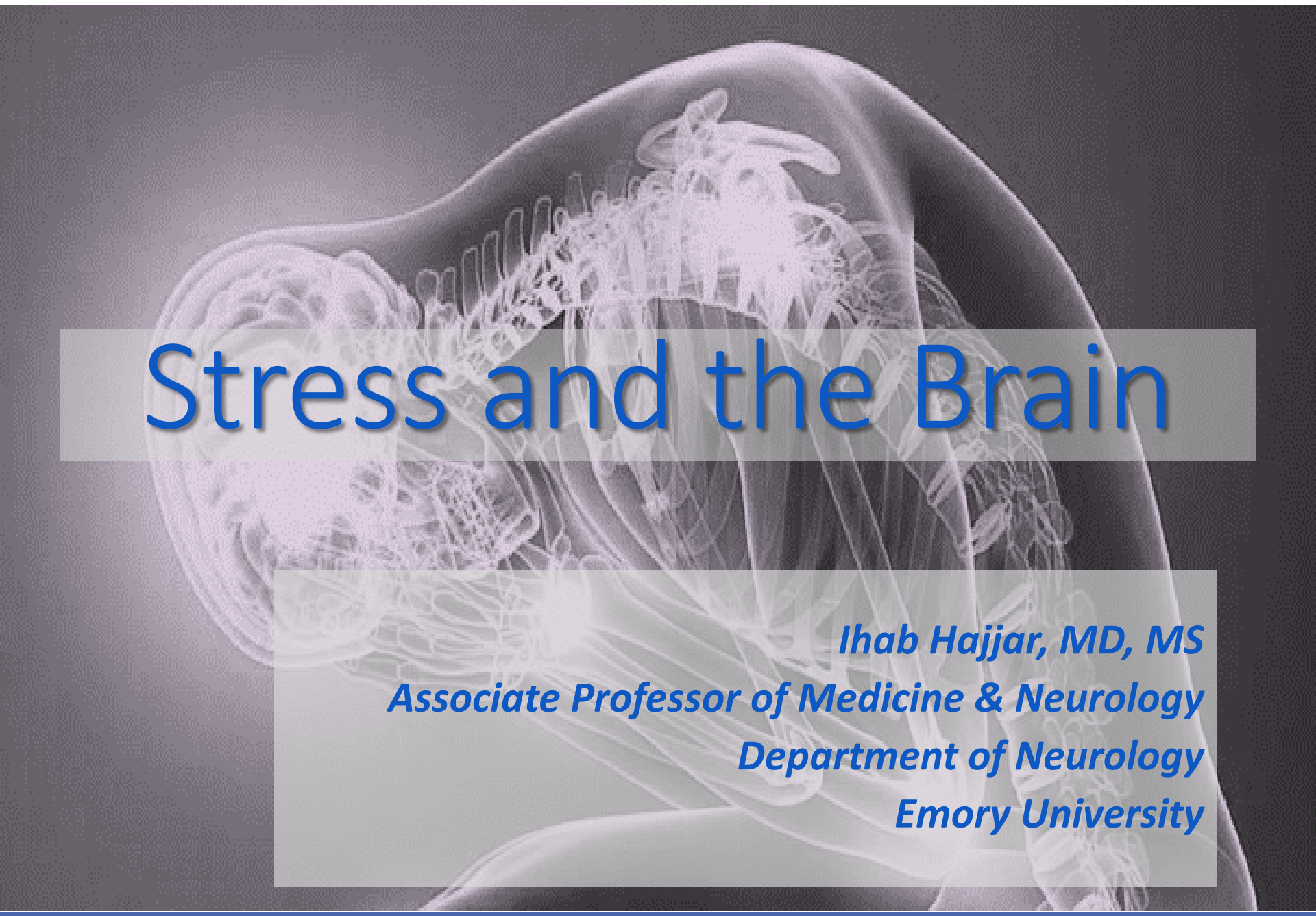

Stress and the Brain

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Life stressors are too many

- Financial stress
- Job stress
- Caregiving (children and adults) stress
- COVID-19
- Individual and System discrimination and social injustice stress (repeated microaggression→ chronic stress)

Studies have documented that chronic/recurrent exposure to stressors is linked to:

- Hypertension
- Obesity (“stress eating”)
- Memory decline
- Accelerated aging

The stress - brain loop

- ↓ attention
- ↓ perception
- ↓ short-term memory
- ↓ learning
- ↓ word finding

cellular changes in the hippocampus

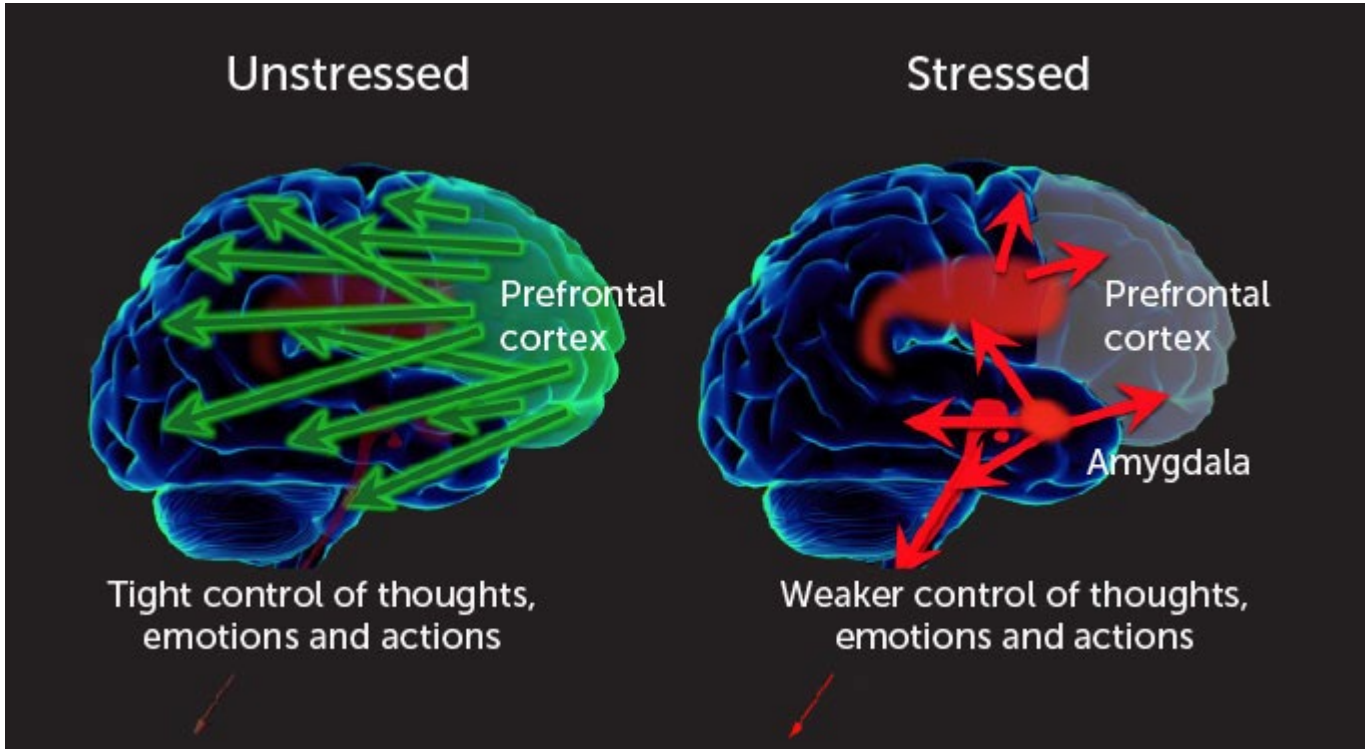
increases glucocortoids

decreased regulation of cortisol

chronic stress

- inadequate sleep
- poor nutrition
- emotional distress

High Stress disrupts brain networks lowering attention and focus



Psychosocial stress reversibly disrupts prefrontal processing and attentional control
C. Liston, B. S. McEwen, B. J. Casey Proceedings of the National Academy of Sciences Jan 2009, 106 (3) 912-917; DOI:

Ways to counter the effects of stress

Stress management techniques:

- deep breathing,
- imagery therapy,
- prayers, spirituality
- Exercise and sport involvement
- social interaction and group activities
- Recognizing personal stressors is critical

Break the stress cycle: Mindfulness