Collen-Francqui Chair Sabina De Geest

Sabina De Geest, a Professor of Nursing and Director of the Institute of Nursing Science and Chair of the Department of Public Health of the Faculty of Medicine at the University of Basel (Switzerland) and part time Professor of Nursing at the Academic Centre for Nursing and Midwifery of the Department of Public Health and Primary Care at the KU Leuven (Belgium), is the **2018-2019** laureate of the Collen-Francqui Chair at the Faculty of Medicine and Health Sciences of the University of Antwerp. Professor Tinne Dilles, Chair of the NuPhaC research group, is the promotor of this year's Collen-Francqui Chair at the University of Antwerp.

Sabina De Geest gave a series of 6 lectures focusing on 'Implementation Science' in spring 2019. "Implementation research is the scientific study of the use of strategies to adopt and integrate evidence-based health interventions into clinical and community settings in order to improve patient outcomes and benefit population health" (NIH). It is an emerging scientific field highly relevant for health scientists, clinicians, as well as policy makers interested to implement and sustain scientific evidence in daily clinical practice settings.

The inaugural lecture took place on Friday 15 March 2019. The final lecture was on 17 May 2019, with colecturer **Dr Karim Berkouk** of the **European Commission**.

About Sabina De Geest

Sabina De Geest is a Professor of Nursing and Director of the Institute of Nursing Science and Chair of the Department of Public Health of the Faculty of Medicine at the University of Basel (Switzerland). She is also a part time Professor of Nursing at the Academic Centre for Nursing and Midwifery of the Department of Public Health and Primary Care at the KU Leuven (Belgium). She obtained her Master's Degree and PhD at the KU Leuven (Belgium). She has adjunct appointments at Schools of Nursing in the US (i.e. Johns Hopkins University, University of Pittsburgh, New York University) and in Australia (University of Technology, Sydney).

Sabina De Geest leads the *Leuven Basel Research Group*, an international, interdisciplinary research group focusing on improving outcomes in chronically ill (e.g., solid organ & stem cell transplantation) and older patient populations. Driven by implementation science methodology, her research portfolio focuses on the development of innovative care models, partially also powered by eHealth. In addition, research addressed psychosocial and behavioural pathways and their relation to outcomes in chronic illness and the development and testing of instruments to assess patient reported outcomes. Projects are conducted in Europe, Australia and North & South America.

Her research has been published in leading interdisciplinary journals. Prof De Geest has published over 300 international peer-reviewed papers resulting in 8500 citations (h-index Google Scholar = 57 / Scopus 46) and has been successful in attracting competitive project-related research (> €6.230.000) and non-project related (e.g. for education) funding (> €3.000.000).

About implementation science

Improving the speed and quality of empirical evidence's implementation into real world settings is a top priority for health care systems. Indeed, suboptimal implementation not only increases research waste, it also keeps cutting-edge treatments and interventions from the patients who need them and, in the worst cases, leaves those patients exposed to ineffective or even harmful ones. To date, the most effective bridge between evidence generated in the trial world to outcomes in real world settings is implementation science. Defined as "the scientific study of methods to promote the integration of research findings and evidence-based interventions into healthcare policy and practice", implementation science "seeks to understand the behaviour of healthcare professionals and support staff, healthcare organizations, healthcare consumers, and policymakers in context as key variables in the sustainable uptake, adoption, and implementation of evidence-

based interventions".[1] Accordingly, over the past decade, implementation science's success at translating researchers' results into meaningful actions across the full range of health care stakeholders has made it a leading methodology for proposals submitted to the EU's Horizon 2020 programme.

[1] NIH Fogarty International Center

https://www.fic.nih.gov/ResearchTopics/Pages/ImplementationScience.aspx (accessed Oct 2, 2018).

Goal of the course

This course's overall goal is to advance course participants' knowledge and skills in view of implementation science, with a particular focus on implementation research designs, implementation science outcomes, contextual analyses, implementation strategies, patient and public involvement in research, and reporting of implementation science results as well as building implementation science infrastructures.

Target group

This implementation science course is relevant to all health care disciplines. It applies to a variety of health care settings for a broad set of interventions. Course participants will need a solid basis in clinical research methods (e.g. conceptual thinking, quantitative and qualitative methodology, statistical analysis).

Lecture Series Programme

Accreditation is pending for each lecture.

Inaugural lecture: Implementation science: Making research findings more powerful for clinical use Lecture in English

Friday 15 March 2019, 5-6 p.m., followed by a reception

Location: Campus Drie Eiken – Building Q – Promotiezaal – Universiteitsplein 1, 2610 Wilrijk

Lecture Series

Apart from the inaugural lecture, which is in English, all lectures are in **Dutch**.

Lecture 1: Implementation research aims & designs or how to develop a research project with clinical impact as the ultimate goal

Lecture in **Dutch**.

Friday 29 March 2019, 4-6 p.m.

Location: Campus Drie Eiken - Building O - Auditorium O.O2 - Universiteitsplein 1, 2610 Wilrijk

Lecture 2: Contextual analysis in implementation science: Making sense of complexity Lecture in **Dutch**.

Friday 26 April March 2019, 4-6 p.m.

Location: Campus Drie Eiken – Building O – Auditorium O.O2 – Universiteitsplein 1, 2610 Wilrijk

Lecture 3: Getting your intervention implemented in the real world: State of science of implementation strategies

Lecture in **Dutch**.

Friday 3 May 2019, 4-6 p.m.

Location: Campus Drie Eiken – Building O – Auditorium O.O2 – Universiteitsplein 1, 2610 Wilrijk

Lecture 4: Listen to all the voices: Methods for stakeholder involvement in implementation science Lecture in Dutch.

Friday 10 May 2019, 4-6 p.m.

Location: Campus Drie Eiken – Building O – Auditorium O.O2 – Universiteitsplein 1, 2610 Wilrijk

Lecture 5: Reporting of implementation science studies and developing implementation science infrastructures

Lecture in **Dutch**.

Co-lecturer: Dr Karim Berkouk, Acting Head of the Unit for Non Communicable Diseases and the Challenge of Healthy Ageing at the Directorate-General for Research and Innovation of the **European Commission**

Friday 17 May 2019, 4-6 p.m.

Location: Campus Drie Eiken – Building O – Auditorium O.O2 – Universiteitsplein 1, 2610 Wilrijk

Preparing the lectures

These publications will allow you to prepare for the lectures.

Inaugural lecture: Implementation science: Making research findings more powerful for clinical use - 15 March 2019

Please read before the lecture:

- Peters et al. Implementation research: what it is and how to do it. BMJ 2013;347:f6753 doi: 10.1136/bmj.f6753
- Zullig et al. Moving from the trial to the real world: Improving medication adherence using insights of implementation science. Annual Review of Pharmacology and Toxicology 2018 Aug 20. doi: 10.1146/annurevpharmtox-010818-021348. [Epub ahead of print]

Lecture 1: Implementation research designs or how to develop a research project with impact in the clinical setting as ultimate goal - 29 March 2019

Please read before the lecture:

- Curran et al. Effectiveness-implementation Hybrid Designs. Combining Elements of Clinical Effectiveness and Implementation Research to Enhance Public Health Impact. Medical Care 2012; 50(3): 217-226.
- Proctor et al. Outcomes for implementation research: conceptual distinctions, measurement challenges, and research agenda. Adm Policy Ment Health 2011; 38(2):65-76.

Optional readings:

- Peters et al. Implementation research in health. A practical guide. WHO 2013.
- Craig et al. MRC framework paper Developing and evaluating complex interventions: the new Medical Research Council guidance. BMJ 2008 337: a1655

Lecture 2: Contextual analysis in implementation science: making sense of complexity - 26 April 2019

Please read before the lecture:

- Pfadenhauer et al. Making sense of complexity in implementation science: The context and Implementation of Complex Interventions (CICI framework). Implementation Science 2017; 12:21
- Li et al. Organizational contextual features that influence the implementation of evidence based practices across health care settings: a systematic integrative review. Systematic Reviews 2018; 7:72., 2013:8:22.

Optional readings:

• Watson et al. Defining the external implementation context: an integrative systematic literature review. BMC Health Services Research 2018; 18:209.

• Chaudoir et al. Measuring factors affecting implementation of health interventions: a systematic review of structural, organizational, provider, patient and innovation level measures. Implementation Science 2013, 8:22

Lecture 3: Getting your intervention implemented in the real world: state of science of implementation strategies - 3 May 2019

Please read before the lecture:

- Waltz et al. Use of concept mapping to characterize relationships among implementation strategies and assess their feasibility and importance: results from the Expert Recommendations for Implementing Change (ERIC) study. Implementation Science 2015;10:109
- Bunger et al. Tracking implementation strategies: a description of a practical approach and early findings. Health Research Policy and Systems 2017; 15:15.

Lecture 4: Listen to all the voices: methods for Patient and Public Involvement (PPI) in implementation science - 10 May 2019

Please read before the lecture:

• National Institute for Health Research. INVOLVE. Briefing notes for researchers: involving the public in NHS, public health and social care research. Eastleigh. 2012.

Optional readings:

Value plus EU

Lecture 5: Reporting of implementation science studies and developing implementation science infrastructures - 17 May 2019

Please read before the lecture:

• Pinnock et al. Standards for Reporting Implementation Studies (StaRI) Statement. BMJ 2017; 356:i6795

Optional readings:

• Crable et al. Standardizing an approach to the evaluation of implementation science proposals. Implementation Science (2018) 13:71

Laudatio Collen-Francqui Chair of professor dr. Sabina De Geest, delivered in Antwerp, on 15 march 2019 by professor dr. Tinne Dilles, promotor

Honourable Vice-Rector Esteemed prof. Sabina De Geest Dear Colleagues Dear Ladies and Gentlemen

Today, you are attending a unique Collen-Francqui Inaugural lecture. It is unique in several ways, all with one common "causal" factor, the laureate of this Collen-Francqui Chair, prof. dr. Sabina De Geest. I explicitly want to say that it is a great honor to me, to be the promotor of this chair, as I have always been very much impressed with Sabina's work. I will start with some extractions from her curriculum, where after I will continue with some remarkable achievements and impressions.

Already immediately after her bachelor's degree in nursing, in 1984, Sabina De Geest started her international career. At the University Hospital of the Westfälischen Wilhelms University, she specialized in anaesthesia- and intensive care nursing. After two years she returned to the Catholic University of Leuven to get a master's degree in medical and social sciences, magna cum laude. The first time of many the USA is mentioned in her curriculum, is in 1989, for an internship of two months in heart and heart lung transplant programs in Presbyterian Hospital in Pittsburgh. She combined working in practice with research, resulting in a successful PhD defense in 1990 at the Catholic University of Leuven. Also at a postdoctoral level, she continued combining research and clinical practice and extending her expertise in international courses.

Many of the organizations she visited, noticed her high level of excellence. She was appointed in many of them. She has a primary academic appointment at the Catholic University of Leuven. In the United States she has academic appointments at the University of Pittsburgh, the University of Missouri, John Hopkins University, the University of Pennsylvania and New York University. In Sidney, Australia, she has an honorary appointment at the University of Technology.

Her main appointment, however, is in Switzerland. One of Sabina's greatest achievements is the foundation of the Institute of Nursing Science in Basel. In 2000, she went to Switzerland to start the Institute from scratch. Since the foundation, she is professor in nursing and director of the institute. In January 2020 they celebrate their twentieth anniversary. Congratulations already! Since 2006 about 20 PhD projects have successfully been defended. From the 19 ongoing PhDs only 6 involve Swiss students, showing the international character of the institute. At the faculty of medicine of the University of Basel she also serves as chair of the Department of Public Health. Her appointments show how much she is internationally appreciated for her expertise as a scientist, an educator, an innovator, a leader and a manager.

Her research mainly focusses on therapeutic adherence and behavioral and psychological factors that influence the clinical outcome in chronic patients. Over the past few years, she redirected her research more towards implementation science. The impact on the patient has always been a central theme in her research. Through implementation science Sabina increases the efforts in closing the gaps between research and clinical practice. Over 300 peer-reviewed publications, over 8000 citations, an impressive list of over 100 successful grant applications, and many honors and awards, demonstrate the impact of professor Sabina De Geest and her invaluable contribution to health care research, and especially to nursing research.

There is more..., yet, I decided to stop here and to continue with some achievements and impressions which go beyond the facts of the curriculum.

I wanted to take the freedom to start from my own first impressions about prof. De Geest. As a nurse student, we had to read several of her publications. Through her focus on evidence based practice, rigorous research methodology, and entrepreneurship she showed that qualitative nursing care required more than only a good heart. Professor De Geest is a role model for the professionalization of nursing practice.

Later on I met her in Basel where she organized summer courses in research methodology. These summer courses, with renowned lecturers, helped many doctoral students and postdocs, improving their research competences. Indirectly, through these summer courses, Prof. De Geest has improved the quality of many researchers' work.

One of her team members shared with me the following words: "She manages to build projects with a clear mission and vision, supported and valued by all stakeholders. The African saying " If you want to go fast, go alone. If you want to go far, go together" could have been written for her. "

I also contacted prof. dr. Pierre Van Moerbeke, CEO of the Francqui Foundation. As far as he could remember, Sabina is the first laureate of the Francqui Chair in the domain of nursing science. He was sure for the last 25 years, yet, in all probability also way back in history. So, Sabina, you continue on your path of being the first: the first nurse specialist in the University Hospital in Leuven in the domain of heart transplantation, the first European nurse in the American Academy of Nursing Science, the first director of the first master program in nursing in Switzerland, and the first nurse honored with a Francqui Chair.

So, I want to conclude that Prof. De Geest has changed nursing, nursing science, and inspired and educated many to continue on her path. Therefore, this inaugural lecture is more than unique.

After this inaugural lecture, Sabina will share with us her expertise on implementation science in a lecture series of 5 sessions starting on march 29th. In the last session, on May 17th, she will be joined by dr. Kerstiëns, head of the Unit "Non- Communicable Diseases and the challenge of healthy ageing" of the European Commission, as implementation science is very important in applying for European research funding. So, I want to invite you all to this lecture series.

We are looking forward to your introductory lecture, and to the presentations in the following weeks. Please, prof. Sabina De Geest, I invite you to take the floor.