IMPORTANT: This syllabus form should be submitted to OAA (gsbs\_academic\_affairs@uth.tmc.edu) a week before the start of each semester.

**NOTE to STUDENTS:** If you need any accommodations related to attending/enrolling in this course, please contact one of the Graduate School's 504 Coordinators, Cheryl Spitzenberger or Natalie Sirisaengtaksin. We ask that you notify GSBS in advance (preferably at least 3 days before the start of the semester) so we can make appropriate arrangements.

Term and Year: Fall 2022

Course Number and Course Title:

GS14 1021:Current Topics in the Neurobiology of Disease

Credit Hours: 1

Meeting Location: McGovern Medical School

WebEx/Zoom Link:

https://uthealth.webex.com/uthealth/j.php?MTID=

mbe8909975c0992f57bf16b8361cc337e

Password: NOD22

Program Required Course: No

Approval Code: No

(If yes, the Course Director or the Course Designee

will provide the approval code.)

Audit Permitted: Yes

Classes Begin: August 29, 2022

Classes End: December 9, 2022

Final Exam Week: **Dec. 12-16, 2022** 

# **Class Meeting Schedule**

Day	Time
Tuesday	12:00 pm

### **Course Director**

Name and Degree: John Byrne, PhD

Title: Professor, June & Virgil Waggoner Chair

Department: Neurobiology and Anatomy

Institution: **UTH** 

Email Address: John.H.Byrne@uth.tmc.edu

Contact Number: **713-500-5602** 

**Course Co-Director/s:** 

Name and Degree: Jordan Lake, MD, MSc

Title: Associate Professor

Department: Internal Medicine, Infectious Diseases

Institution: **UTH** 

Email Address: Jordan.E.Lake@uth.tmc.edu

# Instructor/s (see attached class schedule)

1.

Name and Degree

Institution:

**Email Address:** 

2.

Name and Degree

Institution:

Email Address:

3.

Name and Degree

Institution:

**Email Address** 

Name and Degree: Rodrigo Hasbun, MD, MPH

Title: Professor

Department: Internal Medicine, Infectious Diseases

Institution: **UTH** 

Email Address: Rodrigo.Hasbun@uth.tmc.edu

Name and Degree: Joy Schmitz, PhD

Title: Louis A. Faillace, MD, Professor, Director, Center for Neurobehavioral Research on Addictions

Department: Psychiatry and Behavioral Sciences

Institution: UTH

Email Address: <u>Joy.M.Schmitz@uth.tmc.edu</u>

#### **Course Description:**

This course is an integrated approach to neurological diseases, which includes background information as well the diagnosis, the treatment, and the biological mechanisms of the diseases under study. The topic for Fall 2022 is "Neurobiology of HIV". HIV infection is associated with neurological and cognitive difficulties. Antiretroviral drugs used to combat HIV have been shown to reduce neurocognitive dysfunction but numerous challenges remain. In addition to cognitive health, people living with HIV are vulnerable to psychosocial stressors, substance use disorders, and HIV-related stigma. This course will provide students with a broad understanding and appreciation of key topics related to the impact of HIV infection in the brain, specifically: (1) HIV-associated neurocognitive disorders; (2) biological therapies for HIV; and (3) the psychosocial impacts of HIV infection. Online lectures will be given by leading experts in the field from UTHealth and other universities across the country.

## Textbook/Supplemental Reading Materials (if any)

when necessary directors may provide additional information for students.

### **Course Objective/s:**

Upon successful completion of this course, students will gain a broad understanding and appreciation of key topics related to the impact of HIV infection in the brain, specifically: (1) HIV-associated neurocognitive disorders; (2) biological therapies for HIV; and (3) the psychosocial impacts of HIV infection.

Student res	ponsibilities and	expectations	/Course Red	quirements:

- Attendance
- Completion of final essay based on a course lecture. (PostdoPostdoctoralws are exempt)

**Grading System:** Pass/Fail

**Student Assessment and Grading Criteria**: (May include the following:)

Percentage	Description
Homework ( %)	
Quiz ( %)	
Presentation ( %)	
Midterm Exams ( %)	
Final Exam ( 20 %)	Completion of final essay based on a course lecture. (Postdoctorals fellows are exempt)
Workshop or Breakout-Session ( %)	
Participation and/or Attendance ( 80 %)	

# **CLASS SCHEDULE – Fall 2022**

	Duration		
	(Hour(s)		
	taught by		
Date	lecturer)	Lecture Topic	Lecturer/s
Tuesday/		Overview neurocognitive disorders in people	
Aug. 30	1	living with HIV/AIDS	Rodrigo Hasbun, MD, MPH
Sept. 6	1	HIV 101	Scott Letendre, MD
Sept. 13	1	Viral Escape	Scott Letendre, MD
Sept. 20	1	CNS as an HIV reservoir	Serena S. Spudich, MD
Sept. 27	1	Neurocognitive Assessment	Steven Woods, PsyD
		HIV and Aging synergy on the brain with	
Oct. 4	1	neuroimaging research	Beau M. Ances, MD, PhD
Oct. 11	1	TBA	
Oct. 18	1	Biotypes	Avindra Nath, MD
		HIV testing, adherence to antiretroviral	Thomas P. Giordano, MD,
Oct. 25	1	therapy, and retention in HIV care	MPH
		HEROES program as it addresses HIV harm	
		reduction and treatment services for persons	
Nov. 1	1	who inject drugs	James R. Langabeer II, PhD
		Treatment strategies for substance use and HIV	Glenn-Milo Santos, PhD,
Nov. 8	1	prevention among key populations	МРН
Nov. 15		No Lecture	
Nov. 22		No Lecture	
INUV. ZZ		Effect of cannabinoids on HIV and	
Nov. 29	1	inflammation	Emeka Okafor, PhD, MPH
11071.25	-	Immune network dysregulation of the CNS	
Dec. 6	1	with HIV persistence and OUD	Le Zhang, PhD
			<i>.</i>
Dec. 13		No Lecture	

**NOTE:** Provide other class information as needed.