



INSTITUTE OF NEUROIMMUNOLOGY

SLOVAK ACADEMY OF SCIENCES

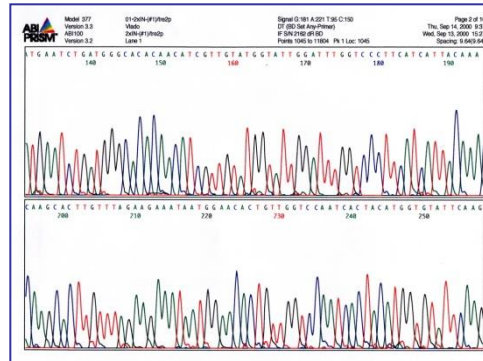


CENTRE OF EXCELLENCE



THE MISSION

...to deliver the results of the research
from the bench to the patients ...





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1996



Institute of Neuroimmunology

1999



AXON Neuroscience SE

2002



Slovak Alzheimer Society

2002



Centre MEMORY



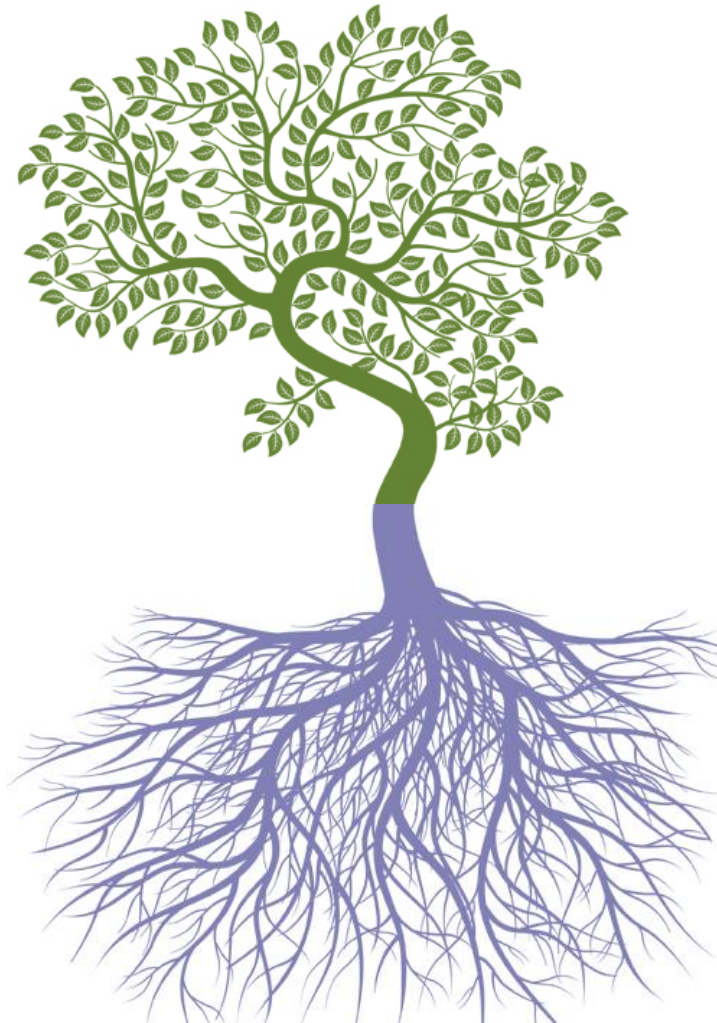
Institute's Branch at the University of Veterinary Medicine and Pharmacy in Kosice



Laboratory of biomedical microbiology
and immunology



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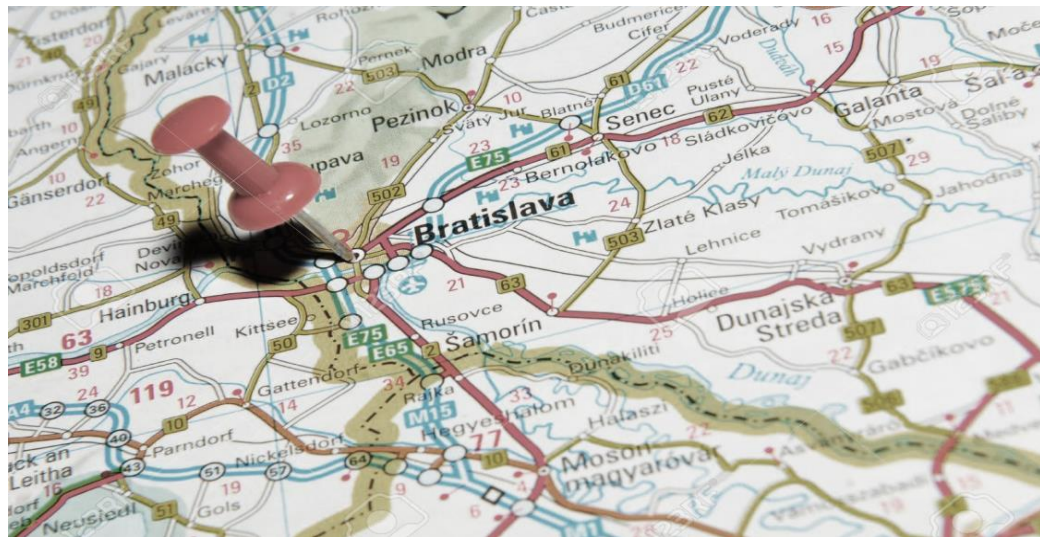


**Institute of
Neuroimmunology**

**Laboratory of
Molecular Biology,
MRC, Cambridge**

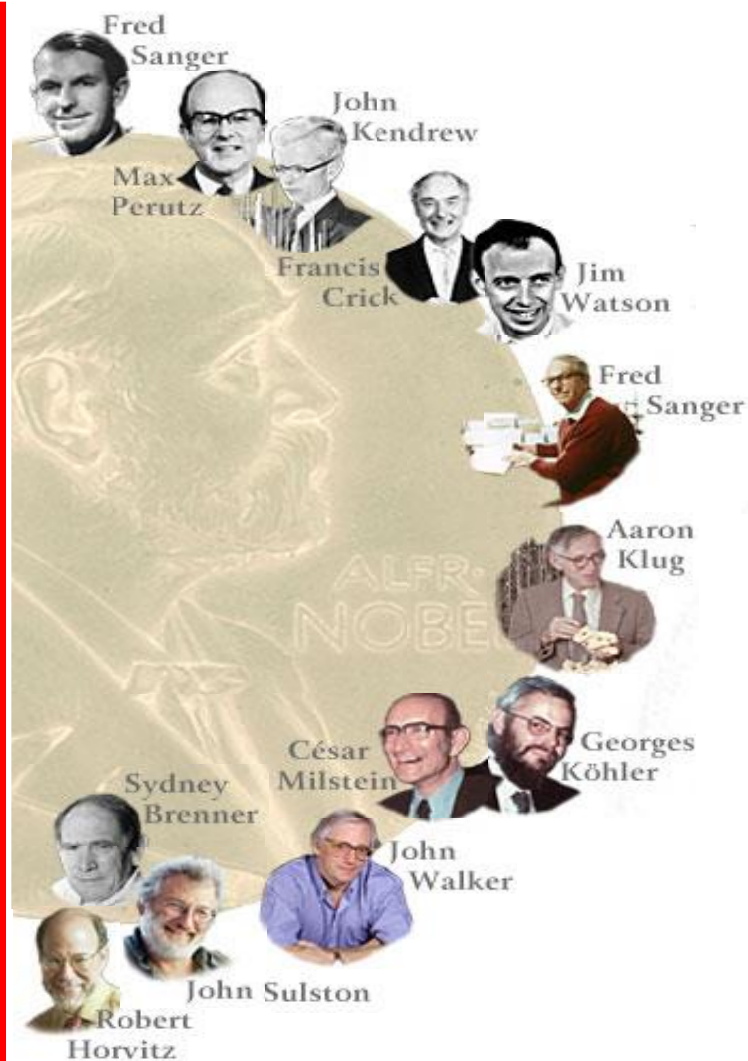


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MRC

Medical
Research
Council





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NOBEL PRIZE LAUREATE



MARTIN
ROTH



AARON
KLUG



CESAR
MILSTEIN



MICHEL
GOEDERT

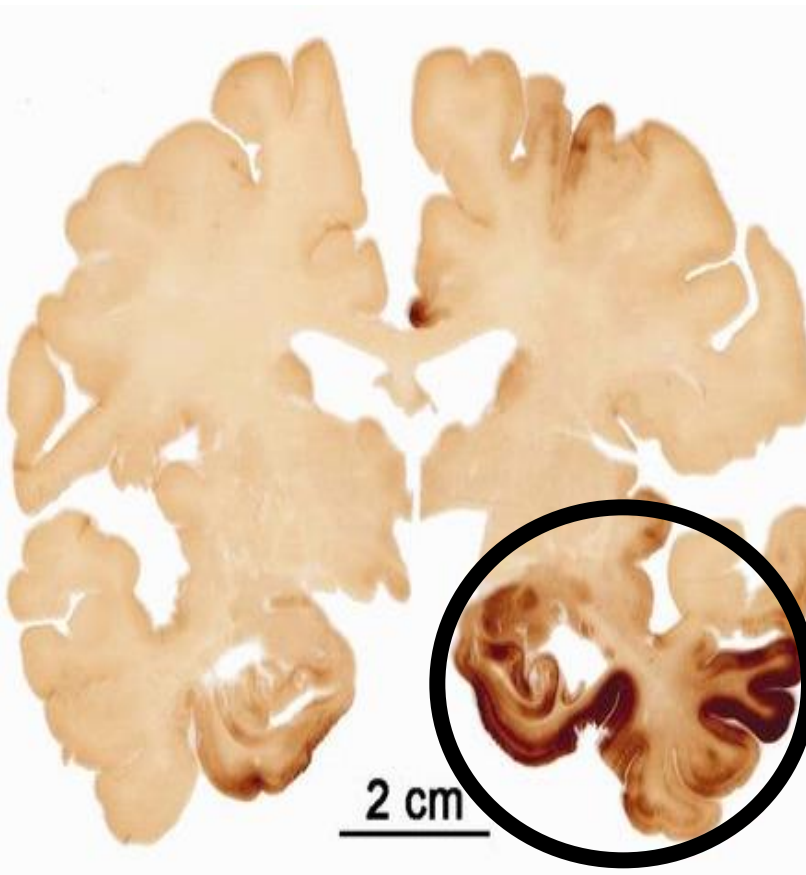


CLAUDE
WISCHIK



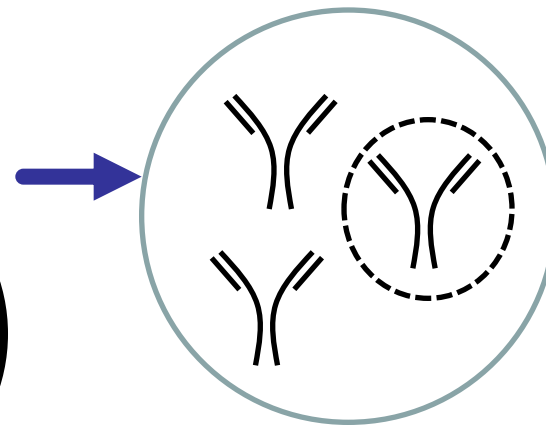
MICHAL
NOVAK





Neurofibrillary
tangles

Antibodies



Tau
protein

1988



2016

nature
REVIEWS

NEUROLOGY

Tau and neurodegeneration: the story so far

Khalid Iqbal, Fei Liu and Cheng-Xin Gong

Acknowledgements

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WE TAKE PART IN THE HISTORY OF TAU RESEARCH

are now available, and tau radiotracers for PET are under development. In this article, we provide an overview of the pivotal discoveries in the tau research field over the past 40 years. We also review the current status of the field, including disease mechanisms and therapeutic approaches.

29 Hasegawa M *et al*. Protein sequence and mass



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NIU Research Scientists
average age
46.8 years

Andre
Metab

Ton
Immu

P
Molec

N

Br

Proteomics

Monika Žilková
Cellular Models

Michal Novák
Head of the Institute

Neuro-Immunology

Rostislav Škrabana
Structural Biology

Robert Zilka
Microomics

Cente
tomics

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The Slovak top scientists returned back



In vivo imaging/electrophysiology
NATURE, NEURON, J NEUROSCIENCE...



Ribosome display
NATURE BIOTECH, PNAS...



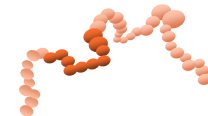
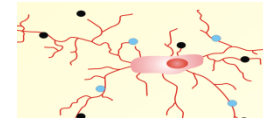
Integrative computational biology
NATURE, NATURE METHODS, NATURE
MEDICINE, SCIENCE...



Doctoral studies at the Institute

three full accreditations for doctoral studies from
the Ministry of Education of the Slovak Republic:

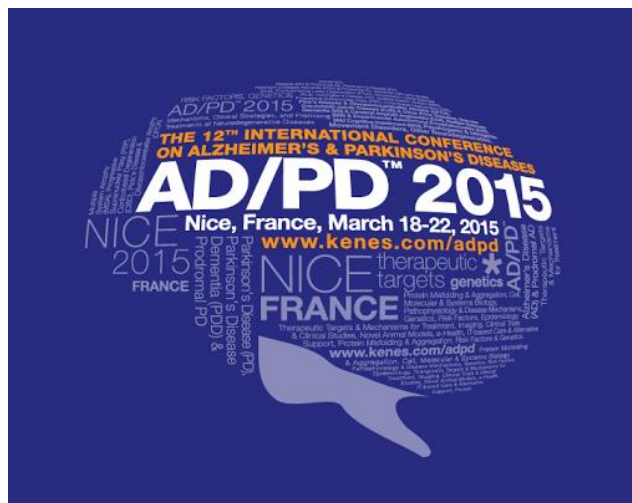
- neurosciences
- immunology
- molecular biology





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Alzheimer's Association
International Conference®

Washington, D.C., United States | July 18-23, 2015

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Upper Quartile

66% papers in the top **25%**
scientific journals

20% papers in the top **10%**
scientific journals



THE LANCET

Neurology

Safety and immunogenicity of a tau vaccine, AADvac1, for Alzheimer's disease: a randomised, double-blind, placebo-controlled, phase 1 trial

Petr Novak, Reinhold Schmidt, Eva Kontsekova, Norbert Zilka, Branislav Kovacech, Rostislav Skrabana, Zuzana Vince-Kazmerova, Stanislav Katina, Lubica Fialova, Michal Prcina, Vojtech Parrak, Peter Dal-Bianco, Martin Brunner, Wolfgang Staffen, Michael Rainer, Matej Ondrus, Stefan Ropele, Miroslav Smisek, Roman Sivak, Bengt Winblad, Michal Novak




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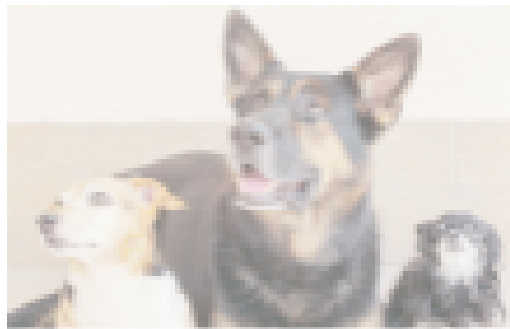
NEWS



9 OCTOBER 2015 | LATEST NEWS

Is your dog demented? New test may tell

Study examines cognitive decline in elderly dogs



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SCIENCE EXPRESS



09 OCT 2015, VOL. 350, #6257



National networking

...approved by the Presidium of SAS in 2011

“CENTRE of EXCELLENCE
for BRAIN RESEARCH”

BRAIN CENTRUM



National networking

BRAIN CENTRE

The centre was specifically aimed at:

- neurodegenerative diseases
- neurodevelopmental disorders of the human brain
- traumatic spinal cord lesions
- regenerative medicine



International networking

PROGRAM	PROJECTS
JOINT PROGRAMMING – NEURODEGENERATIVE DISEASE RESEARCH (JPND)	BIOMARKAPD
FP7-HEALTH	JUMPAHEAD
EUROPEAN COMMISSION - PUBLIC HEALTH PROGRAMME	ALCOVE
COST – NGP-NET	"Non-globular proteins - from sequence to function
MARIE SKLODOWSKA CURRIE – INNOVATIVE TRAINING NETWORKS	SYDAD



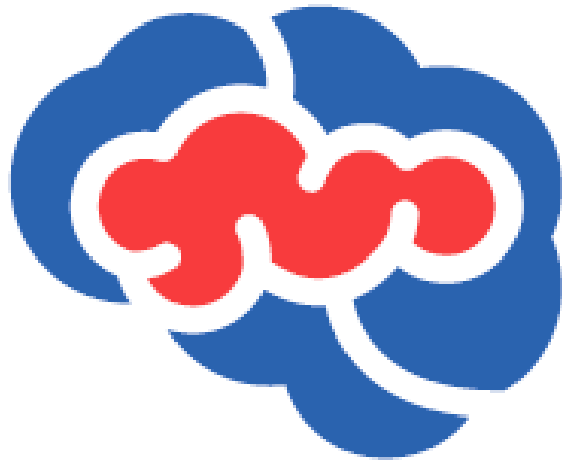
Conferences

National and International





2016 - 2020



**Slovak National
Program to Combat
Alzheimer's Disease**



Research
Diagnostics
Prevention
Human rights
Services and care
Education
Destigmatization



International networking continues

4 projects
HORIZON2020

PRO

TS

JOINT

NEUR

RESE

ERA-M



Popularisation

Dissemination, Education, AD destigmatization





Our contribution to the Alzheimer's disease research

WHO Prize

for Research in Health Care for the Elderly and
in Health Promotion

Prof. Michal Novak



