

# Do you carry a permutation in the *fragile X (FMR1)* gene?

**We are researching cognition, balance, and walking patterns in people who carry a permutation in the *fragile X (FMR1)* gene.**

**We are looking for PM carriers between the ages of 40-90.**

You may be able to participate in this study if:

- ✓ You are able to walk for at least 2 minutes
- ✓ You are able to stand unassisted for at least 30 seconds

You will be asked to:

1. Have your balance and walking tested while wearing sensors around your wrists, ankles, chest, and waist; these are worn outside of your regular clothing. Your balance will be tested while standing on and off a foam pad with eyes open and closed and your walking will be tested by having you walk up and down the hallway at different speeds. These will be done with and without a simultaneous thinking task.
  2. Perform a short series of movements with your hands and arms while wearing a sensor on your index finger to test for tremor.
  3. Perform a short series of thinking tasks and a functional balance test.
  4. Answer questionnaires about your balance confidence and any symptoms of anxiety and depression.
  5. Have a short neurological examination.
  6. You may be asked to have a sample of your blood or cheek cells taken to determine your FMR1 gene status.
- ✓ The testing will be performed in Dr. O’Keefe’s office in the Rush University Armour Academic Center at 600 South Paulina and the Movement Disorders Clinic in the Rush Professional Building at 1725 West Harrison.
  - ✓ The time it takes to complete the above tests is 1.5 to 2 hours.

Participants will NOT be monetarily compensated for participation in this study.

**For more information, contact:**

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