

NATIONAL PROGRAM FOR RESPIRATORY RESEARCH

'Een Leven Lang Longen' 'Lungs Lasting a Lifetime'



Why is a National Program for Respiratory Research needed?



An increasing number of people die due to a lung disease

- Lung diseases can not be cured and have a huge personal, societal and economic impact
- Therefore, attention is crucial and breakthroughs in research are needed

10 most important causes of death worldwide in 2011



Pulmonary diseases

Ischaemic heart disease

CVA

Pulmonary infections

COPD

Diarrhea

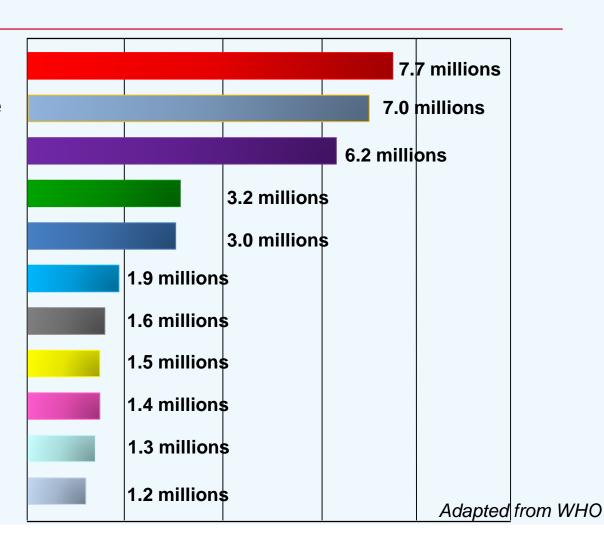
HIV/AIDS

Lung cancer

Diabetes

Trauma

Preterm birth









Bottom-up:12 transdiciplinary teams



SWOT and future perspectives in 12 respiratory disease areas (opportunities in- and outside respiratory field)

Allergy **Asthma** BPD/PCD COPD CF ILD Infections **Intensive Care** Lung transplantation Lung cancer Pulmonary hypertension Sleep apnea



Collaboration between research fields Leven Long Longen'



	Allergy	Asthma	BPD/ (PCD)	COPD	CF	ILD	Infect	IC	CA	LTX	PH	Sleep Apnea
Allergy		Х	X				X					
Asthma	X		X	X			X					
BPD/ (PCD)				X	(X)		(X)			х	х	
COPD	X	X	X) x	X		X	X		
CF		Х		(X		X	X					
ILD		Х		X	X				X	Х	X	
Infection			(X)	X	Х			Х		Х		
IC		X		X		X	Х				X	
CA				X		Х						
LTX				X	Х	X					Х	
PH			X	X	X	X				X		
Sleep		X	X	X				X				

International scores

4-5 3.5-4



	Allergy	Asthma	RPD/	COPD	CF	ILD	Inf	IC	LTX	LCa	PH	Sleep
	,o. gy	,	PCD	SOFD	5 1		" "			Loa	' ' '	Apnea
			1 00									•
Phenotyping and												
Severity												
Biological												
mechanisms												
Environment and												
lifestyle												
Development												
and ageing												
Prevention												
Diamaria												
Diagnosis												
monitoring												
Therapy medical												
Therapy non-												
medical												
Implementation												
and care												

International scores



	Allergy	Asthma	BPD/ PCD	COPD	CF	ILD	Inf	IC	LTX	LCa	PH	Sleep Apnea
Biobanking												
Data management Clinical studies												

4-5 3.5-4











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'Lungs Lasting a Lifetime' conference





'Lungs Lasting a Lifetime' conference, First 1.5 days



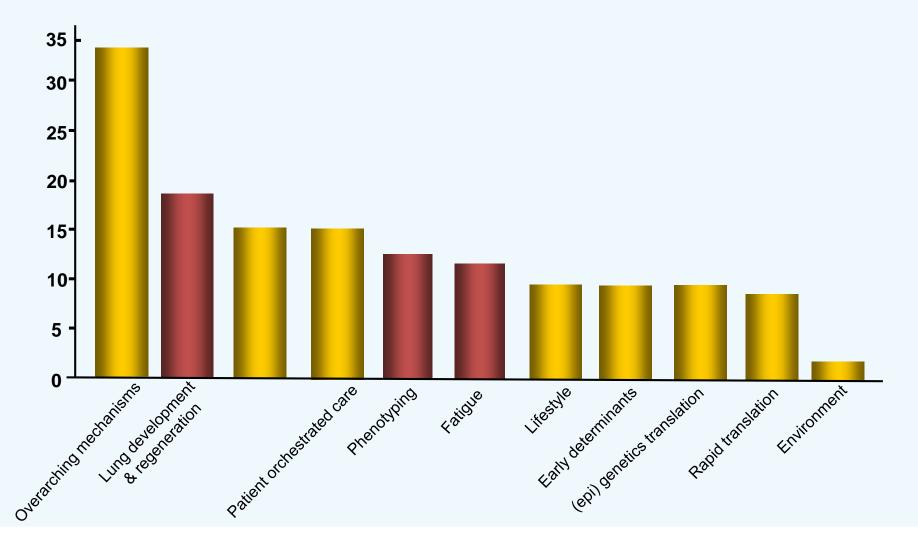
45 Participants: patients and lung researchers (basic and applied research)

- 1. What are het main questions regarding lung health
- 2. Which questions can provide solutions for multiple diseases
- 3. As a consequence, which areas of research should be focused on during the coming 5-10 years?

Results by patients and researchers



First 1.5 days



'Lungs Lasting a Lifetime' conference



Third day

'Een Leven Lang Longen'

Representatives from:

European Respiratory Society

Dutch Royal Academy of Sciences (KNAW)

Lung Alliance Netherlands

Lung Foundation Netherlands

Dutch University Organisation

Dutch public-private Topsectors in research

Zon Mw

Nefarma (association for innovative medicines)

Scientific and professional organisations

Basic researchers Clinical Researchers International experts

Five priorities for research and relevant impact



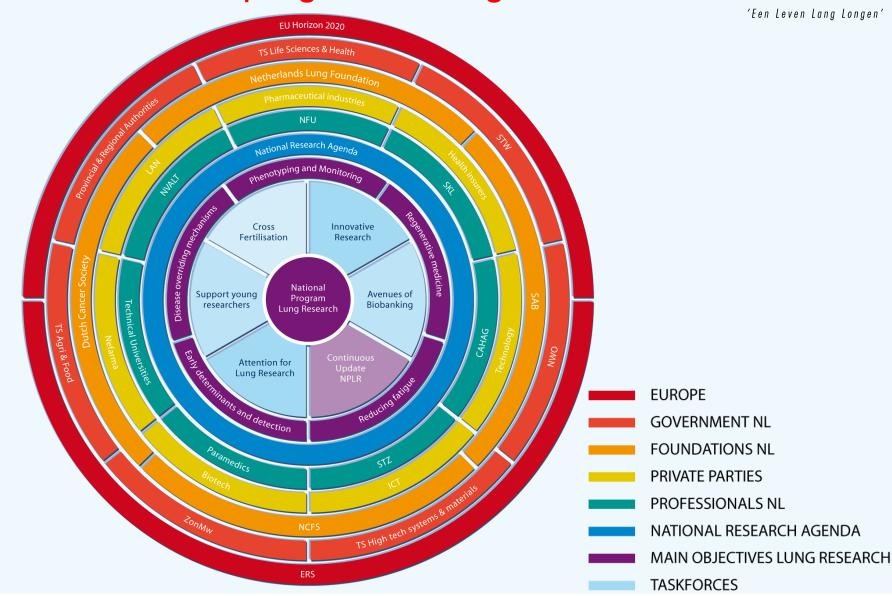
- 1 Overarching disease mechanisms
 - New therapies by cross-talk in research
- 2 Phenoyping and monitoring
 - Patient-tailored diagnosis and treatment
- 3 Regenerative medicine
 - Reduction of tissue damage, cure
- 4 Reduction of fatigue with lung diseases
 - Reduced burden of disease, Increased societal participation
- 5 Early determinants and detection
 - Sustainable health, prevention and evidence for lifestyle recommendations

6 Taskforces and 5 Priorities to strenghten visibility, quality of research and effective collaboration



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Nationaal Programma Longonderzoek Een Leven Lang Longen

Professionals UMCs, STZ, resec	Patiënten & publiek	
Reverse progressionSuppress exacerbationsIndividual phenotyping	Een leven lang longen	Geen achteruitgang • Minder longaanvallen • Therapie op maat •
Childhood to elderly age Prevention Prognosis Endotyping	2025	Van wieg tot ouderen Preventie Beloop Mijn longziekte
Registries, cohorts, biobanks, cross- sectional studies, pre-clinical models	2020	Landelijk onderzoeksnetwerk Patiënt participatie Longziekten in kaart brengen
Public & private calls	2017	Alle neuzen dezelfde
	2015	kant op

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Just a question

How many people die within 2 years after hospitalization due to a:

Heart attack?

Lung attack?







Just a question

How many people die within 2 years after hospitalization due to a:

Heart attack? 8-15%

Lung attack? 35-50%



