

## Stance Phase Control for Gait Training during Inpatient Stroke Rehabilitation

### Key Personnel

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### Methods

Participants will be fitted with an adjustable training brace for the affected leg. The brace will keep the leg stable (preventing buckling) during walking. Participants will practice walking with the brace, and then will attend a single testing session in which they will walk across an instrumented walkway under three different conditions: 1) not wearing the brace, 2) wearing the brace, with the mechanisms for providing stability in place and functioning as intended, and 3) wearing the brace, but with the mechanisms disabled. We will analyze walking characteristics for these three conditions. Participants also will be asked to complete a survey to share their perceptions about walking with the brace.

### Subject Inclusion and Exclusion Criteria

#### Key Criteria for Study Inclusion:

1. 18 years of age or older
2. **≤ 3 weeks post unilateral, non-cerebellar stroke**
3. **currently undergoing inpatient rehabilitation**
4. able to read and speak English
5. weight ≤ 220 lbs., height between 5'2" and 6'2" (in order to be able to be fitted with a training brace)
6. able to walk at least 18 steps with no more than moderate assistance of one person using assistive device(s) as needed

#### Key Criteria for Study Exclusion:

1. current pain or limited motion that interferes with performance of ambulation activities
2. history of prior stroke with residual impairments