



AMERICAN  
SOCIETY FOR  
MICROBIOLOGY

# Short Introduction: Possibilities, Advantages of Membership

Dr. Balogh István  
Country Ambassador ASM  
[baloghi.bp@gmail.com](mailto:baloghi.bp@gmail.com)  
06 30 431 6881



AMERICAN  
SOCIETY FOR  
MICROBIOLOGY

ASM

39 000 members

## Student membership

- Eligibility for **travel awards, grants, fellowships**
- Scope the **job market** with Career Connections
- **Free print subscription to Microbe magazine**
- Member discounts on meeting, conference, and webinar registrations
- Advance your career with an ASM Mentor
- Access to the members' only directory
- Grantwriting and scientific publishing institutes
- Career planning and networking resources
- Career resources and mentoring for science teaching positions

# Memebership type

- Student (22 - 15 USD)
- Supporting (22 USD)
- Conributing (55 USD)
- Premium (132 USD)
- Poscdoc (22 USD)
- Global Outreach (Ø USD)
- All of them: **INFORMATION** (access /open access/subscription journals, magazines, books, reports, FAQ series etc.)

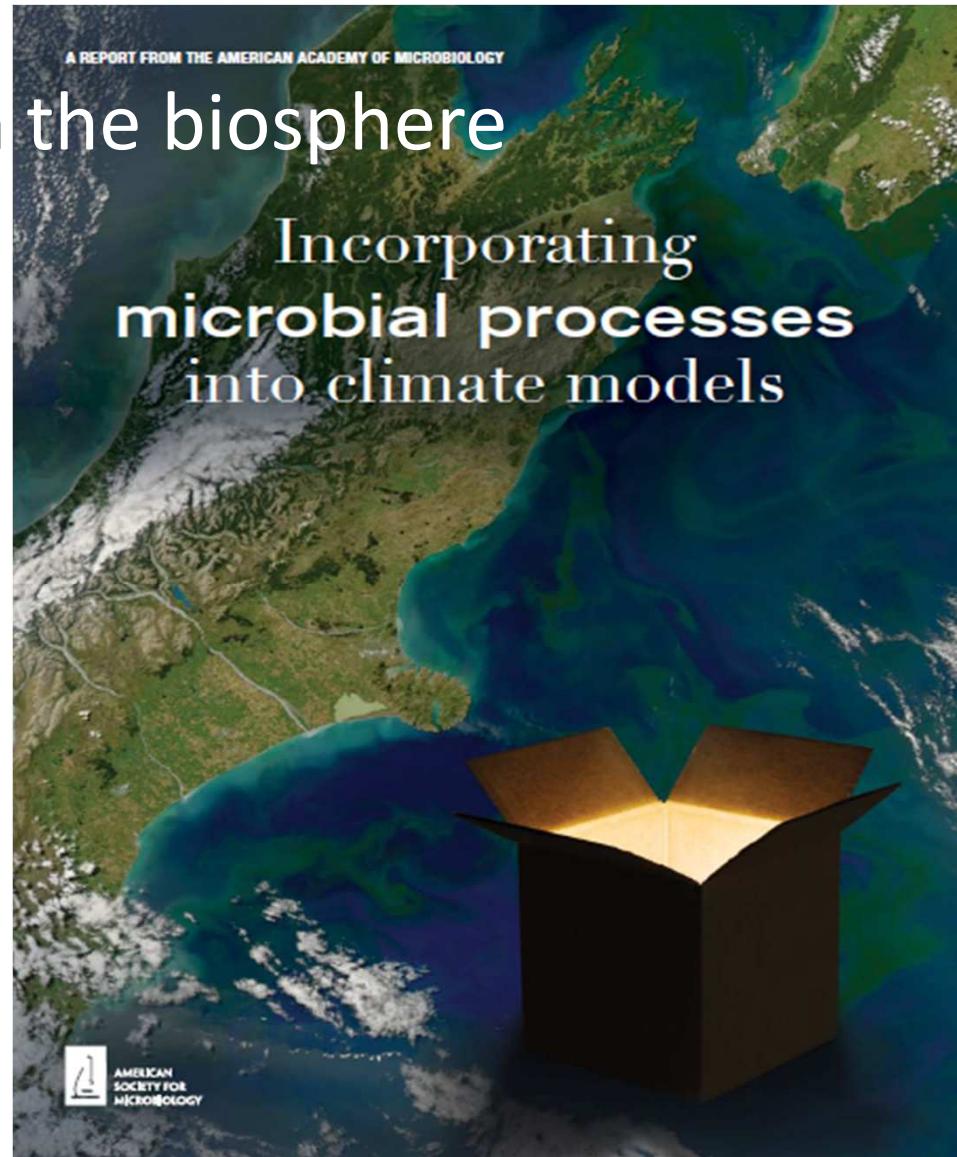
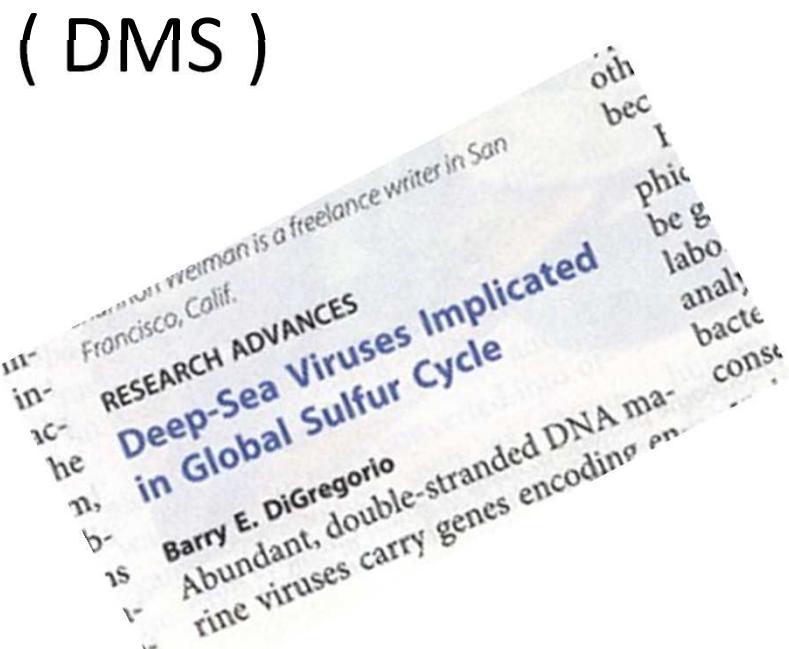
# Global Outreach

The ASM Global Outreach Program seeks to engage scientists from resource-constrained countries by providing membership and full access to all online ASM journals at no cost.

Afghanistan, Guinea, Pakistan, Angola, Guinea-Bissau, Rwanda, Bangladesh, Haiti, Sao Tome Principe, Benin, Kenya, Senegal, Burkina Faso, Kyrgyz Republic, Sierra Leone, Burundi, Lao PDR, Solomon Islands, Cambodia, Lesotho, Somalia, Cameroon, Liberia, South Sudan, Central African Republic, Madagascar, Sudan, Chad, Malawi, Tajikistan, Comoros, Mali, Togo, Cote d'Ivoire, Mauritania, Uganda, Democratic Rep. of the Congo, Mozambique, Uzbekistan, Djibouti, Myanmar, United Rep. of Tanzania, Eritrea, Nepal, Vietnam, Ethiopia, Niger, Yemen, Gambia, Nigeria, Zambia, Ghana, Papua New Guinea, Zimbabwe

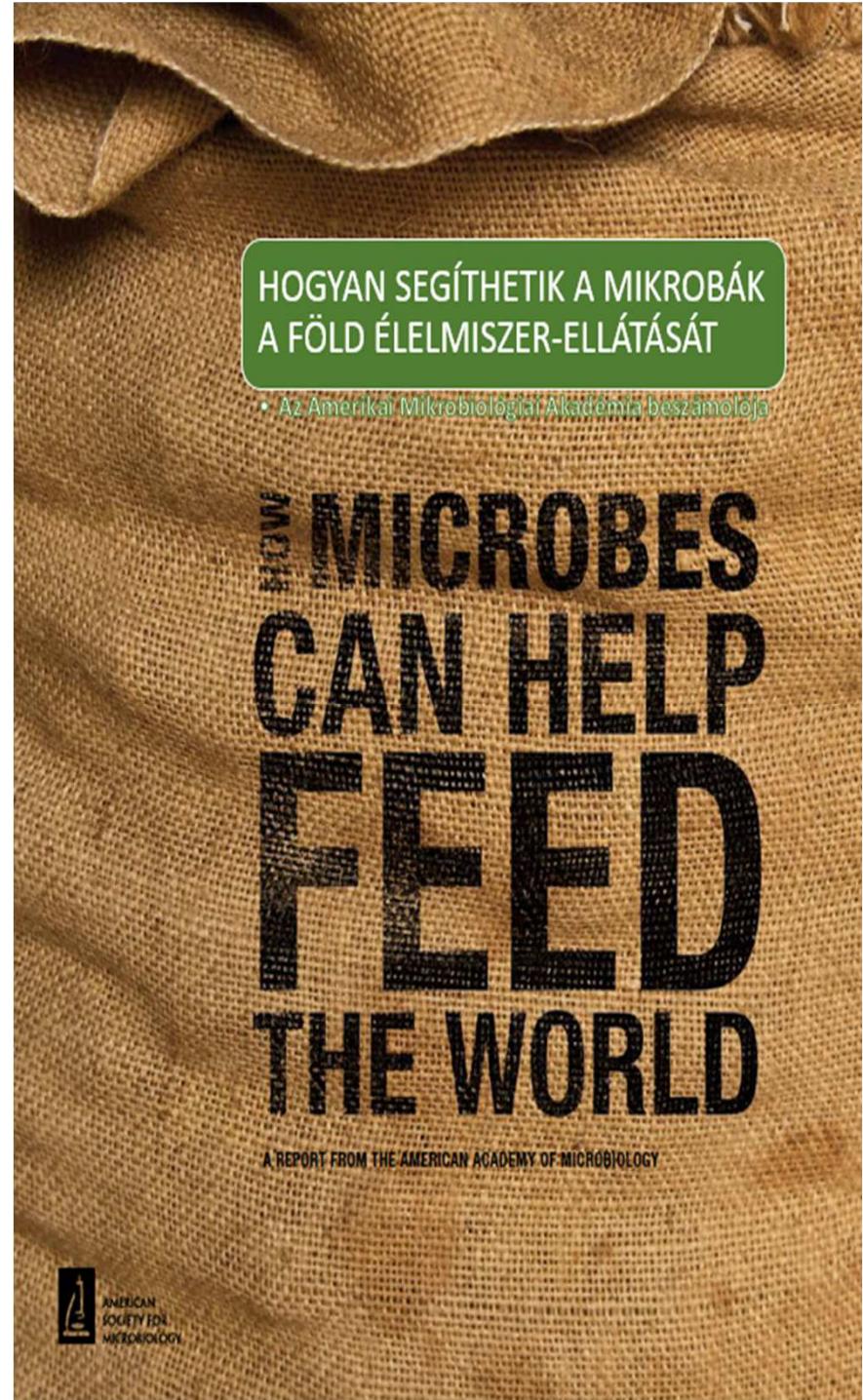
# Ecology, Global Environment

- e.g. - S circulation in the biosphere

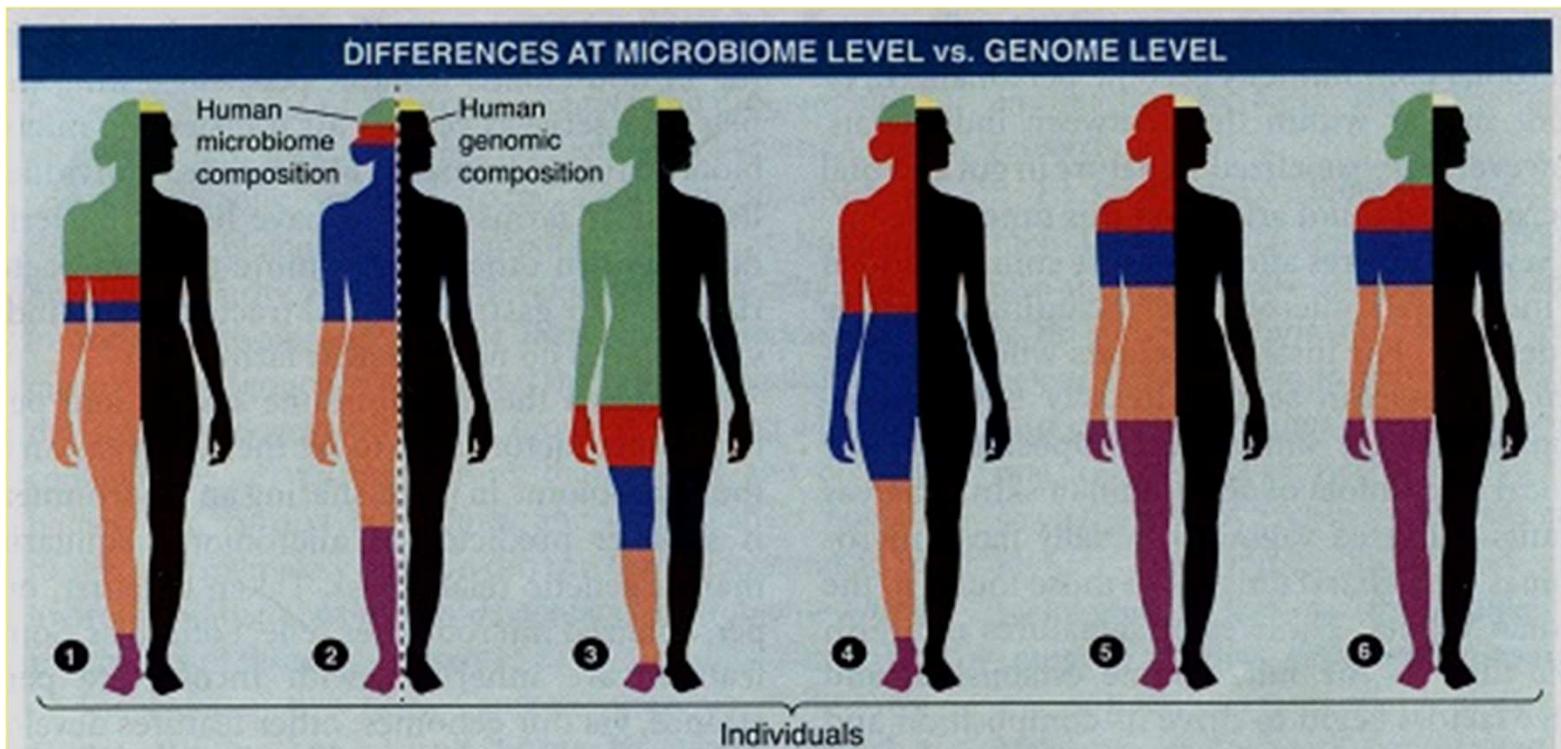


# Agriculture

- a talajoltók óriási jövöje  
( PGPR )



# Health - Medical



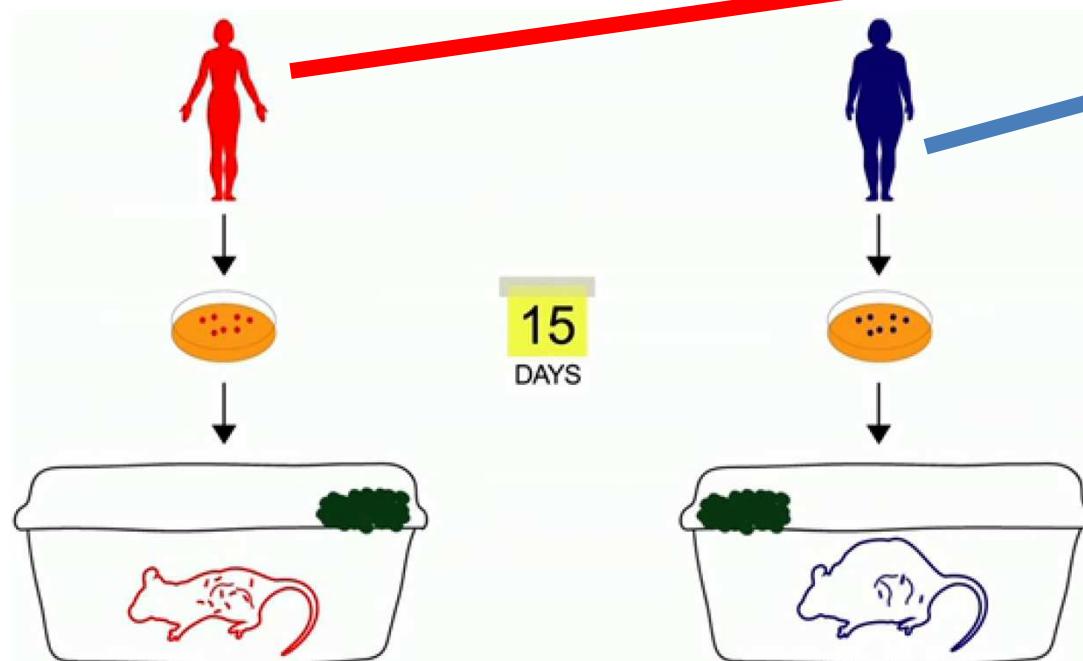
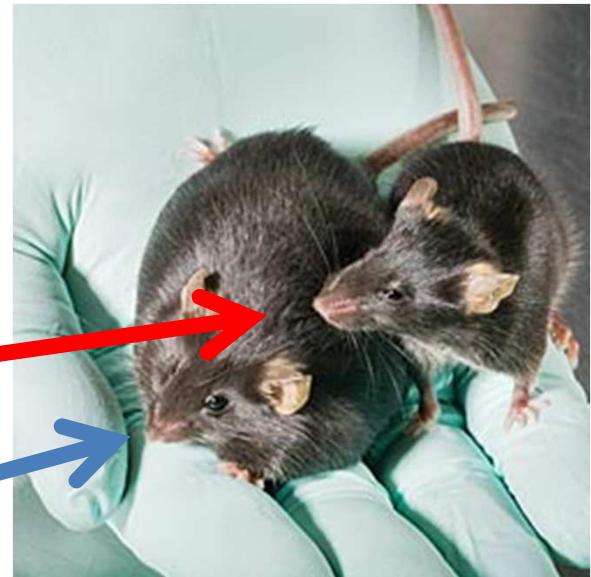
Humans are far more different from each other in their microbiome composition than in their genomic composition. The colors in the left side of each individual represent bacterial phyla, while the colors on the right side indicate host genomic similarity. For the most part, we contain similar phyla living in and on our bodies, but their relative abundances can be drastically different. On the other hand, our genomic composition is nearly identical, with only a small fraction (around 0.1%) differing across individuals.

# Gut microbes may contribute to obesity?

-Gut microbes from obese and lean HZ human twins

-Inoculation of germ free mouse strains with gut microbes

-It was discovered that obesity is transmissible from human to mouse and that it was associated with changes in serum levels of branched-chain amino acids.



\*Ridaura et al. : Gut Microbiota from Twins  
Discordant for Obesity Modulate Metabolism  
in Mice. Science, 2013 September 6. 341:6150

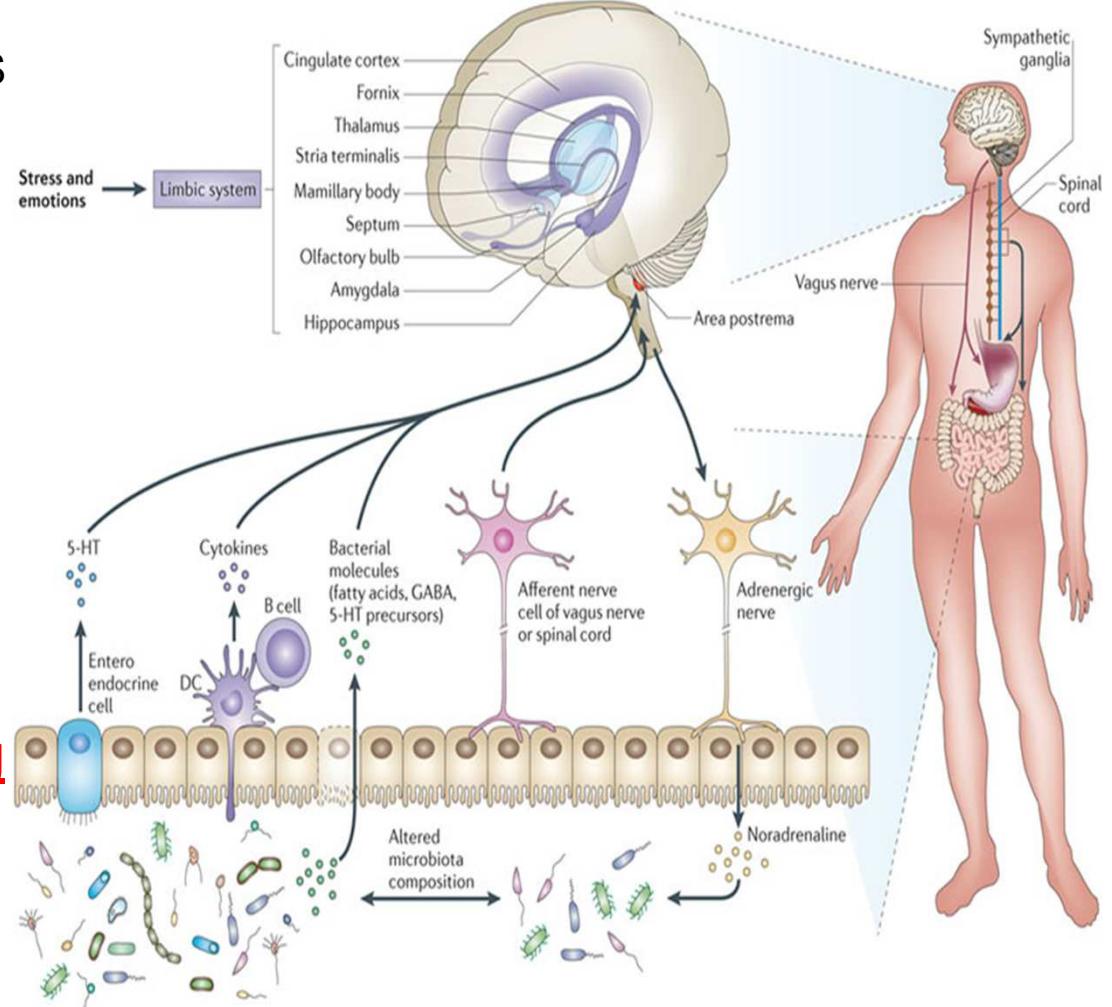
# The Brain-Gut-Microbe axis

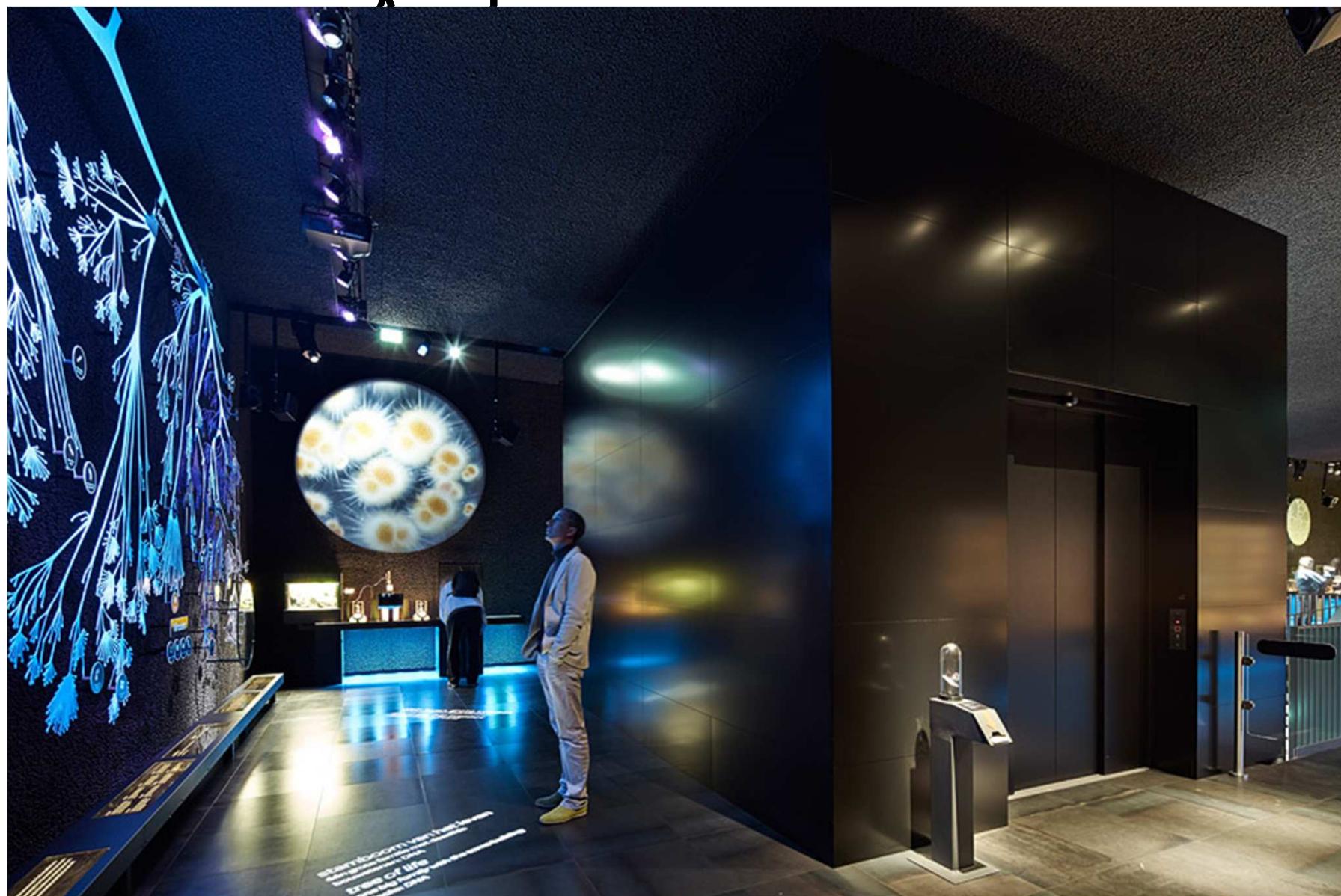
Bidirectional communication between CNS and Gut-Microbiota

- Microbes produce neurotransmitters : GABA, noradrenaline, serotonin, dopamine and acetylcholine

**-Germ free mice had less BDNF (brain delivered neurotrophic factor) and a decrease of important nerves in cortex and hippocampus, as well as cognitive loss and less working memory.**

- Microbes produce tryptophan and kynurene when stimulated by inflammatory factors





# Miért vállaltam?

## Ismерetterjesztés...(van rá időm...?)

- „Kimutatták a szalmonella vírusát”
- „A migránsok úgynevezett polivírust is behurcolhatnak”
- Háztartási fertőtlenítőszerek - WC kontra mosogatószivacs
- Rutinszerűen felírt antibiotikumok
- Radel Kft: kórházak
- Oktatás
  - szegény
  - frontális
  - TDK
  - SOTE....

# Köszönöm a figyelmet!

