure that this knowledge can actually be used in public health practice and beyond. This means that strong links between research, practice and education are, more than in clinical research, crucial conditions for the effective translation of public health research into society.

## 2. Goals

### 2.1 Sustainability

APH joins many other research institutes around the world in adopting the 2030 agenda for Sustainable Development. APH focuses specifically on contributing towards the Sustainable Development Goal (SDG) of good health and wellbeing (#3). However, insofar the 17 goals are interwoven, APH also seeks to contribute towards the other SDGs, such as poverty (#1), hunger (#2), education (#4), gender equality (#5), clean water and sanitation (#6), and decent work (#8). Furthermore, APH aims to reduce its negative impact on climate (#13) and waste (#12) through its daily operations, in accordance with the Health 2020 policy framework (WHO Regional Office for Europe, 2013a).

Sustainability refers to a balance between humans, environment and economy, in the context to growth. This context challenges the delivery of sustainable public health, as the current unsustainable growth path and the time needed to reverse course will witness increasing global threats to public health such as pandemics and local emergencies such as violent conflicts and refugee crises. The Netherlands as well as many other currently high resources countries will be facing these dangers with a rapidly aging population. In addition to the rise of noncommunicable diseases, such as chronic diseases and mental health problems, societies need to be better prepared for communicable diseases as well. Fortunately, many measures taken to prevent and limit noncommunicable diseases (e.g., lifestyle changes, food and consumption, activity, social participation, education) may also mitigate the impact of communicable diseases and outbreak countermeasures.

Sustainable health care also requires addressing the widening gap between the health care work force in an aging society, the increasing volume that is demanded for care in its different forms (curative care, long term care, mental health care), and the increasing innovation in health care. Sustainable public health will be delivered by fewer people with more extensive training than is currently the case.

APH aims to stimulate research around the design and implementation of sustainable public health interventions in the broadest sense. Example projects could be focusing on reducing pollution to combat increase in respiratory infections, safeguarding the food chain from additives like hormones and antibiotics, or measuring / decreasing the footprint of health care provision.

### 2.2 Digitalization

When we think of digitalization and technological innovations, we first think of the rise of big data and artificial intelligence (AI), and how they are radically changing the world and dominating global discussions on how we can make and preserve our world more sustainable across all sectors. In health care, digital solutions, technological innovations and big data offer new opportunities in the areas of diagnostics and treatment, prevention, and the organization and management of care at

individual, institutional and system level. They are pivotal in addressing health challenges our society is facing today (see box 1) in order to dampen the rising healthcare costs and to keep health care manageable and responsive. Digital technology and big data can play a decisive or catalytic role in predictive medicine and personalized prevention, in decision support tools for healthcare professionals and policy makers, and in supporting citizens in self-management of their health through wearable technology and health apps. Digital tools can help turn the tide by preventing or treating diseases with personalized support and giving people a high degree of self-control.

Despite the many promising and sometimes decisive applications of digital technology in health care and beyond, there are still many limitations and challenges to overcome from a medical, ethical, legal and social perspective before sustainable implementation can take place. Especially when it comes to the implementation of AI in health care, there are concerns about black boxes, bias that can increase inequality, threats to privacy and security and lack of transparency.

APH aims to stimulate methodologic and applied research focusing on these challenges for implementation. Examples of relevant topics are the assessment of the positive or negative impact of predictive models on inequality, for instance using data of longitudinal cohorts and registrations data and research focusing on prospective assessment of ethical or legal issues related to implementation of digital health tools. Also, improvement of social participation of marginalized groups by digitalization would suit this theme.

### 2.3 Resilience in times of health crisis

The COVID-19 pandemic brings the core of public health to a clear and devastating reality. By directly threatening population health and putting health care resources under pressure, acute nationwide measures to protect population health against COVID-19 were taken all over the world. Because of the huge uncertainties around the characteristics of this coronavirus, the impact of the disease and the instigated countermeasures on (inequalities in) population health and wellbeing, health (care) systems, societal cohesion, the economy, food and agriculture, education and other aspects of life, is hard to predict. However, it is certain that the impact of COVID-19 is disruptive, takes place in all societal domains and will most likely last for multiple years. In the acute phase, just after the outbreak of the coronavirus pandemic, clinical trials in search of effective treatment and studies addressing the infectious and immunological issues surrounding the virus predominated. Even when the pace of the outbreak is curbed, research is urgently needed on the long-term consequences of the crisis and on lessons for future outbreaks.

APH aims to contribute to asking and addressing pertinent questions about the pandemic and its countermeasures, to support development and evaluation of innovative solutions and strategies, and to contribute to the resilience of individuals and health (care) systems for future health crises. Our focus is on responsive health care in this pandemic from a societal perspective, using multidisciplinary approaches to increase preparedness for future health crises. The many cohort studies in APH cover populations across the whole lifespan as well as new and vulnerable groups and will be of great value in this effort. Moreover, many longstanding collaborations with societal partners support relevance and implementation of our research findings. At health system level, examples of relevant focus areas are measurement of impact of health crisis on health system performance (access, quality of care); strategies to safeguard continuity of services delivery; the use of timely and accurate data for public health decision-making; the capacity of health care system to respond to surges in demand when faced with unexpected events; counteracting the spread of disinformation or 'fake news' which is a serious threat to management of a health crisis.

The COVID-19 pandemic has made it clear to organizations worldwide that the increasing focus on efficiency and cost reduction leads to vulnerable organizations and ethical dilemmas. The theme of crisis resilience is therefore essential, especially in health care. Research covering the consequences of the COVID-19 pandemic or other health crises will be stimulated with this call. This

theme is also about research that can make us, as an organization, more crisis-resistant in order to be and remain a robust and responsive organization in any crisis - an agile organization which is able to share available scientific knowledge in a timely manner, which contributes to strengthening social resilience and is a platform for collaboration.

### 3. Guidelines for applicants

#### 3.1 What can you apply for?

The 2021 round offers room for three Postdoc fellowships, and one PhD candidate embedded at an external partner. The maximum budget that is available in this round amounts in total €475,000.-, which must be matched with its equivalent. The budget for these grants should be spent on salary costs, bench fee and education costs (for the PhD candidate only) of the appointed researcher up to a maximum of 50% of the proposed budget in the application.

Applications should fit within at least one of the novel strategic themes and can be submitted for:

- a) a postdoc researcher (defined as up to 10 years after PhD) to dedicate 50% of his/her working time at an APH affiliated department (0.4 to 0.5 FTE max.) during 2 years on a research project, funded for a maximum of 50% by APH and matched by the department and / or an external partner(s) involved. The total budget that an application for a Postdoc may propose amounts to a maximum of €220,000.-, spread over 2 years, of which a maximum of €110,000.- (50%) can be financed by APH. This includes a bench fee of up to €5,000.-; or
- b) a PhD candidate for 4 years, funded for a maximum of 50% by APH and matched by an external (non-academic) partner. The total budget that an application for an Embedded PhD may propose amounts to a maximum of €290,000.-, spread over 4 years, of which a maximum of €145,000.- (50%) can be financed by APH. This includes a bench fee of up to €5,000.- and education costs of up to €10,000.-

All applications must take into account the following terms:

- The maximum amounts mentioned above take into account the different internal surcharge rates that apply to direct funding (i.e., APH funding and in some cases the funding matched by the department) and other funding (i.e., the funding matched by external partners and, in some cases, the department).
- Depending on the proposed structure in matching funding or the salary scale of the proposed candidate, the budget applied for may be lower than the maximum amount stated above. This may not be supplemented with material or other costs.
- The amounts are exclusive of VAT, which must be charged on contributions from external partners under certain conditions. If VAT does apply, the proposed budget can exceed the maximum amounts but only in consultation with APH.
- Only budget proposals verified by the department's financial advisor / controller will be accepted.

#### 3.2 Who can apply?

##### Postdoc fellowships

Each researcher (minimum postdoc level) primarily participating in APH can submit an application for a fellowship project. For the postdoc fellowships the candidate should currently work within an APH affiliated department or should have finished his / her PhD trajectory within APH. The PhD must have been obtained after November 22, 2011. The candidate needs a letter of recommendation by the head of the department hosting the fellowship. A personal development

plan (max. 1 A4) specifying the candidate's strong and weak points, a training plan and a publication plan for at least 3 publications must also be added.

It is expected that the fellow will participate actively in at least one APH committee, for instance the Scientific Quality Committee, Implementation Committee, Valorization Committee, or Junior Council. The fellow will present at one meeting of the APH Board of Directors or the Program Leaders and is willing to present at APH's Annual or Spring meeting.

### Embedded PhD candidates

To encourage research within the context of public-private partnerships (PPP), APH will grant an 'embedded' PhD position. Each researcher (minimum postdoc level) primarily participating in APH can submit an application for an embedded PhD project. The profile of the embedded PhD candidate recruited for this project should include a relevant Master degree and support from both the external partner and the APH affiliated department must be guaranteed. Moreover, the PhD candidate is expected to participate actively in APH events.

The embedded PhD candidate works, at least part-time, in a non-academic organization, such as a company in the private sector, a NGO, or a non-academic public sector organization, on a research question relevant to that company, but with independent scientific co-supervision from an APH researcher. Costs are shared by APH and the company, and the company takes care of the transferable / commercial skills training of the PhD candidate and will increase the job prospects of the PhD candidate within the company (or similar ones in its sector) after the PhD trajectory has finished.

### 3.3 When to apply?

The call will open at November 22, 2021 and close February 28, 2022, 23:59 hrs. Decisions on awarded grants will be announced April 1, 2022. The scheduled project starting date for the research grant proposals accepted by April 1, 2022, is before June, 2022. The ultimate starting date of the granted projects is July 1, 2022.

#### Timeline

November 22, 2021	Call for proposals
February 28, 2022, 23:59 hrs	Submission deadline
March 1 - March 15, 2022	Assessment and prioritizing of proposals by the Grant Review Council
April 1, 2022	Decision by the APH Board of Directors and Program Leaders
July 1, 2022	Ultimate starting date of the granted projects

### 3.4 How to submit

Applications must be submitted by email to [d.vanderlaan@amsterdamumc.nl](mailto:d.vanderlaan@amsterdamumc.nl) with cc to [aph@amsterdamumc.nl](mailto:aph@amsterdamumc.nl) no later than **Monday February 28, 2022, 23:59 hrs.**

There are two types of application forms: one for the Postdoc fellowship and one for the Embedded PhD candidate. These forms are not tied to one of the three novel strategic themes and can be submitted for any theme. The forms are available via the links below. Use the specific form associated with the type of appointment for which you are applying. The form states which attachments must be submitted with your application. The form must be filled out in English. Incomplete application forms cannot be processed. Applications can only be submitted by a researcher (minimum postdoc level) primarily participating in APH with the approval of the head of department and other partners involved.

- [APH Call 2021\\_Application Form Postdoc Fellowship.docx](#)
- [APH Call 2021\\_Application Form Embedded PhD candidate.docx](#)

## 4. Assessment procedure

### 4.1 General procedure

The quality of the submitted proposals will be assessed by an independent Grant Review Council of four independent APH principal investigators representing methodologic and thematic expertise within APH. Based on this assessment the Grant Review Council will advise the APH Board of Directors and Program Leaders. The APH Board of Directors will then decide which proposal will be funded.

#### Assessment criteria

- originality of the research question & innovative character of the proposed project;
- scientific quality of the proposed project;
- societal impact of the proposed project (where applicable);
- contribution to the novel strategic themes;
- suitability within APH and its APH research programs;
- team science, how the applicant collaborates with other researchers from different disciplines, and how the individual strengths and expertise of the team members demonstrably reinforce each other;
- for the fellowships: Curriculum Vitae of the proposed candidate (incl. dissertation, peer reviewed publications, innovation skills, successful fund raising, societal impact and collaboration).

### 4.2 Contact and other information

#### Scientific questions

For scientific questions about the call for proposals please get in touch with:

**Martine C. de Bruijne, MD PhD**

Director of Amsterdam Public Health research institute & Professor of Public Health, especially Quality of Care at Dept. of Public and Occupational Health

Email: [mc.debruyne@amsterdamumc.nl](mailto:mc.debruyne@amsterdamumc.nl)

#### Technical questions

For technical questions about the application, please get in touch with one the APH policy officers via [aph@amsterdamumc.nl](mailto:aph@amsterdamumc.nl)