ABSTRACT:
The increasing abundance of personal data related to health and wellness presents new opportunities for discovery and insight and can help individuals learn from their own experiences, as well as from experiences of others. These trends inspired active research in machine learning and data mining; they also present new opportunities for research in interactive systems. There remain many open questions as to how to design interactive solutions that leverage new streams of personal and social data and new data science capabilities to promote self-management of chronic diseases. In my research, I investigate these questions in the context of self-management of type 2 diabetes, and, specifically, nutrition management. In this talk I will discuss several ongoing research initiatives that strive to help individuals make informed choices by promoting reflection, providing decision-support, and generating personalized recommendations.

BIO:
Dr. Lena Mamykina is a Florence Irving Assistant Professor of Biomedical Informatics at the Department of Biomedical Informatics at Columbia University. Dr. Mamykina’s research resides in the areas of Biomedical Informatics, Human-Computer Interaction, Ubiquitous and Pervasive Computing, and Computer-Supported Collaborative Work. Her broad research interests include individual and collective cognition, sensemaking, and problem-solving in the context of health and wellness. She is specifically interested in novel interactive solutions that take advantage of new streams of personal and social data and novel data science capabilities. Dr. Mamykina received her B.S. in Computer Science from the Ukrainian State University of Maritime Technology, M.S. in Human Computer Interaction from the Georgia Institute of Technology, Ph.D. in Human-Centered Computing from the Georgia Institute of Technology, and M.A. in Biomedical Informatics from Columbia University. Her dissertation work at Georgia Tech focused on facilitating reflection and learning in context of diabetes management with mobile and ubiquitous computing. Prior to joining DBMI as a faculty member, she completed a National Library of Medicine Post-Doctoral Fellowship at the department.