

Department of Mathematics, Statistics and Computer Science

## **COLLOQUIUM ANNOUNCEMENT**

## Designing Beyond-the-Desktop Technologies for Older Adults

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2:00 PM, Friday October 26, 2018

Cudahy Hall, Room 401

## **Abstract**

Almost 50% of adults aged 65+ owned a smartphone in the US in 2016. Although mobile and household technologies are increasingly becoming ubiquitous, not much is known about how to design beyond-the-desktop technologies for the aging population. Older adults are differently abled; building computing solutions accessible to them requires understanding unique design requirements, such as their physical, cognitive, and socioeconomic constraints. I will discuss two projects: myCityMeter and myPHA.

myCityMeter measures the pollutants associated with mild cognitive impairment (MCI) in older adults. Using a set of neighborhood-level stationery and personal mobile sensors, myCityMeter helps users to monitor their long-term environmental exposures, know potential exposures when planning activities, journal cognitive performances, and take day-to-day actions to avoid the environmental risk factors for early dementia.

myPHA or my personal hospitalization app provides personalized hospitalization account at discharge to people with chronic health conditions, such as heart failure. myPHA integrates physician and nurse documentation and is informed by the patient's socio-cultural perspective. The design challenges here include eliciting a multitude of information from patients during their hospital stays, such as their health literacy or activation level, and suitably delivering health information post-discharge to increase patient empowerment.

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For further information: see <a href="http://www.marquette.edu/mscs/resources-colloquium.shtml">http://www.marquette.edu/mscs/resources-colloquium.shtml</a>
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