



Sustainability Lunch Talks

Econursing, an innovative approach to promote health at 360°

Prof. Dr. Marie Friedel

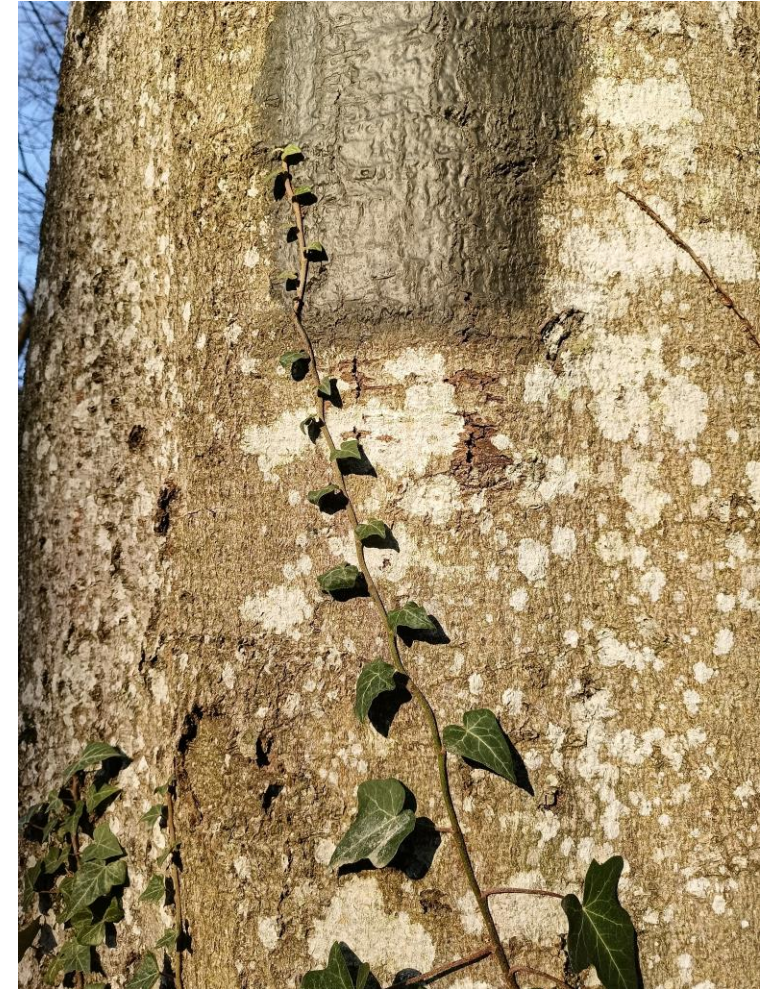


UNIVERSITÉ DU
LUXEMBOURG

Co-Director of Programs in Nursing Science: Prof. Dr. Laurence Bernard

- I, hereby declare, that I have no potential conflicts of interest to report.

- 1. Implementation of new Bachelors in Nursing Science
- 2. Urgent need to promote environmental health
- 3. Presentation of the new course Econursing

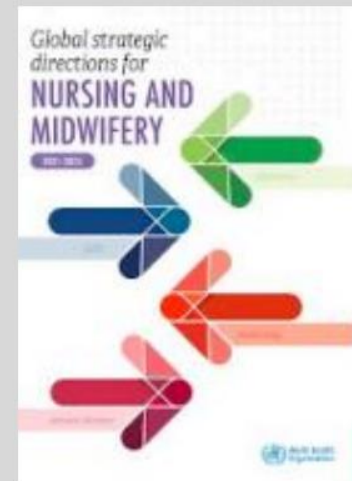


Credits: Marie Friedel

- 1. Implementation of new Bachelors in Nursing Science at the University of Luxembourg

Urgent need to invest in health care education

Evidence





OPEN ACCESS

Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care

To cite: Aiken LH, Sloane D, Griffiths P, et al. *BMJ Qual Saf* 2017;**26**:559–568.

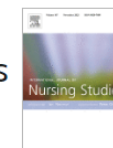
Linda H Aiken,¹ Douglas Sloane,¹ Peter Griffiths,² Anne Marie Rafferty,³ Luk Bruyneel,⁴ Matthew McHugh,¹ Claudia B Maier,⁵ Teresa Moreno-Casbas,⁶ Jane E Ball,² Dietmar Ausserhofer,⁷ Walter Sermeus⁴, For the RN4CAST Consortium











ELSEVIER

International Journal of Nursing Studies

Volume 147, November 2023, 104601



Costs and cost-effectiveness of improved nurse staffing levels and skill mix in acute hospitals: A systematic review

[Peter Griffiths](#)^{a b c}  , [Christina Saville](#)^{a c} , [Jane Ball](#)^{a c} ,
[Chiara Dall'Ora](#)^{a c} , [Paul Meredith](#)^{a b} , [Lesley Turner](#)^{a c} , [Jeremy Jones](#)^c 

INTENS CRIT CARE NUR 81 (2024) 103596



Contents lists available at [ScienceDirect](#)

Intensive & Critical Care Nursing

journal homepage: www.sciencedirect.com/journal/intensive-and-critical-care-nursing



Research Article

Unfinished nursing care in intensive care units and the mediating role of the association between nurse working environment, and quality of care and nurses' wellbeing

Arnaud Bruyneel^{a,1,*}, Nicolas Bouckaert^{b,1}, Magali Pirson^a, Walter Sermeus^c, Koen Van den Heede^{b,c}

^a Health Economics, Hospital Management and Nursing Research Dept, School of Public Health, Université Libre de Bruxelles, Belgium

^b Belgian Health Care Knowledge Centre (KCE), Brussels, Belgium

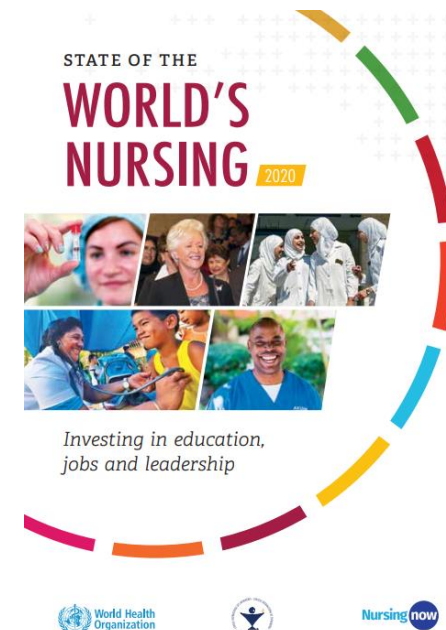
^c KU Leuven Institute for Healthcare Policy, Leuven, Belgium



- 1. Academic career opportunities
- 2. Professional autonomy
- 3. Recognition and support
- 4. Work conditions
- 5. Equitable salary
- 6. Work-Life balance

Workplace policies must address the issues known to impact nurse retention in practice settings; this includes the support required for nurse-led models of care and advanced practice roles.

Kroczek, M., Späth, J. The attractiveness of jobs in the German care sector: results of a factorial survey. Eur J Health Econ 23, 1547–1562 (2022). <https://doi.org/10.1007/s10198-022-01443-z>



Nursing shortage amplified by the pandemic

6 millions nurses (WHO, 2020)

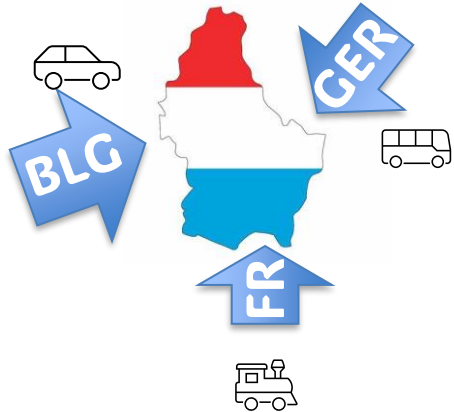
23-27 millions nurses and midwives (Lancet 2022)



[Au Brésil, ravagé par le Covid, des infirmières inventent une nouvelle «Main de Dieu» | Slate.fr](#)

Etat des lieux des professions médicales et des professions de santé au Luxembourg

70% cross-border nurses



LAIR REPORT IN 2019

Synthèse du Rapport Final

Version 2019-10-01

Santé et Prospectives
Siège social : 87 Schmiedenacht, L-4993 Sanem, G.D. de Luxembourg
Tél : (+352) 59 49 55 GSM : (+352) 621 277 983
E-mail : marieliselair@gmail.com
Registre du commerce : B176851
TVA : LU26158716

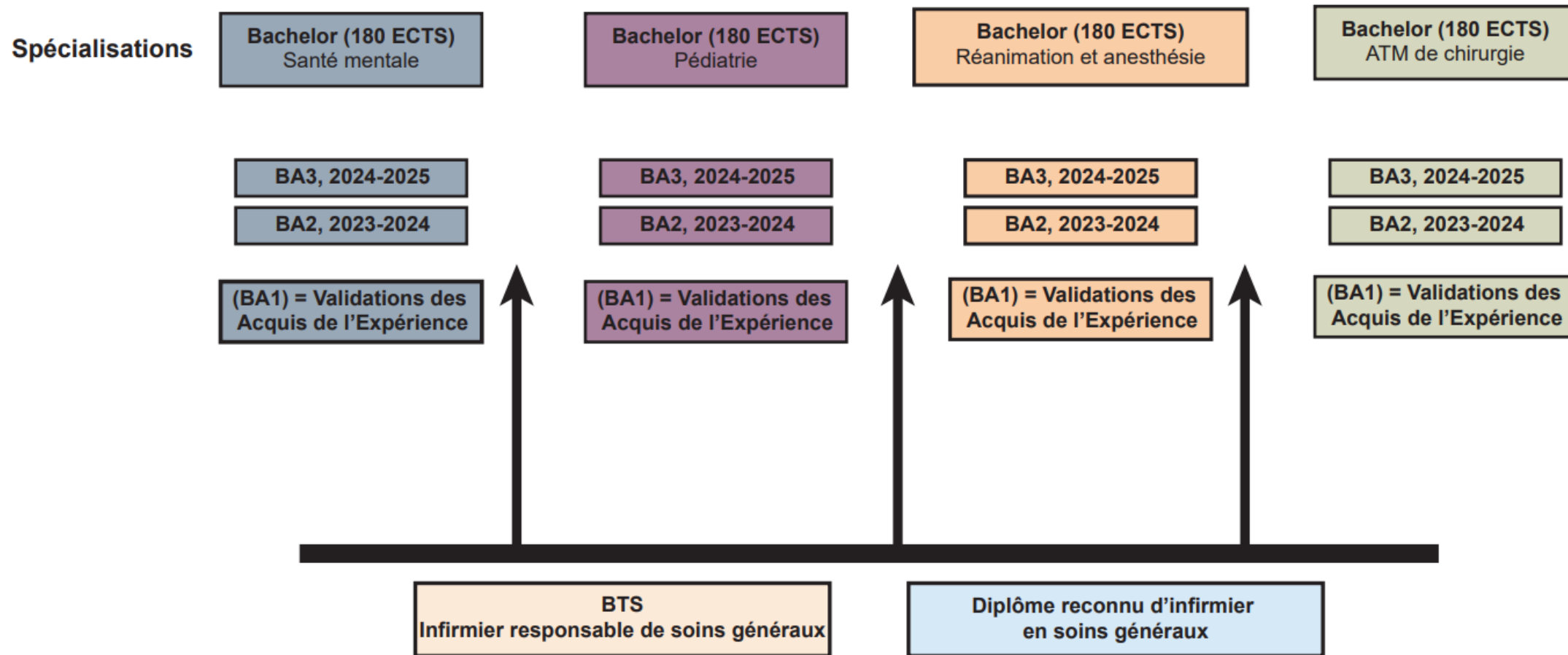
Etat des lieux des professions médicales et des professions de santé- Rapport final Synthèse version 2019-10-01
ML Laiz, Santé et Prospectives 1



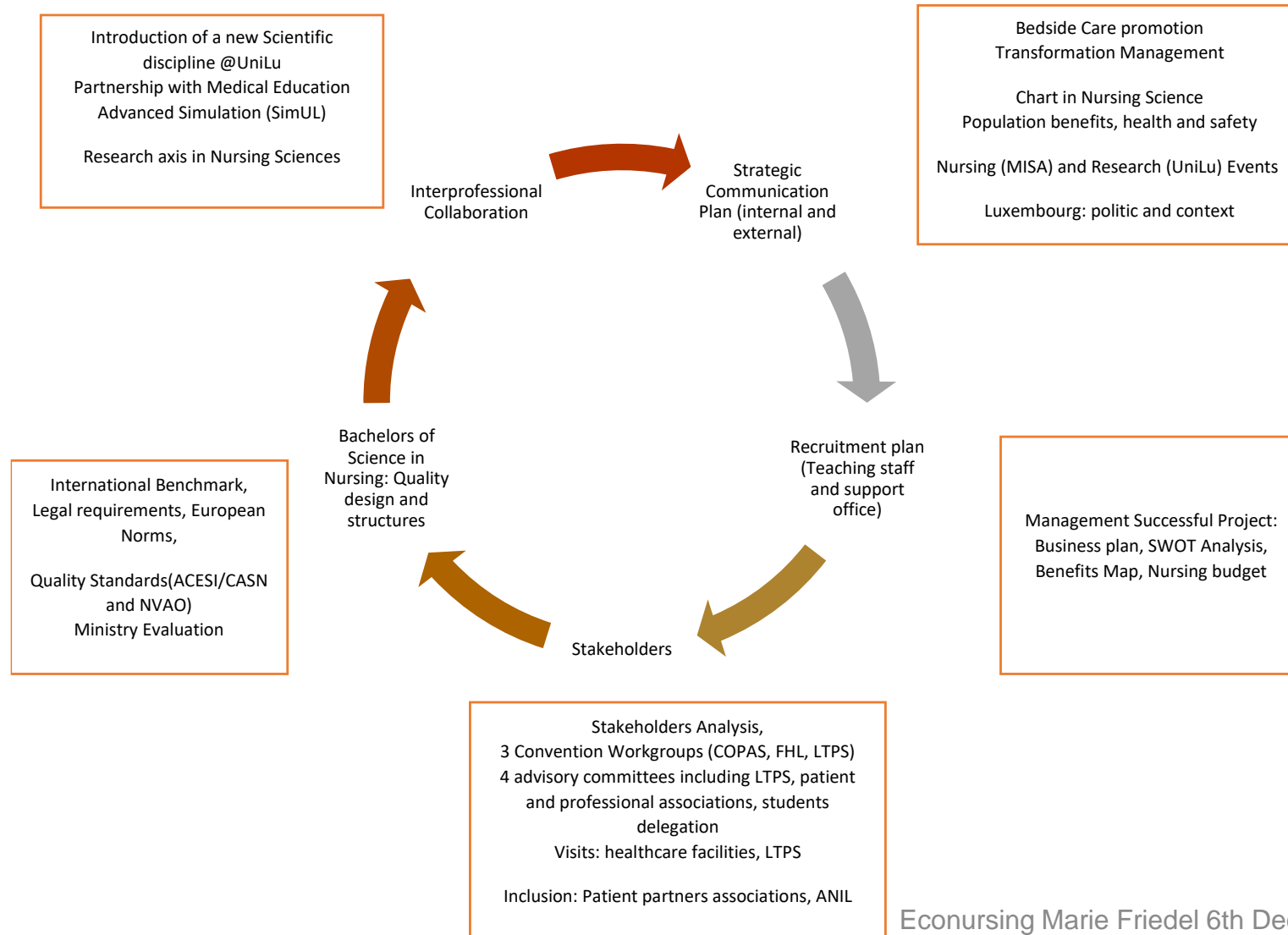
ASSOCIATION NATIONALE DES INFIRMIÈRES
ET INFIRMIERS DU LUXEMBOURG



University of Luxembourg receives a ministerial mandate in 2021



Collaborative approach to develop the new bachelors



Bachelors in Nursing Science at FSTM

📖 FACULTY OF SCIENCE, TECHNOLOGY AND MEDICINE

- Faculty of Science, Technology and Medicine (FSTM)
- Multidisciplinary
- Double mission
 - Education
 - Research
- Produce and disseminate knowledge
- Train responsible citizens



1

Faculty

5

Departments

3

Campus sites



5

Disciplines

41

Study programmes

3

Official languages



2,000

Students

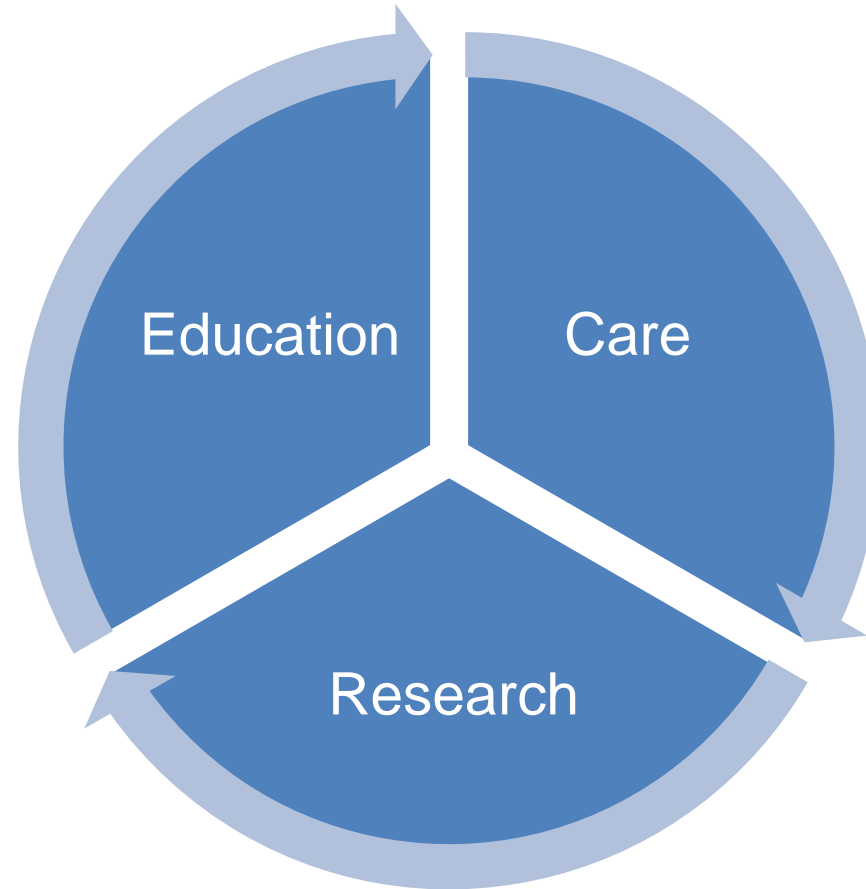
130

Countries

56%

International students

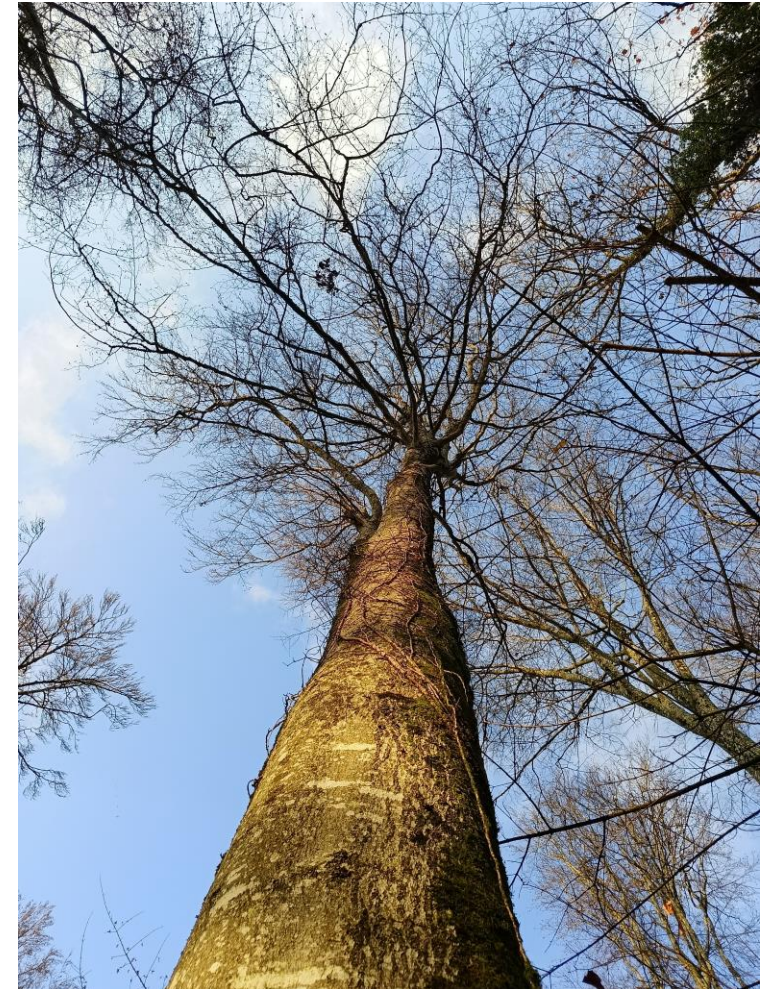
Academic bachelor in Nursing Science: a unique opportunity



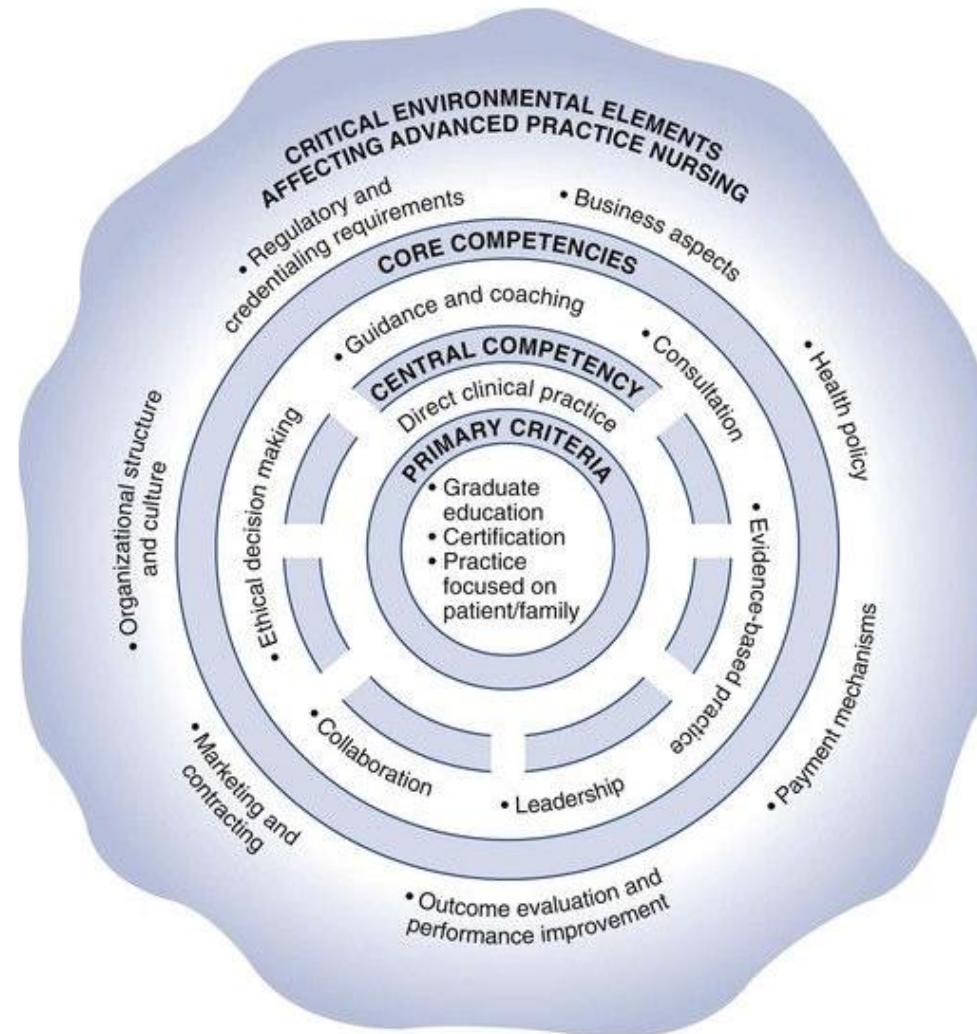
What are nursing sciences?

- ✓ Empirical knowledge
- ✓ Ethical knowledge
- ✓ Esthetic knowledge
- ✓ Personal knowledge
- ✓ Emancipatory knowledge

Carper BA. Fundamental patterns of knowing in nursing. ANS 1978;1(1):13–24. 1978 Aspen Publishers, Inc.



Credits: Marie Friedel



Tracy, M. F. et O'Grady, E. T. (2023). *Hamric and Hanson's advanced practice nursing: an integrative approach* (7th ed.). Elsevier.



Image: Christophe Beau (reproduit avec permission)
Basée sur Fleury & Fenoglio, Charte du Verstohlen, 2022



Vers des nouveaux bachelors universitaires en sciences infirmières au Grand-Duché du Luxembourg :
Quel vécu exprimé par les étudiants infirmiers du Lycée Technique pour Professions de Santé ?

Maly Goedert, Marie Friedel, Laurence Bernard

Louvain-la-Neuve
9 février 2022



Agreement of collaboration between University of Luxembourg and the Lycée Technique pour

Université du Luxembourg > News > L'Uni et le LTPS vont coopérer pour

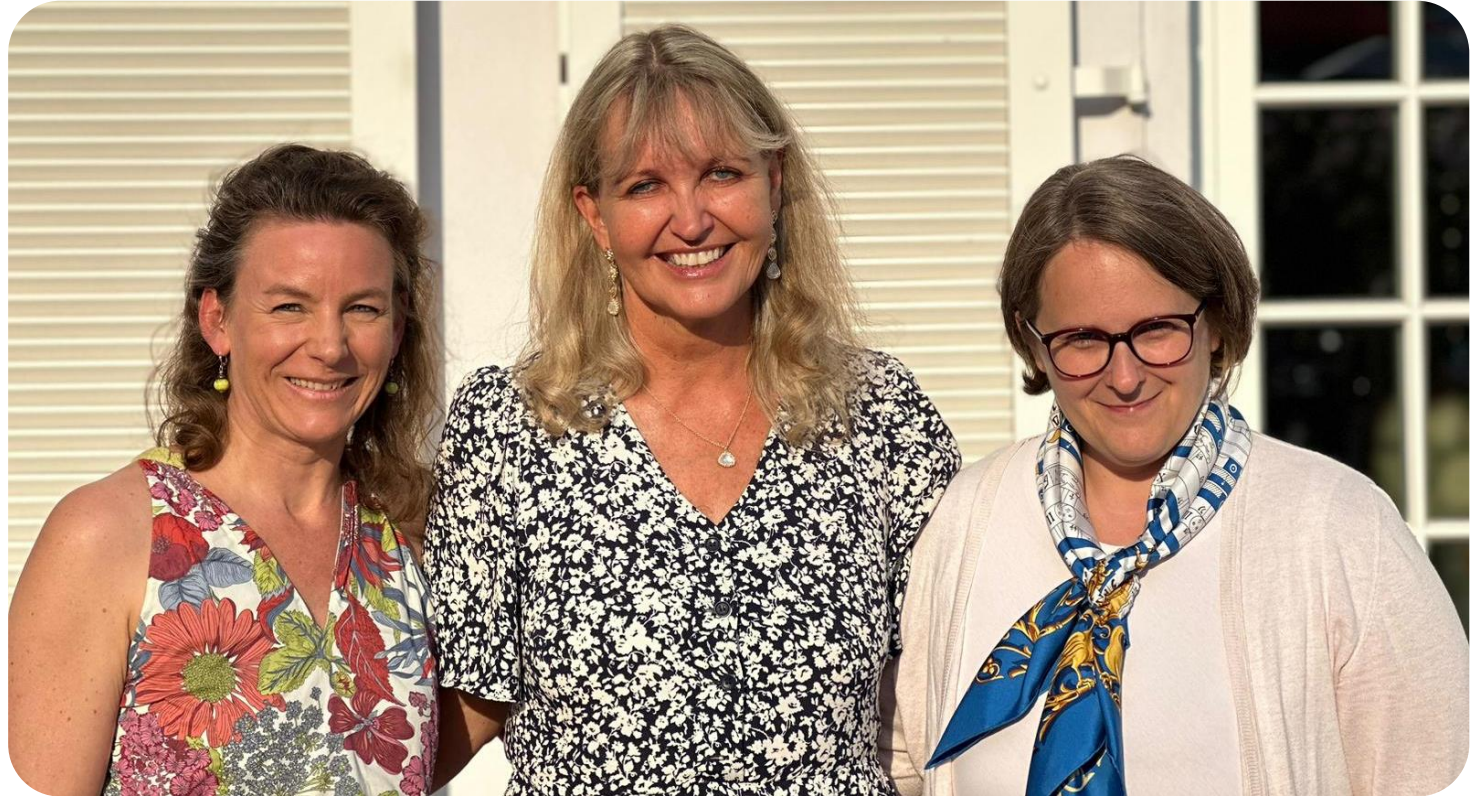
News

L'Uni et le LTPS vont coopérer pour la formation des infirmiers

Faculté des Sciences, des Technologies et de Médecine (FSTM)

Université / Administration centrale et Rectorat

20 juin 2023



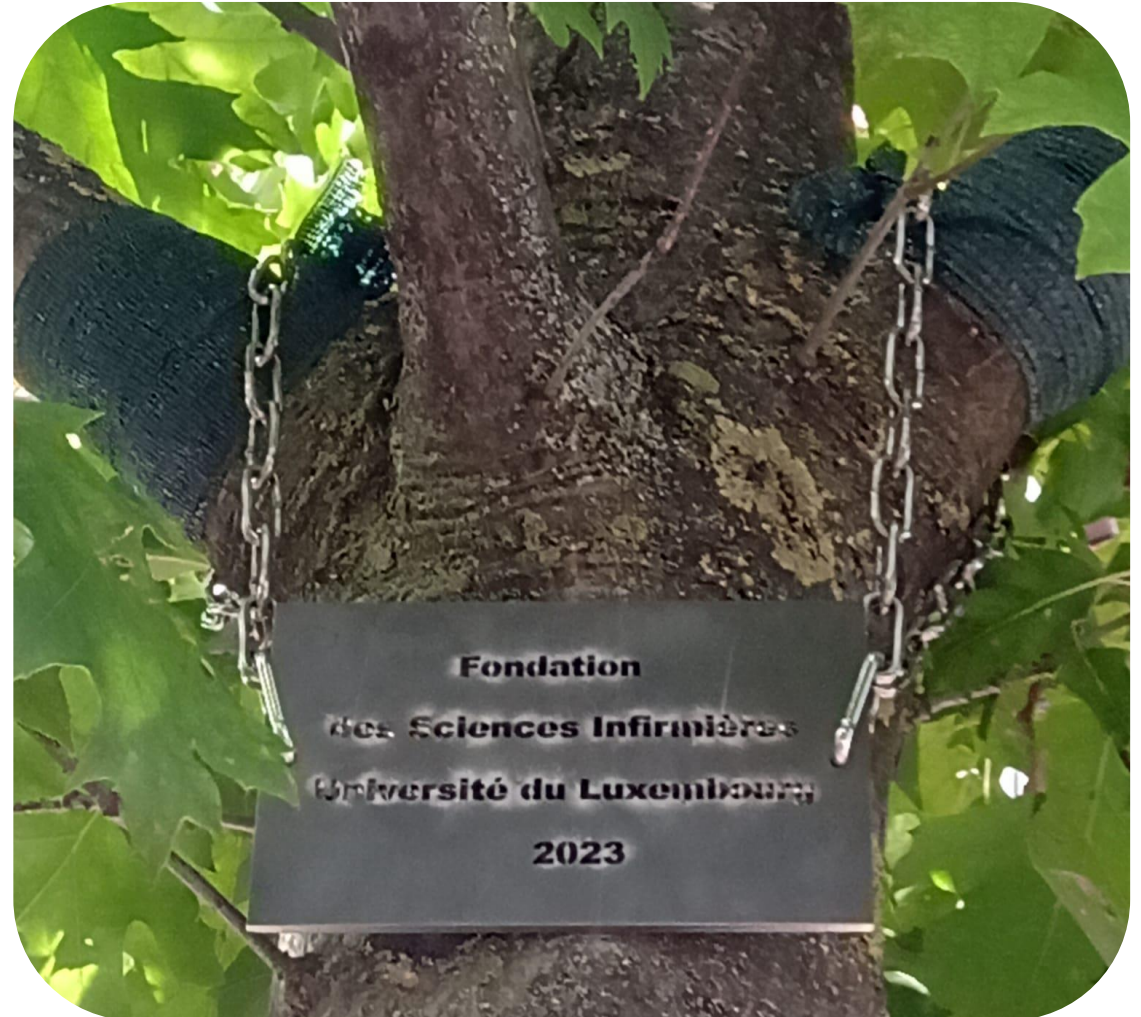
Marie Friedel, Maly Goedert, Laurence Bernard

<https://www.uni.lu/fr/news/luni-et-le-ltps-vont-cooperer-pour-la-formation-des-infirmiers/>

Foundation



Credits: Aswin Lutchanah



Credits: Dan Lecocq

First academic entry - 18 th September 2023



Welcome day - Campus Belval - Sep 2023

Start of the 4 new bachelors in Nursing Science - Specialisations



**Assistant technique
médical de chirurgie**



Infirmier en pédiatrie



**Infirmier en anesthésie
et réanimation**



Infirmier psychiatrique



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UNIVERSITÉ DU
LUXEMBOURG

Twin a Nurse

Vous souhaitez soutenir et accompagner un.e étudiant.e en sciences Infirmières dès la rentrée académique de septembre 2023 ?
Tentez l'aventure, rejoignez-nous!

Votre profil ?

- 👂 Être disponible et à l'écoute
- 🏥 Issu.e de tous secteurs confondus, pas forcément issu.e du monde infirmier/médical/santé
- 👤 Être en emploi ou retraité

Quel est l'objectif de ce projet ?

- ✓ Soutenir un.e étudiant.e infirmier.e pendant toute ses études
- ✓ Aider l'étudiant.e à développer ses compétences linguistiques
- ✓ Partager vos compétences et expériences
- ✓ Début en octobre 2023

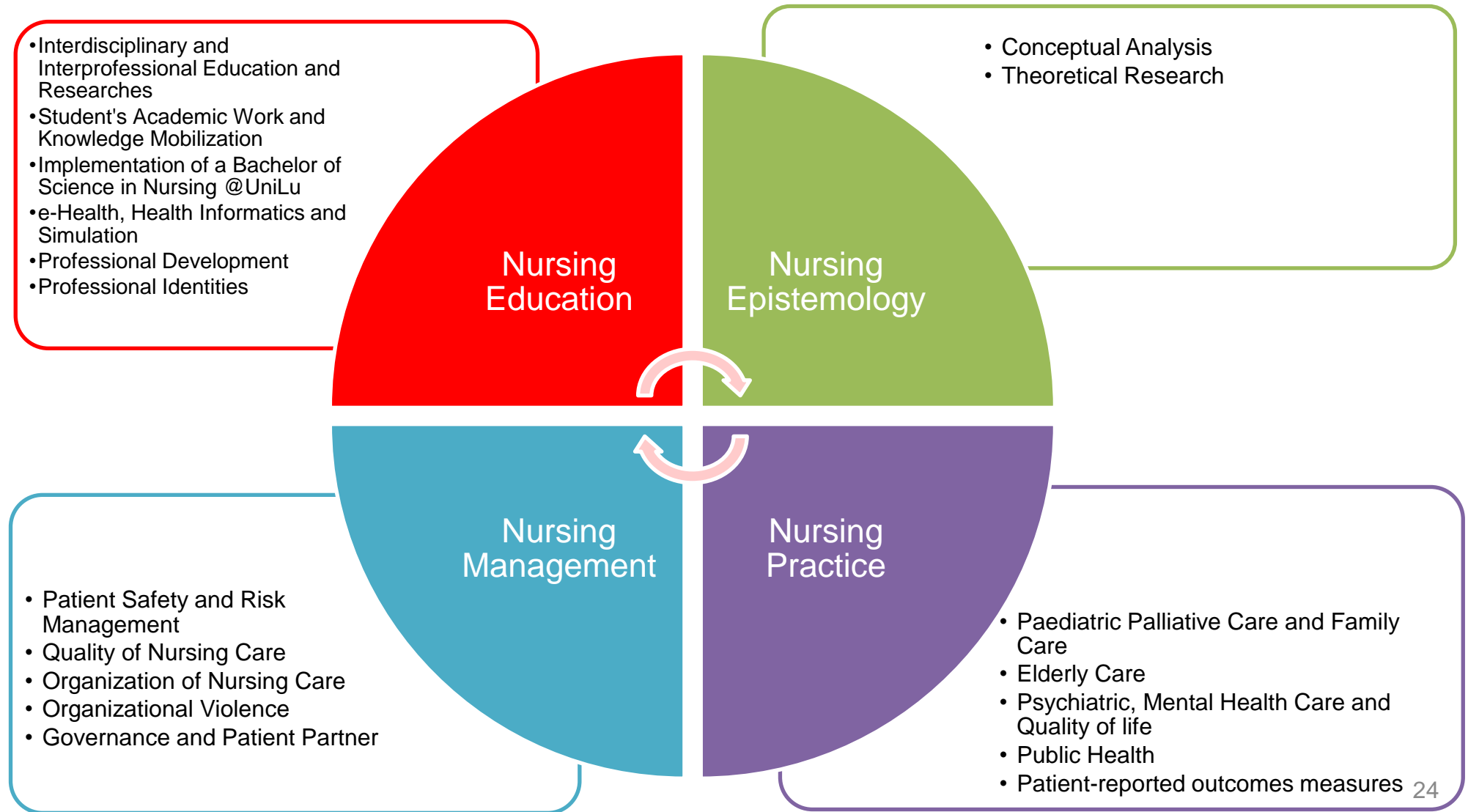
GET IN TOUCH

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✉ nursing@uni.lu
🌐 <https://www.uni.lu/>
📍 2, Avenue de l'Université, L-4365 Esch-sur-Alzette



S'INSCRIRE

Coordinated by
Mélissa Mohr MSc Educ and
Dr Semra Smajic RN PhD



- 2. Urgent need to promote environmental health

Origins of greenhouse gases in the health care sector

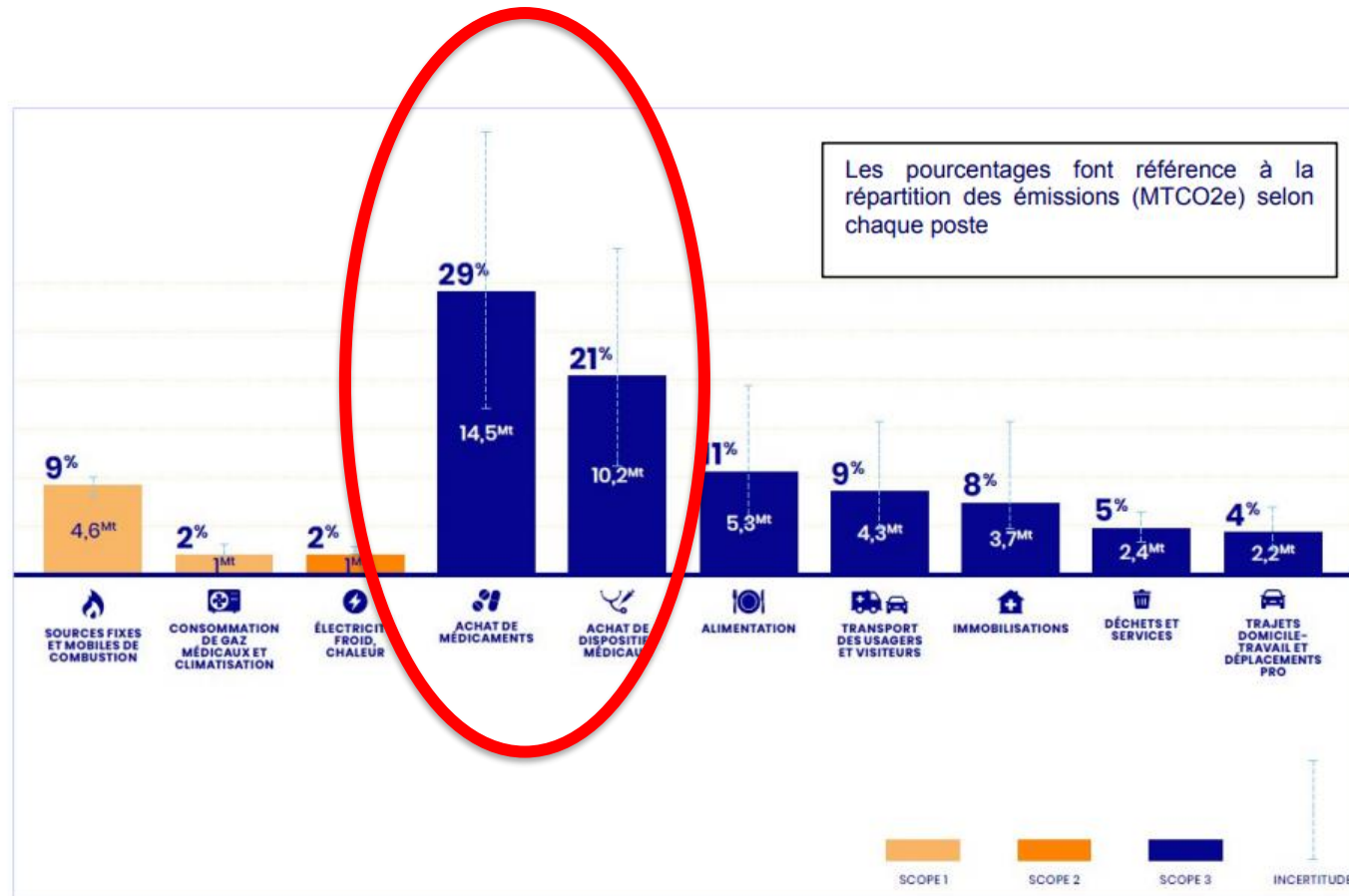


Figure 1 - Répartition des émissions de gaz à effet de serre du secteur de la santé (MtCO₂e)

Source: calculs The Shift Project 2023

https://theshiftproject.org/wp-content/uploads/2023/04/180423-TSP-PTEF-Rapport-final-Sante_v2.pdf



Health-centred climate action could still save millions of lives every year. A just and equitable transition away from fossil fuels and towards renewable energy and energy efficiency can reduce the health harms of energy poverty, power high-quality health-supportive services, and prevent the millions of deaths occurring annually from exposure to fuel-derived air pollution. Greener, people-centred cities, and balanced, low-carbon diets can support transformative improvements in physical and mental health.

<https://www.lancetcountdown.org/2023-report/>

THE SHIFT PROJECT



Objectifs de développement durable

Cop 28 à Dubaï : l'OMS veut plus de lien entre la lutte contre le changement climatique et la santé

L'Organisation mondiale de la Santé (OMS) a appelé, lundi, les négociateurs de la prochaine COP28, qui démarrera jeudi à Dubaï, à accorder davantage d'attention au lien entre la lutte contre le changement climatique et les soins de santé.



Belga | Agence



Publié le 27-11-2023 à 19h19 - Mis à jour le 27-11-2023 à 19h20



COP28
UAE

ARTICLES

Planetary Health Preparing Nursing Students for the Future

Vandenberg, Shannon Y. RN, PhD(c), CCHN(C), CCNE, CCCI

[Author Information](#)

Nurse Educator 48(6):p 293-297, November/December 2023. | DOI: 10.1097/NNE.0000000000001420



JOURNAL OF
NURSING SCHOLARSHIP

GUEST EDITORIAL

Building Sustainable Careers in Nursing Science: Scientific Innovations and Transdisciplinary Collaborations

REVIEW SUMMARIES

PHN PUBLIC HEALTH NURSING

Nursing and Sustainable Development Goals (SDGs) in a COVID-19 world: The state of the science and a call for nursing to lead

Charles Peter Osingada MA, MPH, BSN^{1,2} | Carolyn M. Porta PHD, MPH, RN, PHN, FAAN^{1,3}

Public Health Nursing, 2020

SPECIAL ISSUE ARTICLES | Free Access

Mandate for the Nursing Profession to Address Climate Change Through Nursing Education

Jeanne Leffers PhD, RN, FAAN , Ruth McDermott Levy PhD, MPH, RN, Patrice K. Nicholas DNSc, DHL(Hon.), MPH, MS, RN, ANP, FAAN, Casey F. Sweeney PhD, RN

First published: 14 August 2017 | <https://doi.org/10.1111/jnu.12331> | Citations: 72

Continuing Education: *Journal of Nursing Scholarship* is pleased to offer readers the opportunity to earn continuing education credit for this article.

Consensus Statement

AMEE Consensus Statement: Planetary health and education for sustainable healthcare

Emily Shaw, Sarah Walpole , Michelle McLean , Carmen Alvarez-Nieto , Stefi Barna, Kate Bazin, ...show all

Pages 272-286 | Published online: 19 Feb 2021

Cite this article <https://doi.org/10.1080/0142159X.2020.1860207>



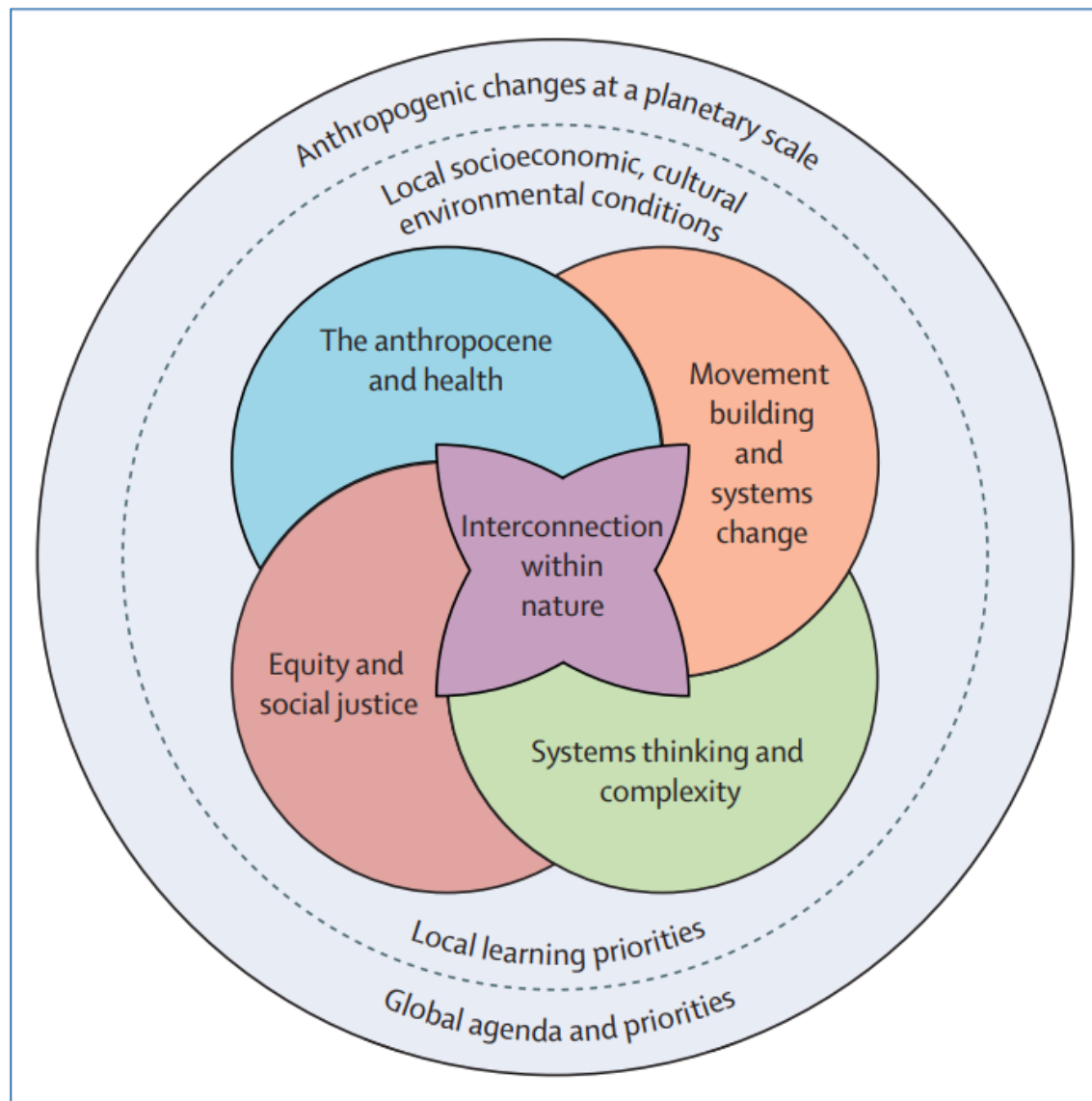


Figure: The planetary health education framework

> [Lancet Planet Health](#). 2021 May;5(5):e253-e255. doi: 10.1016/S2542-5196(21)00110-8. Epub 2021 Apr 21.

A framework to guide planetary health education

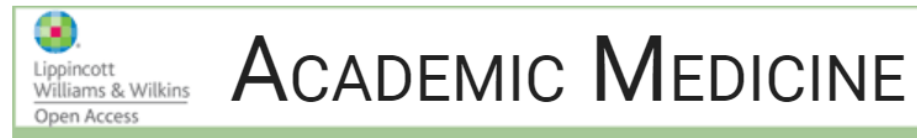
Carlos A Faerron Guzmán ¹, A Alonso Aguirre ², Barbara Astle ³, Enrique Barros ⁴, Brett Bayles ⁵, Moses Chimbari ⁶, Naglaa El-Abbadi ⁷, Jessica Evert ⁸, Finola Hackett ⁹, Courtney Howard ¹⁰, Jonathan Jennings ¹¹, Amy Krzyzek ¹², Jessica LeClair ¹³, Filip Maric ¹⁴, Olwenn Martin ¹⁵,

- 20-30% of care provided is not required/potentially harmful and represent a high cost
- Low-value-care harms patients (directly and indirectly) and threatens sustainability of healthcare systems.

Brownlee S., et al. (2017). Evidence for overuse of medical services around the world. *Lancet*

Grimshaw, J. M., et al. (2020). De-implementing wisely: developing the evidence base to reduce low-value care. *BMJ quality & safety*.

- “**Value** in health care is the measured improvement in a **person’s health outcomes** for the **cost** of achieving that improvement.”



[Acad Med.](#) 2020 May; 95(5): 682–685.

Published online 2019 Dec 10. doi: [10.1097/ACM.00000000000003122](https://doi.org/10.1097/ACM.00000000000003122)

PMCID: PMC7185050

PMID: [31833857](https://pubmed.ncbi.nlm.nih.gov/31833857/)

Defining and Implementing Value-Based Health Care: A Strategic Framework

[Elizabeth Teisberg](#), PhD,¹ [Scott Wallace](#), JD, MBA,² and [Sarah O’Hara](#), MPH³

Building a resilient and sustainable nursing workforce



PATIENTS QOL



QUALITY OF CARE



COSTS/BENEFITS



QOL OF NURSES

Based on the quadruple aim (Bodenheimer & Sinsky, 2014)

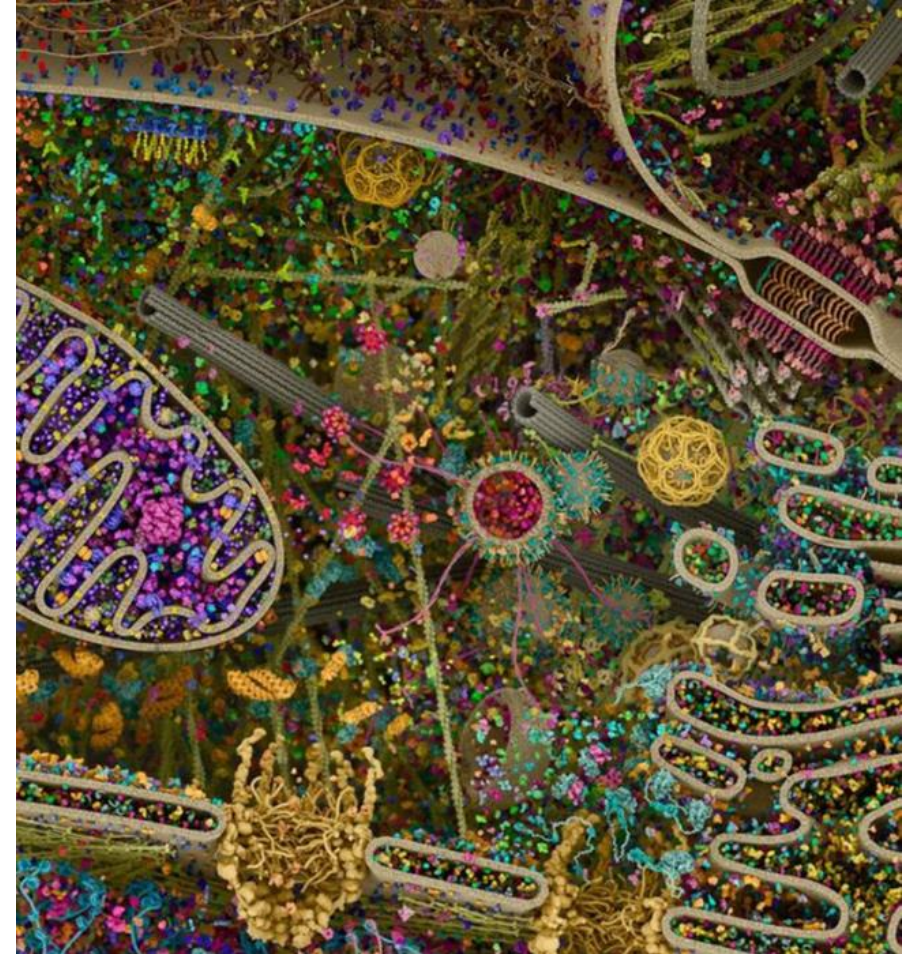
+ EQUITY IN CARE

- 3. Presentation of the new course in Econursing

- 25 teaching units
- 2 ECTS
- Common to all 4 bachelors of Nursing Science -specialization
- Invited experts
- Exam: Individual written essay

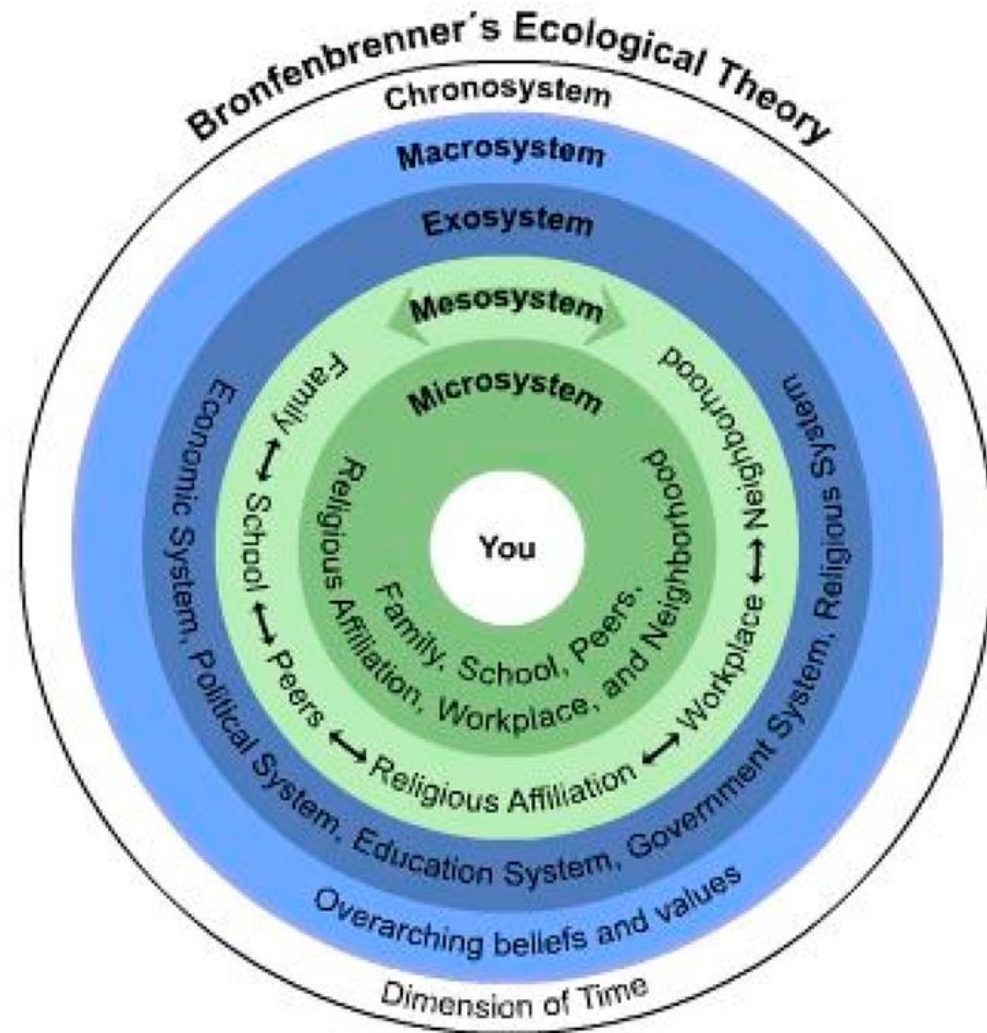
Tackling complexity

- Human beings and the environment are interrelated
- Human actions impact the environment
- Environmental quality determines human health
- Environmental health begins with inner ecology
- “Complex is what is woven together”. Edgar Morin



A human cell

Systemic approach



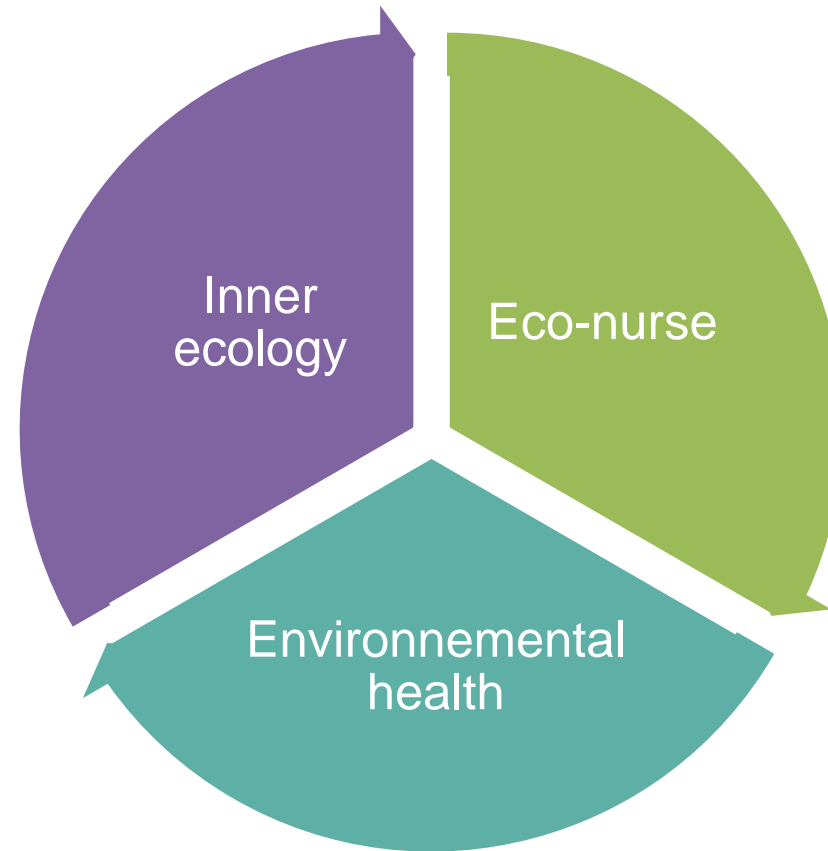
https://www.mdpi.com/children/children-03-00011/article_deploy/html/images/children-03-00011-g002-1024.png

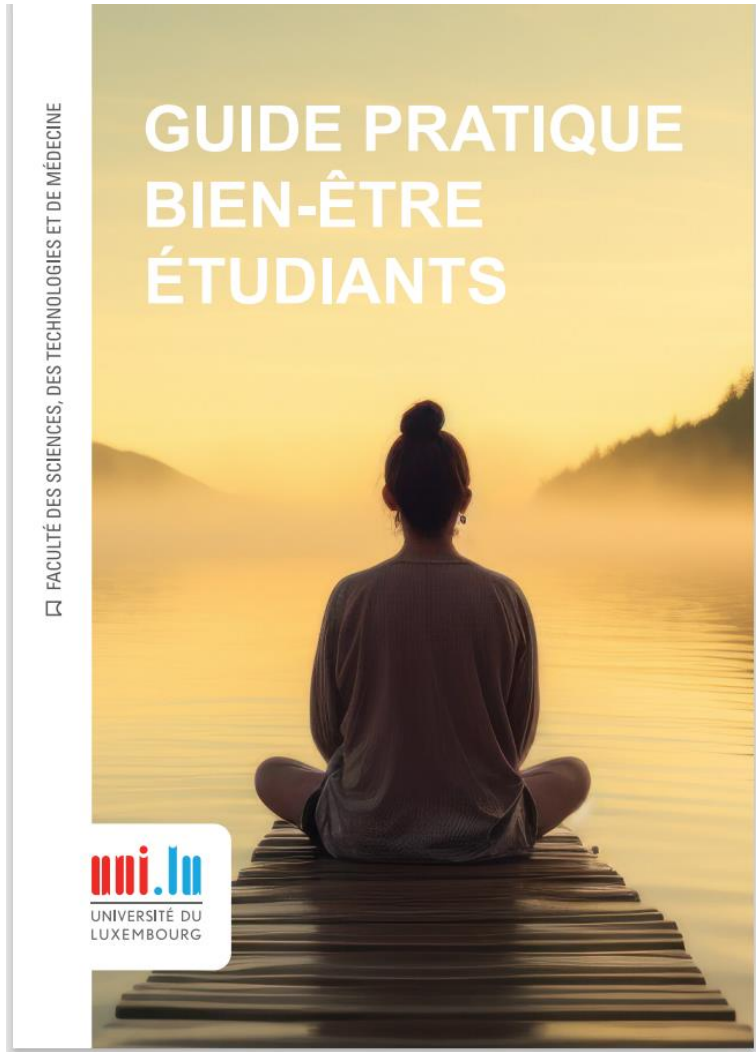
Searching for homeostasis / Equity



Fountain in Montréal, 2023
Credits: Marie Friedel

Three interconnected dimensions in the course Econursing





- Gratitude (Mc Gullough)
- Will to meaning (Frankl)
- Mindfulness (Kabat-Zinn)
- Connectedness (Blum)
- Emotional intelligence (Goleman)
- Self-compassion/empathy (Eisenberg)
- Learned optimism (Seligman)
- Learned hopefulness (Zimmerman)
- Social support (Cohen)
- Humor (Martin)
- Locus of control (Rotter)
- Sense of coherence (Antonovsky)

Evidence based practices



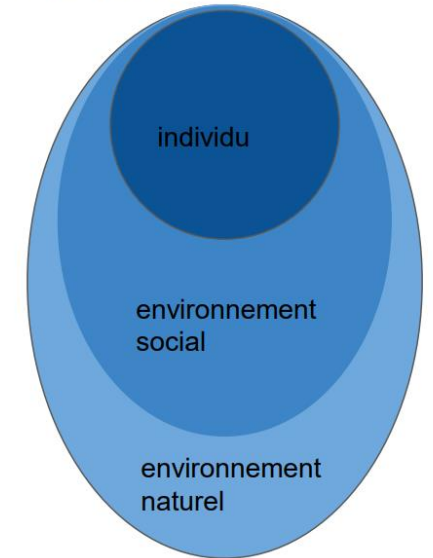
ENVIRONNEMENT
SANTÉ
FORMATION

<https://www.ecoinfirmier.com/>

How can we act as econurse? In pediatrics, anesthesia, operating room, psychiatry...

- Environnemental Health
- Salutogenesis (A. Antonovsky, 1979)
- Impact on well-being/eco-anxiety
- Group exercises on low-value-care

Le mille feuille du bien-être



Gaël Brulé, 2023

Découvrir La Fresque du Climat

Où les trouver

Photos



Exhibition at Ellergonn
Credits: Marie Friedel

Fresque du Climat au Luxembourg : un atelier pour sensibiliser de façon ludique et collaborative au dérèglement climatique

<https://www.letzshift.lu/fr/solutions-locales/la-fresque-du-climat-luxembourg>

- “Walking diagnostics” on the Belval campus (Community Health)
- Collective feed-back and presentation to the Sustainability Team of the University



Credits: Marie Friedel

CONGRÈS annuel
Bruxelles - HELBIP

Econursing:
Écologie intérieure et santé environnementale:
un cours d'éco-nursing pour promouvoir
l'homéostasie et la durabilité
des éco-systèmes infirmiers

Marie FRIEDEL
Full Professor and Director
of Programs in Nursing Science
Université du LUXEMBOURG

Formation en soins INFIRMIERS
au LUXEMBOURG (4 Bachelors)

Processus collaboratifs
pour créer ces nouveaux programmes

Après la pandémie, **10 ESSENTIELS** qu'on ne peut pas RETIRER
compagnonnage
soin aux MORTS

PARRAINAGE - MENTORAT
par des infirmiers expérimentés

Lancet Countdown
ODD The shift project
Santé environnementale

COURS D'ÉCONURSING
Trouver l' HOMÉOSTASIE ensemble

Oser recevoir de l'AIDE
dons contre-dons

Réduire les soins de SANTÉ

la fresque du climat

Question de SPIRITUALITÉ (pas religions)
dans un cours sur les soins PALIATIFS

ÉCOLOGIE intérieure

complexité interrelatives

"Est complexe ce qui est tissé ensemble"

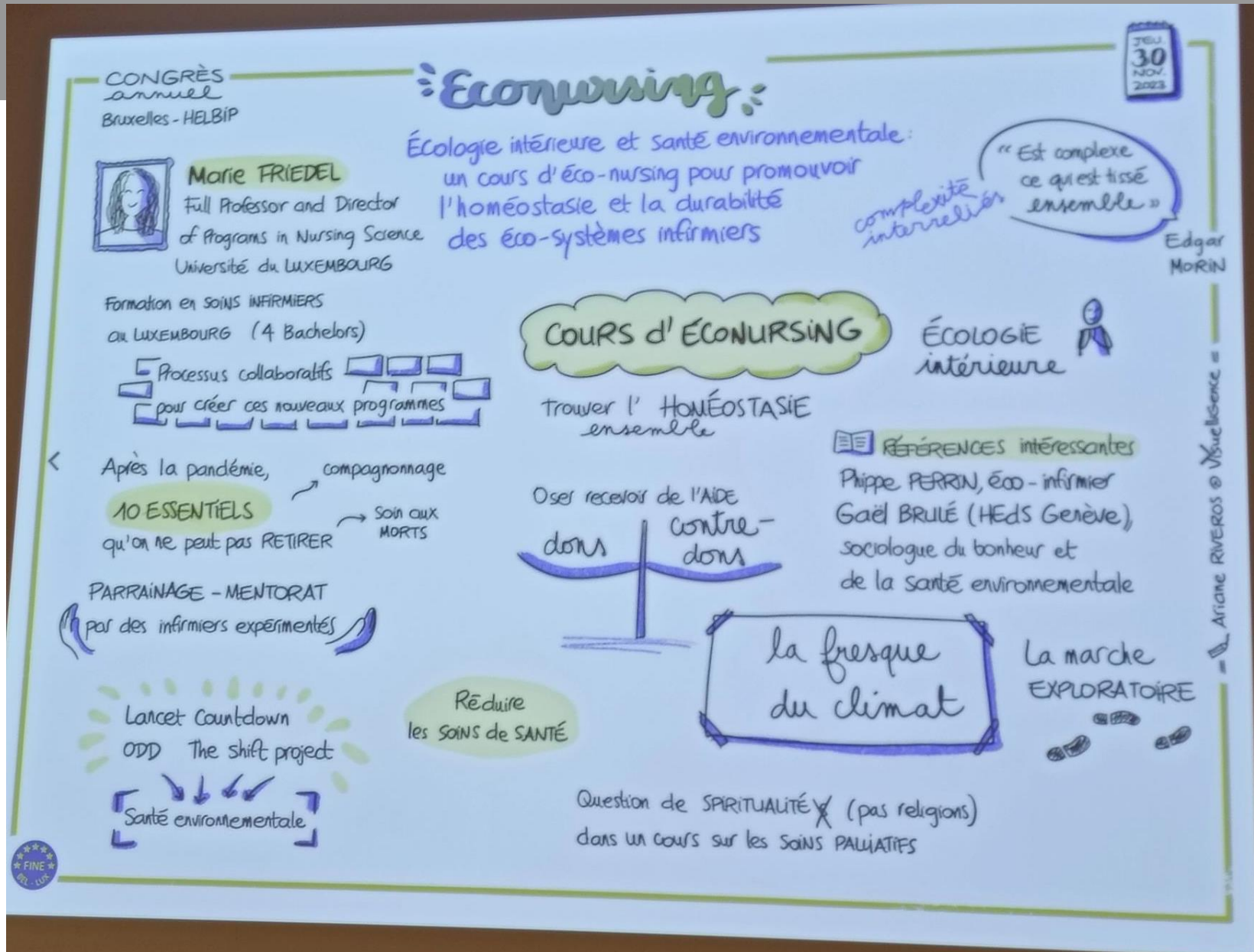
Edgar MORIN

REPÉRANCES intéressantes
Phippe PERRIN, éco-infirmier
Gaël BRULÉ (HEDS Genève),
sociologue du bonheur et
de la santé environnementale

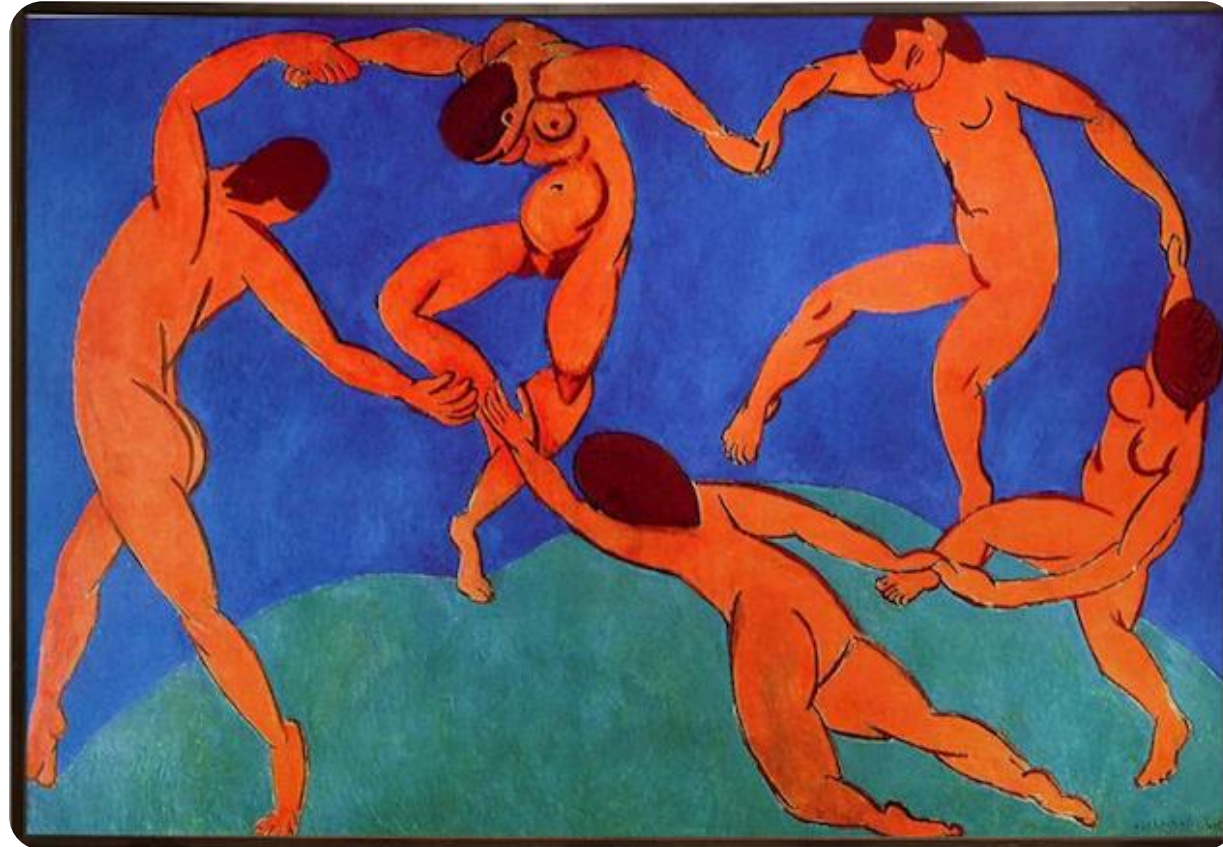
La marche EXPLORATOIRE

JEU 30 NOV. 2023

Ariane RIVEROS @ VisuelScience



Dance of caring (Boyken and Schoenhoefer, 1993)



<https://www.etsy.com/listing/1052286634/>

La danse II, Henri Matisse (1932)

- Aiken, L. H., Sloane, D., Griffiths, P., Rafferty, A. M., Bruyneel, L., et al. & RN4CAST Consortium (2017). Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care. *BMJ quality & safety*, 26(7), 559–568. <https://doi.org/10.1136/bmjqs-2016-005567>
- Bodenheimer, T., & Sinsky, C. (2014). From triple to quadruple aim: care of the patient requires care of the provider. *Annals of family medicine*, 12(6), 573–576. <https://doi.org/10.1370/afm.1713>
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- Grimshaw, J. M., Patey, A. M., Kirkham, K. R., Hall, A., Dowling, S. K., et al. (2020). De-implementing wisely: developing the evidence base to reduce low-value care. *BMJ quality & safety*, 29(5), 409–417. <https://doi.org/10.1136/bmjqs-2019-010060>
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- Kajander-Unkuri, S., Koskinen, S., Brugnoni, A., Cerezuela Torre, M., Elonen, I., et al. (2021). The level of competence of graduating nursing students in 10 European countries-Comparison between countries. *Nursing open*, 8(3), 1048–1062. <https://doi.org/10.1002/nop2.712>
- Kroczek, M., Späth, J. The attractiveness of jobs in the German care sector: results of a factorial survey. *Eur J Health Econ* 23, 1547–1562 (2022). <https://doi.org/10.1007/s10198-022-01443-z>
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- To Matthieu Gillieron and Laurent Betry
- To the government of Luxembourg
- To all supporters of our nursing science unit



Bench on the Vélodukt (2023)
Credits: Marie Friedel

Letz' discuss!