



Qualifications

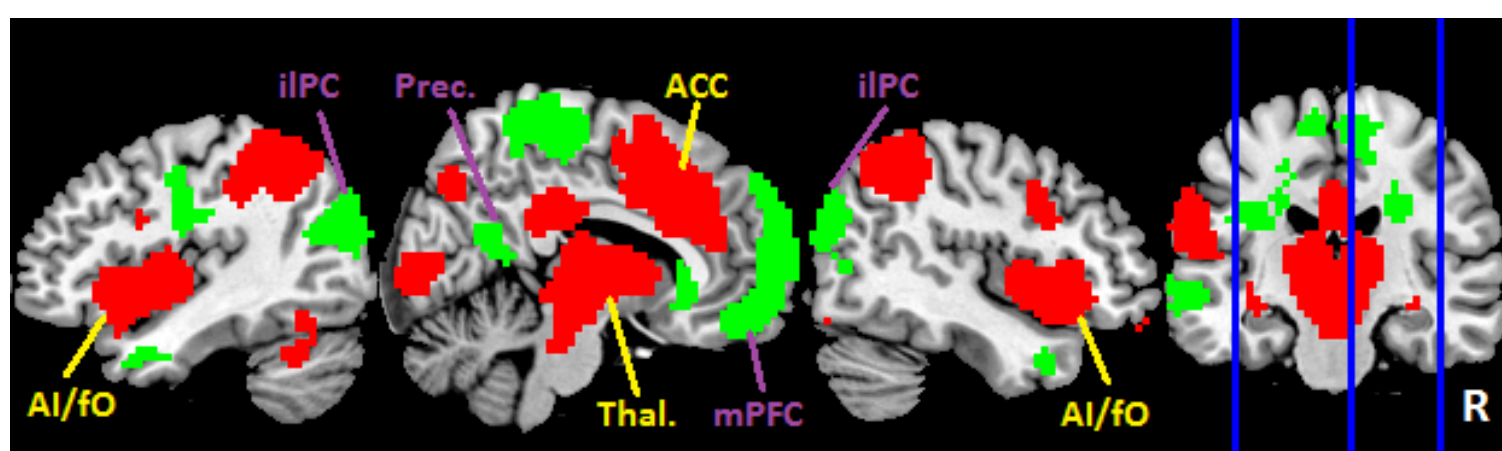
Extensive research background in cognitive neuroscience, cognitive psychology, and psycholinguistics, including:

- Communicating in challenging conditions
- Vigilance and attention control
- Cognitive and motivational constructs of aptitude
- Individual differences as predictors of performance and neural function
- Physiological and neurocognitive predictors of behavior
- Training to improve cognition and stress resilience
- Developing and evaluating computer-based tools for personnel selection and skills training

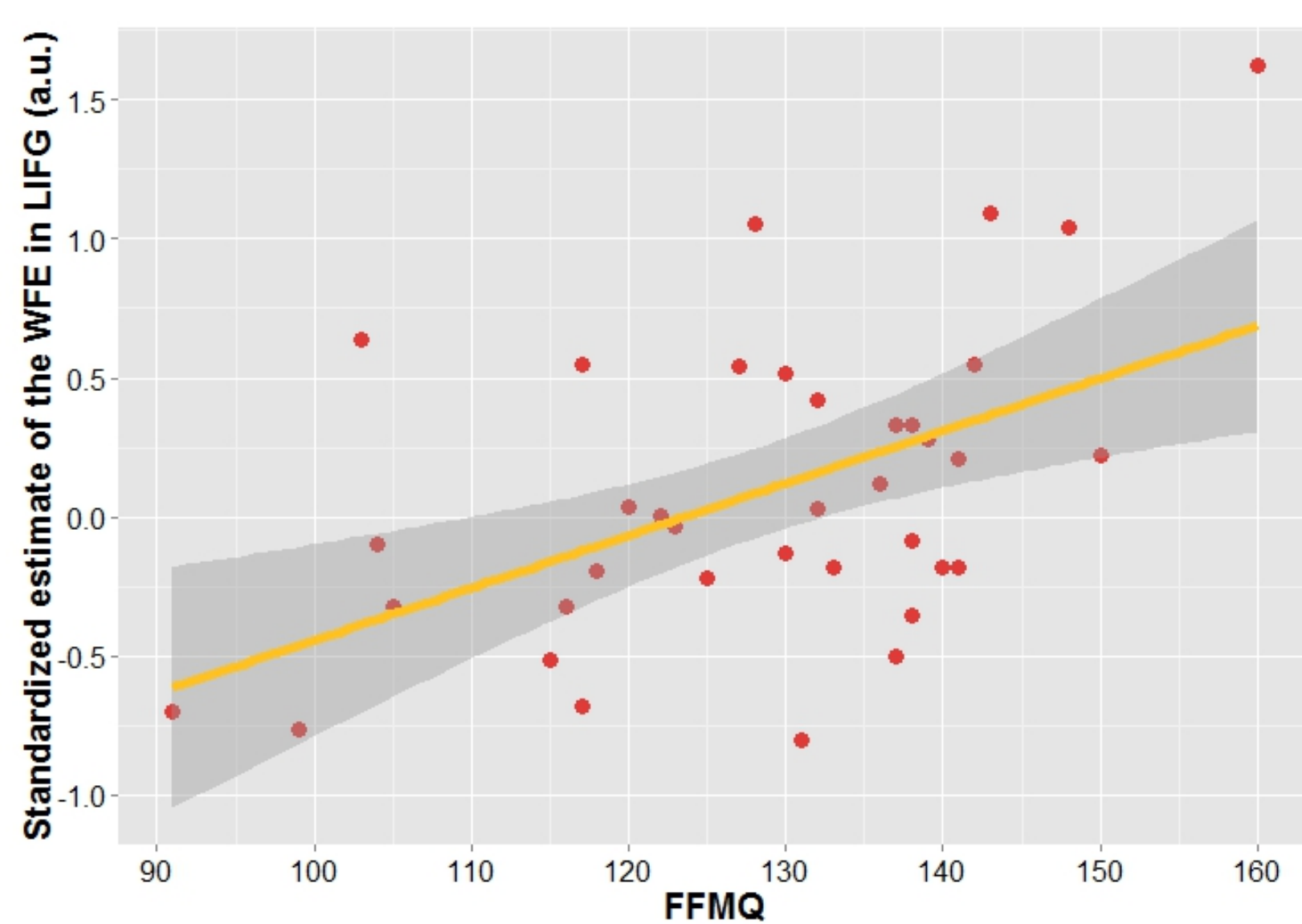
Methodological capabilities

- Behavior, including test battery development
- Eye-tracking and pupillometry
- Physiological metrics (cardiac, respiration)
- Electroencephalography (EEG)
- Functional Magnetic Resonance Imaging (fMRI)

Neural Measures of Focused Attention and Distraction



Individual Differences: Linking Neural Measures to Surveys of Attentional Control

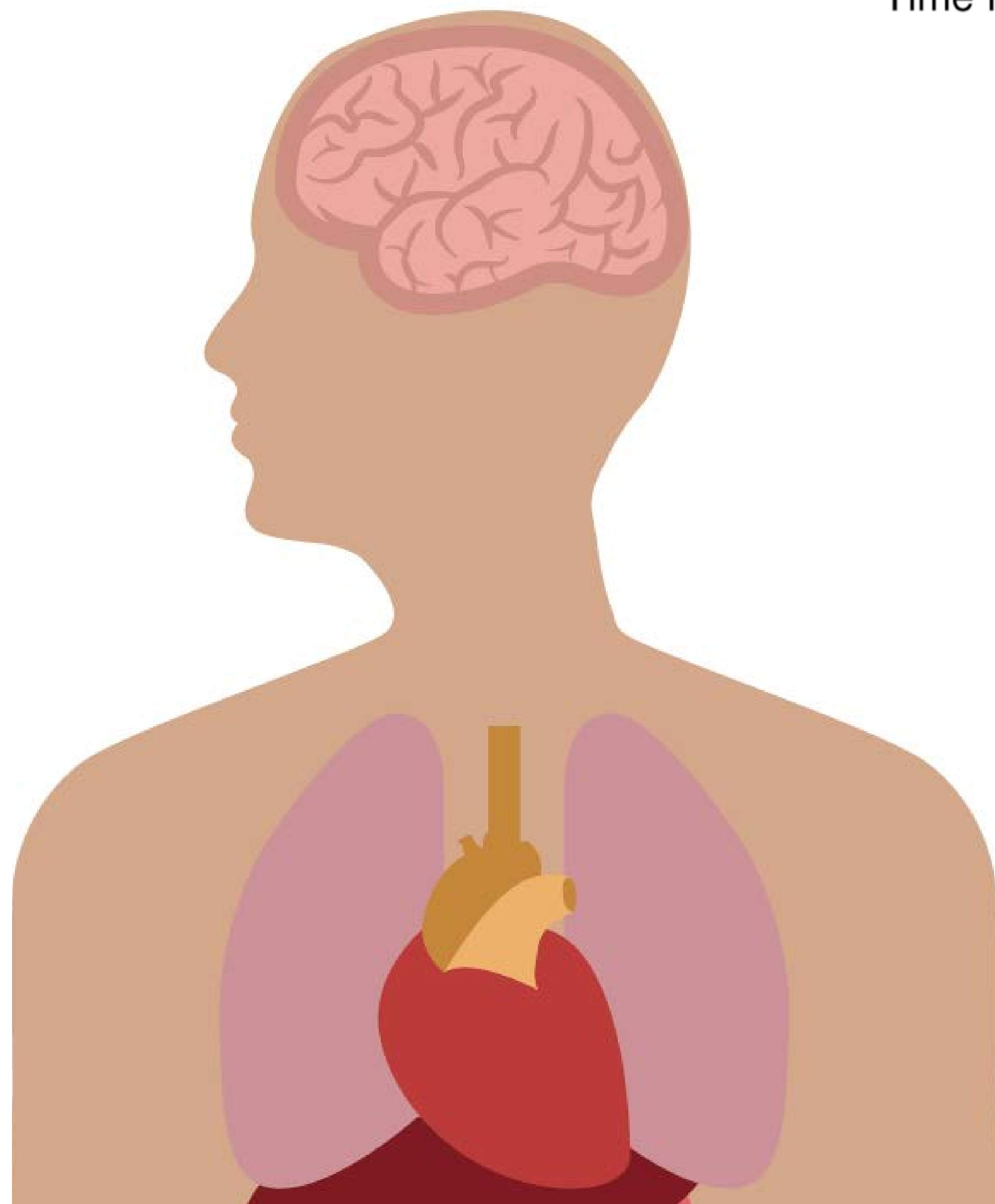
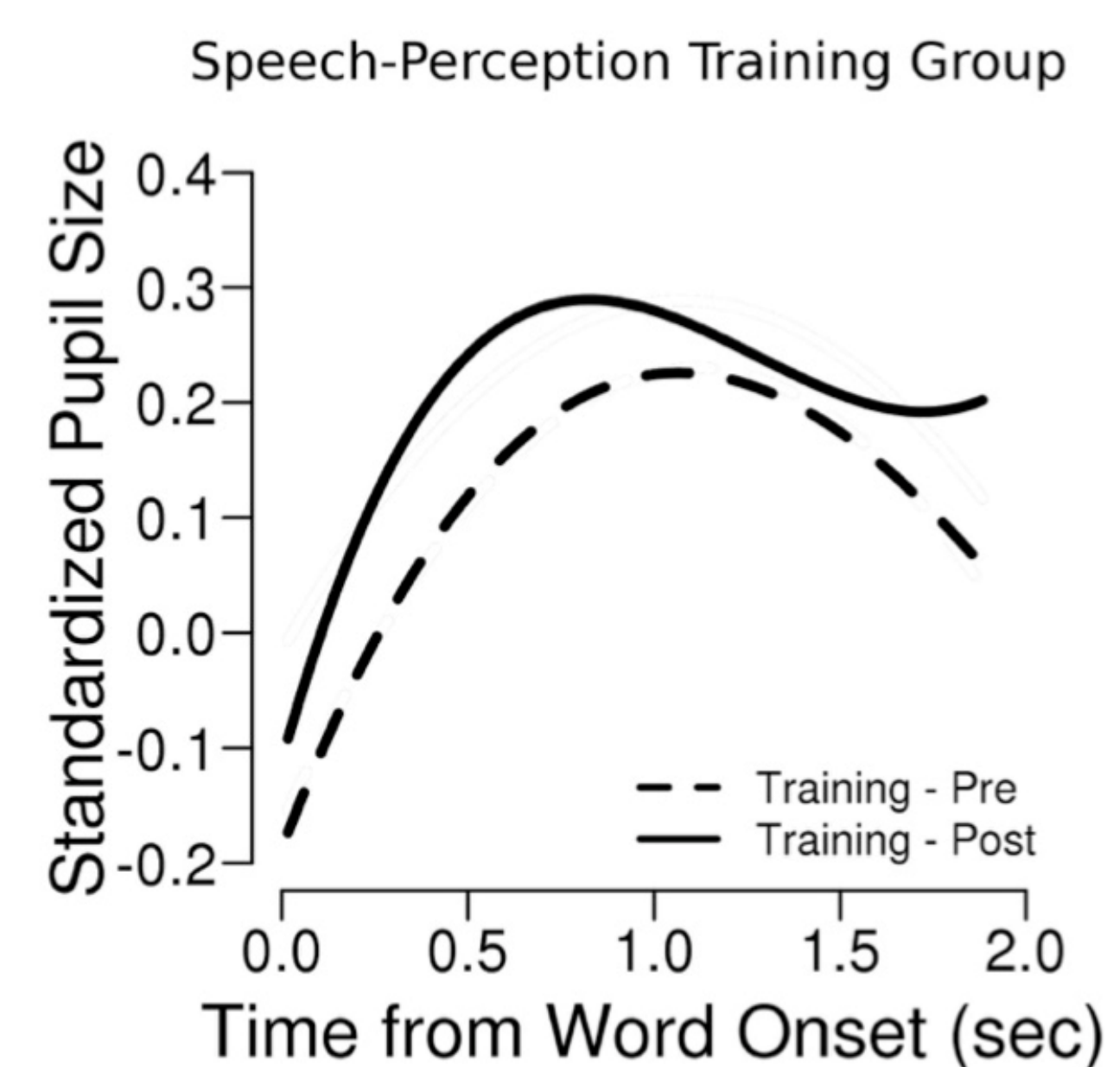


Research areas of interest

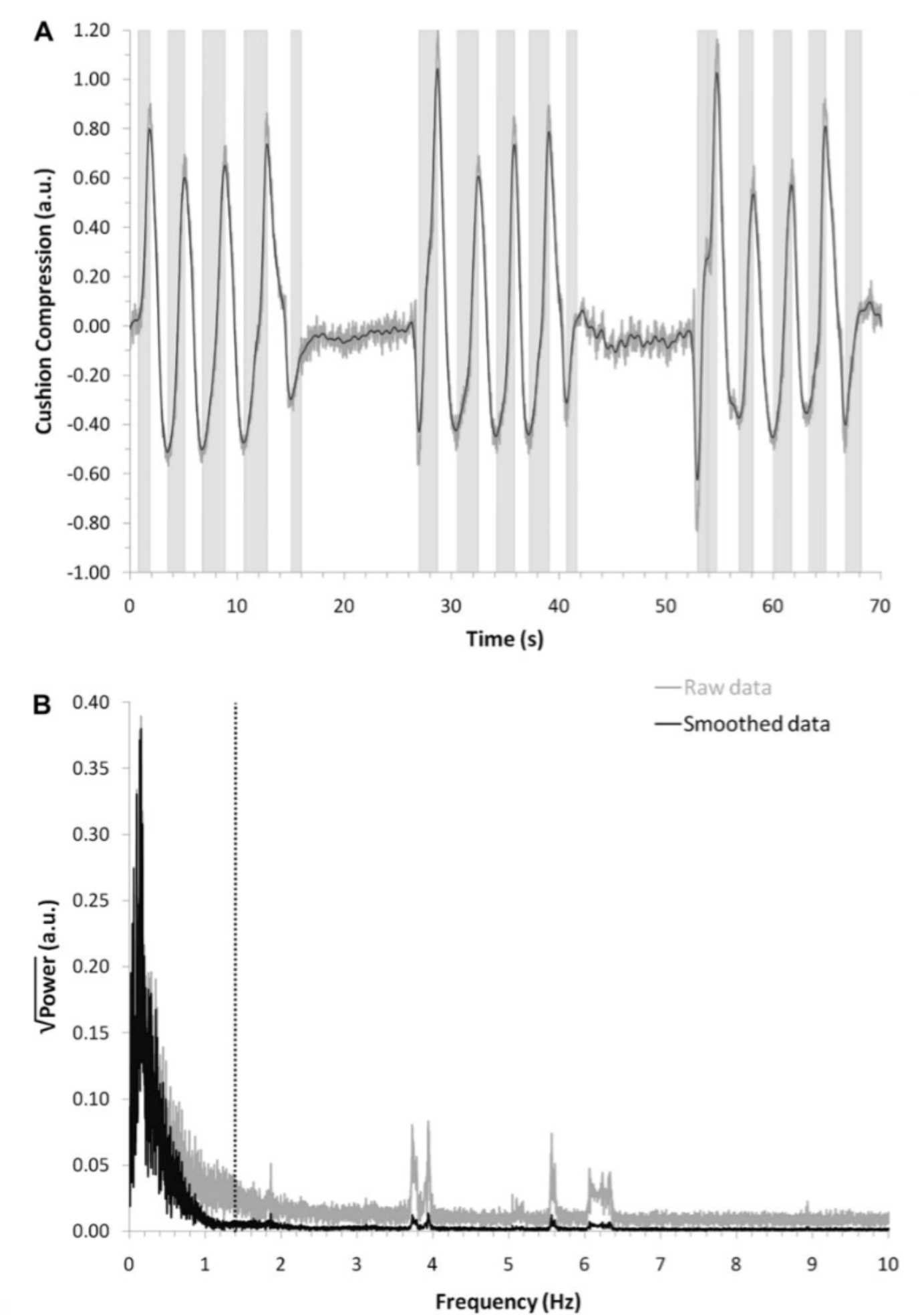
Validating and implementing the use of multimodal data as a means of:

- Assessing aptitude for job selection
- Monitoring and optimizing vigilance and workload during job performance
- Evaluating and maximizing training effectiveness for job-relevant skills
 - Text and speech comprehension
 - Decision making
 - Attention control, mindfulness
 - Creative problem solving

Pupil Dilation as a Measure of Training Efficacy



Analysis of Respiration Data



Objective

To conduct high-quality human subject research that validates the efficacy of wearable, multimodal sensors that measure the cognitive, mental, and physical states for the purpose of personnel selection, performance evaluation, and skill training/maintenance.

Seeking team members with complementary interests

Human factors engineers, signal-processing engineers, software/hardware developers, etc.

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