

WE RECEIVED 700 MILLION FOR RESEARCH AGING AND AGE-RELATED DISEASES



PHOTO: The project team, from the left: Lukáš Palko; Pavla Seilerová; Gorazd B. Stokin, MD, PhD, FAAN; Michal Janota; Dr. Alena Kružiková; Filip Uhrák

Our project entitled **A Molecular, Cell and Clinical Approach to Healthy Aging** (abbreviated ENOCH) was approved for a grant from the EU Structural Funds, specifically from the Operational Program Research, Development

and Education, administered by the Ministry of Education, Youth and Sports of the Czech Republic. The main research objective of the project is to formulate a joint research program that is focused on research into aging and age-related diseases, namely cancer, chronic inflammation and degenerative diseases.

The project will be implemented between 2018 and 2023 and will involve approximately 220 researchers from FNUSA-ICRC, which is the main beneficiary of the project. The project partners are the **Institute of Molecular and Translation Medicine at Palackého University in Olomouc (IMTM)**, the **Regional Center of Applied Molecular Oncology of the Masaryk Oncological Institute (RECAMO)**, the De-

partment of Neurology at the Faculty of Medicine, Olomouc University Hospital, and the **Blood Cancer Research Group at Ostrava University (BCRG)**. Researchers will be divided into four main research programs according to their specialization.

Thanks to the project, a unique platform for top scientists in Moravia will be created, within which researchers will communicate and link their knowledge and experience on aging issues and associated disorders. The head of the project will be FNUSA-ICRC Chair Gorazd B. Stokin, who has long been focusing on research into the causes of Alzheimer's, one of the major problems of the older generation.

PRESTIGIOUS RECOGNITION OF OUR RESEARCHERS: FNUSA-ICRC TEAM IS A CO-AUTHOR OF THE BEST CZECH CARDIOLOGY RESEARCH ARTICLE IN 2017



PHOTO: Dr. Ota Hlinomaz with Prof. Zuzana Mořovská, Ph.D. (Královské Vinohrady University Hospital in Prague)

Two awards for the best cardiology publications published in the previous year - **The Best of Czech Cardiology** - were awarded at the annual meeting of Czech Society of Cardiology in Brno to Dr. Ota Hlinomaz, the leader of **Acute Coronary Syndromes Research Team of FNUSA-ICRC**.

He was awarded the first prize as the 1st co-author of PRAGUE-18 study publication, whose leader is prof. Zuzana Motovska PhD. from the **Královské Vinohrady University Hospital** in Prague. This study compares new medications preventing blood coagulation in patients with acute

myocardial infarction, who had surgically fixed constricted areas or completely closed coronary arteries supplying the heart muscle. Dr. Hlinomaz also placed third for co-authorship of a publication regarding research in which experts compared two methods of restenosis in stent treatment.

Both publications co-authored by Dr. Ota Hlinomaz were published in renowned international scientific magazines. The winning study PRAGUE-18 in **Journal of the American College of Cardiology (JAAC)** and the study which placed third got published in **Circulation: Cardiovascular Interventions**.

ARTICLE CO-AUTHORED BY DR. MIKULÍK WAS PUBLISHED IN THE NEW ENGLAND JOURNAL OF MEDICINE

Dr. Robert Mikulík, Ph.D., Head of Cerebrovascular Research Team of FNUSA-ICRC and Head of the Complex Cerebrovascular Center at St. Anne's University Hospital, participated in a major worldwide study on the pharmacological treatment of recurrent stroke.

The study included 7 213 patients aged 50 years and older who have recently had an ischemic stroke caused by cerebral arterial embolism. Experts compared the efficacy and safety of two drugs – rivaroxaban, which had not been used to prevent this type of stroke, and aspirin, which is a well-established drug used to prevent stroke. The research has shown that rivaroxaban reduces the risk of stroke recurrence after embolic stroke to the

same extent as aspirin, but is not more effective than aspirin as expected. Robert Mikulík participated in this study not only as a co-author but also as a member of the Steering Committee that developed the procedure for the study and managed its proper progress. The study was published at the end of May in one of the world's most prestigious scientific journals – **The New England Journal of Medicine** and, at the same time, the study was presented at the European Stroke Organisation Conference in Gothenburg, Sweden.

In the history of FNUSA-ICRC, this is a publication with the highest impact factor to date – IF 72.406. The scientific articles that had been previously published by FNUSA-ICRC authors with the highest

impact factors: **Chemical Reviews** (IF 45.661), **JAMA** (IF 30.026) and **Cell** (IF 28.710) journals.



FOTO: Dr. Robert Mikulík, Ph.D.

EXCELLENT RESEARCH RESULTS - DR. LUMÍR KREJČÍ WAS AWARDED A PRIZE OF THE RECTOR OF THE MASARYK UNIVERSITY



The award of the Rector of Masaryk University for long-term excellent research results was awarded at the Dies Academicus Molecular Biologist at the ceremo-

ny in mid-May, to Dr. Lumír Krejčí, Ph.D., Principal Investigator of our research team Genome Integrity, which also operates at the Faculty of Medicine and the Faculty of Science of Masaryk University. Dr. Krejčí have long been researching the regulatory processes involved

in maintaining the integrity of the cell's genetic information, repairing damaged genetic information, and impacting these processes on the development and prevention of tumor development.

THE FIRST ITALIAN SCIENTIFIC CONFERENCE IN THE CZECH REPUBLIC PROMOTED THE WORK OF ITALIAN SCIENTISTS

Aiming to promote Italian researchers and the quality of their scientific work, the First Italian Conference in the Czech Republic was organized by the Embassy of the Italian Republic in collaboration with the Italian Cultural Institute in Prague and the Center for Translational Medicine at FNUSA-ICRC on the occasion of the National Science and Research Day, which is celebrated in Italy in mid-April every year.

The unique conference was held on 17 April at the Center for Translational Medicine, FNUSA-ICRC. The opening presentation of the conference featured speeches by the Italian Ambassador, HE Aldo Amati, Director of St. Anne's University Hospital, MUDr. Martin Pavlík, DESA, EDIC, Dean of the Faculty of Informatics and former Rector of Masaryk University, Prof. Jiří Zlatuška, and FNUSA-ICRC Chair Dr. Gorazd Stokin, PhD, FAAN. In addition, the Italian employees from FNUSA-ICRC, from the Faculty of Arts and the Faculty of Informatics of Masaryk University presented their activities and achievements in the Czech Republic.

There are 16 Italian researchers at FNUSA-ICRC, 3 of whom are Principal Investigators of research teams and 1 is the FNUSA-ICRC Vice Chair for Research. These Italian researchers came to FNUSA-ICRC from prestigious foreign institutions such as University College London, Europe's fourth best university, or the Japanese National Institute for Materials Science.



PHOTO 1: Conference opening, from the left: René Samek, MSc., MA; J. E. Aldo Amati, Prof. Dr. Jiří Zlatuška, Dr. Martin Pavlík Ph.D. | PHOTO 2: Giancarlo Forte, PhD., J. E. Aldo Amati

BIostatistic TEAM WILL COOPERATE WITH THE MEDICAL CENTER IN SEATTLE

Silvie Bělašková, PhD., leader of Biostatistics Research Team FNUSA-ICRC, participated at a conference focused on neurology, 70th Annual AAN Meeting in Los Angeles (USA). There Silvie managed to enter into partnership with the manager of UW Medicine

Headache Center in Seattle - Natalia Murinova MD, MHA. Medical center in Seattle has a wide database of patients treated for migraines, headaches and chronic headaches. The latter is just what will be analyzed within the scope of new cooperation at the department of

biostatistics. Natalia Murinova also accepted an invitation to the International Clinical Research Center, where she will present the latest results of her work and news from neurological research.

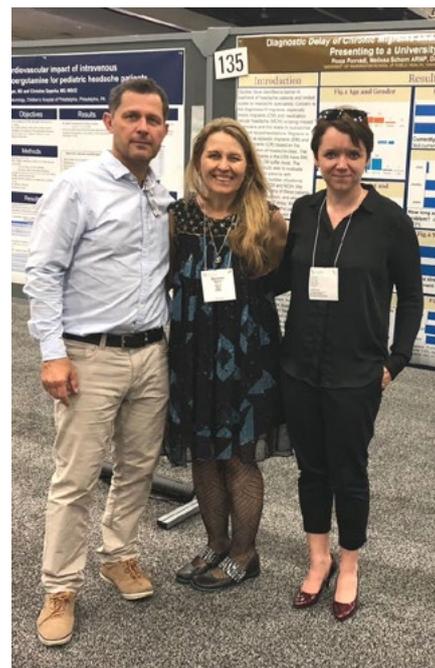


PHOTO: Silvie Bělašková, PhD. and Natalia Murinova M.D., M.H.A

FNUSA-ICRC ANIMAL CENTER WORKSHOP IN OLOMOUC

FNUSA-ICRC Animal Center hosted practical workshops on the TSE systems: IntelliCage, PhenoMaster & MotoRater in May. Participants had a chance

to learn more about rodent phenotyping practices, to share each other's experiences, and to establish collaborations. The workshops were a part of the activities

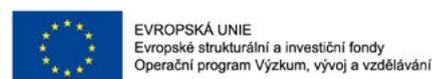
within the RIAT-CZ project (ATCZ40) supported by INTERREG PROGRAMME (Austria - Czech Republic cooperation).



PHOTO: Participants of FNUSA-ICRC Animal Center Workshop in Olomouc



PHOTOS: Attractive Region Work Group Seminar & Workshop



WORK GROUP MEETING ATTRACTIVE REGION RIS-JMK

FNUSA-ICRC hosted a meeting of representatives from the region, cities, universities and research institutes, innovative companies, and other organizations involved in supporting research, development and innovation in the South Moravian Region.

This was a meeting of **Attractive Region Work Group**, one of the five **Regional Innovation Strategy Groups of the South Moravian Region**, initiative to support the competitiveness of the region. The session started with a block of presentations and discussions about marketing of the region.

At the end of the event, participants were invited to visit 4 of FNUSA-ICRC laboratories - sleep laboratory, clinical and pharmacological unit, center of biomedical engineering, and preventive program of Kardiovizie Brno 2030.



VICE PRESIDENT OF THE WORLD STROKE ORGANISATION VISITED BRNO AND ACKNOWLEDGED THE ACTIVITIES OF THE CEREBROVASCULAR TEAM



PHOTO: Prof. Bornstein with Hana Pokorná and Lucie Vondráčková (Project HOBIT)

In the middle of May, Prof. Natan Bornstein, Vice President of the World Stroke Organisation, arrived in Brno for a three-day visit to personally visit Brno-based research institutions and to share his rich experience of stroke treatment with colleagues from FNUSA's First Neurology Clinic.

Prof. Bornstein visited the Institute of Biophysics of the Czech Academy of Sciences and the Department of Animal Experiments for Stroke Research at the University of Vet-

erinary and Pharmaceutical Sciences Brno, where researchers presented the activities and results of projects in the field of stroke.

Prof. Bornstein spent a major part of his visit discussing projects in which he personally participates with members of the Cerebrovascular Research Team. Prof. Bornstein has been involved in the development of the international **REGistry of Stroke Care Quality (RES-Q)**, is now being used in 45 countries worldwide, and has also been working

with us to improve stroke care in countries of Eastern Europe and Central Asia within the **ESO-EAST** project. ESO-EAST is implemented under the auspices of the European Stroke Organisation (ESO). During his visit, Prof. Bornstein acknowledged the quality and the results of research into the diagnosis and treatment of cerebral infarctions that is being implemented at Brno-based institutions in collaboration with the FNUSA-ICRC Cerebrovascular Team.

WORLD GURU OF STROKE BIOMARKER RESEARCH COLLABORATES WITH OUR CEREBROVASCULAR TEAM

In April, renowned expert Prof. Joan Montaner who works at research institutes in Barcelona and Sevilla visited his colleagues from the FNUSA-ICRC Cerebrovascular Research. Prof. Montaner is involved in joint research by the FNUSA-ICRC Cerebrovascular Team and the company BioVendor, which focuses on testing stroke biomarkers and subsequently developing devices to detect these biomarkers.

The meeting, which aimed to define the direction of further research, was attended by over 20 professionals from BioVendor

and the FNUSA-ICRC Cerebrovascular Team. During the meeting, Prof. Montaner toured BioVendor's laboratories in Brno and learned about the methods used there. In addition, he also gave his Czech colleagues a presentation on latest developments in biomarker research and the possibilities for the use of biomarkers in the diagnosis and treatment of stroke. Research in the field of stroke biomarker testing is implemented within the BioStroke project that is funded by the South Moravian Region and BioVendor.

FNUSA-ICRC PARTNERS WITH SCIENCE PARTY BRNO: 100 YEARS OF CZECH SCIENCE AND ITS FUTURE

This year's 11 May was dedicated to celebrate the 100th anniversary of Czech science. On this occasion, the Science Party Brno: Celebrate 100 Years of Czech Science and its Future took place - an event organised by CEITEC and the Science Party Brno community.

This rather unconventional celebration of science was held in the Open Garden premises in Údolní street. Attendees had a unique opportunity to meet

scientists, science promoters, and research enthusiasts. The aim of the event was to draw the public's attention to the importance of science for modern society.

The professional program was also attended by representatives of the International Clinical Research Center and its **Kardiovizie Brno 2030** Research Team. This is a unique prevention project aimed at identifying current health risks to the residents of Brno and minimizing



them by 2030 through preventive programs. At the FNUSA-ICRC booth, those interested could have their blood pressure measured, breath carbon monoxide tested, or vascular age estimated.