Webinar Date: Thursday, October 10, 2019 – This webinar will be delivered in French.

Presentation: 12:00pm to 1:00pm EDT

Title : Learning by Concordance (LbC): Thinking on authentic tasks with automated feedback from a panel of experienced professionals

Presenter : Dr. Bernard Charlin, University of Montreal

Biography: Bernard Charlin is Professor within the department of Surgery at the University of Montreal. He has been trained as a head and neck surgeon in Montpellier, France. He holds a Master degree in Education from Harvard University and a PhD in Education from the University of Maastricht. He belongs to CPASS (Centre de pédagogie appliquée aux sciences de la santé) His research field is reasoning in context of uncertainty (theory, acquisition, assessment). He has written or co-written more than 100 papers in the peer reviewed scientific literature. He received from The Royal College of Physicians and Surgeons of Canada in 2015 the Duncan Graham award for outstanding contribution to medical education and in 2018 the Innovation price from the Society for Teaching and Learning in Higher Education.

Learning by Concordance (LbC)

**Thinking on authentic tasks
with automated feedback from a panel of experienced professionals**

Expertise in the professions involves reasoning and acting appropriately in multiple professional situations involving complexity and uncertainty. In front of a patient, clinicians generate options (diagnostic, investigative or treatment) and evaluate iteratively the effect that the new information has on the hypotheses or options.

Learning by concordance (LbC) is an online training modality that places participants in a simulated context and solicits micro-judgments on questions that authentically reflect those posed by professionals in their practice.

Vignettes are deliberately short. They do not contain all the data needed to solve a case. Each question has three parts: (1) a clinical case, described in a vignette accompanied or not by multimedia material; (2) an option relevant to the case; (3) a new information. The task for the participant is to decide the impact that new information has on the option presented. These micro-judgments are compared to those of a panel of experienced practitioners placed in the same simulated context, having previously answered the same questions and having justified their answers. These answers and justifications are provided to learners after each question. A summary of key messages, including hyperlinks to other educational resources, is provided at the end of the cases. Here is an example of the question format from sports medicine training.

Clinical vignette		
Mrs F, 40, complains of a pain in her right buttock that has been hindering her for 3 months in her professional activity (office) and sports activities. She runs 2 times a week for an hour.		
If you were thinking of …	**And then you find …**	**The effect on your hypothesis is**
ankylosing spondylitis	she tells you that the pain wakes her up in the morning	Strongly negative Negative That doesn't change anything Positive

		Strongly positive
Sciatica	the pain increases with cough	Strongly negative
		Negative
		That doesn't change anything
		Positive
		Strongly positive

After being confronted with questions that they are likely to encounter in their practice, participants get two sources of automated feedback: 1) The answers of the panelists, 2) The explanations given by the panelists to justify their answers and then detailed information and then key messages about the topic overall.

The tool is a powerful means of learning that applies both to initial training and continuing education.

Reference: Fernandez N, Foucault A, Dubé S, Robert D, Lafond C, Vincent AM, Kassis J, Kazitani D, Charlin B. Learning-by-Concordance (LbC): Introducing undergraduate students to the complexity and uncertainty of clinical practice. Canadian Medical Education Journal, 7 (2): e-104-e113, 2016.