Laboratory focus

Dr. Wong's research focuses on using innovative technologies and data to identify psychological, behavioral, and environmental influences on daily life participation with the goal of developing effective rehabilitation. His current work uses ambulatory assessments and wireless health systems as efficient and objective measures of daily, cognitive, and emotional functioning among people after a stroke or with other neurological conditions. Dr. Wong is involved in interdisciplinary collaborations with investigators from computer science and engineering, informatics, psychiatry, public health, and vascular neurology to further develop mobile health (mHealth) strategies for precision health and rehabilitation. Internationally, his lab collaborates on projects in China, Hong Kong, Singapore, Korea and Australia.

Mechanisms explored in laboratory

1. Cognition and everyday functioning
2. Depression
3. Engagement and motivation
4. mHealth
5. Ecological momentary assessment and intervention

Contributions to rehabilitation science

Dr. Wong has worked with NIH- and NIDILRR-funded outcomes measurement initiatives, including development and implementation of the NIH Toolbox, the Neuro-QoL, and the PROMIS, which are administered via a computerized adaptive testing (CAT) platform for neurorehabilitation and cancer treatments. Other research efforts include investigating patient engagement, environmental influences on participation, and chemotheraphy-related cognitive impairment. He is also part of the team building a rehabilitation outcomes database in China, and the stroke registry at Washington University. Currently, Dr. Wong specializes in the use of innovative mobile technologies and data science methods to continuously monitor and enhance daily, cognitive, and emotional functioning for people after a stroke or with other neurological conditions.

Current and recent funding

<table>
<thead>
<tr>
<th>Title</th>
<th>Principal Investigators</th>
<th>Funding Source</th>
<th>Project Period</th>
<th>Total Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVALUATING COGNITIVE FUNCTION IN BREAST CANCER SURVIVORS WHO RECEIVED CHEMOTHERAPY</td>
<td>Wong, A.W.K., Ng, S., Dashner, J., Baum, M.C., Hammel, J., Magasi, S., Lai, J.S., Carlozzi, N.E., Tulsky, D.S., Miskovic, A., Goldsmith, A., &amp; Heinemann, A.W. (2017)</td>
<td>NIH- and NIDLIRR-funded outcomes measurement initiatives, including development and implementation of the NIH Toolbox, the Neuro-QoL, and the PROMIS, which are administered via a computerized adaptive testing (CAT) platform for neurorehabilitation and cancer treatments. Other research efforts include investigating patient engagement, environmental influences on participation, and chemotheraphy-related cognitive impairment. He is also part of the team building a rehabilitation outcomes database in China, and the stroke registry at Washington University. Currently, Dr. Wong specializes in the use of innovative mobile technologies and data science methods to continuously monitor and enhance daily, cognitive, and emotional functioning for people after a stroke or with other neurological conditions.</td>
<td>7/1/14-present</td>
<td>$1,354,946</td>
</tr>
</tbody>
</table>

Representative publications
