Participation Timeline for Healthy Participants

I am a healthy adult and want to participate. What do I do?

Healthy adults will act as a "comparison" group for the data we collect from stroke patients (i.e. information on arm and hand movements, as well as information on brain connections through brain imaging).

This study will last up to 2 weeks. Participation will comprise coming to the University of Minnesota 2 times for 2 hours on average each time.

The adults will participate in:

- Screening and clinical evaluation of the arm and hand (exercises with the arm and hand; recording of the movements with small sensors on the arm and hand; questionnaires related to arm function and quality of life)
- Magnetic Resonance Imaging (MRI) scanning. The scanning will also comprise doing exercises with a robot. The robot attaches to the finger and will gently move your finger in various shapes while you are in the MRI scanner. The purpose of the robot is to evaluate body awareness (how well you can feel movements of your finger).

Candidates must fit the following criteria:

- Men and women, 18-99 years of age in good health
- Able to hear and comprehend instructions given during the study

Candidates will not fit the requirements of the study if:

- Candidates have injuries/arthritis to the arm of hand
- Candidates have metal implants, such as surgical clips, or pacemakers. They should not have an MRI, because of the magnetic environment of the MRI scanner
- Candidates are pregnant
- Candidates lack the capacity to consent

If you are uncertain if this study would be for you, feel free to contact us for more information with no obligation.

For more information, please contact Dr. Van de Winckel at 612-625-1191
**Screening Visit (about 2 hours)**
*This visit will occur in the Children’s Rehabilitation Center - Physical Therapy Clinical Assessment Lab (Room 302)*

You will be asked to do the following:
- Consent to participate in the study
- Review your demographic information and medication history
- Complete study required clinical assessments and surveys

**Baseline Visit (about 2 hours)**
*This visit will occur at the Center for Magnetic Resonance Research (CMRR)*

- MRI Scanning of structural images, and functional MRI procedure with robot. The robot is attached with tape and Velcro to your finger and gently guides your finger in various motions so that you can feel the movements while in the scanner. You will be asked to indicate whether movements are the same or different. You will also be asked to differentiate between musical segments that are played while in the scanner.
- Urine samples will be collected for women of childbearing age. (A negative pregnancy test is required prior to undergoing an MRI).

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Screening</th>
<th>Baseline (+7 days after screening)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informed Consent</td>
<td>☺️</td>
<td></td>
</tr>
<tr>
<td>Demographics/Medical History</td>
<td>☺️</td>
<td></td>
</tr>
<tr>
<td>Complete Assessments/Procedures</td>
<td>☻️</td>
<td></td>
</tr>
<tr>
<td>MRI Scanning</td>
<td></td>
<td>☻️</td>
</tr>
<tr>
<td><em>Urine Pregnancy Test</em></td>
<td></td>
<td>☻️</td>
</tr>
</tbody>
</table>

*For women of childbearing potential only*