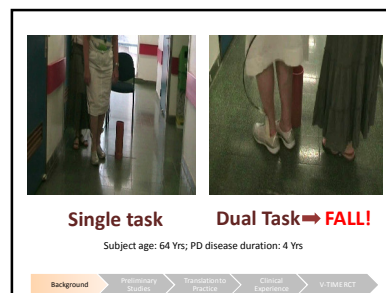
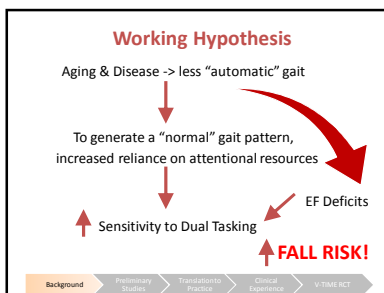
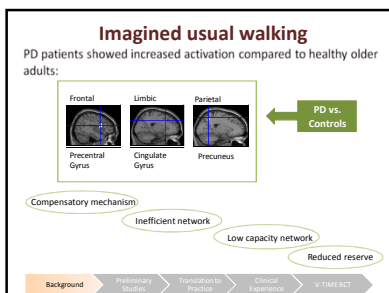
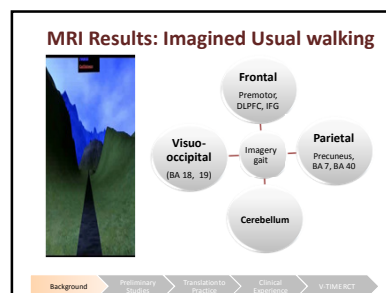
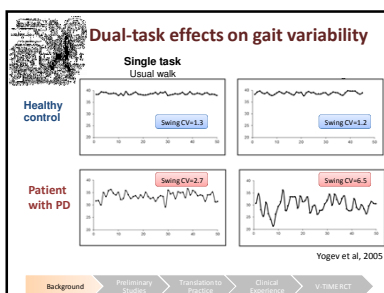
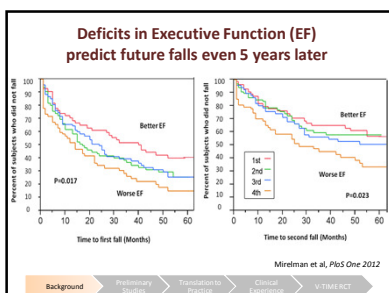
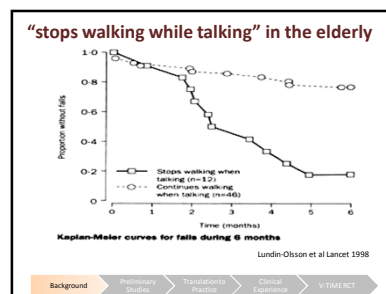
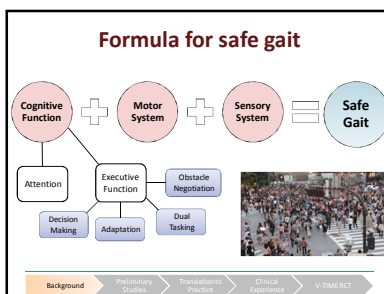


### The V-TIME Multi-Modal Approach to Reducing Fall Risk

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 March 25, 2015



### Multi-modal treatment approach

**Gait training that promotes motor learning, while introducing graded motor and cognitive challenges tailored to individual subjects**

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### VR for gait training in patients with Parkinson's disease

20 Subjects with PD  
18 Sessions

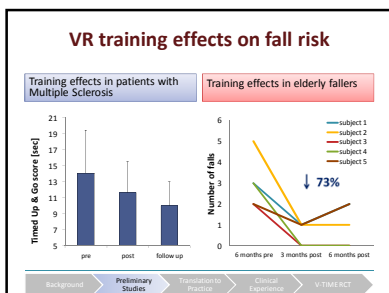
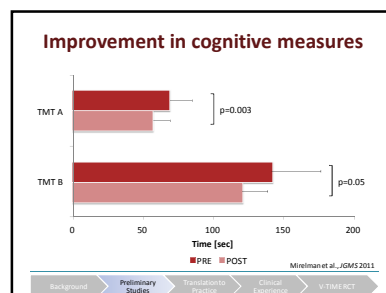
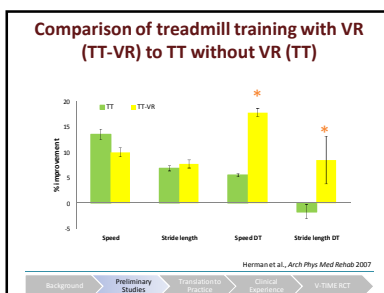
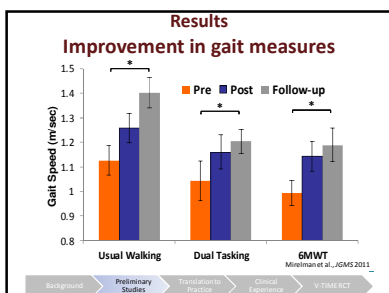
	Mean ± SD
Age (y)	67.4 ± 6.5
Gender (M/F)	14/6
Disease duration (y)	9.8 ± 5.6
H&Y staging (I-IV)	2.2 ± 0.4
Montreal Cognitive Assessment (MoCA)	25.7 ± 1.7

Mirreman et al., JGMS 2011

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### Example of the Effects of Training

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### Translating research into practice

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### Data analysis Patient characteristics

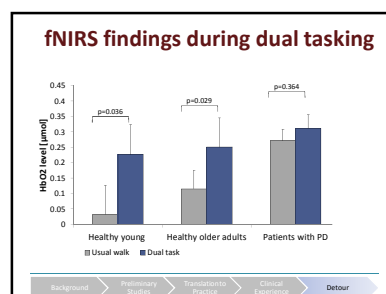
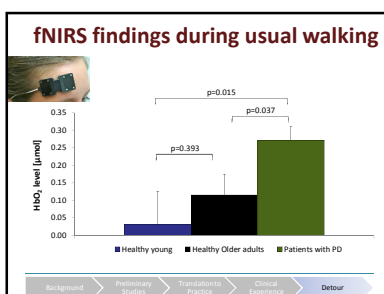
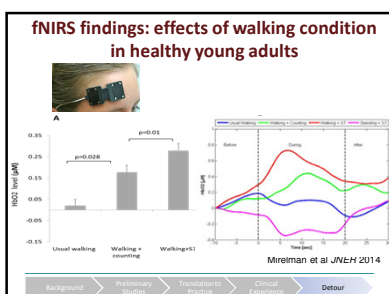
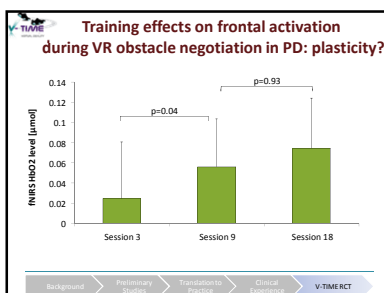
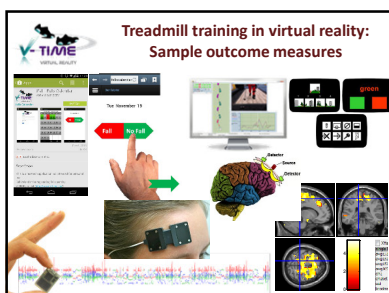
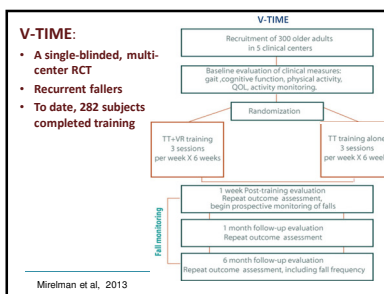
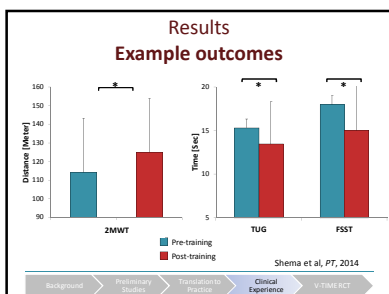
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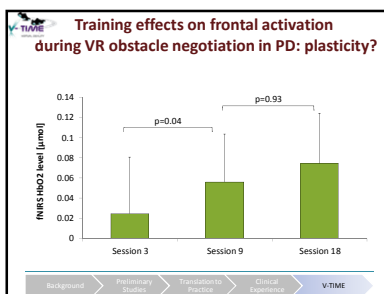
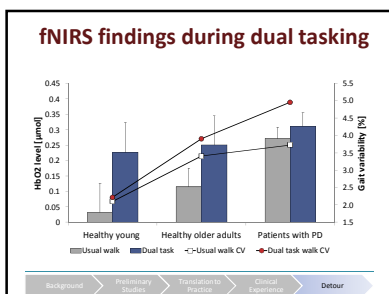
	Mean ± SD
Age (y)	72.18 ± 10.38
Gender (% Women)	50%
Education (y)	14.95 ± 3.87
Number of falls in last 6 months	3.02 ± 5.64
Baseline gait speed (m/sec)	1.12 ± 0.27

- 40% Ischemic stroke
- 18% Post-stroke
- 12% High level gait disorder
- 10% Idiopathic faller
- 7% Peripheral neuropathy
- 5% Other

Shema et al., PT, 2014

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### Discussion

- Engaging and motivating training → 95% adherence
- Applicable to diverse patient populations
- Improvement in gait and balance and in the performance of complex tasks

- Task specific training
- Transfer to untrained tasks
- Retention

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### Discussion

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### Thank you for your attention

**Acknowledgments**  
 Prof. Nir Giladi  
 Dr. Anat Mirelman  
 Dr. Keren Rosenberg  
 Dr. Tanya Gurevich  
 Moran Dorfman  
 Marina Brozgol  
 Aner Weiss  
 Leor Grundlinger  
 Talia Herman  
 Eran Gazit  
 Inbal Maidan  
 Shirley Shema

Funding provided in part by:  
 MJFF, National Institutes of Health, Israel US Bi-National Science Foundation, Israel Science Foundation, Israel Ministry of Health, European Commission (V-TIME)

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