

Welcome to the Master's Open Day Human Movement Sciences

Go
the **extra**
mile



Lex Verdijk

Programme coordinator

Focus Sports & Nutrition

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Content

- What is HMS about?
- Why HMS in Maastricht?
- Main themes of HMS @UM
- Course outline & programme details
- What the future might bring
- Admission
- Meet Lucas Thurnherr!



What is HMS about?

To understand and optimize human movement in relation to health and disease, aging and (sports) performance



What is HMS about?

'Move More and Sit Less': These Are the New Physical Activity Guidelines for Americans

By [Yasemin Saplakoglu, Staff Writer](#) | November 12, 2018 03:15pm ET

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MORE ▾



American Heart
Association's Scientific
Sessions

November 2018

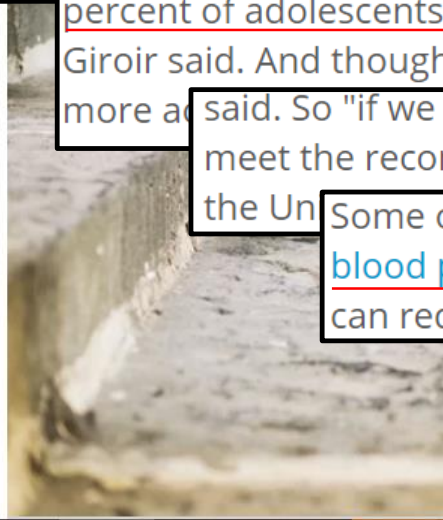
What is HMS about?

'Move More and Sit Less': These Are the New Physical Activity Guidelines for Americans

By Yasemin Saplakoglu, Staff Writer | November 12, 2018 03:15pm ET



MORE ▾



That's because the new guidelines, released today (Nov. 12) by the U.S. Department of Health and Human Services (HHS), say that any exercise is better than none. In other words, even as little as a few minutes of

exerci But currently, only about 26 percent of men, 19 percent of women and 20 percent of adolescents in the U.S. meet the physical activity guidelines, Giroir said. And though trends and studies show that adults are becoming

more active, said. So "if we can get just 25 percent of inactive people to be active and meet the recommendations, almost 75,000 deaths would be prevented in

the United States." Some of the benefits of exercise are immediate — it reduces anxiety and blood pressure, improves sleep and improves insulin sensitivity (which

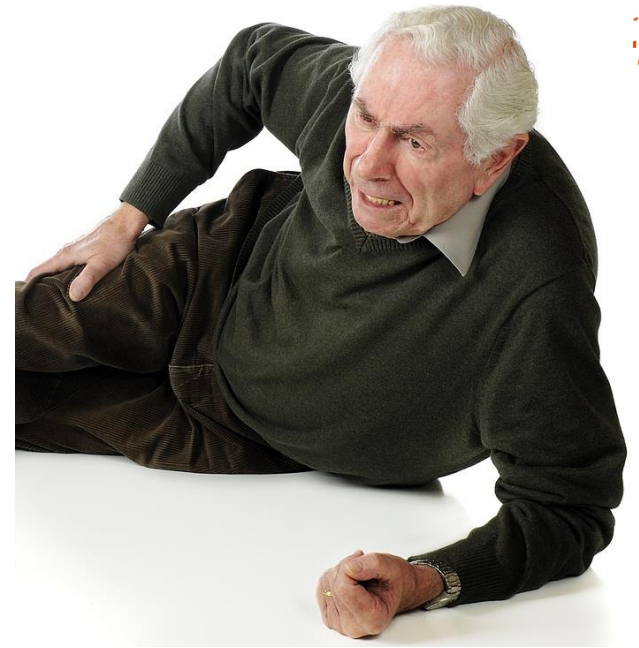
can reduce the risk of heart disease). In the long-term, physical activity has been shown to improve brain health and cognition, reduce the risk of falls for older adults (by strengthening bones or improving balance), slow the progression of hypertension and type 2 diabetes, decrease pain for those with osteoarthritis, reduces the risk of postpartum depression, and some research has shown that it may reduce the risk of developing dementia.

Fall risk in elderly

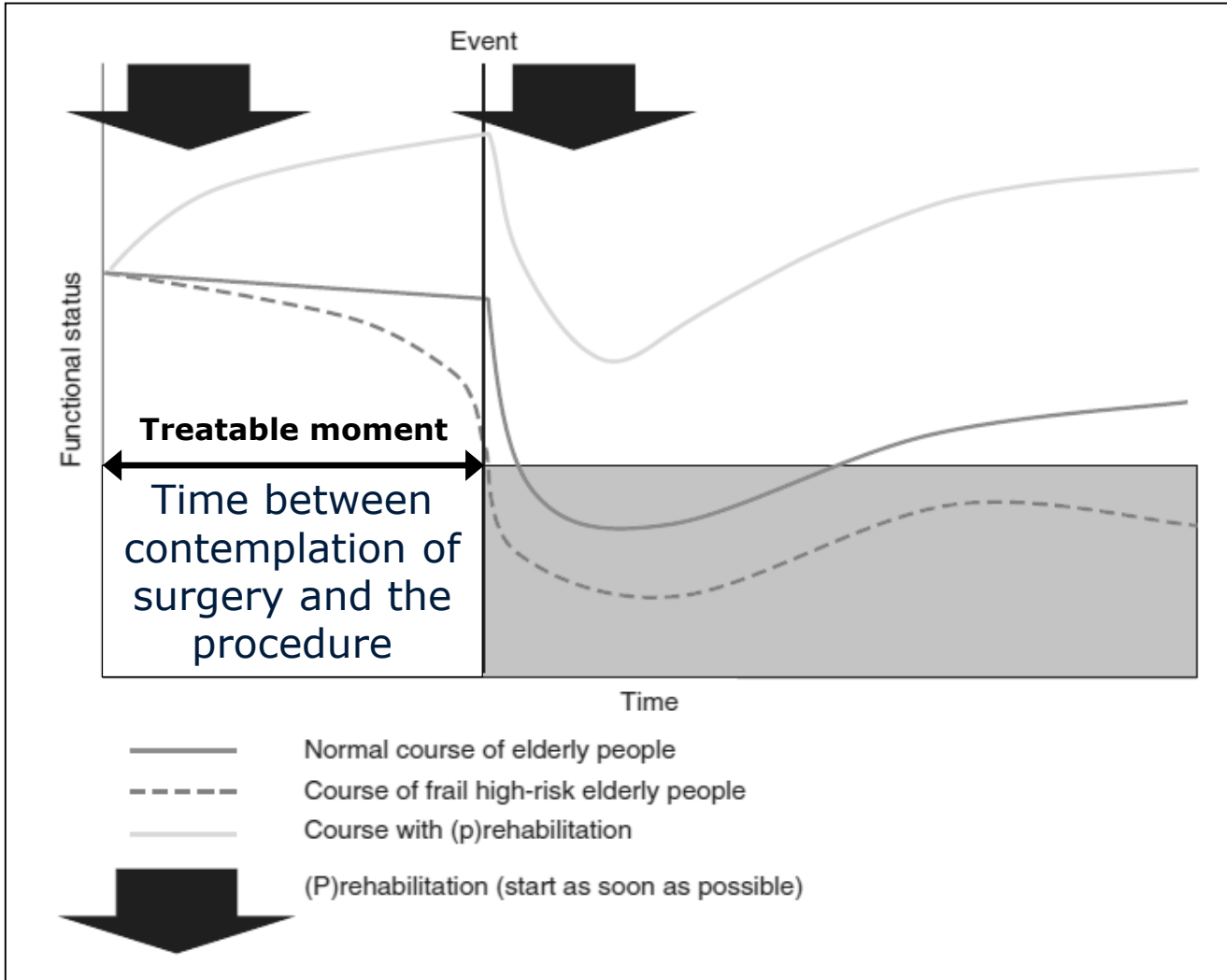
Elderly fall more frequently!

Do they stumble more often or are they less able to control incident stumbles?

Would resistance training be beneficial?



Improving postoperative outcomes



Prehabilitation

- Optimize the patient's physical fitness prior to surgery
- *Nutritional state*
- *Psychological state*

Sitting time is an important health risk

A sedentary lifestyle has been associated with various chronic diseases!

Is exercise necessary?
Can daily non-exercise activity do the job?

How can we assess daily activity?
What is the dose-response relation?



Sports performance

From BBC.com

Everyone loves a fairytale, but how many do you know that involve beetroot shots and ice chambers reaching -135 °C?

“Leicester are not alone in using cutting-edge technology in the Premier League, of course, but using beetroot shots as a performance enhancer and ice chambers to improve recovery do mark them out from the crowd.”

HOW CAN EXERCISE AND NUTRITION BE BEST COMBINED TO OPTIMIZE SPORTS PERFORMANCE?

Leicester City: The science behind their Premier League title

By Alistair Magowan
BBC Sport

© 4 May 2016 | Football

Share



Leicester players wear GPS vests in training to record their every movement

Why HMS in Maastricht?

- Programme close to scientific research performed at UM
- Internationally renowned scientists
- State-of-the-art research facilities

Physical activity and wearables

Go
the **extra**
mile



“Beet”-ing your competitors



Mark Cavendish ✓

@MarkCavendish

 Follow

Doesn't matter how often it happens, taking a pee the day after drinking beetroot juice will always freak you out!!

[#pissingrainbows](#)

10:27 PM - 13 Jan 2012

  248  27

State-of-the-art research facilities



State-of-the-art research facilities



Why HMS in Maastricht?

- Relevant societal themes
- Flexibility, pursue your own interests
- Part-time option
- Two work field-related specialisations

Main themes of HMS @UM

Physical activity and exercise as a means to improve health, prevent illness and counterbalance consequences of ageing



Improving human performance in conditions ranging from limited performance in daily life to elite sports.

Main objectives of HMS @UM

Prepare students for a **research-oriented future** in e.g. academia, higher education, hospitals, rehabilitation centres, life style centres, biomedical companies, sports organisations, sports nutrition companies, etc.

Developing an **evidence-based mindset** to enable students to design, execute, evaluate, interpret, apply, and communicate academic knowledge in their respective field of study



Students choose 1 of the specialisations!!!

Go
the **extra**
mile 

Health & Rehabilitation

Sports & Nutrition



Human movement as a **means** to improve health



Human movement as a **goal** in rehabilitation



Exercise training and nutrition in relation to sports performance



Evidence-based advise on training- and nutritional programmes

(Specialisation Physiotherapy)

**Specific master HMS track for BSc students Physiotherapy from
SOMT University of Physiotherapy:**

Final closure of a four-year academic physiotherapy continuum



Focus on diagnosing, treating, and monitoring patients with conditions and co-morbidities that warrant physiotherapy treatment in a mono- or multi-disciplinary context



Performing and understanding research, and applying evidence-based practice in the professional physiotherapy setting, with the main aim of developing, maintaining, and/or restoring body movement and function

Programme outline (full-time)

| | Specialisation Health & Rehabilitation | | Specialisation Sports & Nutrition | |
|------------------------|--|---------------------------------------|--|---|
| Sept/Oct 2 x 6 ECTS | Imaging Muscle Health | Physical Activity and Health | Nutrition to fuel sports performance | Sports supplements and ergogenic aids |
| Nov/Dec 2 x 6 ECTS | Analysis and restoration of human locomotion | Movement disorders and rehabilitation | Nutrition to support training adaptation | Sports and nutrition: putting science into practice |
| January 6 ECTS | Designing Intervention Research | | | |
| Feb/March 6 ECTS | | Reviews | | |
| Feb/June 24 ECTS | Placement and Thesis | | | |

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Part-time programme

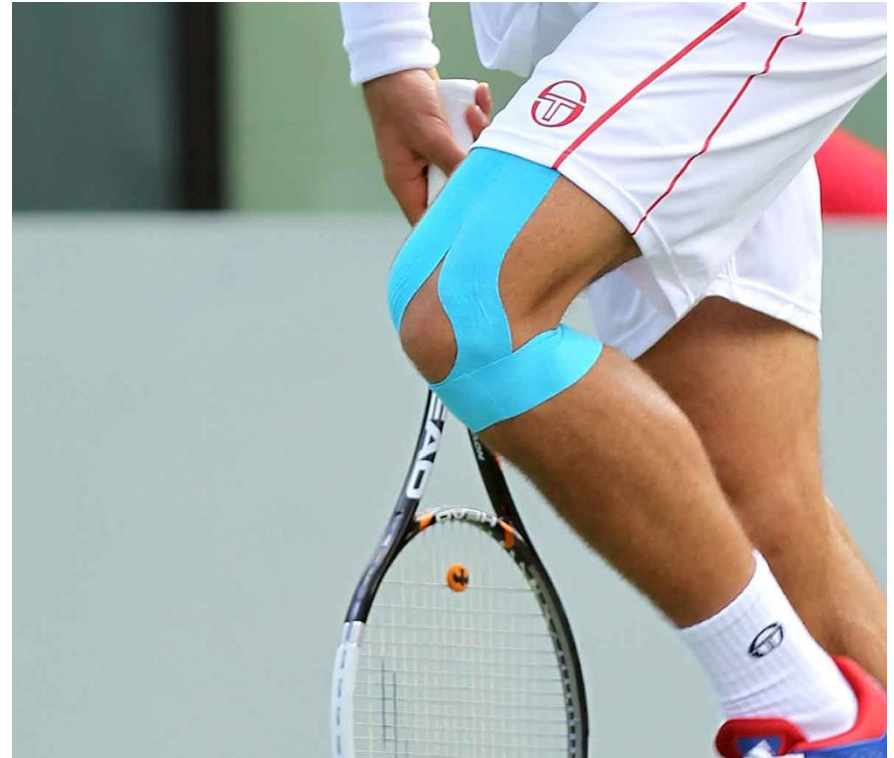
- First year: Friday courses
- Second year: Tuesday courses
- All combined with full-time students
- In principle, all teaching on one day
- Part-time = half time (20 hours/wk)

Teaching methods

- Problem-based learning
- Interactive lectures and workshops
- Practicals in small groups
- Project work
- Hands-on experience (real-life setting)
- Academic skills training



Fact or fashion?



Academic skills

To apply evidence-based practice in your professional setting

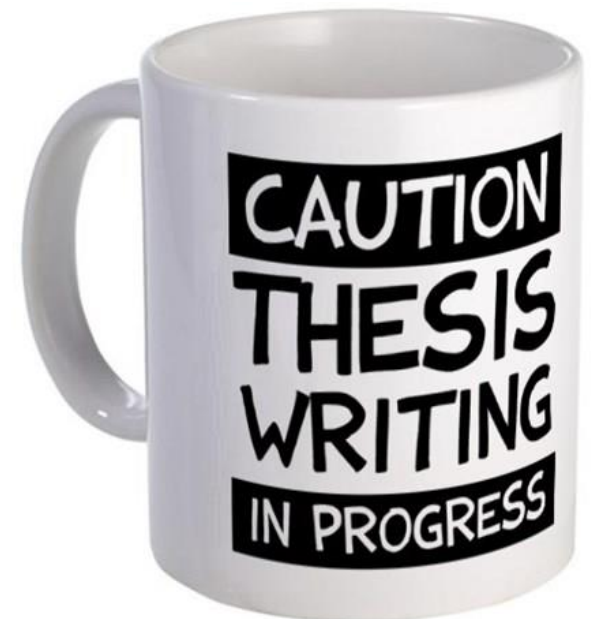
ARGUMENT

A good argument is supported with **reasoning** and **evidence**.

- Searching literature
- Critical reading
- Communicating (writing, presenting)
- Collaborating
- Research methodology
- Data quality
- Data reporting

Placement and M.Sc. thesis

- Research placement
- 16 weeks full-time equivalent
 - Individual choice
 - Gain experience in design, data collection and data analysis
 - Standards for good scientific practice
 - Basic or applied
 - Individual M.Sc. thesis



Placement and M.Sc. thesis

- Research group at UM/MUMC+ or other research institute
- Rehabilitation: Adelante, CIRO, Revant, hospitals
- Sports: NOC*NSF, AIS, AJAX, field labs (e.g. Papendal), KNVB, PSV, Roda JC, SportMax, sports nutrition research institutes (e.g. GSSI), TerraSports, TVM, TEIC, et cetera
- Healthy Life Style: TopSupport, COEUR
- Bio-Medical Engineering: Phillips Research, TNO
- National or international (UK, Australia/NZ, Canada, US, Norway, et cetera)


Internationalisation and diversity

Class of 2018

- ~75 students
- **60% university** (*Biomedical Sciences, Health Sciences, Biology, Nutrition and Health & Medicine*)
- **40% applied sciences** (*Physical Therapy, Occupational Therapy, Biometry, Sport & Health, Sports Sciences, Physical Education, Nutrition/dietetics*)
- **30% non-resident** (*Belgium, Cyprus, Finland, France, Germany, Greece, Hungary, Italy, Spain, Switzerland, UK*)
- **20% part-time students**


What the future might bring...






Lex Verdijk Manager
Joined group: Jul 2012

[Manage group](#)

Your communities 

Groups 

Alumni Human Movement...
[See all](#)

[Discover more](#)






Alumni Human Movement Sciences ...

Maastricht University

 Unlisted group

Start a new conversation in this group


[Post](#)



Meijer Kenneth · 1st
Associate Professor of Human Movement Sciences
4h

Support our team for the Ability Hackaton 2018 in Groningen!



[Click here to support Ability Battle Hackathon organized by UM ABH](#) 

gofundme.com

 Like  Comment

 **Meijer Kenneth** · 1st ...

461 members See all



99+

[Invite members](#)

About this Group

This forum will provide members with a network in the field of Human Movement Sciences. It will help to find colleagues, build a database for future reunions and act as a site to post vacant positions.

Group owner



Hans Savelberg · 1st
Professor Evolving Academic Education / Director of Education Biomedical Sciences at Maastricht University

Group managers



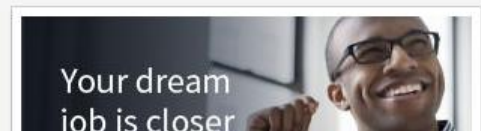
Meijer Kenneth · 1st
Associate Professor of Human Movement Sciences



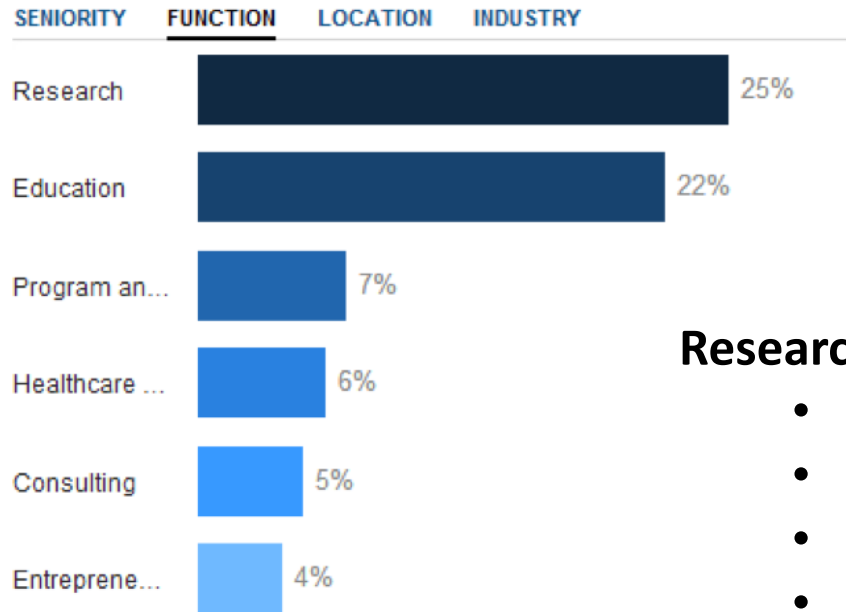
Rob de Bie · 2nd
Professor of Physiotherapy Research at Maastricht University



Lex Verdijk · You
Associate Professor at Maastricht University



Career perspectives



Research-oriented positions in:

- Academia
- Hospitals
- Rehabilitation centres
- Life style centres
- Sport medical centres
- Biomedical companies
- Sports organisations
- Sports nutrition companies



FrieslandCampina 

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Development Specialist (Sports) Nutrition

Job description

As a nutrition expert, you bridge disciplines, co-create the nutritional strategy, and apply healthy solutions in our products to strengthen and safeguard the nutritional credibility of FrieslandCampina

Your primary focus is towards sports products / ingredients. You integrate scientific and market insights into new innovative product or ingredient concepts taking into account brand fit, legislation, cost price, technological feasibility, product knowledge, market knowledge, compliance aspects. In this way you contribute to appealing nutritional stories, better products, and speed to market. You have good listening & influencing skills, and apply this internally and externally.



home > vacatures > fysiotherapeut of bewegingswetenschapper



12-11-2018

Fysiotherapeut of bewegingswetenschapper

Fulltime bij GOUD 3 Erasmus MC in Rotterdam

Fysiotherapeut of bewegingswetenschapper

Vacature met beoogde promotie: Fysiotherapeut of bewegingswetenschapper (totaal 1,0 FTE).

De vakgroep Geneeskunde voor Verstandelijk Gehandicapten is onderdeel van de afdeling Huisartsgeneeskunde aan het Erasmus MC te Rotterdam. De groep legt zich toe op onderzoek naar de gezondheid van mensen met verstandelijke beperkingen, met als doel die gezondheid te verbeteren. Samen met de drie zorgorganisaties Ipse de Bruggen te Zoetermeer, Abrona te Huis ter Heide en Amarant te Tilburg wordt het GOUD (Gezond Ouder worden met een verstandelijke beperking) consortium gevormd. Van 2008 tot 2014 is in dit consortium in een grootschalig onderzoek de gezondheid van ouderen met een verstandelijke beperking in kaart gebracht (GOUD 1). De zorgorganisaties vonden de uitkomsten hiervan zo belangrijk dat in een tweede fase (GOUD

Bekijk het vacatureoverzicht

Meld je aan voor de nieuwsbrief

delen



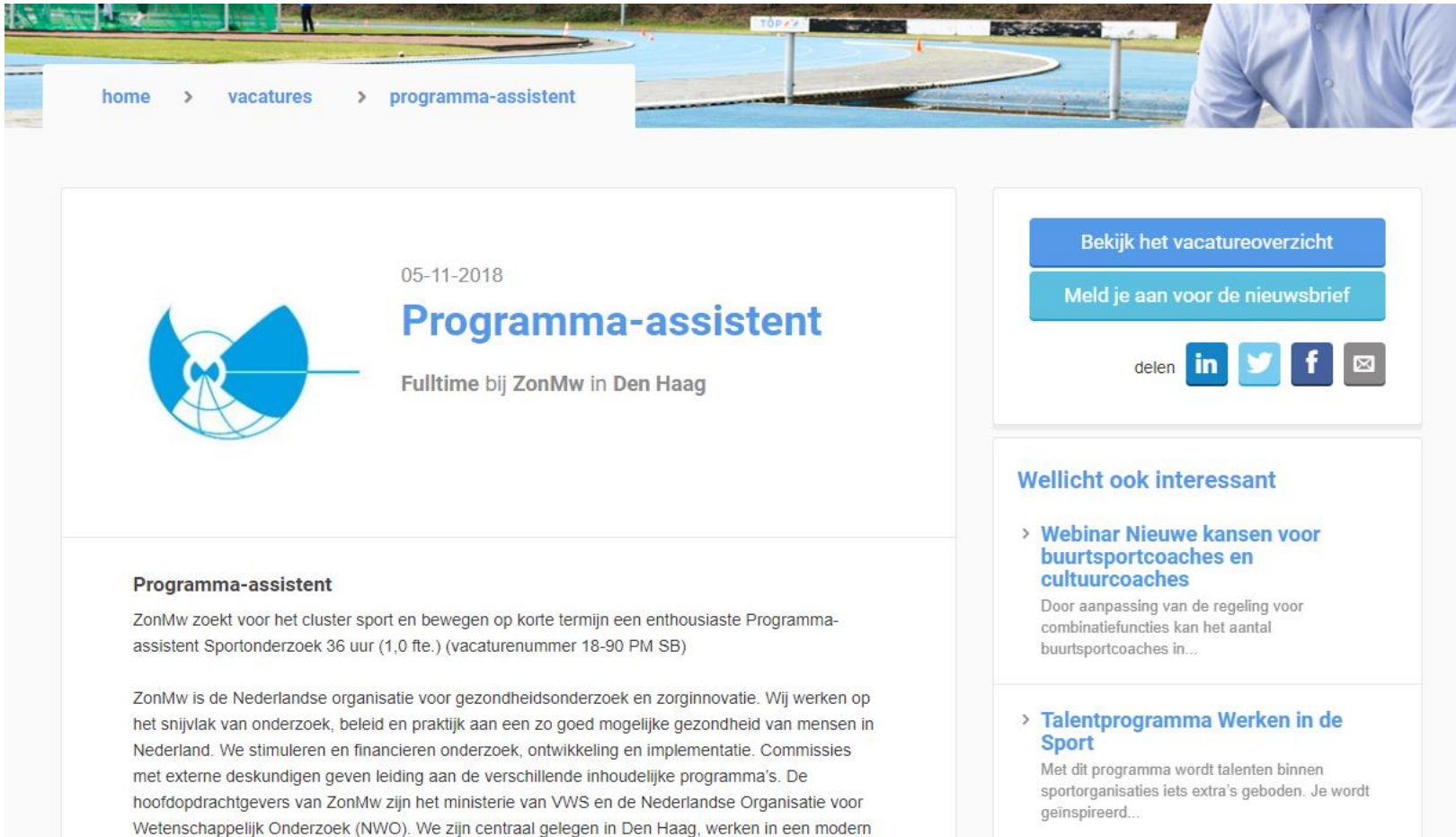
Wellicht ook interessant

> **Webinar Nieuwe kansen voor buurtsportcoaches en cultuurcoaches**

Door aanpassing van de regeling voor combinatiefuncties kan het aantal buurtsportcoaches in...


> **Talentprogramma Werken in de Sport**

Met dit programma wordt talenten binnen sportorganisaties iets extra's geboden. Je wordt geïnspireerd...



home > vacatures > programma-assistent

05-11-2018



Programma-assistent

Fulltime bij ZonMw in Den Haag





Programma-assistent

ZonMw zoekt voor het cluster sport en bewegen op korte termijn een enthousiaste Programma-assistent Sportonderzoek 36 uur (1,0 fte.) (vacaturenummer 18-90 PM SB)

ZonMw is de Nederlandse organisatie voor gezondheidsonderzoek en zorginnovatie. Wij werken op het snijvlak van onderzoek, beleid en praktijk aan een zo goed mogelijke gezondheid van mensen in Nederland. We stimuleren en financieren onderzoek, ontwikkeling en implementatie. Commissies met externe deskundigen geven leiding aan de verschillende inhoudelijke programma's. De hoofdopdrachtgevers van ZonMw zijn het ministerie van VWS en de Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO). We zijn centraal gelegen in Den Haag, werken in een modern

Bekijk het vacatureoverzicht

Meld je aan voor de nieuwsbrief

delen    

Wellicht ook interessant

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Exercise Physiologist

Houston Methodist ★★★★★ 1,237 reviews - Houston, TX

Apply On Company Site

Save this job

Plans, coordinates, implements and evaluates educational and all exercise components of cardiac rehabilitation for both inpatients and outpatients. May also be required to mobilize inpatients, under nursing supervision, as part of the Walk Team

PATIENT AGE GROUP SERVED

Young Adult, Middle Adult and Mature Adult

DUTIES AND RESPONSIBILITIES

- Delivers high quality patient care as outlined in the patient's care plan, putting the patient's needs above all by providing a nurturing environment, continuous positive feedback and firm direction to achieve a positive outcome. Mobilizes patients assigned to the Walk Team, under nursing supervision, with specified adaptive equipment and assistance to the patient. EF
- Continually updates, as technology and heart care evolve, technical knowledge of exercise and other components of cardiac rehabilitation (heart disease, nutrition, stress management etc.). EF
- Maintains all required certifications (BLS; ACLS within one year). Attains and maintains additional certifications that aid in providing the best care available to the cardiac rehabilitation patient population. Maintains active membership in a minimum of one professional organization. EF
- Provides instruction and educational material to cardiac rehab patients in a way that is easily understood, by using handouts and/or brochures that provide clear, precise and accurate information either through daily one-on-one interaction or a class setting. Provides a direct avenue from inpatient to outpatient cardiac rehabilitation. EF
- Develops and maintains constructive, collaborative communication with patients (and their family members) of all ages and conditions, coworkers, medical staff and other hospital personnel to contribute to the quality of the Cardiac Rehabilitation and Walk Team related procedures.
- Demonstrates the ICARE Values statement.
- Follows all safety rules while on the job. Reports all accidents promptly and corrects minor safety hazards.
- Performs other related duties as assigned by management.

EDUCATION REQUIREMENTS

Has at a minimum a bachelor's degree in Exercise Physiology, with preference given to a Masters of Science

Career perspectives

- Programme coordinator M.Sc. Human Movement Sciences
- Performance coach at Boels Dolmans Pro Cyclingteam
- Teacher Physical Therapy at Fontys Hogeschool
- Human Movement Scientist at SMC SportMáx (Máxima Medisch Centrum)
- Sport Scientist at PSV Eindhoven
- Research Assistant at Revant Rehabilitation
- PhD Candidate at Newman University (UK)
- PhD Candidate at Maastricht University
- Clinical Studies Specialist at Medtronic Bakken Research Center
- Researcher Orthopaedics at ViaSana clinic
- Co-founder / Co-owner / CEO at Elite Personal Fitness
- Physical Therapist
- Development Specialist Sports Nutrition at FrieslandCampina

Admissions

Relevant domains university

Biology
Biomedical Sciences
Biomedical Technology
Clinical Technology
Health and Life
Health Sciences
Life Sciences
Medicine
Molecular Life Sciences
Movement Sciences
Nutrition and Health
Sports and Exercise Sciences
University College

Visit the Admissions stand
for more information !!



Relevant domains applied sciences

Biometry
Cesar Therapy
Dietetics
Health Care Technology
Medical Imaging and Radiation
Mensendieck Therapy
Movement Technology
Occupational Therapy (Ergotherapie)
Orthopaedic Technology
Physical Education (Lichamelijke opvoeding)
Physiotherapy
Podotherapy
Psychomotor Therapy (Bewegingsagogie)
Sports and Exercise Sciences
Sport and Movement
Sport and Movement Education
Sport, Health and Management

Application deadlines to start in September 2019

- **Students who apply for a UM-wide scholarship**
up to and including 1 February 2019
- **Non-EU/non-EEA-students**
up to and including 1 May 2019
- **EU/EEA-students**
up to and including 1 June 2019

Admission-related questions?

Please visit the stand from the Board of Admission at the information market for a personal talk with our staff members



Human Movement Sciences master's student

Hi, my name is Lucas from Switzerland
**Human Movement Sciences
master's student**

Follow me on Facebook and find out
about my progress and experience
during the master!



<https://www.facebook.com/MasterChallengeLucas/>

Questions?

Quote from last year's student:

*"I would like to thank all the organisers of this master,
I think that the quality of this course was very high and
I think I acquired very important skills thanks to this program.
Keep up the good work for the future, I will recommend it
if someone will ask me about it"*

**Good luck with your study selection
and see you in Maastricht!**

Lex Verdijk

Programme coordinator

Focus Sports & Nutrition



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