

# The interaction between the state of muscle (strength and proprioception) and the frequency of falling in Hungarian old population

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### Who We Are

- ✓ Premium fitness center and orthopedic medical private practice
- ✓ The first Hungarian 'medical fitness' conception based gym
  - √ Fájdalom Ambulancia medical practice
  - ✓ F&M fitness and more fitness center
- ✓ World class biomechanical diagnostic center and orthopedic medical service







# Project idea

## Project A

- √ 48 subjects
  - √ 12 young, left-handed
  - √ 12 young, right-handed
  - √ 12 old, left-handed
  - √ 12 old, right-handed
- ✓ Cybex NORM dynamometer
- ✓ position sense measurement with both legs
- ✓ interaction between handedness and ageing, regarding to kinesthetic sense and proprioception

### ✓ 48 subjects

- √ 12 usual proprioceptive training
- √ 12 instrumented proprioceptive training
- √ 12 leg strength training
- √ 12 control group
- ✓ Zebris FDM-T Treadmill
- ✓ different preventive strategies which could delay the onset of the risks of falling in elderly

Project B

✓ both strength training and proprioceptive training would decrease falls in elderly



# Looking for

# Consortial parners

- ✓ ICT solutuions
- ✓ technical solution
- √ road to market

