Healthy Ageing in the Northern Netherlands: applied research and regional collaboration

Joost Degenaar, director Centre of Expertise Healthy Ageing
Challenges:

- **Ageing population:**
  increase of 50 million older people towards 2060

- **Burden of disease:**
  we live longer but with more chronic diseases

- **Rising cost for health and social care:**
  increase to 20% of GDP in 2060

**and Solutions:** Prevention, Innovation, Technology, Entrepreneurship
Healthy Ageing: a European top priority

Demographic change and Healthy Ageing - one of the grand societal challenges of EU

Many programmes, actions and initiatives:
• European Innovation Partnership on Active and HA
• Knowledge and Innovation Community (EIT Health)
• Health in Horizon 2020
• Joint Programming Initiatives
• Ambient Assisted Living (AAL)
• Interreg programmes
• Third UE Health programme (Sanco)
European Partnership on Active and Healthy Ageing (EIP AHA)

EIP AHA brings together key stakeholders (end users, public authorities, industry, research and knowledge institutions), tackling practical problems.

EIP AHA pursues a triple win for Europe:

- # enabling UE citizens to lead healthy, active and independent lives while ageing
- # improving sustainability of social&health systems
- # improving competitiveness of markets for innovative products and services, responding to ageing
Ageing in the Netherlands

- **Population**: 16 million: now 17% > 65 year
- **Demographic change**: in 2050: 30% >65 year
- **Costs of health care** system: huge increase  
  (without change 25% of GNP in 2050)

- 1970-2000: **welfare state**; many older citizens in care homes / nursing homes
- from 2013: **participation society**; independent living with help of family, friends, neighbours: big challenge!
- **Urgent need for innovation** in health and welfare
Ageing in the Northern Netherlands

Extra strong demographic change
Regions with shrinking population
and:
Large health care sector
Powerful Higher Education Institutes

**Healthy Ageing** strategic goal in
Regional Innovation Strategy for
Smart Specialisation
Healthy Ageing Network Northern Netherlands (HANNN)

- University of Groningen (RUG) + University Medical Centre Groningen
  (> 35,000 students)
- 4 Universities of Applied Sciences
  (> 45,000 students)
- >100 companies (SME and multinationals)
- Many health care organisations
- Regional authorities (3 provinces, 4 big cities)

(triple helix, and involvement citizens becoming stronger)

N. Netherlands in top 3 Reference Sites EU on Ageing
Succes factors:

- Health is largest branche in N NL (20%)
- Strong partners: UMCG and other HE partners
- Theme HA is important for business and society
- Sustainable regional collaboration on HA (RIS3)
- Support from regional authorities (3 provinces)
- Growing collaboration and trust between partners
- Growing attraction for new business (food, ICT)
- Growing reputation in Netherlands and Europe
Challenges:

- Building a network takes time
- Network, communication, branding is not enough
- Show clear results to stakeholders
- Need for clear vision and action plans
- Business development takes much time
- Collaboration but also competition?
- More international collaboration (Germany)
Central question: Why do some people age healthy, and why have others already severe impairments or diseases early in their life?

- 165,000 participants
- 3 generations
- 3 Northern provinces
- Open infrastructure

"BioSHaReEU: LifeLines = coordinator, 15 biobanks involved; € 12 mio FP7 (BBMRI)"

Mission: to understand the mechanisms that result in aberrant functioning of old cells and tissues in order to develop evidence-based recommendations for healthy ageing.

- 10 high profile research groups (e.g. Systems Biology Centre for Energy Metabolism and Ageing)
- 150 researchers
- 4500 sq mtrs
- International recruits
- Basic science
- Ready in 2011
- 50 M€

International cooperation: Mayo Clinic, Buck Institute, Copenhagen, Cologne, Newcastle
Hanze University of Applied Sciences:
- strong regional partner with a clear profile
- respected European University of Applied Sciences

Focus on:
• Healthy Ageing
• Energy
• Entrepreneurship

. 27,000 students
. 3300 employees
. 80 BA/MA progrs
Healthy and active ageing is a component in 25 BA and 4 MA programmes, not only nursing, physiotherapy etc. but also ICT, LST, sports etc.

Also in special programmes:
- Minor Healthy Ageing
- Minor Care and Technology
- Honours programme Healthy Ageing
- Development 2 new Healthy Ageing masters
Many people involved:

- 29 professors
- 100 researchers
- 30 PhDs on Healthy Ageing
- many students of different programmes

Projects: 10 very large projects and 100 other projects;
EU projects: FP7 Health Literacy; Interreg iAge; Erasmus ELLAN and SPEACH

1/3 of our research capacity on Healthy Ageing
Focus of the HA programme Hanze UAS

Active and healthy lifestyle/prevention
- physical activity
- healthy food
- work environment
- living environment

Integrated approach; eHealth, entrepreneurship

Good track record, base for Centre of Expertise Healthy Ageing
Centre of Expertise Healthy Ageing

• Business plan June 2012
• Start January 2013
• Lead partner Hanze University of Applied Sciences
• Partners from 35 in 2012 to 160 now
• 2013-2016 16 million Euros of which 4 million grant

• Public Private Partnership, partners involved:
  • 4 Universities of Applied Sciences, University of Groningen (RUG), University Medical Centre Groningen (UMCG); 5 schools for vocational training
  • 50 health-welfare institutions
  • 50 companies
  • local government and other partners like HANNN

• 25 Innovation Labs in the region; public/private partnerships
Innovation Labs

• The Centre of Expertise Healthy Ageing (CoE HA) collaborates on innovation in health care, welfare, participation, growing up healthy and healthy ageing.

• Innovation is realised in “innovation labs” where professionals (from the health care and business sector) collaborate with researchers and citizens and realise practical innovation: in education, in the professional practice, and in the business sector.

• Elements: applied research, innovation in healthcare, innovation of education, business development
Innovation Labs

• Public Private Partnership: always collaboration between knowledge institutes, health-welfare organisations and business partners
• Practical Innovation as a goal
• Sustainable: chain of activities for about 4 years
• Quality: selection of Innovation Labs by a committee of partners
• Support and Review by management CoE HA

• 25 Innovation Labs have been realised within 2 years
Positive development CoE HA

- Concept living labs for innovation successful
- Strong growth partners and regional activities
- Allignment education, research, entrepreneurship
- Learning proces innovation/co-makership/PPS
- Economic and societal innovation

- Contribution to eco-system Healthy Ageing N.NL;
  not another network organisation, not only fundamental research;
  but practical innovation and implementation in healthcare
Results 2013 / 2014

- 10 million euro’s in innovation programmes
- from 35 to 160 partners
- 145 partners active in 25 living labs
- 200 students involved in living labs
- 20 research programmes, 7 PhD’s, 70 projects
- new curricula e.g. health, social work
- in 2013/14 14 start-ups HA student companies
- 11 innovative products and services
Challenges CoE HA

- Companies more in the lead
- More innovative products
- Scaling up innovation
- More cash, not only in kind
- Business model after grant period
- Governance: Hanze UAS/other partners
- From regional to (inter)national centre
Examples of Innovation labs:

• Active Ageing for elderly citizens
• Life cycle resistant housing (with citizen participation)
• Active Ageing for children in the community
• eHealth/serious gaming for physical activity with elderly citizens
• Psychiatric health care: from intramural to extramural
• Health Space Design: healthy care environments
• Quality of Living Environment in Care, Home and leisure
• Healthy Ageing at work
• Malnutrition and Healthy Food
• Sensortechology and Health
Conclusions

Regional focus on Healthy Ageing gives the region a stronger profile and new possibilities for development.

For a broad university like Hanze UAS, Healthy Ageing is a theme that inspires many colleagues and students of different backgrounds, that gives opportunities for collaboration between education, applied research and entrepreneurship that helps to develop a stronger profile.
Centre of Expertise Healthy Ageing

The Centre of Expertise Healthy Ageing intends to set up a sustainable network of about twenty-five so-called Innovation Labs in the north of the Netherlands. These are testing grounds in which researchers, teachers, students, businesses and institutions for healthcare and wellbeing will be looking for joint solutions to problems they encounter daily in healthcare, growing up healthy and in healthy ageing.

Hanzehogeschool Groningen (Maastricht University of Applied Sciences Groningen) is the secretary of the Centre of Expertise Healthy Ageing and responsible for central control. More...
Thank you for your attention!

Questions?

Discussion?
What are your experiences with applied research & regional collaboration? (and what are Barriers and Facilitators)

1. The process within your university
   - strategic focus area’s; investments; commitment
   - alignment education, research and business

2. The process with partners
   - other universities; local government; companies; citizens
What are your experiences with Public Private Partnerships?

What are your experiences with Living Labs?

(and what are Barriers and Facilitators)