

DEPARTMENT OF CHEMISTRY

DELIVERS A SPECIAL LECTURE
ON

**“MAGNETIC RESONANCE RESEARCH
FROM BENCH TO BEDSIDE”**

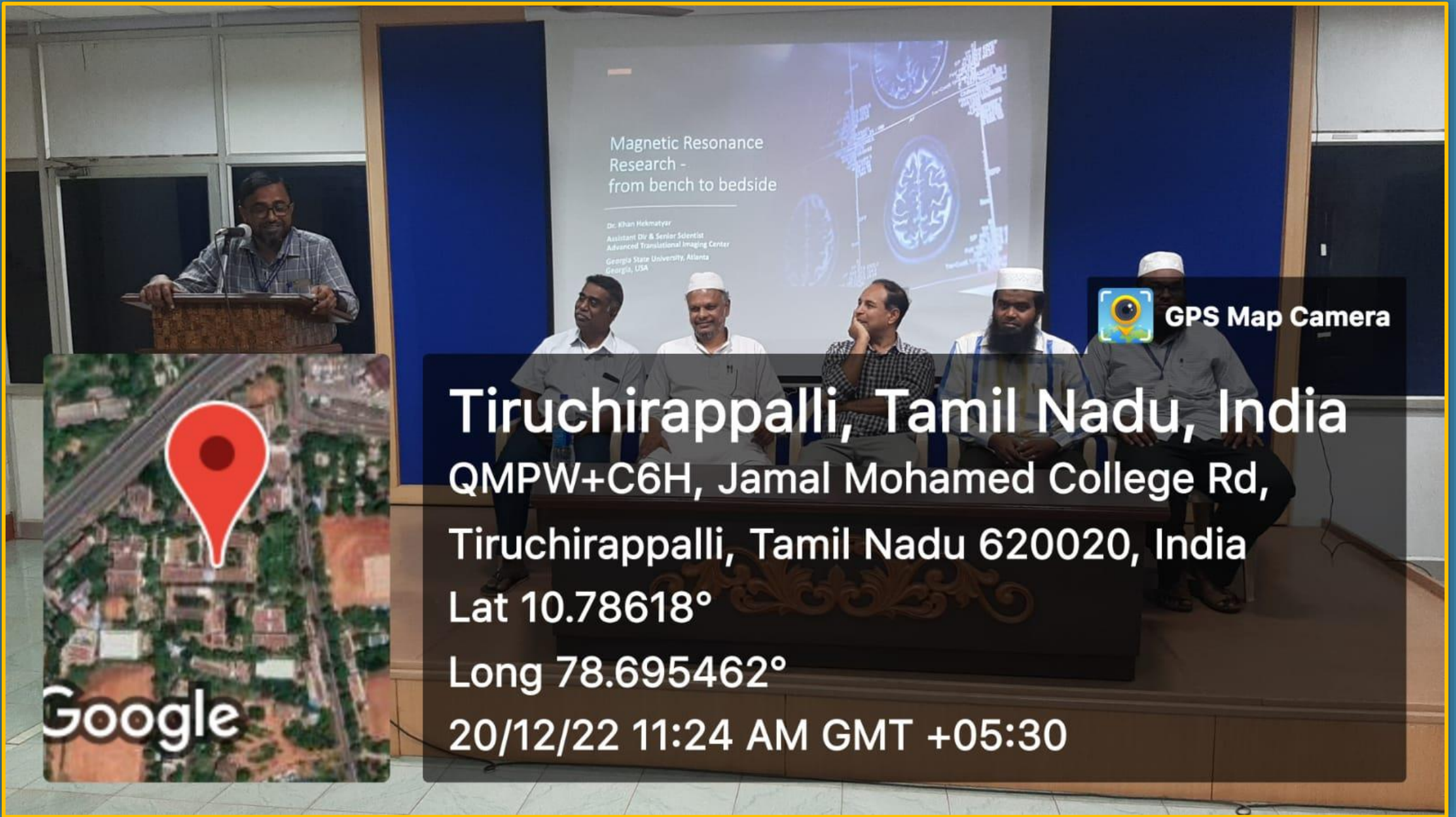
Dr. Khan Hekmatyar

Assistant Director & Senior Scientist

Advanced Translational Imaging Center

Georgia State University, Atlanta, Georgia, USA

20th December 2022

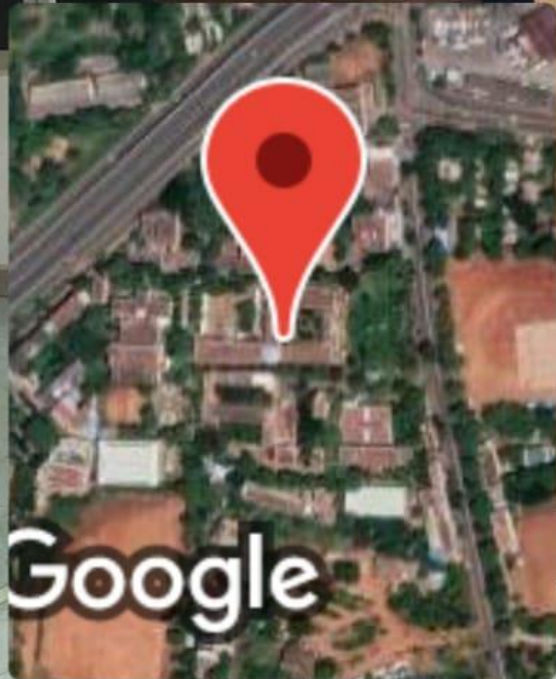


Magnetic Resonance
Research -
from bench to bedside

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GPS Map Camera



Tiruchirappalli, Tamil Nadu, India

QMPW+C6H, Jamal Mohamed College Rd,

Tiruchirappalli, Tamil Nadu 620020, India

Lat 10.78618°

Long 78.695462°

20/12/22 11:24 AM GMT +05:30



Magnetic Resonance Research - from bench to bedside

Dr. Alan Sahawneh
Professor of Radiology
Adjunct, Vanderbilt Imaging Center
Vanderbilt University, Nashville,
Tennessee, USA



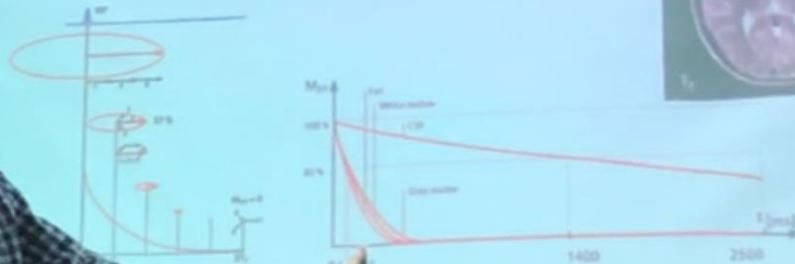
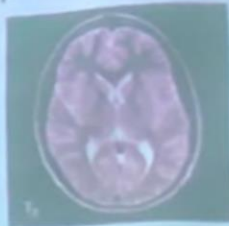
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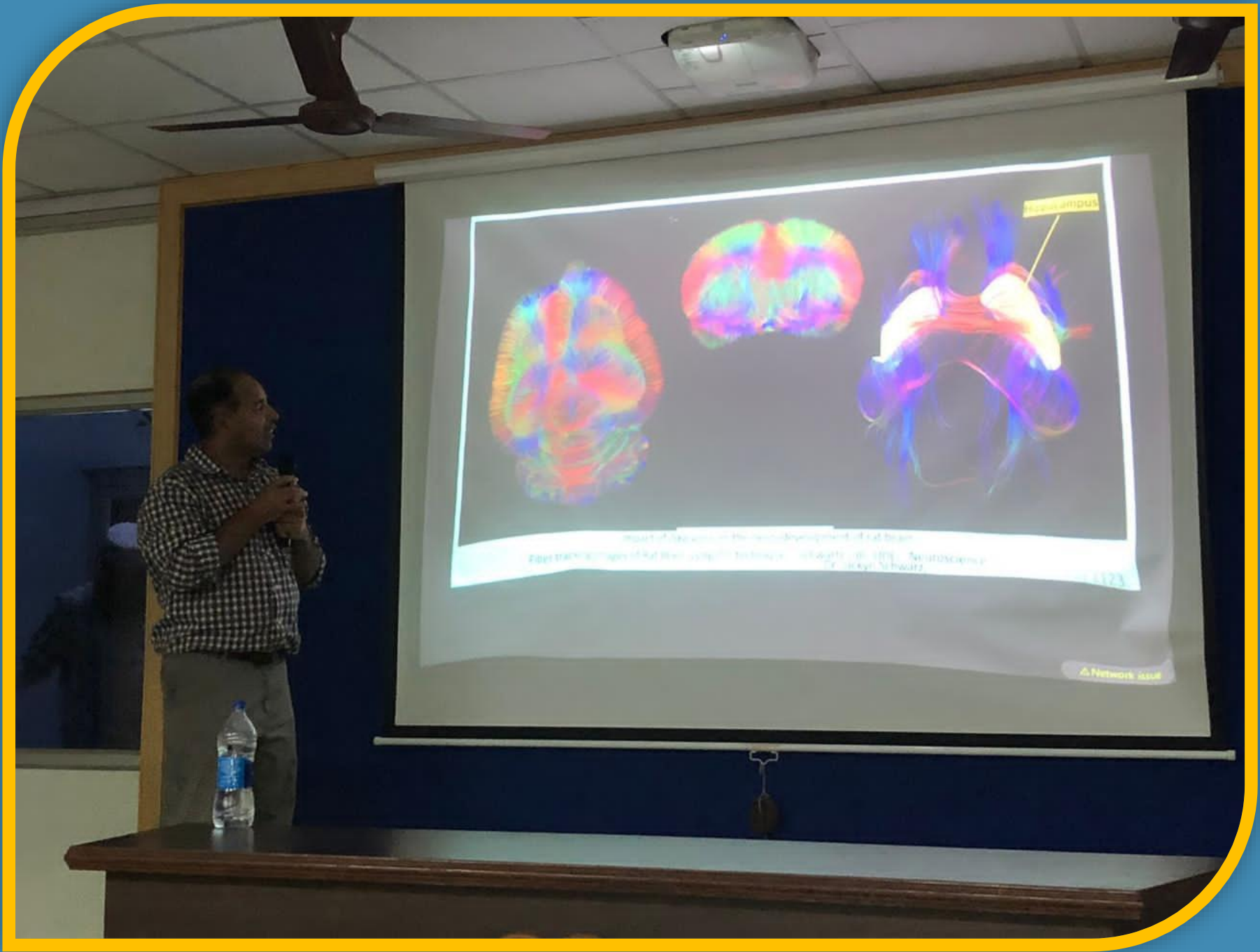
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T2 Relaxation

- T2 transverse magnetizations decays very quickly after a 90° pulse and the spins are more out-of-phase only due to spin-spin interactions.
- After T2, the phase coherence of the spins drops to 37%. after 5 x T2, phase coherence disappears.
- T2 is also tissue-specific.





Impact of lesions on the neurodevelopment of rat brain

Fiber tractography of rat brain using DTI technique

Schwartz et al. 2010, Neuroscience

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Network 2010

