

# Sarphati

---

**amsterdam** research for  
healthy living

Research programme 2019-2022

Sarphati Amsterdam organises a unique infrastructure that facilitates scientific research contributing to the sustainable prevention of both physical and emotional diseases of the constructed environment. The dynamic Sarphati Cohort is central to the Sarphati Amsterdam infrastructure. Our scientific research will provide useful insights into promoting the healthy growth and development of children. The research programme focuses on health disparities relating to the social and physical environment, and translating this knowledge into interventions aimed at reducing health disparities.

## The high-quality research infrastructure at Sarphati Amsterdam

Sarphati Amsterdam carries out innovative, interdisciplinary research into the effective, sustainable prevention of diseases of the constructed environment (also known as non-communicable diseases) among young people in Amsterdam. Sarphati Amsterdam offers a high-quality research infrastructure and unites scientific expertise from a variety of disciplines. The institute aims to make an essential contribution to unravelling the complex mechanisms that lead to disease of the constructed environment, and therefore to promoting the healthy growth and development of young people.

The core of Sarphati Amsterdam is formed by the Sarphati Cohort. This is a unique, large-scale dynamic cohort that includes children in care with Child Health Services (*Jeugdgezondheidszorg* (JGZ)). The Sarphati Cohort distinguishes itself from other cohorts by its dynamism. New children are always streaming in, and are followed up until they turn 19. This constant new influx ensures that current determinants can always be included in the cohort, based on new insights. Within the Sarphati Cohort, it is possible to carry out research in sub-cohorts. This means interventions can be performed with the Sarphati Cohort serving as a control group, after which the progress of the children can be followed for a long period through the cohort.

### **Sarphati Amsterdam Mission**

Innovative interdisciplinary research beneficial to effective and sustainable prevention of diseases of the constructed environment.

### **Sarphati Amsterdam Vision**

Sarphati Amsterdam facilitates a unique and advanced research infrastructure and brings together excellent scientific expertise from various disciplines. In doing so, Sarphati Amsterdam contributes to the ambitious policy objectives set by the City of Amsterdam to promote healthy behaviour and improve the quality of life of growing children.

### **Sarphati Amsterdam Core Values**

<u>innovate</u>	Sarphati Amsterdam aims to be a world player in groundbreaking research that contributes to the promotion of healthier youth in urban settings.
<u>collaborate</u>	Local to global partnerships in the areas of science, healthcare, policy, industry and citizens.
<u>connect</u>	Research actively involving and benefiting citizens, connecting various policy areas and scientific disciplines.

## Broad scope: healthy growth and development

Diseases of the constructed environment are a growing threat for young Amsterdam citizens. The scientific knowledge currently available is insufficient to reverse this threat. The Sarphati Amsterdam research results must provide unique insights into promoting healthy growth and development among Amsterdam youth.

Sarphati Amsterdam aims to generate scientific knowledge that can contribute to:

- Unravelling the complex mechanisms that lead to healthy growth and development
  - In particular, unravelling the complex mechanisms that lead to overweight and obesity
- The development and evaluation of interventions to promote healthy growth and development
- The development of knowledge, methodologies and instruments in the field of healthy growth and development, that genuinely benefit Amsterdam residents
- 

## Focus: early childhood and health disparities in relation to environment

Within these broad objectives, we have defined a number of focus points to which we will pay extra attention in our research programme:

- The translation of knowledge into interventions aimed at promoting healthy growth and development or the prevention of overweight and obesity.
- Identification of the determinants of health disparities in relation to social, cultural, economic and physical environmental factors and their interdependence.
- Investigation into the mechanisms underlying health disparities between ethnic and socio-economic groups
- A healthy start in the first 1,000 days of life

### **What type of research falls within the scope of Sarphati Amsterdam?**

Researchers who wish to collaborate with Sarphati Amsterdam can submit a research proposal. This proposal should contribute to the mission and vision of Sarphati Amsterdam and thus fit within its research agenda. The proposed research should also satisfy at least one of the following criteria:

1. The research makes use of Sarphati Cohort data
2. The research produces valuable knowledge, methodologies or instruments that add to the data collection activities carried out by the Sarphati Cohort.
3. Research that is directly aligned with the evaluation of the Amsterdam Health Weight Approach (*Amsterdamse Aanpak Gezond Gewicht (AAGG)*).

## The steering role played by the Programme Board

The Programme Board consists of senior researchers from the participating knowledge institutions. The Board provides advice on setting up the research programme, assesses research proposals and ensures that the research programme becomes embedded within the knowledge institutions. It will also monitor the social impact of Sarphati Amsterdam.

### Objectives

#### **Embedding the research programme**

The members of the Programme Board will ensure that the research programme becomes embedded within their own knowledge institutions.

#### **Ambassadorial role**

The Programme Board will generate brand awareness for Sarphati Amsterdam and inform researchers of the opportunities available through Sarphati Amsterdam.

### Tasks and responsibilities

#### **Establishment of the research programme**

Every four years, the Programme Board will establish the research programme with the guidance of the Executive Board. Part of this will involve carrying out an inventory of current projects, as well as decision-making about future research topics, data collections and collaborations.

#### **Preparation of the Annual Plan**

The Programme Board will provide input each year for the Annual Plan, which is to be prepared by the Executive Board.

#### **Assessment of research proposals**

Together with the Executive Board, the Programme Board determines whether a study fits within the Sarphati Amsterdam research programme. The Programme Board acts as an advisory group to the Executive Board in this respect, and they decide together whether or not a study can be included in the Sarphati Amsterdam research programme. The Programme Board assesses the suitability of the research within Sarphati Amsterdam and helps the research coordinator to ensure that there is no overlap between different Sarphati Amsterdam projects.

#### **Stimulation of collaboration**

Together with Sarphati Amsterdam's research coordinator, the Programme Board brings researchers into contact with each other. This includes researchers both within and between the knowledge institutions. Contact is achieved through means such as organising workshops or meetings. In this way, the Programme Board can contribute to creating new research ideas, identifying gaps in knowledge, pointing out possible overlap between research studies, and then communicating this to researchers.

#### **Guaranteeing research and data quality**

The Programme Board provides advice on the quality of the Sarphati Amsterdam research and the Sarphati Cohort data. This advice is discussed with the Sarphati Cohort programme manager.

#### **Social impact**

The Programme Board ensures that the topics of the research carried out through Sarphati Amsterdam align as closely as possible with policy, practice and citizens' needs. The Council will assess the potential social impact of the research and monitor it to ensure that it actually yields results that benefit the people of Amsterdam.

## Sarphati Amsterdam research projects

### Lekker Gezond

Contact Person	Organisation	Start Date	End Date
Froukje Takens	GGD Amsterdam (AAGG) & VU University Medical Centre	1/7/2016	31/12/2020
<b>Aim:</b> • What is the effect of the Jump-in intervention on eating behaviour and determinants of eating behaviour of Dutch primary schoolchildren? • Which elements influence the implementation process of Jump-in and to what extent do they influence the effectiveness of Jump-in on children's eating behaviour?			

### MyDailyMoves

Contact Person	Organisation	Start Date	End Date
Lisan Hidding, Teatske Altenburg	VU University Medical & GGD Amsterdam (AAGG)	1/11/2015	1/6/2019
<b>Aim:</b> The development of an instrument for measuring the physical activity of children aged 9-12 years old.			

### Amsterdam Infant Microbiome Study

Contact Person	Organisation	Start Date	End Date
Arnoud Verhoeff	GGD Amsterdam	15/1/2019	1/6/2022
<b>Aim:</b> The general objective of AIMS is to establish a research infrastructure that allows for exploratory research into the development of the microbiome in relation to healthy growth and development. There will be a special focus on growth trajectories and oral health, and special attention given to the role of nutrition and other lifestyle factors in children aged 0-3 years from the ethnically diverse population of Amsterdam, the Netherlands.			

### Healthy Sleep Project

Contact Person	Organisation	Start Date	End Date
Laura Belmon	GGD Amsterdam (AAGG) & VU University Medical Center & VU University	1/6/2016	31/5/2020
<b>Aim:</b> The aim of this project is to develop and pilot a behavioral intervention that promotes healthy sleep behaviour among children aged 4-12 years in Amsterdam.			

### Food4Smiles

Contact Person	Organisation	Start Date	End Date
Femke Boelsma	VU University in collaboration with Fred Foundation	1/1/2018	30/6/2020
<b>Aim:</b> The overall aim of Food4Smiles is to promote the healthy growth and development of children in the first 1000 days of their lives (from conception until 2 years old), in Amsterdam Nieuw West. First, this study aims to gain greater insight into the daily lives of parents with (or expecting) children in the age 0-2 years. Subsequently, Food4Smiles will explore how to work together with parents and stakeholders in Nieuw West on promoting the healthy growth and development of children during the first 1000 days.			

## Antibiotics, probiotics, the microbiome and childhood health

Contact Person	Organisation	Start Date	End Date
Ruth Baron	GGD Amsterdam and Wincolve Probiotics	1/1/2018	31/7/2022
<p><b>Aim:</b> Phase 1: To summarise the evidence regarding the effects of prenatal and early life antibiotics on the development of childhood diseases, such as overweight/obesity and allergies (asthma, hay fever and eczema) (conducted by Sarphati), autism and coeliac disease (conducted by collaborating team in Poland). Phase 2: To examine the prevalence and characteristics of, as well as attitudes towards antibiotics and probiotics usage in Amsterdam. Phase 3: To examine whether probiotics co-administered with antibiotics can mitigate the adverse effects of antibiotics in the development of childhood chronic diseases.</p>			

## Growing (up) in Amsterdam: an ethnographic panel study of eating and physical activity in households with children aged 0-4 years.

Contact Person	Organisation	Start Date	End Date
Christian Bröer, Gerlieke Veltkamp	UvA	1/10/2017	1/10/2022
<p><b>Aim:</b> We will offer a relational and contextual understanding of everyday eating and physical activities, and ways in which families deal with specific challenges and pragmatic concerns during the critical first years of a child's life. Specifically, we will bring to the fore the relationship between relevant everyday health practices and the institutions of health care. In the context of the birth cohort study we contribute to understanding health outcomes.</p>			

## Slaap en groei van Amsterdamse kinderen in de eerste 1000 dagen

Contact Person	Organisation	Start Date	End Date
Margreet Harskamp	UMC, location UvA Meibergdreef	1/9/2017	31/12/2021
<p><b>Aim:</b> Understanding the development and importance of healthy infant sleep and later growth and healthy body composition.</p>			

## ABCD-ELSO: Early life stress and obesity

Contact Person	Organisation	Start Date	End Date
Dr. Susanne de Rooij	Amsterdam UMC, location AMC	1/6/2017	31/12/2019
<p><b>Aim:</b> We aim to unravel the mechanisms underlying the association between early life stress (ELS) and increased risk for obesity.</p>			

## Opgroeien in Amsterdam

Contact Person	Organisation	Start Date	End Date
Prof. Dr. Geertjan Overbeek	UvA	9/1/2019	9/1/2023
<p><b>Aim:</b> The primary aim of this study is to examine whether an intensive parenting intervention that increases sensitive parenting improves children's stress system functioning and reduces behavioural problems. In addition, a main aim is to examine whether these improvements in stress system functioning and behavioural problems are induced by alterations in children's DNA methylation.</p>			

## An Algorithm to Predict the Best Treatment for Disruptive Behaviour Problems in Each Child

Contact Person	Organisation	Start Date	End Date
Patty Leijten	Research Institute for Child Development and Education, University of Amsterdam	1/9/2020	31/12/2023
<p><b>Aim:</b> To increase effectiveness of parenting support programs for disruptive child behaviour, by tailoring parenting support to individual family profiles and programme acceptability.            Research Question: Is parenting support for disruptive child behaviour more effective when it better targets risk factors that for individual families are relevant, malleable, and acceptable?            Hypothesis: Families benefit most from support that targets risk factors that for them are relevant, malleable, and for which they find available evidence-based programmes acceptable.</p>			

## Predicting Toddler Self-regulation from Individual Differences in Infant Attention-driven Eye Movements

Contact Person	Organisation	Start Date	End Date
Ingmar Visser	University of Amsterdam, Research Priority Area Yield	1/4/2019	tbd
<p><b>Aim:</b> In this prospective study, we will first set out to develop novel eye-tracking measures that are sensitive enough to capture individual differences in the emergence of infant attentional control. Once we arrive at a sensitive assessment battery, we will open up a longitudinal study to look at how early-life differences in attentional control can help us understand and explain the way we come to differ later on in our ability to purposefully organise our cognition, behaviour, and emotion, i.e., self-regulation, by relating differences in attentional control at infancy to a wider range of self-regulation outcomes in toddlerhood.</p>			

## Sarphati Diaries

Contact Person	Organisation	Start Date	End Date
Joy Hall, Outi Sirkka	GGD Amsterdam & VU Amsterdam		
<p><b>Aim:</b>  <u>Main goal</u>            Understand the ethnic differences in dietary intake from 6 to 12 months of age in a large group of infants in the multi-ethnic population of Amsterdam, including Dutch, Turkish, Moroccan and Surinamese infants.  <u>Sub-goal</u>            Identify which indicators could be used to develop an age-specific tool to assess determinants of dietary intake to be used in the Sarphati Cohort among infants.</p>			

## LIKE

Contact Person	Organisation	Start Date	End Date
Karien Stronks, Arnoud Verhoeff	AMC		

## Review of sleep measurement instruments

Contact Person	Organisation	Start Date	End Date
Maartje van Stralen, Vincent Busch	VU	2019	

## Opgroeien in Amsterdam

Contact Person	Organisation	Startdate	Enddate
Geertjan Overbeek	UvA	2020	

## GEAR

Contact Person	Organisation	Startdate	Enddate
Ingmar Visser	UvA	2020	

## An Algorithm to Predict the Best Treatment for Disruptive Behaviour Problems in Each Child

Contact Person	Organisation	Startdate	Enddate
Patty Leijten	UvA	2020	