Preface

Design of effective health communication systems faces major challenges in terms of accessibility, trust, expert-to-lay knowledge translation, and persuasiveness. It is proposed that some of these challenges can be addressed by use of AI techniques in combination with empirically-based theoretical frameworks from the field of health communication and related areas. This symposium will bring together an interdisciplinary group of scholars to identify possible solutions.

AI and health communication topics of interest include communication interventions; games, conversational agents, or dialogue systems for healthy behavior promotion; intelligent interactive monitoring of patient’s environment and needs; intelligent interfaces supporting access to healthcare; patient-tailored decision support, explanation for informed consent, and retrieval and summarization of on-line healthcare information; risk communication and visualization; tailored access to electronic medical records; tailoring health information for low-literacy, low-numeracy, or under-served audiences; virtual healthcare counselors; and virtual patients for training healthcare professionals.

Scholars from health communication and related disciplines (sociolinguistics, pragmatics, discourse studies, etc.) will participate in discussion on the following issues as they pertain to the symposium goals: health literacy; healthcare provider-consumer communication, risk communication, including written and visual formats; and use of behavioral, persuasion, and argumentation theories for healthy behavior promotion.

By examining these issues, the symposium is expected to lay down conceptual foundations for guiding future advances in AI healthcare systems.

— Nancy Green, Sara Rubinelli, and Donia Scott