### RESEARCH & DEVELOPMENT

# R&D Letter n° 22 - June 2022



La Source.

# **R&D** Letter

#### Introduction



Nathalie Wellens, vice-dean research and development

In early 2022, the Dean's Office was pleased to welcome its new Vice-Dean for R&D: Nathalie Wellens (Full Professor UAS). She holds a doctorate (Biomedical Sciences Patient Related Services and Public Health Research) and has led numerous projects to implement standardised assessments and care models in various care settings. Her work contributes to the coordination, continuity and quality of care for vulnerable populations. Expert in data linking to strengthen evidencebased decision making, she has led programs in public health and digital health. From her very first weeks at La Source and during her meetings with the

research community, Nathalie Wellens noticed the richness and diversity of the disciplines and expertise of the researchers. She is committed to supporting the existing dynamism and the continuous development of the scientific skills of the community. Her aim is to contribute to strengthening partnerships with scientific and professional networks to address challenges in health care and wellbeing responding to the needs for innovation in current and future clinical practice.

A. Nguyen, faculty dean

In 2021, the research community at La Source has continued to develop its scientific activities resulting in the launch of new studies. Seven people from different backgrounds have been hired to strengthen the research teams. Let us briefly introduce them to you...

Yammise Almeida has a Master's degree in Nursing Science. She worked as a clinical nurse specialist in the visceral surgery department of the CHUV. She has joined the AUDACE project team in the Quality of Care and Patient Safety Teaching and Research LAB (QCPS LAB).

After obtaining her Bachelor's degree in Nursing in 2015, **Leslie Buisso**n worked in the field of psychiatric care in hospitals, both in rehabilitation and acute care units in Geneva. Both her professional and personal experience strengthen the ENSEMBLE project financed by the Swiss National Science Foundation supervised by Shyhrete Rexhaj of the Mental Health and Psychiatry LAB (MHP LAB).

Natalia Estévez-Lamorte holds a PhD in Neuroscience. For almost ten years she was part of the C-SURF research team of Meichun Mohler-Kuo. In this project she investigated various mental health problems and their consequences and associated factors. She is part of the UNI\_COVID project of the Community Health Promotion and Prevention LAB (CHPP LAB) led by Meichun Mohler-Kuo.

**Anne-Sylvie Horlacher** holds a PhD in Language Sciences and has specialised in the analysis of social interactions (in the workplace, in the private sphere and in the media) for the past twenty years. She is part of the CompAl project lead by Evelyne Berger (MHP LAB).

**Philippe Schneider** is currently completing a thesis in cognitive psychology on the links between short-term and long-term memory. He is involved as a research assistant in various

projects, in particular in the project "Protection of life vs. quality of life in the elderly during the COVID-19 pandemic" of Claudia Ortoleva Bucher, head of the Ageing and Health LAB (AH LAB) and in the IETLP project of Maryline Abt (AH LAB)

After a master's degree in Language and Information Sciences and a master's thesis on interactions in a medical environment at the UNIL, **Vincent Wenger** worked as a research associate on the topic of multilingual communication at the Psy&Migrants unit of Lausanne University Hospital (<u>CHUV</u>). He joined the CompAl project lead by Evelyne Berger (MHP LAB).

**Sandra Zoni** holds a Master's degree in Nursing Sciences and has more than ten years of experience in child and family care. She has joined the Child and Family Health LAB (CFH LAB).

N. Wellens, vice-dean research and development

#### **New projects**

[HEalStud\_T2] Degree of exposure of UAS Bachelor students to stressors, relationship with their perceived mental health and exploration of protecting factors: a longitudinal study (extension)

This longitudinal study investigates the mental health of students Bachelor's degree at the Universities of Applied Sciences Western Switzerland just before and during the COVID-19 pandemic. Two first data collections took place in Spring 2020 and 2021. Results show deteriorated mental health and increased perceived stress levels during the pandemic. Resilience, self-efficacy, mindfulness and social support are associated with good mental health. The funding agency has supported a followup study, examining the evolution of these issues after a second year of the pandemic and also the consequences after the partial lifting of the sanitary lockdown restrictions. A third data collection took place in April 2022 and is currently being analysed.

Contact: A. Oulevey Bachmann, CHPP LAB

[IETLP] Feasibility, acceptability and preliminary effects of an educational intervention aimed to introduce patientpartnered bedside nursing handovers.

Several systematic reviews highlight that bedside nursing handovers improve their quality, teamwork, sense of safety and satisfaction of both professionals and the patient. Moreover, bedside nursing handovers allow for the active integration of the patients in their care, thus reinforcing the perspective of personcentred care. However, there is strong resistance to integration in clinical practice. To promote this implementation, it is essential to train nurses. The aim of this study is 1) to develop an educational intervention strengthening the nurses'skills regarding the quality of transmissions and 2) to assess its feasibility and acceptability and 3) to measure preliminary effects. The implementation of bedside nursing handovers is a challenge for improving patients' safety. The novelty of the study is the integration of the patients' indicators.

Contact: M. Abt, AH LAB

# [SGTRI 2.0] A serious game to enhance the quality of emergency triage

SGTRI 2.0 is the successor of a research project (SGTRI) developing a serious game simulating a triage process in the emergency department, using a series of clinical vignettes. The main aim of this first version was to evaluate the acceptability and feasibility of a serious game as well as the research design. Additionally, the preliminary effects of distractors (noise, phone, etc.) on decision making were assessed. The current serious game is oriented towards a pedagogical version so as to train students and health professionals in a realistic and safe environment, more specifically on aspects related to clinical

judgment and nursing clinical decision making. The objective is to develop a gamification process, and to improve the technical and graphical processes of SGTRI.

SGTRI 2.0 is an interdisciplinary project led by the QCPS LAB involving various clinical and technical partners such as the HUG, Cyberlearn and SILAB.

Contact: A. Fiorentino, QCPS LAB

## [P-7] Sex and gender integration in the bachelor curricula of nursing, physiotherapy and occupational therapy

This project contributes to the strengthening of social justice and the transformation of stereotypes and oppressive societal norms. The project will include considerations on the intersection of gender and broader diversity, as well as on the social determinants of health. The



Photo: Shutterstock.

aims are to increase awareness and competence on sex and gender health issues in three study programs, namely physiotherapy, occupational therapy and nursing. The 4 main components are: 1) creating consensus among experts on the topics that need to be addressed around sex and gender; 2) collecting data on the inclusion of sex and gender in the teaching units; 3) creating teaching/learning materials; 4) sharing teaching content between the UAS involved. This project is the result of a collaboration between three UAS (SUPSI, HES-SO, ZHAW) as well as the collaboration with the Swiss Network for Sexual and Gender Medicine.

Contact: M. Turcotte, CFH LAB

#### Research activities

#### The H4

Funded by the Canton of Vaud and La Source Institute, the H4 (Hands-on Human Health Hub) is the leading structure in Vaud dedicated to facilitating and promoting innovation processes in the health care sector. Thus, the H4 is integrated into the extensive ecosystem of innovation support in the canton of Vaud and offers its specific and unique skills. Its understanding of the specificities of the healthcare field and the strength of its network aim to create a multidisciplinary community with the capacity to support the broad variety of projects in a domain undergoing rapid socio-economic and technological changes. The H4 provides a platform on its <a href="website">website</a> for innovators to submit, in a simple and instantaneous manner, their requests for support or guidance for their ideas or projects. They benefit from support ranging from advice to the design and supervision of a concrete experiment in the field.

A <u>Linkedin page</u> is available to present activities and build a community. "The future of care is collaborative!"

Contact: D. Truchot Cardot, SILAB

#### Team-based care for better hypertension control

The randomised controlled trial "A Team-Based Care for Hypertension Management (TBC-HTA)" evaluated the impact of team-based care including nurses, pharmacists and physicians on blood pressure control of patients with hypertension. This study, published in <a href="Frontiers">Frontiers</a> in Cardiovascular Medicine, suggests that a team approach improves the the long-term management of hypertension and could be implementable in Switzerland.

This study was funded by the Bangerter Foundation and the Swiss Academy of Medical Sciences (<u>SAMS</u>) and conducted by Valérie Santschi, full professor UAS and head of the Health Systems, Ethics and Interprofessional Practice LAB (<u>SEI LAB</u>) in collaboration with researchers in Switzerland and Canada.

Contact: V. Santschi, SEI LAB

Summary on the Symposium "Children and youth participation in health promotion and prevention: needs, challenges and avenues for action"

The theme of this symposium, in collaboration with Unisanté, was the participation of children and youth in health promotion and prevention. Experts emphasised the importance of involving them actively in this area. Workshops led by both young people and professionals in the field offered the opportunity to discover examples of good practice. This joint biennial symposium aims at each edition, to disseminate both original knowledge in prevention and health promotion, and practical examples of their applications.

Contact: A. Oulevey Bachmann, CHPP LAB

#### Do not miss

European Symposium " Acting with humanism in times of crisis: discussions and contributions from different disciplines" - September 8<sup>th</sup> 2022 from 8:30 am to 6:30 pm, La Source, Beaulieu site.

In partnership with the Research Centre for Health Economics, Management of Health Care Institutions and Nursing Sciences of the Université Libre de Brussels (Belgium). Information and registration via this <u>link</u>.

**20** years of prevention of elder abuse, ALTER EGO - June 15<sup>th</sup> 2022, from 2:00 pm to 5:30 pm at La Source, Beaulieu site. Information and registration via this <u>link</u>.

#### **New publications**

#### Scientific publications

Anker, D., Carmeli, C., Zwahlen, M., Rodondi, N., Santschi, V., Henchoz, Y., Wolfson, C., & Chiolero, A. (2021). How blood pressure predicts frailty transitions in older adults in a populationbased cohort study: A multi-state transition model. *International Journal of Epidemiology*. dyab210.

Bajgrowicz, É., Pascual, M., Antonini, M., Venetz, J.-P., & Delmas, P. (Éds.). (2021). Symptomatologie et qualité de vie de patients transplantés rénaux de Suisse francophone: Une étude descriptive corrélationnelle. Revue Francophone Internationale de Recherche Infirmière, 7(2).

Basinska, K., Zúñiga, F., Simon, M., De Geest, S., Guerbaai, R. A., Wellens, N. I. H., Nicca, D., & Brunkert, T. (2022). Implementation of a complex intervention to reduce hospitalizations from nursing homes: A mixed-method evaluation of implementation processes and outcomes. *BMC Geriatrics*, 22(1), 196.

Bellier-Teichmann, T., Antonini, M., & Delmas, P. (2022). Assessing Resources in a Population of Hemodialysis Patients: A New Approach to Improve Quality of Care. *Journal of Contemporary* Psychotherapy, 52(1), 67-77.

Bellier-Teichmann, T., Roulet-Schwab, D., Antonini, M., Brandalesi, V., O'Reilly, L., Cara, C., Brousseau, S., & Delmas, P. (2022). Transformation of Clinical Nursing Practice Following a Caring-based Educational Intervention: A Qualitative Perspective. SAGE Open Nursing. 8. 23779608221078100.

Chiolero, A., Calbimonte, J.-P., Manzo, G., Alves, B., Schumacher, M., Gaillard, S., Schaller, P., & Santschi, V. (2021). Exploiter les données du dossier médical informatisé pour améliorer la qualité des soins en ambulatoire. Revue médicale suisse, 17(760), 2056-2059.

- Cullati, S., Quecke, B., Graf, Y., Epure, A.-M., Santschi, V., Chiolero, A., & Carmeli, C. (2022). Caesarean section and offspring obesity in young adulthood. Obesity Reviews, 23(4), e13423.
- De Ridder, D., Belle, F. N., Marques-Vidal, P., Ponte, B., Bochud, M., Stringhini, S., Joost, S., & Guessous, I. (2021). Geospatial Analysis of Sodium and Potassium Intake: A Swiss Population-Based Study. Nutrients, 13(6), 1798.
- Estévez-Lamorte, N., Foster, S., Gmel, G., & Mohler-Kuo, M. (2021). Routes of Administration of Illicit Drugs among Young Swiss Men: Their Prevalence and Associated Socio-Demographic Characteristics and Adverse Outcomes International Journal of Environmental Research and Public Health, 18(21), 11158.
- Frisoni, G. B., Annoni, J.-M., Becker, S., Brockmann, T., Buerge, M., Démonet, J.-F., Georgescu, D., Gietl, A., Hemmeter, U., Klöppel, S., Leyhe, T., Monsch, A. U., Rogantini, F., Roulet Schwab, D., Savaskan, E., Schaller, K., von Gunten, A., & Gold, G. (2021). Position Statement on Anti-Dementia Medication for Alzheimer's Disease by Swiss Stakeholders. Clinical and Translational Neuroscience, 5(2), 14.
- Goumoëns, V. de, Ayigah, K., Joye, D., Ryvlin, P., & Ramelet, A.-S. (2022). The Development of an Early Intervention for Supporting Families of Persons With Acquired Brain Injuries : The SAFIR© Intervention. Journal of Family Nursing, 28(1), 6-16.
- Guerbaai, R., Kressig, R.W., Zeller, A., Tröger, M., Nickel, C.H., Benkert, B., Wellens, N.I.H., Osinska, M., Simon, S., Zúñiga, F., and the intercare research group. (2022). Identifying appropriate nursing home resources to reduce fall-related emergency department transfers. Journal of the American Medical Director's Association.
- Ladoy, A., Vallarta-Robledo, J. R., De Ridder, D., Sandoval, J. L., Stringhini, S., Da Costa, H., Guessous, I., & Joost, S. (2021). Geographic footprints of life expectancy inequalities in the state of Geneva, Switzerland. Scientific Reports, 11(1), 23326.
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- Mohler-Kuo M., Dzemaili S., Foster S., Werlen L., & Walitza S. (2021). Stress and Mental Health among Children/Adolescents, Their Parents, and Young Adults during the First COVID-19 Lockdown in Switzerland. International Journal of Environmental Research and Public Health. 2021 Apr 27;18(9):4668.
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- Mulla, R. T., Turcotte, L. A., Wellens, N. I. H., Angevaare, M. J., Weir, J., Jantzi, M., Hébert, P. C., Heckman, G. A., Hout, H. van, Millar, N., & Hirdes, J. P. (2022). Prevalence and predictors of influenza vaccination in long-term care homes: A cross-national retrospective observational study. BMJ Open, 12(4), e057517.
- Nguyen, A., Frobert, L., Kollbrunner, A., & Favrod, J. (2022). An evaluation of an online training platform for teaching positive emotions for people with schizophrenia. Frontiers in Psychiatry,
- Ortoleva Bucher, C., Delmas, P., Bachmann, A. O., & Gilles, I. (2021). Stressors, self-reported overall health, potential protective factors and the workplace well-being of nurses during the COVID-19 pandemic in Switzerland: A longitudinal mixed-methods study protocol. BMJ Open, 11(12), e057021.
- Ortoleva Bucher, C., Abt, M., Berthoud, L., & Cohen, C. (2022). Health and coping strategies of nursing home residents and their relatives during the COVID-19 pandemic: A mixed-methods study protocol. BMJ Open, 12(3), e059262.
- Quecke, B., Graf, Y., Epure, A.-M., Santschi, V., Chiolero, A., Carmeli, C., & Cullati, S. (2022). Caesarean section and obesity in young adult offspring: Update of a systematic review with meta-analysis. Obesity Reviews, 23(2), e13368.
- Santschi, V., Wuerzner, G., Pais, B., Chiolero, A., Schaller, P., Cloutier, L., Paradis, G., & Burnier, M. (2021) Team-based care for improving hypertension management: A pragmatic randomized controlled trial. Frontiers in Cardiovascular Medicine.
- Schusselé Filliettaz, S., Berchtold, P., Koch, U., & Peytremann-Bridevaux, I. (2021). Integrated Care in Switzerland: Strengths and Weaknesses of a Federal System. International Journal of Integrated Care, 21(4), 10.

- Sobrino-Piazza, J., Foster, S., Estévez-Lamorte, N., & Mohler-Kuo, M. (2021). Parental Monitoring, Individual Dispositions, and Alcohol Use Disorder: A Longitudinal Study with Young Swiss Men. International Journal of Environmental Research and Public Health, 18(18), 9938.
- Tsai, D.-H., Foster, S., Baggio, S., Gmel, G., & Mohler-Kuo, M. (2021). Comparison of Water Pipes vs Other Modes of Cannabis Consumption and Subsequent Illicit Drug Use in a Longitudinal Cohort of Young Swiss Men. JAMA Network Open, 4(4), e213220.
- Vallarta-Robledo, J. R., Joost, S., Vieira Ruas, M. A., Gubelmann, C., Vollenweider, P., Marques-Vidal, P., & Guessous, I. (2022) Geographic clusters of objectively measured physical activity and the characteristics of their built environment in a Swiss urban area. PloS One, 17(2), e0252255.
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#### **Professional publications**

- Bugnon, L., Gasser, A., & Froment, N. (2021). Le microbiote intestinal: le grand lésé de l'ère industrielle. Soins infirmiers, 9
- Butty, C., Weisse, F. de, Froger, O., & Delmas, P. (2021). Interventions non médicamenteuses pour la qualité de vie. Soins infirmiers. 9, 74-75.
- Fink, R., Marbach, M., & Roulet Schwab, D. (2021). Acheter un billet de train en ligne? Rien de plus facile! GERONTOLOGIE CH. Pratique + Recherche. 2, 4-7.
- Fiorentino, A., & Delmas, P. (2021). L'innovation technologique, moteur de la transformation des soins. Soins infirmiers. 10, 65-67.
- Kryeziu, A., Warsame, H. K., & Roulet Schwab, D. (2021). Halte à la maltraitance en EMS. GERONTOLOGIE CH Pratique + Recherche. 3, 18-19.
- Roulet Schwab, D. & Stocker, S. (2021). Des communes amies des aînés. Point CommUNE! 79, 30-31.
- Roulet Schwab, D. (2021). La bientraitance des aînés dans le système de soins et de santé au temps du Covid-19 : Table-ronde en ligne « Les soins de santé, la société et les "vieux" » dans la série « Vieillir » (Medical Humanities). Académie suisse des sciences humaines et sociales
- Simzac, A.-B., Bedin, M. G., & Mendelzweig, M. D. (2021). Habitats collectifs pour personnes âgées autonomes : Réflexions à partir d'exemples français et suisses. Gerontologie et societe, 43(165), 51-67.
- Spichiger, T., Vuilleumier, S., Fiorentino, A. & Dénéréaz, S. (2022). Le patient non-urgent : Un nouveau défi pour l'ambulancier ? Star of Life. 1, 16-21.

#### **Editorial**

Oulevey Bachmann, A., Sanzone, L., & Lavoie-Tremblay, M. (2022). Transition à la vie active : Un défi rassembleur pour la profession infirmière. S@voir inf, Février.

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