

A decorative background at the top of the slide featuring a network diagram with light blue lines connecting various nodes, some of which are highlighted in a darker teal color.

# **New Investigator Award Program Mentorship Breakfast**

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**Tamar Gefen, PhD**

# 2019 New Investigator Award Winner

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**Project:** Clinicopathologic Substrates of Dementia Syndromes with FTLD-tau

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**Tamar Gefen, Ph.D.**

Asst Professor, Psychiatry and Behavioral Sciences

Clinical Core Co-Lead

Northwestern University ADRC

# FIRST...the “Acknowledgements”

I am grateful to our participants and their families for their commitment research and their most precious donations. The work presented here was funded in part b NIA/NIH (P30AG013854); and the **National Alzheimer’s Coordinating Center (NACC) New Investigator Award (U01AG016976)**.



Thank you to staff and especially **my mentors!**

## Northwestern Alzheimer’s Disease Research Center (NU-ADRC)



Eileen Bigio, MD



Changiz Geula, PhD



Sandra Weintraub, PhD



Marsel Mesulam, MD

## UPenn ADRC



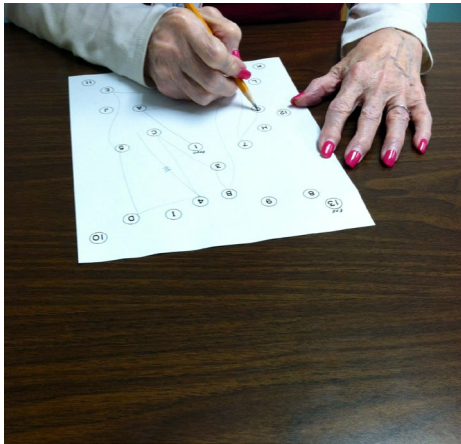
John Q. Trojanowski, MD, PhD  
& Eddie Lee, MD, PhD



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The **goal of the proposal** was to disentangle the complex relationship between dementia syndromes, anatomic atrophy, cell death, and a specific form of FTLT, known as FTLT-tau.

## LIVING



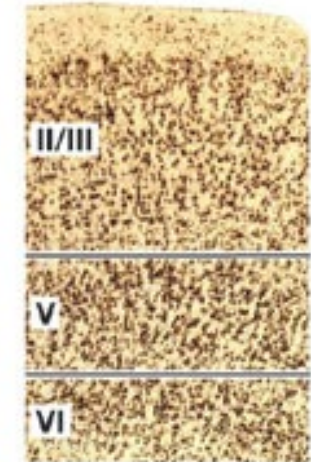
## BIOMARKERS



## BRAIN DONATION



## CELLULAR PATHOLOGY

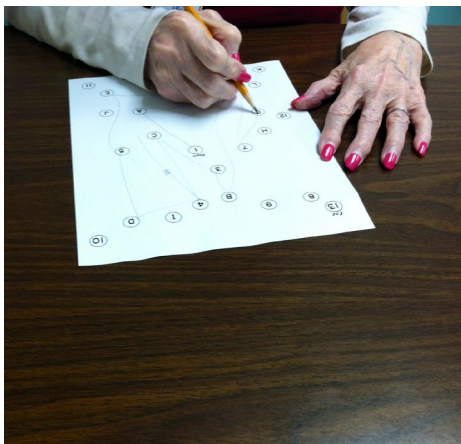


“Structure without function is a corpse...  
Function without structure is a ghost.”

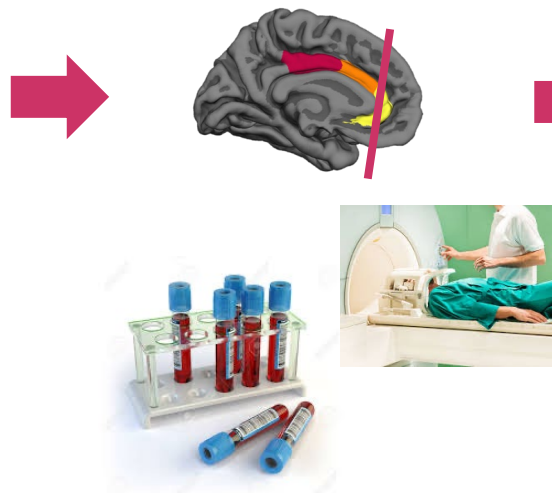
-Stephen Wainwright

# Laboratory for “Translational Neuropsychology” (NIA/NIH R01AG062566)

**LIVING**



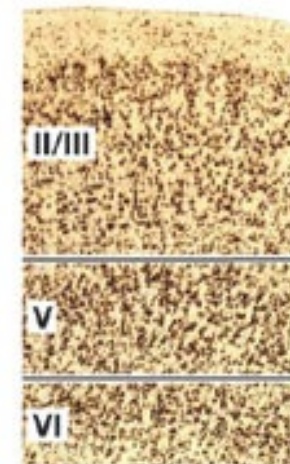
**BIOMARKERS**



**BRAIN DONATION**



**CELLULAR  
PATHOLOGY**



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## Vivienne Lubbat – Diversity Supplement Awardee (R01, Gefen)

- Investigating antemortem and postmortem features of neurodegenerative diseases.
- Facilitation of research skills training including immunohistochemical preparation of postmortem brain specimens and interpretation of clinical and pathologic dementia diagnoses.
- Ongoing mentorship and professional development



Supplement to Research Grant Supports Diversity in the Lab

### RECENT HIGH SCHOOL GRADUATE FINDS PATH THROUGH MESULAM MENTORSHIP

**P**rior to graduating in 2021, Lane Tech College Prep High School student Vivi Lubbat performed lab work solely through a computer screen.

But starting the summer after her graduation, Lubbat got the opportunity to work in a real wet lab (where chemicals and biological matter are analyzed and tested) at the Mesulam Center alongside her mentor, Tamar Gefen, PhD, a clinical neuropsychologist who conducts clinicopathologic studies on dementia syndromes, including primary progressive aphasia (PPA) and behavioral variant Frontotemporal Dementia (bvFTD).

"Vivi came in with passion and interest, but she had no experience," Gefen said. "But when I talk about passion, I'm talking about a burning passion that you don't see in typical 16-year-olds—this real desire to enter the STEM field as soon as possible, diving right in." Gefen committed to mentoring and training Lubbat in techniques for working with postmortem brains and in professional development.

Lubbat was able to work at the lab thanks to a supplement to Gefen's National Institutes of Health (NIH) R01 grant that allows for recruitment of future researchers from groups that are traditionally underrepresented in biomedical, clinical, and social sciences. Lubbat identifies as a proud Palestinian woman. Gefen and she jointly applied for the supplement immediately after they met. "I've been really urging my colleagues to apply," Gefen said. "There's no downside to it."

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Thank you to my NIA  
Program Officer  
**Lisa Opanashuk, PhD**  
for her guidance,  
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support.

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# Translational and multidisciplinary directions...

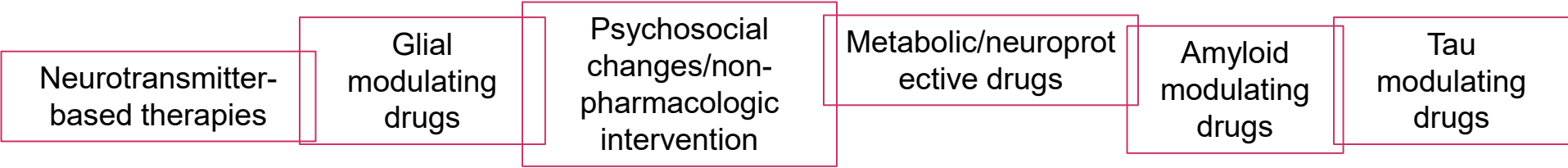
## Multiple Pathogenic Factors



What are the substrates that promote plasticity/resistance or that reduce vulnerability to damage during aging?



## Multiple Strategies for Anti-dementia Interventions



**require translational and multidisciplinary expertise.**



# AND LAST...Acknowledgements

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## And my students...





# Connect with me!

**Tamar Gefen, PhD**

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