

# A 'green prescription': care farms for burn-out

Why? How? Under what circumstances? For whom?

Tom Cornu



Universiteit  
Antwerpen



UNIVERSITÉ  
LIBRE  
DE BRUXELLES

## CONTENT

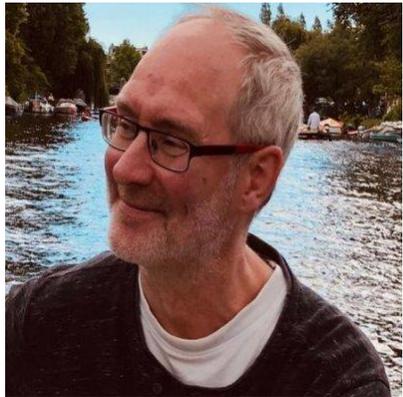
- Our research team
- Rationale for a green social prescription
- An evaluation of care farms for burn-out recovery

# Our research team

## WHO ARE WE?

### University of Antwerp

*RG Care and the natural living environment*



Prof. Hans Keune



Tom Cornu

### Université Libre de Belgique

*Ecole de Santé Publique*



Prof. Dimitri Renmans



Fanny Brunin

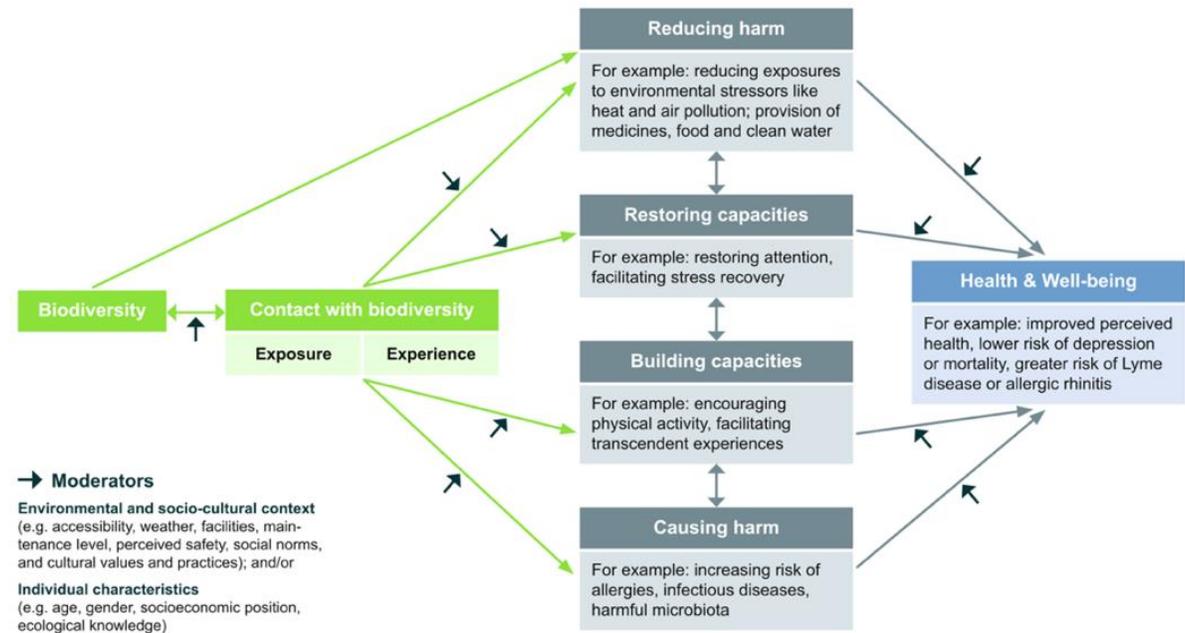
Why invest in 'green social prescribing'?

# THE POSITIVE HEALTH EFFECT OF (BIODIVERSE) NATURE

Nature as a healthy, stimulating environment for physical activity, social contact, ...

The direct health effect of nature on health

- Reduction of physical and mental stress
- Attention restoration
- A stronger and balanced immune system



Marselle et al. 2021

## PROVEN EFFECTS ON ...

- Cardiovascular diseases (heart, brain)
- Mental wellbeing
  - Depression (use anti-depressants)
  - Anxiety disorders
- Diabetes
- Dementia
- Allergy and infections
- ...



## SOME SCIENCE ...

- Kaunas cohort study: reduced chance on heart attack and stroke
  - Distance to green space: > 630 m versus <350 m
  - Men: 50 % higher chance
  - Women: only effect if frequent visits: 180% higher chance
- Study University Luxemburg: reduced stress (cortisol)
  - Comparison nature walk vs treadmill vs nature documentary



## MECHANISMS: ATTENTION RESTORATION AND STRESS REDUCTION

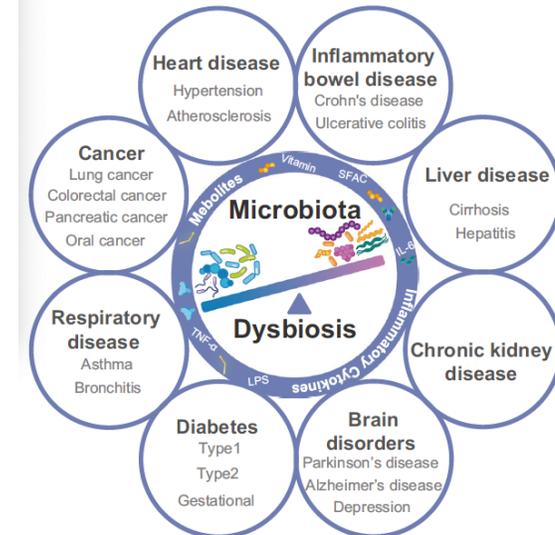
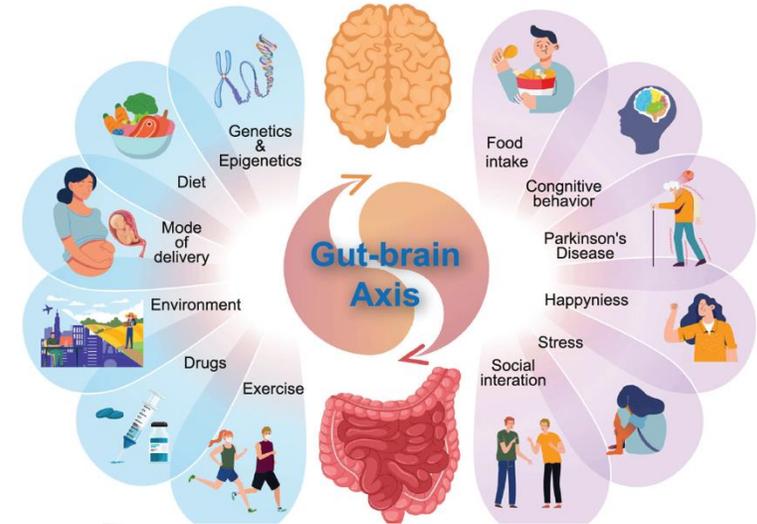
What do you experience when immersed in nature?

- **Being away** from stressors
- Focus on things that are experienced as **interesting or pleasant**
- A place to **reflect**

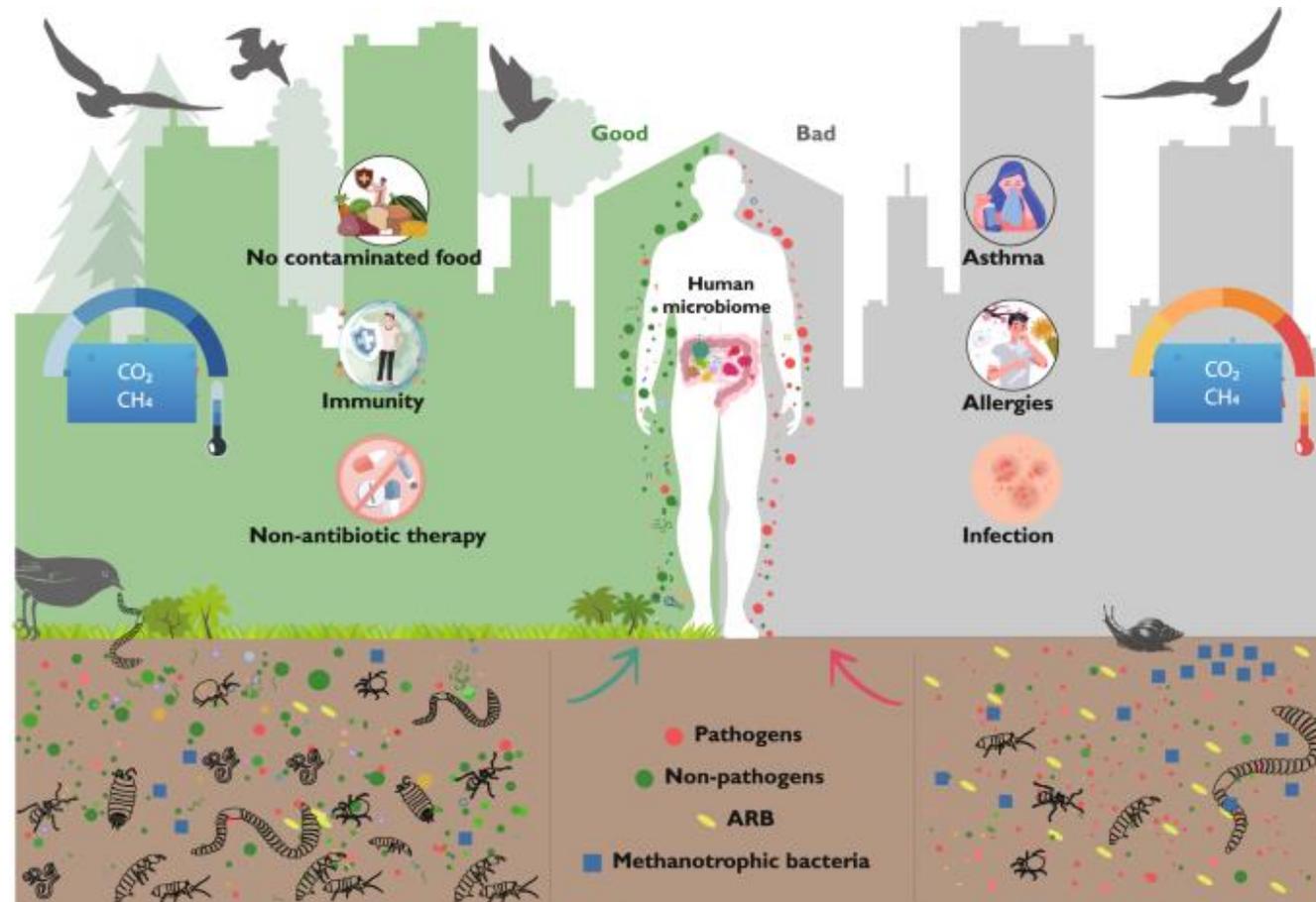
Attention Restoration Theory  
Stress Reduction Theory

## MECHANISMS: MICROBIOMA

- Protection against pathogens
- Help with processing nutrients
- Production of essential elements such as vitamins etc.
- Interactions with the brain via the nervous system and hormonal system
- Regulating the immune system



# MECHANISMS: MICROBIOMA



# EMBRACING NATURE FOR HEALTH AND RESILIENCE

- Daily life
- Health promotion
- Therapy

Nature on prescription  
Green social prescription

|  |   |
|--|---|
| <br>174922-66 004 | Naam en voornaam van de voorschrijver<br>MORTIER DE BORGER<br>LOTTE   |
| DOOR DE VOORSCHRIJVER IN TE VULLEN<br>Naam en voornaam van de rechthebbende: .....                   |   |
| Vorbehouden aan het verpakkingsvignet  | <b>R/ Natuur</b><br>dt/ 4x/week 30 minuten<br>Per week in totaal graag 120 minuten.<br>Natuur: een omgeving die voor u als groen aanvoelt<br>Activiteit: wandelen, op een bankje zitten, sporten... naar keuze<br>Probeer aandacht te besteden aan uw omgeving. |

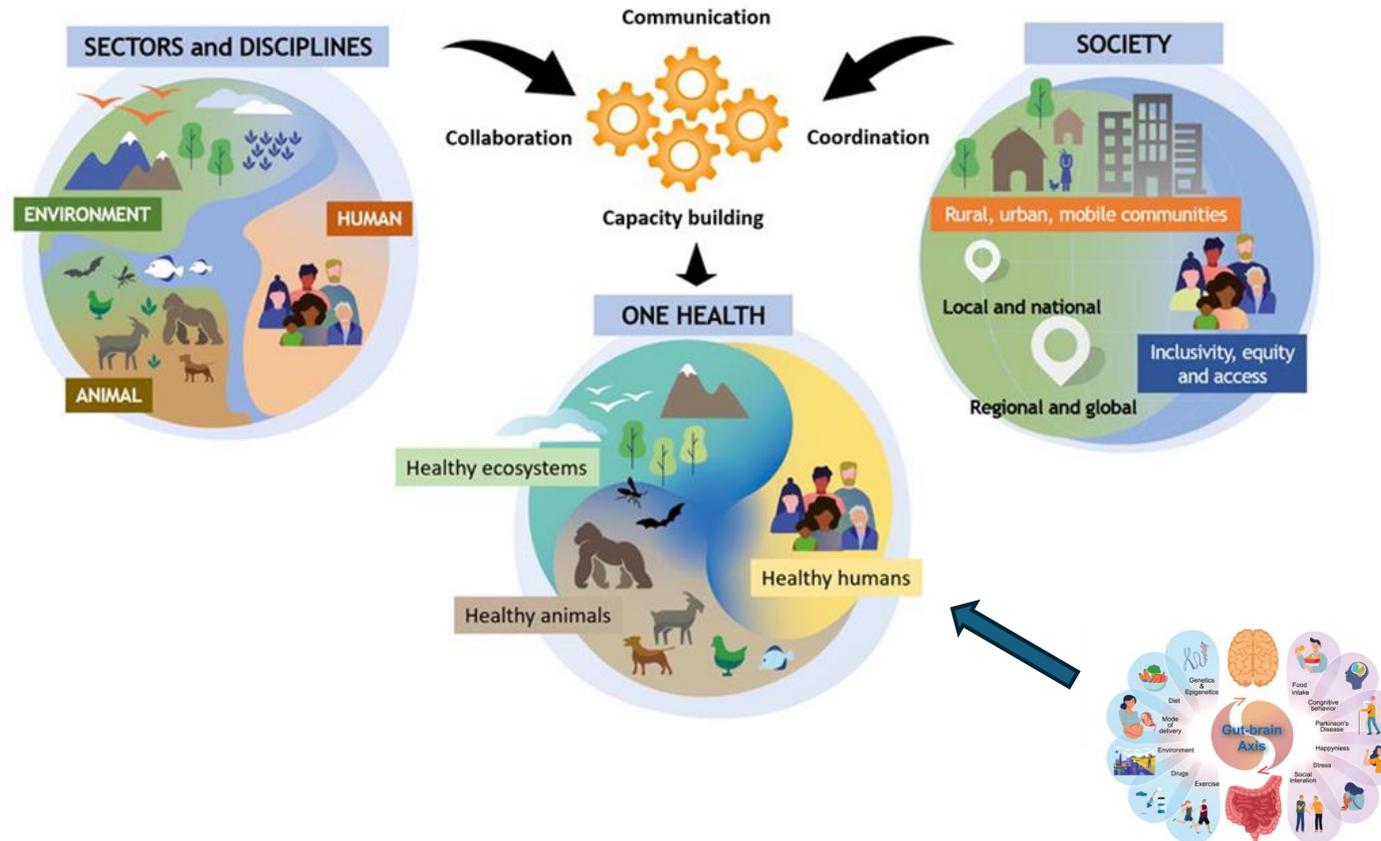
**Groen Voorschrift**

**"Om als herinnering aan uw prikbord of ijskast te hangen."**

Nature contact – social contact – physical activity – other activities (learn, contribute, ...)

# ONE HEALTH: RECIPROCITY AND COLLABORATION

## ONE HEALTH



Evaluating carefarms for burn-out recovery

## WHAT WILL WE DO?

- HIVA study:

*What is the effect of participation in care farms on burn-out?*

- Our Realist Evaluation:

*How, why, under what circumstances and for whom?*

## STEPS OF OUR RESEARCH

How do we think the intervention will work?

INITIAL PROGRAMME THEORY



What happens in reality?

COLLECTING THE EVIDENCE



Maybe we were a bit wrong or didn't know everything

REFINED PROGRAMME THEORY

*HIVA*

*Initiators project*

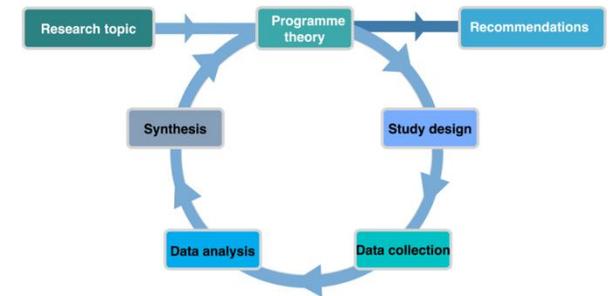
*Literature*

*Interviews*

*Observations*

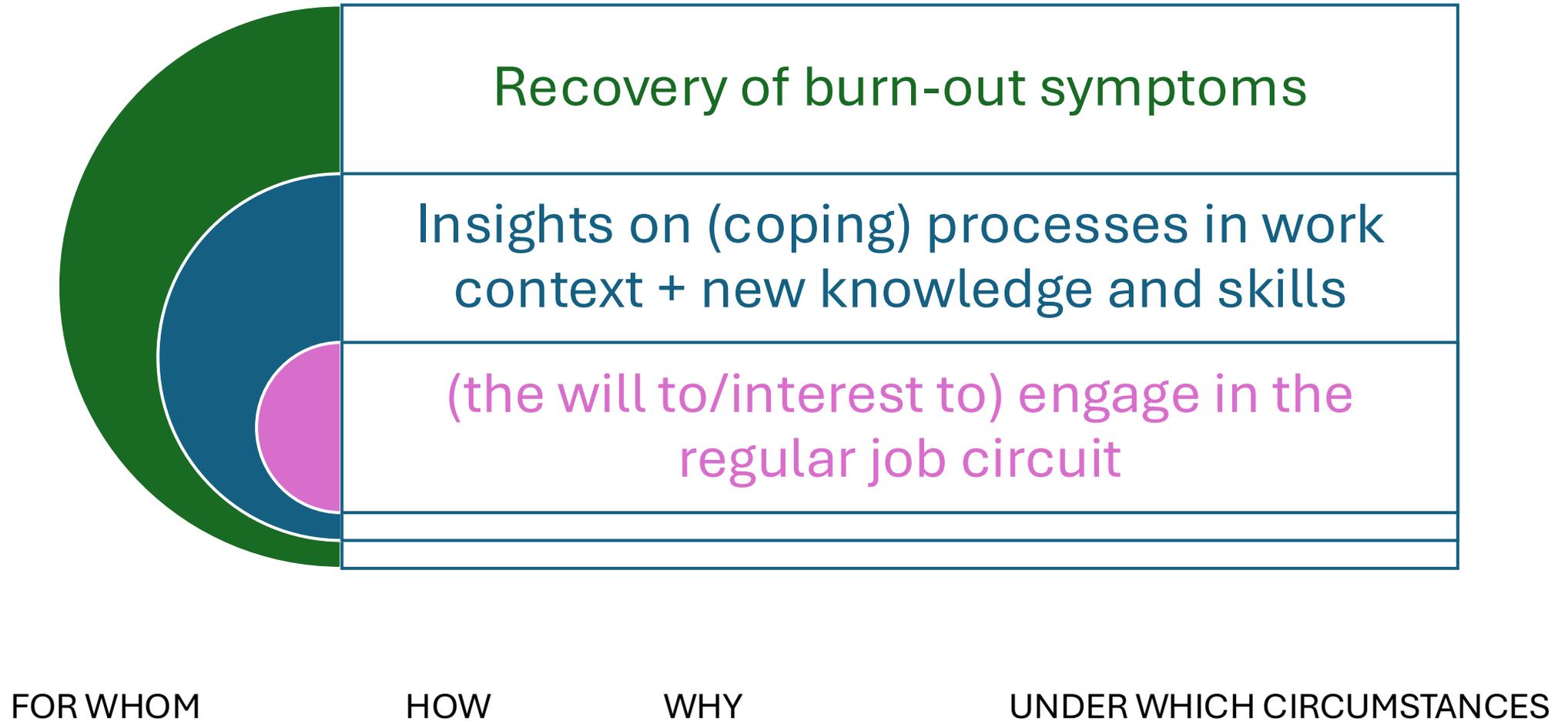
*Analysis*

*Synthesis*



REALIST CYCLE

# HOW DO WE THINK THE INTERVENTION WILL WORK



**QUESTIONS OR COMMENTS?**

