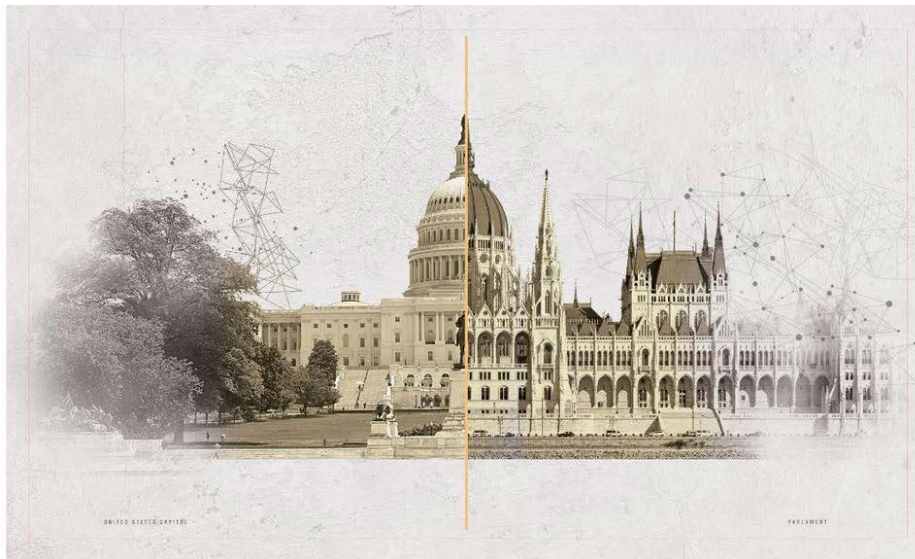




8th Conference of the Association of the Hungarian-American Academicians



Hungarian Academy of Sciences, Budapest, 1825



April 4-5, 2024

Embassy of Hungary, Washington D.C. 20005

1500 Rhode Island Avenue, N.W.



*Association of Hungarian-
American Academicians*

Amerikai Magyar Akadémikusok
Társasága



<https://ahaa-amat.org>

Organizing Committee

Éva Nagy, Pál Maliga, Gábor Tigyi, Sándor Szabó, Zoltán Ács

Financial Support

Embassy of Hungary

Hungarian Academy of Sciences

Association of Hungarian-American Academicians

Contact Information

Éva Nagy, enagy@uoguelph.ca

Pál Maliga, maliga@waksman.rutgers.edu

Program

THURSDAY, APRIL 4, 2024

Arrival & registration at hotel

Dinner Meeting at Cosmos Club (2121 Massachusetts Avenue, NW). Only those who registered for the event and invited guests

6:30pm: Guest Arrival

7:30pm: Guests Seated

10:00pm: Anticipated Departure

FRIDAY, APRIL 5, 2024

8:30 – 9:00 Arrival and registration

9:00 Welcome Addresses

Szabolcs Takács, Ambassador of Hungary to the United States

Tamás Novák, Scientific Attaché

Éva Nagy, Co-President, AHAA-AMAT

Pál Maliga, Co-President, AHAA-AMAT

SESSION 1 – New initiatives of AHAA-AMAT

Chair: Pál Maliga

9:20 – 10:00 **Keynote #1: Zoltán J. Ács**, George Mason University, Washington, DC, USA

Title: Institute for Advanced Studies Wien. Resurrecting a Legacy

Abstract: The purpose of the Institute would be to build up a network of excellent international scholars that would come to the Institute and infuse Modul University with a richer research capacity. The proposed institute would be interdisciplinary in nature, drawing on social science, business, and international relations. Over the years the institute would build up research capacities in collaboration with scholars including PhD students, post docs and visiting faculty from around the world. The institute's colleagues are organically connected to the faculty of Modul University, teaching existing and new courses. They take an active part in the development of the university curriculum, using their extensive international high-level professional experience and supporting this with the institute's research activities. They create educational material that best reflects the needs and challenges of the 21st century. Through a system of workshops, conferences, seminars and retreats the Institute would contribute to the intellectual life of Modul University and Vienna while pursuing an agenda of 21st century issues. The focus would be on excellence, representative government, and leadership. The Institute is established as part of the university but would be a separate entity with its own strategic goal and leadership.

10:00 – 10:30 **Károly Kocsis**, Hungarian Academy of Sciences, Budapest, Hungary
Title: Changing administrative-territorial patterns in the Carpathian Basin during the last hundred years

10:30 – 10:50 **Tibor Gulyás**, TechTra Zrt. Co., Budapest, Hungary
Title: Disruptive technologies. To the forefront of the world

Coffee Break (10:50-11:15)

SESSION 2 – Brain Biology

Chair: Sándor Szabó

11:15 – 11:35 **István Módy**, School of Medicine at UCLA, Los Angeles, CA, USA
Title: A new pill for improving gamma oscillations in the brain

11:35 – 12:00 **László Záborszky**, Rutgers University, Newark, NJ, USA
Title: Hierarchical architecture of the forebrain cholinergic system

12:00 – 12:20 **János Sztipanovits**, Vanderbilt University, Nashville, TN, USA
Title: Addressing Anhedonia Computationally

Lunch (12:20 – 13:20)

SESSION 3 – Cancer

Chair: Éva Nagy

13:20 – 13:55 **Keynote #2: Gábor Tigyi**, University of Tennessee, Health Science Center, Memphis, TN, USA
Title: The War of Immunity against Cancer: How can the Patient Win?

Abstract: Mutations, either acquired or inherited, have been linked to the development of malignancies. DNA repair is perhaps the most efficient high-fidelity mechanism to fix damaged DNA that can lead to mutations and cancer. If unrepaired mutations manifest, the immune system surveillance can eliminate cells that are recognized as “foreign” to the host. Immune surveillance relies first on a mechanism designated as “innate immunity” that recognizes antigen “patterns” that are “foreign” to the host. Innate immunity mobilizes several types of white blood cells that eliminate the foreign “antigens” and initiate the second line of defense, designated as “adoptive” immunity. The adoptive immune response develops cytotoxic T lymphocytes, which specifically kill the cancer cell. In the late eighties, I discovered a small lipid mediator, lysophosphatidic acid (LPA) that now we understand inhibits both innate and adoptive immunity against cancer cells. Cancer cells upregulate the expression of the autotaxin (ATX), the enzyme that generates LPA. Cells in the tumor microenvironment are reprogrammed by LPA derived from the cancer cells to upregulate the expression of ATX and LPA production. These two mechanisms “paralyze” anti-tumor immunity. We identified the LPA receptor subtype 5 (LPA5) that is responsible for blocking tumor immunity. We will demonstrate how this inhibition is exerted on the innate and adoptive immune response and share our drug discovery results aimed at blocking the LPA5 receptor to re-energize tumor immunity. We foresee that some of the new small molecule inhibitors will be therapeutically useful to

restore natural tumor immunity and augment tumor immunotherapies that tend to be ineffective in cancers with overexpression of the ATX-LPA axis.

SESSION 4 – Diseases and Cures

Chair: László Záborszky

13:55 – 14:15 **Éva Mezey**, NIDCR, NIH, Bethesda, USA

Title: The role of Copeptin and Vasopressin in hematopoiesis

14:15 – 14:35 **Szilvia N. Varagya**, Fulbright-Schuman Scholar, Harrisburg University of Science and Technology, University of Pennsylvania, PA, USA

Title: Battle of Words - and Viruses. Communication Strategies and Linguistic Devices Addressing Public Health Crises

14:35 – 14:55 **Sándor Szabó**, American University of Health Sciences (AUHS), Long Beach, CA, USA

Title: Update on Long COVID

Coffee break (14:55 – 15:25)

SESSION 5 – Education

Chair: Edith Moravcsik

15:25 – 15:45 **Alán Alpár**, Semmelweis University, Budapest, Hungary

Title: Challenges of the medical curriculum in the 21st century. The Semmelweis University approach.

15:45 – 16:05 **Charles Vörösmarty**, CUNY Advanced Science Research Center, Hunter College New York, NY, USA

Title: The Three Essential Infrastructures for Sustainable Development and Global Resiliency

SESSION 6 – Organellar Biology

Chair: István Módy

16:05 – 16:25 **György Hajnóczky**, Thomas Jefferson University, Philadelphia, USA

Mitochondria: cellular powerplants and more

16:25 – 16:45 **Pál Maliga**, Rutgers University, Piscataway, NJ, USA

Title: Seed Plastids: a Novel Platform for Recombinant Protein Expression

17:00 – 18:00 Business meeting for AMAT members and HAS representatives only

The future of AMAT?

18:30 Gala Dinner

Introduction: Pál Maliga

Keynote #3 Lecture

János Bergou, Hunter College of the City University of New York, New York, NY, USA

Title: Making the impossible happen: Capturing the ultrafast motion of electrons in atoms with ultrashort pulses of light – the 2023 Nobel Prize for Physics

Abstract: Hummingbirds flap 60 to 200 times per second, too fast for the human eye to follow. The technique of slow motion, requiring very fast cameras, makes the invisible “visible”, but there is a limit on how fast cameras can operate. For even faster motion, like a flying bullet, there is another method: illuminating the target with very short light flashes. Electrons in atoms are some of the fastest flying bullets Nature gave us, they fly almost with the speed of light. To capture their motion, we need light flashes that last a billionth of a billionth of a second, or 0.000,000,000,000,001 seconds, to be precise. Generation of such short flashes and direct observation of the speeding electron was long thought to be impossible. Doing the impossible earned Pierre Agostini, Ferenc Krausz, and Anne L’Huillier the 2023 Nobel Prize for Physics.

**Association of Hungarian-American Academicians (AHAA)
Amerikai Magyar Akadémikusok Társasága (AMAT)**

<https://ahaa-amat.org/>

The Association of Hungarian-American Academicians (AHAA, in Hungarian Amerikai Magyar Akadémikusok Társasága or AMAT), and the Amerikai Magyar Akadémikusok Alapítványa (AMAL) are registered charitable organization in the US and Hungary, respectively. The not-for-profit corporations are organized for scientific, and educational purposes to promote interactions among Hungarian scientists working in or visiting the U.S.

The Association organizes annual meetings, including popular scientific lectures to inform its members and the public about scientific fields represented by its members who are external members of the Hungarian Academy of Sciences (HAS).

AHAA/AMAT has established a travel fellowship fund for young Hungarian students and young researchers pursuing education in science to attend scientific meetings in the United States.



The AMAT management board (from left) Pál Maliga, Gábor Tigyi, István Módy, Éva Nagy, Éva Mezey, Laszló Záborszky, Zoltán Ács and Sándor Szabó.

Important Addresses, Locations and Contacts in Washington

Embassy of Hungary, 1500 Rhode Island Ave NW (10202-362-6730) Web: washington.kormany.hu

Holiday Inn Washington Central/White House, 1501 Rhode Island Ave NW (front desk, 1-202-483-2000) Web: ihg.com

Cosmos Club 2121 Massachusetts Ave NW (1-202-387-7783) Web: cosmosclub.org

Walk (blue dots) from Embassy/Holiday Inn to Cosmos Club (0.8 mi/1.3 km) is about 20 mins.

