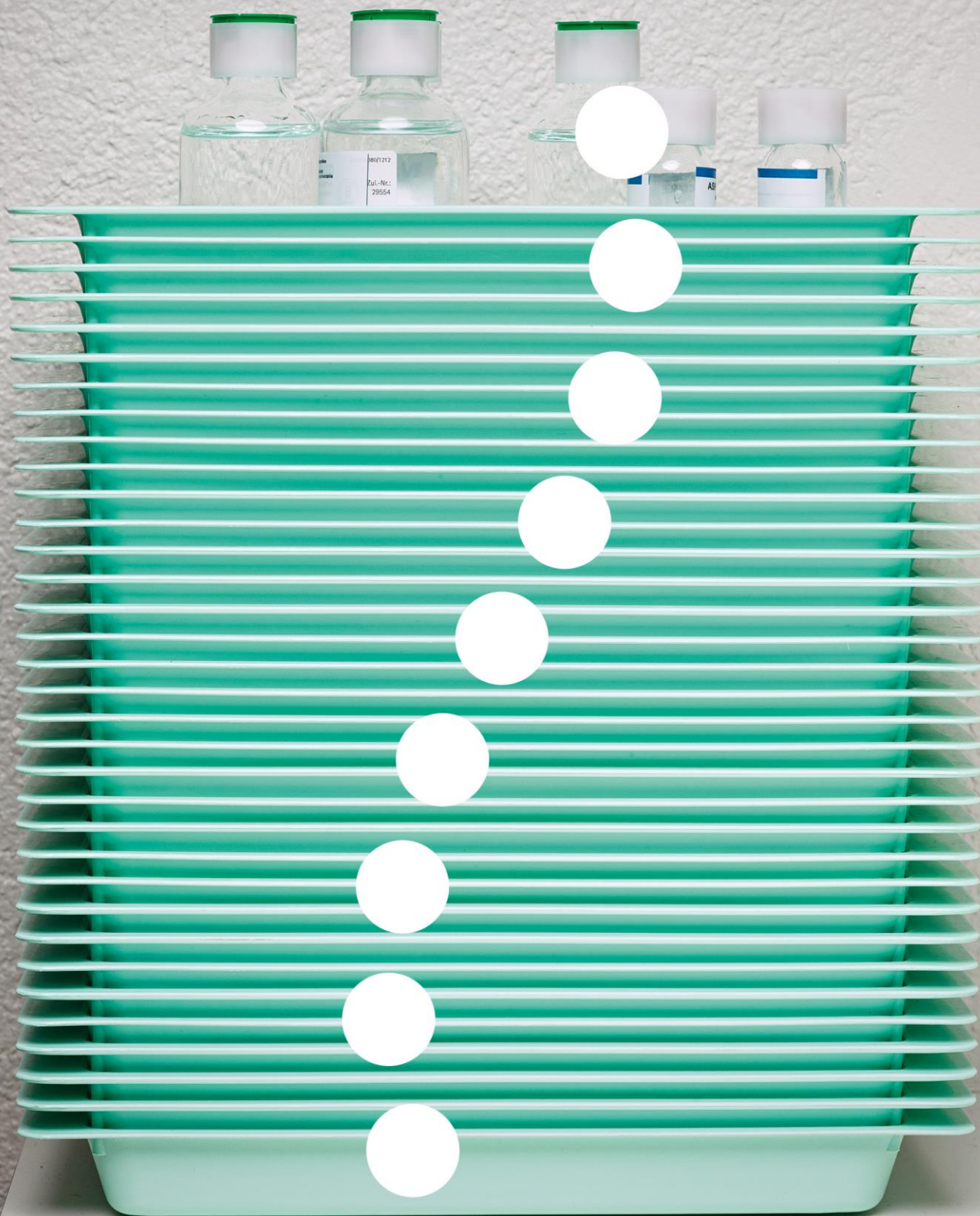


RESEARCH & DEVELOPMENT

R&D Letter

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La Source.
Institut et Haute
Ecole de la Santé

Hes·so
University of Applied Sciences and Arts
Western Switzerland

R&D Letter

Introduction

La Source School of Nursing is delighted to count five new projects amongst its research works, including two which are funded by the prestigious Swiss National Science Foundation ([SNSF](#)). Three of these projects address the impact of COVID-19 on patient healthcare. They respectively propose: to identify and analyse how nurses maintain and preserve good health despite a pandemic; to examine the strategies developed in nursing homes (Etablissements Médicaux Sociaux - EMS) for the care of the elderly during the pandemic, and to characterise the changes and collateral damage in emergency pre-hospital care. The pandemic has opened up areas of research unexplored until now and our research teams have taken them on with a remarkable agility. The topics addressed show the strength of our research activities, which are resolutely rooted in our current socio-sanitary reality.

In this newsletter, we would like to highlight the achievements of Prof. **Claudia Ortoleva Bucher** for two reasons: for her nomination as the head of the Ageing and Health Teaching and Research Laboratory ([AH LAB](#)), and for the approval of two of her new projects, which are presented below. She has been active at the AH LAB for 4 years as a professor, has initiated several research projects aiming to develop care for the elderly, and has successful collaborations with other LABs. She has also developed lines



*Claudia Ortoleva
Bucher, Head of the
AH LAB*

of services for acute geriatric and long-stay units, and shares her expertise by teaching mainly in postgraduate and Master programmes. Her LAB has welcomed a new member, **Maryline Abt**, who will work as a research assistant in the two projects that have received funding. Maryline Abt is the holder of a PhD in nursing sciences. She has a clinical expertise in psychiatry as well as research experience acquired at the Institute of Higher Education and Research in Healthcare ([IUFRS](#)) and at the Lausanne University Hospital ([CHUV](#)). She has furthermore contributed to the development of care pathways intended for the elderly in the Canton of Jura.

Three other collaborators have joined our research teams: **Margot Fournier** at the Mental Health and Psychiatry LAB ([MHP LAB](#)), **Guillaume Cruchon** and **Jimena Sobrino Piazza** at the Community Health Promotion and Prevention LAB ([CHPP LAB](#)). **Margot Fournier** holds a PhD in Neuroscience and works for the [ENSEMBLE](#) project. She studied the biological mechanisms involved in schizophrenia and early psychosis for almost 10 years at the Lausanne University Hospital. Her career has led her to take an interest in the destigmatisation of these diseases and the support of informal caregivers. **Guillaume Cruchon** is the holder of a Master's Degree in nursing sciences and a clinical consultant in healthcare at the Hospital Federation of the Canton of Vaud. His collaboration with Prof. Annie Oulevey Bachmann continues within the context of the **HealStud** study and he is also a member of the **SwissNiFe** research team. **Jimena Sobrino Piazza** is the holder of a Master's Degree in Survey Methodology and is specialised in the implementation and analysis of large-scale surveys. She is a member of the **C-Surf** project.

Another piece of good news is that Prof. **Alexandra Nguyen** and Prof. **Véronique de Goumoëns** have successfully accomplished their thesis examination. The former in Educational Sciences at the University of Geneva with research on discursive practices, the trajectories of affectivity and on the dynamics of places. Her research on the latter topic adopts an interactional approach to work and training analysis. It shows how issues related to power, expertise and the expression of emotions are managed collaboratively in the processes of therapeutic relationship training (see [link](#)). **Véronique de Goumoëns'** doctoral work in nursing sciences deals with the issue of care for families and patients affected by acquired brain injuries from the acute phase of hospitalisation. She developed and tested the intervention programme SAFIR© (Soins Aux Familles: Intervention pRécoce) in partnership with families and healthcare practitioners in a department of clinical neuroscience (see [link](#)). Moreover, she was appointed deputy director of the Office for the Exchange of Knowledge for best care practices (Bureau d'Echange des Savoirs pour des praTiques exemplaires de soins - BEST). [BEST](#) is the Centre of Excellence of the Joanna Briggs Institute ([JBI](#)) and is active in the development and implementation of *Evidence-Based Practice* (EBP). It also aims to answer healthcare practitioners' and teachers' questions on the relevance and effectiveness of treatments and care interventions. This newsletter is yet another opportunity to highlight our researchers' commitment and achievements, our pleasure in sharing this information, which is renewed at every of its issues.

S. Vuilleumier, Research Deputy-Dean, La Source

New projects

[INF_COVID] Stressors, overall health and workplace wellbeing of Swiss nurses during the COVID-19 pandemic and potential health protective factors: A longitudinal mixed-method study

The COVID-19 pandemic exposes nurses to different types of stressor in new environments that can be linked to high levels of moral distress. Studies taking a salutogenic perspective have shown that nurses can maintain good health, despite a pandemic, by mobilising certain resources. This project is led by three LABs and funded by the SNF. Its aim is to better understand how nurses working in Swiss hospitals have been maintaining good health and well-being throughout the COVID-19 pandemic, by studying the moderating effect of the resources mobilised on the stressors inherent to the pandemic situation. To do so, an online survey will be proposed every 6 months for 2 years, coupled with qualitative interviews. The target population is constituted of nurses who work in healthcare institutions and who have been in contact with persons afflicted with COVID-19 in the French and German speaking parts of Switzerland.

Contact: C. Ortoleva-Bucher, AH LAB

[CompAI] Interactional analysis as a method for training and professional development: A comparative study in the fields of education and health.

Service-oriented occupations, such as social and healthcare professions, are characterised by a strong language and relational component, which raises the question of how (future) professionals should be trained in order to interact efficiently and appropriately in the course of their duties. This inter-institutions project, led together with the University of Geneva and funded by the SNSF, aims to test out a training method based on interactional analysis, which allows for the development of interactional skills in service occupations. Three programmes, which are part of the Bachelor curricula of our school, will be studied and compared to three continuing

education programmes for early childhood educators. By focusing on seminars dedicated to the interactional analysis of healthcare practices, the objective of this project is to document the benefits, the effects and the conditions of use of interactional analysis in the area of professional education.



CompAI Interactional analysis seminar

Contact: E. Berger, MHP LAB

[Prehosp-COVID] Impact of COVID-19 on demands regarding prehospital emergency missions: comparative analysis before and during the outbreak

The COVID-19 pandemic not only affects COVID-19 patients, but also patients requiring emergency care for other health problems. The purpose of this investigation is to identify these collateral effects. To do so, a descriptive and comparative statistical analysis of paramedic primary interventions will be conducted for the years 2018 (n=35,188) and 2020 in the Canton of Vaud. The results will enable to quantify the differences between the types of health issues encountered (33 categories), their severity (NACA scores), the population typology of patients, as well as intervention times and location, before and during the pandemic. This will enable to identify the potential collateral effects and the consequences of COVID-19 on paramedic interventions. It will also provide essential information for the development of collaboration amongst prehospital healthcare professionals and the establishment of guidelines related to epidemics.

Contact: A. Fiorentino, QCPS LAB

[SPA_COVID] The impact of COVID-19 in nursing homes: Health and coping strategies for the elderly and their relatives

The COVID-19 pandemic has severely affected elderly persons living in nursing homes, their relatives, and professionals. This study will enable to identify the stressors to which they are confronted, as well as the coping strategies developed by elderly persons and professionals to cope with this situation and their effects on the former and their relatives. The assessment of the strategies that are used, and in particular their effects, will be useful for the evolution of clinical practices. This will allow for the identification of shortcomings as well as successful practices in the management of nursing home residents and their relatives. These results will provide perspectives to develop health prevention interventions that are relevant for the future in order to prevent the consequences of a prolonged lockdown for elderly persons living in nursing homes and their relatives.

Contact C. Ortoleva-Bucher, AH LAB

[3DImplants] Identification, analysis and understanding of the value chain of the decision process for the implementation of a 3D pre-operative planning system for implants

The planning of a total hip replacement is complex. The size and position of the prosthesis must be perfect to ensure optimal anchoring and stability. 3D planning is the most reliable technique and allows for a precise definition of implants. [EZPlan](#), which was developed by the SeedImpulse company, is an innovative software solution for the planning of total hip replacement in 3D based on a 2D scan. It allows for the definition of the most appropriate implants, and for an optimal post-operative follow-up. EZPlan is primarily on the clinical market. Knowing the criteria used by clinical stakeholders in

their purchase decisions is therefore crucial. This project, which is led by the Source Innovation Lab ([SILAB](#)) and funded by [Innosuisse](#), aims to gather information from stakeholders coming from the Clinic of La Source who are involved in the decision-making chain for the purchase and implementation of EZPlan. The project will enable SeedImpulse to better understand its market and potentially improve its product according to the expectations of its users.

Contact: D. Cefai, SILAB

Research activities

A national price for the MOOC on recovery in mental health, entitled “Se rétablir, un vrai délire ? (Recovering, a true delusion?)”

The [MOOC](#) designed by the MHP LAB has received the first price for the promotion of health literacy, awarded by [Alliance Compétences en santé](#). This price rewards the peers-relatives-professionals partnership, which indisputably responds to the needs for popularised scientific information and knowledge of the target population, i.e. users, relatives and professionals. There were 3,200 registrations in total for the first four sessions; the average retention rate is of 45% (4% in international literature) and the assessment feedback is excellent. Next session: [here](#).

Contact: P. Ferrari, MHP LAB

Do not miss

Reflection day in education organised by the health sciences field of study of the HES-SO: “**L’après COVID-19 pour l’enseignement dans les HES Santé (Post COVID-19 Teaching in High Schools of Health Sciences)**” - 3rd September 2021, online. When a crisis creates opportunities. Information and registration: <https://www.hes-so.ch/actualites/detail-actualites/journee-de-reflexion-pedagogique-organisee-par-le-domaine-sante-hes-so>

Symposium “Participation des enfants et des jeunes en promotion de la santé et prévention : besoins, défis et pistes d’action (Participation of children and youngsters in the promotion and prevention of health: needs, challenges, and orientations for action)” – 5th October 2021, online. A collaboration between the department for the promotion and prevention of health at Unisanté and the [CHPP LAB](#). Amongst the topics addressed: The health of Swiss children and youngsters today. Participation of youngsters in projects for the promotion and prevention of health, and others.

New publications

Scientific publications

- Bedin, M. G., Kuhne, N., & Droz Mendelzweig, M.** (2020). Volition to risk taking in the ordinary activities of daily life of older people living at home alone : A study using explication interviews. *Health, Risk & Society*, 22(7-8), 421-436.
- Berthoud, L., Turcotte, M., Dzemaili, S., Ducraux, D., Zumstein-Shaha, M., & Ortoleva Bucher, C.** (2021). Facilitators and barriers in implementing clinical nursing assessment in mental health care of older people a multimethod approach. *Nursing & Health Sciences*, 23(1), 208-218.
- Chiolero, A., Cullati, S., & Santschi, V.** (2021). Primary healthcare for a long term and sustainable vaccination strategy. *BMJ*, 372, n650. <https://doi.org/10.1136/bmj.n650>
- Chiolero, A., Paradis, G., Santschi, V., & Cullati, S.** (2021). Contrer l'infodémie et la désinformation sanitaire. *Revue médicale suisse*, 17(730), 538-540.

- Delmas, P., Antonini, M., Berthoud, L., O'Reilly, L., Cara, C., Brousseau, S., Bellier-Teichmann, T., Weidmann, J., Roulet-Schwab, D., Ledoux, I., Pasquier, J., Boillat, E., Brandalesi, V., & Konishi, M. (2020).** A comparative descriptive analysis of perceived quality of caring attitudes and behaviours between haemodialysis patients and their nurses. *Nursing Open*, 7(2), 563-570.
- Delmas, P., Fiorentino, A., Antonini, M., Vuilleumier, S., Stotzer, G., Kollbrunner, A., Jaccard, D., Hulaas, J., Rutschmann, O., Simon, J., Hugli, O., Gilart de Keranflec'h, C., & Pasquier, J. (2020).** Effects of environmental distractors on nurse emergency triage accuracy: A pilot study protocol. *Pilot and Feasibility Studies*, 6(171), 1-10.
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- Fiorentino A, Delmas P., Simon J., Antonini M., Jaccard D., Hulaas J., Hugli O., Vuilleumier S., Stotzer G., Kollbrunner A., Gilart de Keranflec'h C. (2020).** Serious game to explore decision-making by triage nurses in a stressful environment GSGS'20 Gamification and Serious Games Symposium – Neuchâtel, Suisse. Conférence paper.
- Fleury, V., Himsl, R., Joost, S., Nicastro, N., Bereau, M., Guessous, I., & Burkhard, P. R. (2021).** Geospatial analysis of individual-based Parkinson's disease data supports a link with air pollution: A case-control study. *Parkinsonism & Related Disorders*, 83, 41-48.
- Golay, P., Moga, M., Devas, C., Staecheli, M., Poisat, Y., Israël, M., Suter, C., Silva, B., Morandi, S., Ferrari, P., Favrod, J., & Bonsack, C. (2021).** Measuring the paradox of self-stigma: Psychometric properties of a brief scale. *Annals of General Psychiatry*, 20(5)
- Ladov, A., Opota, O., Carron, P.-N., Guessous, I., Vuilleumier, S., Joost, S., & Greub, G. (2021).** Size and duration of COVID-19 clusters go along with a high SARS-CoV-2 viral load: A spatio-temporal investigation in Vaud state, Switzerland. *Science of the Total Environment*, 787, 147483.
- Lequin, P., Ferrari, P., Suter, C., Milovan, M., Besse, C., Silva, B., Golay, P., Bonsack, C., & Favrod, J. (2021).** The Joint Crisis Plan: A powerful tool to promote mental health. *Frontiers in Psychiatry*, 12, 621436.
- Müller, R., Cohen, C., Delmas, P., Pasquier, J., Baillif, M., & Ortoleva Bucher, C. (2021).** Scope of Nursing Practice on a Surgical Ward: A Time-Motion Study. *Journal of Nursing Management*, n/a(n/a).
- Nguyen, A., Frobert, L., Ismailaj, A., Monteiro, S., & Favrod, J. (2021).** Qu'est-ce que les professionnels dévoilent d'eux-mêmes dans la relation thérapeutique avec les personnes atteintes de schizophrénie ? *Pratiques Psychologiques*.
- Pellet, J., Suter, C., Nguyen, A., Brana, A., Gavillet, A., Ismailaj, A., Bonsack, C., & Favrod, J. (2021).** Honnête, ouvert, prêt (HOP)! Acceptabilité et faisabilité de la version française d'un programme d'auto-déstigmatisation de la maladie psychique. *Annales médico-psychologiques, Revue psychiatrique*, 179(4), 317-322.
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- des processus de médiation en classe de L2. *Babylonia*, 3(1), 50-57.
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- Bregnard, L., Z'Rotz-Strautmann, & Roulet Schwab, D. (2020).** Covid-19. Le confinement et les séniors. Les effets collatéraux de la protection des personnes âgées. *Soins infirmiers*, 7-8, 60-62.
- Ehretsmann, A., Suter, C., & Ferrari, P. (2020).** Reprendre sa santé mentale en main. *Reiso, Revue d'information sociale, Décembre*.
- Favrod, J., Nguyen, A., Frobert, L., & Bonsack, C. (2020).** Ce que les TCC nous apprennent sur le délire. *Santé mentale*, 253, 49-53.
- Frischhertz, L., Robert-Nicoud, S. & Froment, N. (2021).** L'impact environnemental des masques chirurgicaux. *Soins infirmiers*, 3, 76-77
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- de Goumoëns, V. de (2020).** Editorial. VFP/APSI Update, *Association Suisse pour les Sciences Infirmières*, Automne, 4.
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- Roulet Schwab, D. (2020).** La violence de couple ne connaît pas de date de péremption. *Gérontologie CH Pratique + Recherche*, 3, 22-23.
- Roulet Schwab, D. (2020).** Portrait de Lucie Bregnard « C'est une activité professionnelle qui a du sens et me nourrit ». *Gérontologie CH Pratique + Recherche*, 3, 18-19.

Book chapters

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- Nguyen A., Frobert L., Pellet J., & Favrod J. (2021).** La supervision à la compétence du dévoilement de soi professionnel en psychiatrie : Perspective interactionnelle d'un dispositif de formation et d'une recherche. In C. Chatigny, F. Chrétien, & V. Rémy (Ed.), *Apprentissage et transmission de l'expérience en situation de travail : Un dialogue entre ergonomie et formation d'adultes*. Presses Universitaires de Rouen et du Havre

Professional publications

- Antonini, M., Perriraz M., Delmas P., Ortoleva Bucher C., Bellier-Teichmann T., Peytremann Bridevaux I., & Gilles I. (2020)** Nurses and healthcare assistants' views of their institution's response to first wave of COVID-19 pandemic and their intentions to remain in their current workplace: a first glance at the ProH-COVID project. *Bulletin of the Swiss Sociological Association*, 157, 20-25
- Berger, E., & Pekarek Doehler, S. (2020).** La configuration conjointe

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