# Smart Cane Data Collection Sheet

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| **Sub #** | **Sex** | **Height** | **Weight** | **Age** | **# Years used a cane** | **Date of OA Diagnosis** | **Most affected knee** | **Cane hand** |
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## Marcus Bailey Study

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| **Condition** | **Time to walk 50 meters** | **Notes** |
| 1. Naïve cane use Conventional cane  Motor disabled |  |  |
| 1. With instruction Conventional cane Motor disabled |  |  |
| 1. Smart Cane w/ feedback Motor enabled |  |  |
| 1. Conventional try 15% BW Motor disabled |  |  |

### Instructions for each of the four conditions

Walking course distance is 50 meters (164 ft).

**Condition 1.** With the vibromotor disabled. Walk to the finish line at the end of the hallway as you would normally walk with a cane.

**Condition 2.** With the vibromotor disabled. Hold the cane in the hand opposite the affected leg. Take a step forward with your affected leg and bring the cane forward to the same distance, making a triangle with the end of the cane and your two legs. The cane should strike the ground at the same instant the heel of your affected leg hits the ground. *“Attempt to place 15% of your body weight into the cane with each cane strike.”* Let the subject practice a few times and then say, *“Good, now remember to load the cane to 15% of your body weight.”*

**Condition 3.**  With the vibromotor enabled. “*During this trial you will feel a vibration in the handle once you have placed 15% of your body weight through the cane. Try to press into the cane until you feel the vibration with each cane strike.* “

**Condition 4.** With the vibromotor disabled. *“Try to load the cane with 15% body weight just like the last trial, expect this time you will not feel any vibration. Try to remember how you did it during the last trial. “*