PROJECT SUMMARY (See instructions):
The goal of this study is to identify optimal web-based design(s) for learning in older adults seeking healthcare information from the internet. Although web-based health information is available and older persons are accessing the web in greater numbers, current digital resources including the most commonly accessed health information websites are not optimally designed for older adults who experience various levels of frustration and confusion when seeking health information from web resources. This is because web developers seldom consider the unique cognitive characteristics of the older people when designing and developing webpage architecture. The proposed interdisciplinary research project aims to pinpoint factors that critically influence older peoples information processes in a web environment and how to incorporate those factors in the design of a maximally accessible web search and access structure for older adults seeking healthcare information.

Approximately 60 participants will be recruited from two senior centers in Salt Lake County. The participants will be randomly divided into three groups: control group, experiment 1 and experiment 2 groups. The control group will learn the caregiving tutorial online which does not include the cognitive principles of multimedia learning in its design; the experiment 1 group will learn the caregiving tutorial online which includes the cognitive principles of multimedia learning in its design; and experiment 2 group will learn the caregiving tutorial online which includes cognitive principles of multimedia learning and cognitive support (e.g., general questions) in its design. Several measures will be used: demographic and computer experience survey, domain knowledge pretest, recall and knowledge transfer tests. One Way ANCOVA and step-wise regression analyses will be conducted to analyse the data.

RELEVANCE (See instructions):
The research project aligns with the Center on Aging RFP that supports "applications Ö establishing new interdisciplinary research collaboration in an aging related interest area." It also aligns with research areas in NIH (R21) 2012 RFP to test different communication approaches to promote understanding of patient decision-making process and strategies targeted to patients with developmental or cognitive limitations.