

## CURRICULUM VITAE

### Laszlo Nagy, M.D., Ph.D.

#### PERSONAL INFORMATION:

Sex: Male  
Date of Birth: October 11, 1966  
Place of Birth: Debrecen, Hungary  
Marital status: Married-Andrea E. Károly, M.D.; 2 sons (Bence  
László Nagy & Máté Zsombor Nagy)  
Citizenship: Hungarian



#### ADDRESS AND TELEPHONE NUMBERS:

##### Primary appointment:

Department of Medicine, Johns Hopkins  
University, Johns Hopkins All Children's  
Hospital, Saint Petersburg, FL 33701  
600 Fifth Street South  
St. Petersburg, FL 33701  
(727) 767-8928  
(727) 767-8804 (FAX)  
E-mail: [lnagy@jhmi.edu](mailto:lnagy@jhmi.edu)

Johns Hopkins All Children's Hospital website: <https://www.hopkinsallchildrens.org/>

##### Secondary Appointment:

Department of Biochemistry and Molecular Biology  
Faculty of Medicine  
University of Debrecen  
Nagyerdei krt. 98.  
Debrecen, Hungary  
e-mail: [nagyl@med.unideb.hu](mailto:nagyl@med.unideb.hu)  
University of Debrecen website: <http://nlab.med.unideb.hu/index.html>  
phone: +36-52-416-342

#### EDUCATION AND TRAINING:

1991 M.D., University Medical School of Debrecen, Hungary  
1991-1992 Research Fellow of the Hungarian Academy of Sciences, Department of  
Biochemistry, University Medical School, Debrecen, Hungary  
1992-1995 Postdoctoral Fellow, Department of Pharmacology, University of Texas, Houston,  
Medical School(Advisor: Peter J.A. Davies, M.D., Ph.D.)  
1995 Ph.D., (Cell and Molecular Biology) University Medical School of Debrecen,  
Hungary (Advisors: Laszlo Fesüs, M.D., Ph.D. and Peter J.A. Davies, M.D., Ph.D.)  
1995-1999 Research Fellow in Biochemistry and Molecular Biology, Department of  
Biochemistry and Molecular Biology, University medical School of Debrecen,  
Hungary  
1996-1999 Postdoctoral Associate, Gene Expression Laboratory, The Salk Institute for  
Biological Studies, La Jolla, CA (Advisor: Ronald M. Evans, Ph.D.)  
1997-1998 Postdoctoral Fellow of the Howard Hughes Medical Institute

2005 Doctor of Science (D.Sc.) Hungarian Academy of Sciences  
 2006 Dr. habil. (Habilitation) University of Debrecen, Basic Medical Sciences

#### **ACADEMIC POSITIONS/EMPLOYMENT:**

1999-2000 Assistant Professor of Biochemistry and Molecular Biology, Department of Biochemistry and Molecular Biology, University of Debrecen, Hungary  
 1999-2010 Adjunct Professor of Pharmacology and Physiology Department of Integrative Biology Pharmacology and Physiology University of Texas-Houston, Medical School, Houston Texas  
 2000-2006 Associate Professor of Biochemistry and Molecular Biology, Department of Biochemistry and Molecular Biology, University of Debrecen, Hungary  
 2000-2016 Founding Head of Center for Clinical Genomics and Personalized Medicine, University of Debrecen, Hungary  
 2006- Professor of Biochemistry and Molecular Biology, Department of Biochemistry and Molecular Biology, University of Debrecen, Hungary  
 2013-2018 Director & Professor, Genomic Control of Metabolism Program, Sanford Burnham Prebys Medical Discovery Institute-Lake Nona, FL  
 July-Nov 2018 Adjunct Professor, Sanford Burnham Prebys Medical Discovery Institute - Lake Nona, Orlando, FL  
 2018-Present Professor of Medicine and Biological Chemistry (PAR), Associate Director, Center for Metabolic Origins of Disease  
 Department of Medicine, Division of Endocrinology, Diabetes and Metabolism and Department of Biological Chemistry  
 Johns Hopkins University, School of Medicine,  
 Co-Director, Institute for Fundamental Biomedical Research, Johns Hopkins All Children's Hospital, St. Petersburg, FL.

#### **RESEARCH INTEREST:**

I am interested in dissecting the transcriptional and epigenomic basis of cell type specification and nuclear receptor mediated signaling in cells, particularly in macrophages, associated with metabolic diseases, chronic inflammation, cancer progression and tissue repair using system level, genomic, epigenomic, cell and molecular biology approaches.

#### **HONORS AND AWARDS:**

1989 Pro Scientia Gold Medal for Outstanding Scientific Achievements presented by the President of the Hungarian Academy of Sciences  
 1989 Outstanding Tutor in Biology University Medical School of Debrecen  
 1991 Wessprémi-Prize for Outstanding Academic and Scientific Activity presented by the Rector of the University Medical School of Debrecen  
 1998-1999 Special Fellow of the Leukemia Society of America  
 1998 Cheryl Whitlock/Pathology Prize, Stanford University  
 1999 Boehringer Ingelheim Research Award  
 1999-2002 Széchenyi Professorship  
 1999 Ranked as #5 scientist in 1999 based on the number of highly cited, "Hot papers" published in 1997-1998 (Institute for Scientific Information Hot papers Database)  
 2000-2010 Howard Hughes Medical Institute International Research Scholar  
 2000-2004 European Molecular Biology Organization (EMBO) Young Investigator  
 2003-2006 Szechenyi Istvan Professorship  
 2005-2010 Wellcome Trust International Senior Research Fellow

- 2007 EMBO Member
- 2007 Corresponding Member of the Hungarian Academy of Sciences (HAS)
- 2008 European Society for Clinical Investigation (ESCI) Award for Excellence in Biomedical Investigation
- 2010-2011 Fulbright Scholar
- 2012 Academia Europaea, Member (Membership number: 3221)
- 2012 Scientist of the Year 2012 (City of Debrecen, Dehir)
- 2013 Regular Member of the Hungarian Academy of Sciences (HAS)
- 2014 Béla Tankó Award, Hungarian Biochemical Society
- 2014 Elected member, Henry Kunkel Society

#### **MEMBERSHIPS IN PROFESSIONAL SOCIETIES:**

- 1989- Member, Hungarian Biochemical Society
- 1995- Member, Society of Pro Scientia Gold Medal Laureates
- 2002- Member, Endocrine Society (US)
- 2002- Member, European Macrophage and Dendritic Cell Society
- 2003- American Society of Biochemistry and Molecular Biology
- 2006- Founding member, Hungarian Society for Bioinformatics, Executive committee Member (2006-2010)
- 2011- Member, American Association of Immunologists
- 2012- Member, American Physiological Society
- 2015- Member, American Heart Association
- 2015- Member, American Diabetes Association

#### **ADVISORY FUNCTIONS:**

- 2004-2006 Scientific Advisor, BioSystems International SAS
- 2004-2010 Member, Scientific Advisory Board, Cell therapy Unit, University of Debrecen
- 2006- Member, Gerson Lerhman Group Councils
- 2007- Chief Scientific Officer, UDGenoMed, Ltd.
- 2008-2014 Member, Scientific Advisory Board, Gedeon Richter Pharmaceuticals, Inc.
- 2008 Member of the International Advisory Board of the 10<sup>th</sup> Symposium on Dendritic cells (Kobe, Japan)
- 2010- Advisory Committee member, International Society of Dendritic Cell and Vaccine Research
- 2010-2012 Scientific Advisory Board member, Institute of Genetics, HAS BRC, Szeged, Hungary
- 2012-2015 Member, FEBS Advance Course Committee
- 2016- Member, EMBO Council
- 2019- Member, ERC, LS6 Immunology Advanced Grant Panel
- 2019-2022 Chair, International Scientific Advisory Group, Biological Research Center of the Hungarian Academy of Sciences at Szeged, Hungary
- 2019- International Mentor, University of Szeged, Hungary

#### **ACADEMIC FUNCTIONS:**

- Doctoral Committee, Member (University of Debrecen) 2004-2007
- Doctoral Committee, Chair (University of Debrecen) 2007-2010
- University Senate, Member (University of Debrecen) 2012-2013
- Member of the Lake Nona site Executive Committee (Sanford Burnham Prebys Medical Discovery Institute) 2013-2017

#### **EDITORIAL AND PEER REVIEW RESPONSIBILITIES:**

- 2005- Editor, FEBS Letters
- 2007- Advisory Editor, PPAR Research
- 2009- Member of the Editorial Board, European Journal of Clinical Investigation
- 2010-2017 Member of the Advisory Editorial Board, EMBO Reports
- 2010- Member of the Advisory Editorial Board, Cell Death and Disease
- 2010-2012 Advisory Editorial Board Member, Encyclopedia of Life Sciences, Biochemistry,
- 2011- Founding Editor, FEBS OpenBio
- 2012- Member of the Editorial Board, Molecular and Cellular Biology
- 2012- Member of the Editorial Board, Clinical and Translational Medicine, Section of Clinical Genomics
- 2011- Member of FEBS Letters Award Committee
- 2013- Chair of FEBS Letters Award Committee
- 2018- Associate Editor, Journal of Clinical Investigation

**GUEST EDITOR:**

- 2005 Molecular Nutrition and Food Research 49(11) (with Gerhard Spiteller)
- 2008 FEBS Letters Special Issue on Metabolic Disease 582(1) (with Peter Tontonoz)
- 2013 Immunobiology Special Issue on EMDS 2012 (with Eva Rajnavolgyi)
- 2013 Seminars in Cell and Developmental Biology Nuclear Receptors in Embryonic Stem Cells
- 2017 FEBS Letters Special Issue on Immunity and Metabolism 591(19) (with Wilfried Ellmaier)

**AD HOC JOURNAL REVIEWER:**

Arthritis and Rheumatism, Atherosclerosis, Thrombosis and Vascular Biology, Biochemical Pharmacology, Biophysical Journal, BBA, Biomolecular Concepts, Blood, BMC Medical Genomics, BMC Genomics, British Journal of Clinical Pharmacology, Cancer Immunology, Immunotherapy Cancer Research, Chemistry and Biology, Circulation, Cell Death and Differentiation, Cell Death and Disease, Cellular Reprogramming, Clinical Nutrition, Cytokine, Diabetes, Diabetologia, Drug Discovery Today, EMBO Journal, EMBO Molecular Medicine, EMBO Reports, European Journal of Immunology, Genes and Development, Immunity, International Journal of Biochemistry and Molecular Biology, International Journal of Cancer, International Immunology, Journal of the American Chemical Society, Journal of Biological Chemistry, Journal of Cell Biology, Journal of Clinical Investigations, Journal of Immunology, Journal of Leukocyte Biology, Leukemia, Molecular Aspects of Medicine, Molecular Carcinogenesis, Molecular and Cellular Biology, Molecular and Cellular Endocrinology, Molecular Endocrinology, Molecular Nutrition and Food Research, Molecular Pharmacology, Nature, Nature Immunology, Nature Medicine, Oncogene, Physiology, Proceedings of the National Academy of Sciences of the USA, Progress in Lipid Research, Prostaglandins and Other Lipid Mediators, PLoS ONE, PLoS Genetics, Science, Science Signaling, Stem Cells, Swiss Medical Weekly, WIREs Systems Biology and Medicine

**Verified refereeing activity from 2003 on PUBLONS.com Total: 365+ reviews**

<https://publons.com/author/1174144/laszlo-nagy#profile>

<https://publons.com/author/1174144/laszlo-nagy#stats>

**CONFERENCE AND ADVANCED COURSE ORGANIZATION:**

- 2004 Symposium Organizer, World Congress on Basic and Clinical Immunogenomics, Budapest
- 2003, 2005, 2007 Member, Organizing Committee, 3X EMBO Meeting Series on Nuclear Receptors

2005	Main Organizer, Atherosclerosis and Lipid Peroxidation, Debrecen-Hortobagy
2005	Symposium Organizer, 30 <sup>th</sup> FEBS-IUBMB Congress Budapest
2006	Main Organizer and Course Director, HHMI-UD Advanced Course on Modern Methods of Gene Expression Detection and Data Integration, Debrecen
2008	Member of the International Advisory Board, 10 <sup>th</sup> Symposium on Dendritic Cells, Kobe, Japan
2009	Main Organizer, EMBO Meeting Series on Nuclear Receptor, Dubrovnik, Croatia
2010	Symposium Organizer and Session Chair, 14 <sup>th</sup> ICI International Congress of Immunology, Kobe, Japan
2011	Main Organizer and Course Director, FEBS-UD Advanced Course on Gene Expression Regulation and Data Integration, Debrecen
2016	Main Organizer, Faculty Retreat, Sanford Burnham Prebys Medical Discovery Institute, Carlsbad, CA
2019	Main Organizer, EMBO Workshop on Research Integrity, University of Debrecen

**AD HOC REVIEWER FOR RESEARCH FUNDING ORGANIZATIONS:**

AICR, Boehringer Ingelheim Funds (Germany); Commission of the European Union (evaluator, reviewer, rapporteur), ERC reviewer; The Wellcome Trust (UK); FWO Belgium; European Molecular Biology Organization (EMBO); European Research Council (ERC), Netherlands Organization for Scientific Research (NWO); Hungarian Scientific Research Fund (OTKA); National Science Foundation (USA); Medical Research Council (UK); Association for International Cancer Research (UK); Semmelweis University, Hungary; Spanish Ministry of Health (Spain); Hungarian Academy of Sciences (Bolyai Fellowship Committee); Luxembourg National Research Fund (Luxembourg); Austrian Science Fund (FWF); University of Kentucky, COBRE CMED Pilot Projects, Swiss Federal Institute of Technology Zurich (ETH) (Switzerland); Science Foundation of Ireland; National Institutes of Health (intramural research) (USA); National Scientific Research Council (Romania)

**NATIONAL INSTITUTE OF HEALTH (NIH):**

2015: Integrative Nutrition and Metabolic Processes (INMP) Study Section, Temporary Member  
 2018: Molecular and Cellular Endocrinology (MCE) Study Section, Temporary Member  
 2019: Integrative Nutrition and Metabolic Processes (INMP) Study Section, Temporary Member

**RESEARCH SUPPORT (direct cost):**

**Total amount (2000-): \$ 12,500,500 (direct cost)**

**Active:**

2016-2020	METAKARD -New mechanisms in metabolic and cardiovascular disease National Research, Development and Innovation Office - GINOP-2.3.2-15-2015-00006 \$400,000 PI: Laszlo Fesus Role: Co-PI (5%)
2016-2019	Dissecting and aligning the regulatory and effector mechanisms shaping murine M2 macrophages Hungarian Scientific Research Fund (OTKA) (K116855)

- \$152,000  
Role: PI (5%)
- 2017-2019 Dissecting the transcriptional network allowing macrophages to control angiogenesis  
Hungarian Scientific Research Fund (OTKA) (KH126885)  
\$70,700  
Role: PI
- 2017-2019 Dissecting the transcription factor network of macrophage polarization and its implications to angiogenesis  
American Heart Association - 17POST33660450  
\$52,216/yr  
PI: Bence Daniel  
Role: Mentor
- 2017-2020 Highly integrated genome level examination of transcription factor cascades during alternative macrophage polarization using next-generation sequencing methods  
Hungarian Scientific Research Fund (OTKA) (PD124843)  
\$54,000  
PI: Gergely Nagy  
Role: Co-PI
- 2017-2021 The role of the transcription factor BACH1 in macrophage function and tissue homeostasis  
Hungarian Scientific Research Fund (OTKA) (K124298)  
\$170,000  
Role: PI
- 2017-2022 RXR Reginoids for Cancer Chemoprevention  
NIH- P01 CA210946  
\$12,402/yr  
PI: Kedishvili, N  
Role: Co-I (5%)
- 2018-2022 PPARgamma as an Architectural Regulator of Gene Expression in Endocrine Signaling  
NIH- R01 DK115924  
\$250,000/yr  
Role: PI (25%)
- 2019-2023 Impact of Heme Homeostasis on Adipocyte Function  
NIH-R01 DK121196-02  
2018-2022  
\$52,801/yr  
PI: Saez, E  
Role: Subcontract PI (25%)

**Pending:**

- 2020-2024 A Computational Study of Enhancer Target Genes in Mammalian Genomes  
NIH-R01  
\$147,375/yr  
PI: Li, X  
Role: Subcontract PI (10%)
- 2020-2025 DHA-derived Resolving Production and Signaling in Tissue Repair Macrophages in Metabolic Disease  
NIH-R01  
\$210,847/yr  
PI: Nagy L and Spite, M  
Role: PI (20%)
- 2020-2025 Elucidation of gene regulation in macrophages: the Heme- BACH1-HMOX1 paradigm  
NIH/NCI  
\$250,000  
Role: PI (20%)
- 2020-2025 Impact of Heme Homeostasis on Adipocyte Function  
NIH-R01  
\$5,000/yr  
PI: Walter, J  
Role: Subcontract PI (1%)

**Completed Research Support:**

- 1989 FEBS Youth Travel Fellowship FEBS International Summer School on the Molecular Genetics of Differentiation, West-Berlin  
\$1,200
- 1989 Research Studentship (3 months) Dept. of Pharmacology, Univ. of Texas HSC at Houston (Soros Foundation-University Medical School of Debrecen)  
\$1,500
- 1992 Medical Student Grant (Pro Cultura Foundation) Generation of tissue transglutaminase null mutant cell lines with homolog recombination  
\$1,800
- 1992 FASEB Travel Fellowship for the 1992 Summer Conference on Retinoids Saxtons River, Vermont  
\$500
- 1992 Postdoctoral Fellowship of the University of Texas-Houston, Medical School  
\$10,000
- 1997-1998 Postdoctoral Fellowship of the Howard Hughes Medical Institute  
\$34,000/year

- 1998-2000 Leukemia Society of America Special Fellow Award  
\$38,000/year
- 1999-2003 European network to study the regulation of key metabolic processes by nuclear receptors European Union Framework Program 5 “EU-NUC-REC-NET” Research Training Network  
\$216,700  
PI: John Schwabe  
Role: Co-PI (10%)  
The goal of the project was to train young researchers on the general area of nuclear receptor research.
- 1999-2003 Chromatin activation in retinoid-induced apoptosis  
Fogarty International Research Collaboration Award (FIRCA) 5 RO3 TW 01146-02  
\$96,000  
Role: PI (5%)  
The goal of this project was to determine the role of chromatin activation in retinoic acid receptor regulated apoptosis.
- 1999-2001 Molecular mechanisms of nuclear receptor action in health and disease Boehringer Ingelheim Research Award  
\$257,400  
Role: PI (50%)  
The goal of this project was to allow the PI to establish his own research laboratory at the University of Debrecen.
- 1999-2000 The role of the lipid activated transcription factor PPAR in the pathogenesis of atherosclerosis Egészségügyi Tudományos Tanács (ETT) (Hungarian Ministry of Health) T-07 254/99  
\$6,800  
Role: PI (1%)  
The role of the project was to carry out gene expression analyses on atherosclerosis linked macrophages and identify PPAR-regulated transcriptional events.
- 2000-2001 Hormonal regulation of nuclear receptor co-repressor interactions Royal Society (UK)  
\$15,000  
PI/Project leader: Schwabe, J  
Role: Co-PI (2%)  
The goal of this project is to promote exchange between the Schwabe and Nagy laboratories.
- 2001-2004 Role for PPAR $\gamma$  and LXR in the biological effects of modified LDL Hungarian Higher Education Research Fund (FKFP) 0208/2001  
\$31,500  
Role: PI (10%)  
The goal of this project was to compare the effects of oxidatively modified LDL



on PPAR and LXR regulated transcriptional events.

- 2001-2004 Nuclear receptor network regulating myeloid cell differentiation  
European Molecular Biology Organization (EMBO) Young Investigator Award #0246  
\$76,000  
Role: PI (5%)  
The goal of this project was to establish an independent laboratory.
- 2001-2004 Role of PPAR $\alpha$ : RXR heterodimers in myeloid cell differentiation and function  
Hungarian Scientific Research Fund (OTKA) T034434  
\$58,500  
Role: PI (10%)  
The goal of this project was to characterize the role of PPAR:RXR in ligand regulated transcriptional changes in myeloid cells in vitro.
- 2001-2005 Crosstalk between PPAR and LXR in the control of lipid metabolism  
RGY021/2001-M Young Investigator Award of The Human Frontier Science Program  
\$275,000  
PI: Peter Tontonoz  
Role: Co-I (10%)  
The goal of this project was to study the interrelationship between PPAR $\alpha$  and LXR signaling in macrophages in health and in vascular disease.
- 2001-2005 Role of PPAR $\gamma$  in normal monocyte-macrophage cell function and in diseases  
International Research Scholarship of the Howard Hughes Medical Institute #55000326  
\$425,000  
Role: PI (20%)  
The goal of this project was to identify the role and targets of PPAR $\gamma$  in monocyte-macrophage differentiation and function.
- 2002-2005 New molecular methods for the detection and monitoring of metabolic diseases: the role of nuclear Receptors  
Biotechnology 2002 (Hungarian Ministry of Education)  
\$200,000  
Role: PI (1%)  
The goal of this project was to develop molecular methods for the study and characterization of nuclear receptors in metabolic disease.
- 2003-2006 “Nutriceptors” Research Training Network European Union Framework Program 5  
\$150,000  
PI: Heinz Nau  
Role: Co-I (1%)  
The goal of this project was to train young researcher in research topics related to nutrient sensing nuclear receptors.

- 2005-2006 Practical Course on Advanced Methods on Gene Expression Analysis Howard Hughes Medical Institute  
\$150,000  
Role: PI (2%)  
The goal of this project was to organize a practical course on state of the art gene expression analysis.
- 2005-2010 Role of RXR heterodimers in macrophage differentiation and function Wellcome Trust International Senior Research Fellowship #074021  
\$247,200  
Role: PI (20%)  
The goal of this project was to identify and characterize the role of RXR heterodimeric receptors in macrophages in mice.
- 2005-2011 Role of a lipid activated transcription factor, PPAR $\gamma$  in the innate responses of macrophages during pathogen infection  
International Research Scholarship of the Howard Hughes Medical Institute #5500524  
\$500,000  
Role: PI (20%)  
The goal of this project was to characterize the role of macrophage PPAR in innate immune response.
- 2006-2011 PPAR $\gamma$  a lipid activated transcription factor at the crossroad of lipid metabolism and inflammation International Research Scholarship of the Howard Hughes Medical Institute # 55005621  
\$500,000  
Role: PI (20%)  
The goal of this project was to study the role of PPAR $\gamma$  in macrophages in health and in disease.
- 2008-2012 Decoding nuclear hormone receptor activity using chromatin immunoprecipitation in human primary immune cells  
Hungarian Scientific Research Fund (OTKA) (NK72730)  
\$394,600  
Role: PI (10%)  
The goal of this project was to carry out systematic genome-wide localization studies to determine the role and contribution of nuclear receptors to human primary immune cell (dendritic cells, macrophages) function.
- 2009-2011 Stem cell and gene therapy research center at the University of Debrecen, Medical and Health Science Center Program project involving 10 other research groups  
TAMOP-4.2.2/08/1 IKUT  
\$1,650,500  
Role: PI (10%)

- The goal of this project was to create and operate a research program for the study and usage of stem cells and stem cell research at the University of Debrecen in basic research and also in clinical settings.
- 2009-2012 Development of the Research Center for Molecular Medicine of the University of Debrecen, Medical and Health Science Center  
FP7-REGPOT-2008-1/229920 MOLMEDREX  
\$1,351,700  
Role: PI (5%)  
The goal of this project was to upgrade the infrastructure and methodology in the Genomic and Imaging Core laboratories and link UD to its twinning partner EMBL.
- 2012-2015 System level studies on the cellular networks providing immune defense in humans  
Program project involving 15 other research groups  
TAMOP/4.2.2A/11/1/KONV-2012-0023, Hungarian Government DEFENSE-NET  
\$3,860,000  
Role: PI (20%)  
The goal of this project was to create and operate a research program on the system level analysis of the immune system in basic research and also in clinical settings.
- 2012-2015 A novel mouse model for the study of PPAR $\gamma$  deficiency Hungarian Scientific Research Fund (OTKA) (K100196)  
\$177,500  
Role: PI (5%)  
The goal of this project was to develop and characterize a mouse model devoid of PPARgamma.
- 2013-2017 NR-NET: FP7-People-2013-ITN (MULTI-ITN)  
Control of metabolic and inflammatory pathways by nuclear receptors.  
\$518,200  
PI: Iannis Talianidis  
Role: Co-PI  
The goal of this project is to train young scientists in research topics involving metabolism, inflammation and nuclear receptors.
- 2012-2017 The goal of this project is to delineate the interrelationship between cytokine and nuclear receptor signaling during macrophage polarization in health and disease.  
MTA-DE “Lendület-Momentum” Immunogenomics Research Group  
\$958,400  
Role: PI (10%)  
The goal of this project is to delineate the interrelationship between cytokine and nuclear receptor signaling during macrophage polarization in health and disease.
- 2013-2017 Identification of novel biomarkers for the development and progression of atherosclerosis Visegrad-Taiwan Collaborative Grant

\$106,200

PI: Johannes Bluijssen Role: Co-I (1%)

The goal of this project is to identify biomarkers in vascular disease involving smooth muscle cells, dendritic cells and macrophages.

2013-2017 The role of PRMT8 in neuronal development

Hungarian Brain Research Program (NAP) KTIA\_13\_NAP-A-I/9.

\$89,400

Role: PI (2%)

The goal of this project is to identify the in vivo function of a protein-modifying PRMT8.

2015-2017 The role of macrophage PPARgamma in muscle regeneration

Hungarian Scientific Research Fund (OTKA) (K111941)

\$118,000

Role: PI (5%)

The goal of this project is to identify and characterize the role of PPARgamma during sterile inflammation in skeletal muscle.

**CORPORATE SPONSORED RESEARCH AGREEMENTS AND GRANTS (direct cost):**

**Total amount (2000-): \$5,286,300 (direct cost)**

2001-2002 Development of quantitative PCR assays Biorex Rt., Hungary

\$7,000

Role: PI (1%)

The goal of this project was to develop quantitative PCR assay for toxicology studies in the rat.

2001-2003 Identification of disease relevant target and biomarker candidates by comprehensive interrogation of the genome and proteome in COPD

Pfizer Global Research, Fresnes Laboratories, France

\$164,000

Role: PI (5%)

The goal of this project was to develop a biobank and collect clinical samples for biomarker discovery in COPD.

2003-2007 Discovery and validation of biomarkers and drug targets for COPD: a clinical genomics, proteomics and genetics collaboration with the University of Debrecen Pfizer Global Research, Sandwich, UK

\$385,000

The goal of this project was to develop a biobanking project for expression analysis of lung alveolar macrophages from COPD patients.

Role: PI (10%)

- 2004 Analysis of GBP-15 in PPAR regulated processes  
N-GENE Research and Development Ltd, Budapest, Hungary  
\$1500  
Role: PI (1%)  
The goal of this project was to assess PPAR $\alpha$  activation of a compound in transient transfection assays.
- 2005-2007 Comprehensive pilot and biomarker early validation studies for COPD GPCR target and biomarker discovery  
Biosystems International SAS, France  
\$205,000  
Role: PI (5%)  
The goal of this project was to expression profile lung alveolar macrophages from COPD patients to find biomarkers of disease stratification and progression.
- 2006-2007 Global gene expression analysis on rat liver  
Richter Gedeon Ltd, Hungary 0980699  
\$23,800  
Role: PI (5%)  
The goal of this project was to identify gene expression markers of altered cholesterol and fatty acid metabolism in rats on novel antipsychotic drugs.
- 2008-2012 Biobank based biomarker discovery in schizophrenia SCHIZO-08- NKFP  
\$4,500,000  
Role: PI (10%)  
The goal of this project was to identify biomarkers for the usage of novel antipsychotic drugs, with a particular emphasis on metabolic complications.
- 2014-2017 Development of biosimilar antibodies VKSZ\_12-1-2013-0001 (VKSZ K+F)  
\$62,000  
Role: PI (5%)  
The goal of this project is to provide genomic methods to the quality assurance of biosimilar antibody production.

### TEACHING AND EDUCATION:

**Medical Biochemistry** for Medical Students (Fall and Spring semester, weekly group discussions, Hungarian and English language class) (University of Debrecen 1995-2013)

**Gene expression regulation lectures** in Medical Biochemistry Course for Medical Students (Spring Semester 12 lectures, Hungarian and English language class) (University of Debrecen 1995-2016)

**Gene expression regulation seminars** in Biochemistry course for Medical Students (Spring Semester 15 seminars, Hungarian class) (University of Debrecen 2008-2013)

**Molecular Medicine Course** for Medical Students and Post-graduate Students (Fall semester, 20 lectures, Hungarian and English language class) (University of Debrecen 1999-2014)

**Molecular Biology** for Medical Students and Dentistry Students (Spring Semester 10 lectures, Hungarian and English language class) (University of Debrecen 2000-2006)

**Biochemistry** for Medical Students and Dentistry Students (Spring Semester 6 lectures, Hungarian and English language class) (University of Debrecen 2000-2004)

**Biochemistry** for Medical Students and Dentistry Students (Spring Semester 12 lectures, Hungarian and English language class) (University of Debrecen 2005-2006)

**Molecular mechanism of diseases concerning large populations** elective course, Course leader (Fall semester 12 lectures, Hungarian and English language class) (University of Debrecen 2007-2014)

**Biochemistry for Pharmacy students** for Pharmacology Students (Spring Semester 3 lectures, Hungarian language class) (University of Debrecen 2000-2004)

**Cell and Organ biochemistry** for Molecular Biology Students (Spring Semester 4 lectures, Hungarian language class) (University of Debrecen 2008-2011-2013)

#### **TRAINEES:**

##### **Graduate students trained** (Year of PhD obtained)

Szilvia Benkő	(2004)
Attila Szántó, M.D.	(2005)
Bálint L. Bálint, M.D.	(2006)
Lajos Széles	(2009)
Dániel Törőcsik, M.D.	(2010)
Szilárd Pólliska	(2011)
Bertalan Meskó, M.D.	(2012)
Peter Brázda	(2014)
Bence Daniel	(2014)
Zoltán Simándi	(2015)
Melinda Oros	(2016)
Anikó Dózsa, M.D.	(2016)
Andreas Patsalos	(2017)
Zsolt Czimmerer	(2018)
Nikolaos Giannakis	(expected 2019)
Adrienn Gyöngyösi	(2019)
Attila Horváth (50%)	(2019)

#### **POST-DOCTORAL FELLOW TRAINEES:**

##### **At University of Debrecen:**

István Szatmári, Ph.D.	(2001-2007)
Ralph Ruehl, Rer.nat.	(2003-2006)
Attila Szántó, M.D., Ph.D.	(2005-2009)
Britt Nakken, Ph.D.	(2005-2008)
Bálint L. Bálint, M.D., Ph.D.	(2006-2013)
Tamás Rószter, Ph.D.	(2005- 2009)
Endre Barta, Ph.D.	(2009-2014)

Zsuzsanna Nagy, Ph.D. (2010-2014)  
Tamás Varga, Ph.D. (2007-2017)  
Frank Batista, Ph.D. (2014-2017)  
Petros Tzerpos, Ph.D. (2015-)  
Gergely Nagy, Ph.D. (2017-)  
Zsolt Czimmerer, Ph.D. (2018-)

**At Sanford Burnham Prebys Medical Discovery Institute:**

Bence Daniel, Ph.D. (2014-2018)  
Zoltan Simandi, Ph.D. (2014-2018)  
Andreas Patsalos (2017-2018)

**At Johns Hopkins School of Medicine:**

Bence Daniel, Ph.D. (2018-2019)  
Andreas Patsalos, Ph.D. (2018-)  
László Halász, Ph.D. (2019-)

**Sabbatical visitors hosted at the University of Debrecen:**

Professor Gerhard Spiteller (University of Bayreuth)  
Sponsored by Humboldt Stipendium  
(2004-2005)

**Sabbatical visitors hosted at the Sanford Burnham Prebys Medical Discovery Institute:**

Dr. György Vámosi Senior Research Fellow/Associate Professor at University of Debrecen, Hungary  
Sponsored by Fulbright Scholarship and Rosztoczký Foundation (2014-15)

**Interns Trained at Sanford Burnham Prebys Medical Discovery Institute:**

**2015:**

Peter G. Nagy (Duke University)  
Patrick Beane (Rollins College)  
Brad Prast (University of Central Florida)  
Stephanie Barthel (University of Munich, Germany)  
Isabella DeLuca (University of Munich, Germany)

**2016:**

Vanesse Klee-Vincent (University of Central Florida)  
Priscila White (University of Central Florida)  
Heja Aga (University of Munich)  
Tatiana Sieler (University of Central Florida)  
Ines Telahr (University of Munich)

**2017:**

Matine Hajian (University of Munich)  
Isabella Restrepo (University of Central Florida)

**PUBLICATIONS:**

**Total citations: 19859 h-index: 54 i10-index: 113 (Google Scholar)**

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**Publications: (PUBMED MyBibliography)**

<http://www.ncbi.nlm.nih.gov/sites/myncbi/laszlo.nagy.1/bibliography/47333053/public/?sort=date&direction=ascending>

**Publications/Citations: (GOOGLE**

**Scholar)**<https://scholar.google.com/citations?user=z8h9V1wAAAAJ&hl=en&oi=ao>

**Publications/Citations: (Researcher ID)**

<http://www.researcherid.com/rid/A-3814-2008>

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# shared senior authorship

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32. Szekanecz, Z., Mesko, B., Poliska, S., Vancsa, A., Szamosi, S., Vegh, E., Simkovics, E., Laki, J., Kurko, J., Besenyei, T., Mikecz, K., Glant, T. and **Nagy, L.**: Pharmacogenetics and pharmacogenomics in rheumatology. *Immunological Research* 2013; 56(2-3): 325-333 *Invited Review* PMID:PMC4139282

33. Simandi, Z. , Cuaranta-Monroy, I. and **Nagy, L.**: Nuclear receptors as regulators of stem cell and cancer stem cell metabolism. *Seminars in Cell and Developmental Biology* 2013; 24:716-723. *Featured on cover*

34. Balint, B.L., **Nagy, L.**: A funkcionális genomikai eszköztár szerepe az onkológiai kutatásokban. *Magyar Onkológia* 2013; 57: p. 21. (in Hungarian)

35. Soos, B., Mesko, B., Poliska, S., Vancsa, A., Szamosi, S., Vegh, E., Simkovics, E., **Nagy, L.**, Szekanecz, Z.: A rheumatoid arthritis genetikája és genomikája: Farmakogenetika és farmakogenomika. *Immunológiai Szemle* 5:(1) pp. 19-27. (2013) (in Hungarian)

36. Cuaranta-Monroy, I and **Nagy, L.**: PPAR $\gamma$  needs a helping hand to make fat. *Cell Death and Differentiation - Editorial* 2013 20:1599-1600 PMID: PMC3824600.

37. **Nagy, L.**: Nuclear hormone receptors are powerful regulators of stem cell maintenance, differentiation, metabolism and function. *Seminars in Cell and Developmental Biology- Editorial* 2013 24(10-12) 669. doi 10.1016/j.semdb.2013.10.006.

38. **Nagy, L.**, Rajnavolgyi, E.: EMDS 2012: 26th meeting of the European Society for Macrophage and Dendritic Cell Biology in Debrecen, Hungary, September 1-3, 2012. *Immunobiology-Editorial* 2013

39. Soos, B., Kurko, J., Besenyei, T., Szabo, Z., Szanto, S., Mesko, B., Poliska, S., **Nagy, L.**, Laki, J., Glant, T., Mikecz, K.: A rheumatoid arthritis genetikája és genomikája: patogenetikai vonatkozások. *Magyar Reumatológia* 2013; 54:(1) pp. 7-17. (in Hungarian)

40. **Nagy, L.** A Magreceptor Kutatólaboratórium és a Debreceni Klinikai Genomikai és Személyre Szabott Orvoslási Központ a Debreceni Egyetem OEC, Biokémiai és Molekuláris Biológiai Intézetében. *Biokémia* 2013; 37: (3) pp.11-21 (in Hungarian)

#### 2014

41. Daniel, B, Nagy, G, and **Nagy, L.** The intriguing complexities of mammalian gene regulation: how to link enhancers to regulated genes. Are we there yet? *FEBS Letters* 2014; 588: 2379-2391.

#### 2015

42. Cuaranta-Monroy, I., Kiss, M., Simandi, Z., **Nagy, L.** Genomewide effects of peroxisome proliferator-activated receptor gamma in macrophages and dendritic cells-revealing complexity through systems biology. *European Journal of Clinical Investigation* 2015 Sept 45(9) 964-75.

43. **Nagy, L.:** A géntől a genomig és vissza. *Biokémia* 2015; 39: (1) 5-17. (In Hungarian)

#### 2016

44. Kiss, M and **Nagy, L** Nuclear Receptors in Immune Function. In: Ratcliffe, M.J.H. (Editor in Chief), *Encyclopedia of Immunobiology* 2016; Vol. 3, pp. 146–156. Oxford: Academic Press.

45. Pap, A., Cuaranta-Monroy, I., Peloquin, M. and **Nagy, L.** Is the Mouse a Good Model of Human PPAR $\gamma$ -Related Metabolic Diseases? *International Journal of Molecular Sciences* 2016 17, 1236; doi:10.3390/ijms17081236. *Invited Review*

#### 2017

46. Horvath, A, Simandi, Z. and **Nagy L.** Transcriptional complexes as Functional Agents: Getting in touch with the genome requires teamwork at multiple levels. *Journal of Applied Physiology* 2017, 123:1014-1015. doi:10.1152/jappphysiol.00558.2017. *Commentary*

47. **Nagy, L.** and Ellmeier, W. Immunity meets metabolism and then they start talking. *FEBS Letters* 2017, 591: (19); 2957-58. *Editorial, Special Issue on Immunity and Metabolism*

#### PATENTS:

1. Compounds useful for the modulation of processes mediated by nuclear hormone receptors, methods for the identification and use of such compounds  
ISSUED ON 5/14/2002 AS U.S. PATENT NO.6,387,673
2. Use of RAR antagonists as modulators of hormone mediated processes  
ISSUED ON 8/20/2002 AS U.S. PATENT NO. 6,436,993
3. Treatment of disease states, which result from neoplastic cell proliferation using PPAR-gamma activators and compositions ISSUED ON 11/11/2003 U.S. PATENT NO.6,646,008
4. Methods for the use of inhibitors of co-repressors for the treatment of neoplastic diseases  
ISSUED ON 3/16/2004 US PATENT NO.6,706,762
5. Novel use of PPAR-gamma modulators and professional APCs manipulated by the same  
Hungarian Patent Application (May 14<sup>th</sup>, 2003) P0301358, International PCT/IB2004/050707 (pending) International application number: WO 2004/101776 A3
6. Method for conferring cytoprotection Hungarian Patent Application P0600497 (June19<sup>th</sup>,

2006) International PCT/HU2007/000055 European Patent # 2081599

7. Control system for immunoprecipitation studies P1200395 (HU) US61666945
8. Diagnostic method for TNF- $\alpha$  responsiveness, P1200712 (HU)

#### **DISSERTATIONS:**

1. Programmed cell death in malignant cell lines in vitro  
**Thesis for the degree of M.D. (in Hungarian)** University Medical School of Debrecen, Debrecen, Hungary (1989)
2. Retinoid regulated gene expression during differentiation and apoptosis, Molecular analysis of the promoter of the mouse tissue transglutaminase gene  
**Thesis for the degree of Ph.D. in Medical Sciences** (cell and molecular biology)  
University Medical School of Debrecen, Debrecen, Hungary (1995)
3. Molecular mechanisms involved in nuclear hormone receptor action in health and disease  
**Thesis for the Degree of Doctor of the Hungarian Academy of Sciences**  
University of Debrecen, Debrecen, Hungary (2004)

#### **INVITED GUEST/SPEAKER ENGAGEMENTS (2014-):**

##### **January 2014**

**Invited Speaker** - Alexander Fleming Biomedical Sciences Research Center, Athens, Greece  
“Nuclear Hormone Receptors Link Metabolism to the Expression of the Genome in Immune Cells”

##### **March 2014**

**Invited Speaker** - Keystone Symposia-Whistler Conference Center, Whistler, BC  
“The Genomic Basis of a Retinoid X Receptor-Induced Angiogenic Macrophage Phenotype”

##### **June 2014**

**Invited Speaker** - Hungarian Academy of Sciences, Budapest, Hungary  
“Genes, genomes and cell fates”

**Invited Speaker** – Special Seminar, SBP-La Jolla

“The Genomic Basis of the Activity of Retinoid X Receptor in Macrophages”

##### **August 2014**

**Invited Speaker**, Annual Hungarian Biochemical Society, Debrecen, Hungary  
From Genes to Genomes and Back

**Invited Speaker**, FEBS/EMBO, Greece, Paris, France

“The Enhancer Network Operated by Liganded RXR Supports Angiogenic Activity in Macrophages-  
Inflammation & Disease”

##### **September 2014**

**Invited Member**, Open Society Foundation, New York

##### **October 2014**



***Invited Speaker***, XXXIX Congress of the Brazilian Society of Immunology, Rio de Janeiro  
“The Active Enhancer Network Operated by Liganded RXR Supports Angiogenic Activity in Macrophages”

**November 2014**

***Invited Speaker***, 12<sup>th</sup> Research Center for Genomic Medicine International Symposium, Saitama Medical Univ., Saitama, Tokyo  
“Genomic Control of Nuclear Receptor Mediated Signaling in Cell Types Associated with Metabolic Diseases & Chronic Inflammation”

***Invited Speaker***, Danube Scientific Conference on Epigenetics, Budapest, Hungary  
“Cistromic and Long-Range Interactions of Lineage-and Signal Specific Transcription Factors Integrate Macrophage Specification, and Control of Lipid Signaling”

**December 2014**

***Invited Member***, ESGI Meeting, Berlin, Germany

**March 2015**

***Invited Speaker***, EWRR Meeting, Budapest, Hungary  
“Nuclear Receptor Signaling in Macrophages Link Metabolism & Inflammation”

**April 2015**

***Invited Member***, The Henry Kunkel Society meeting, Annecy, France

***Invited Member***, FEBS ACC Meeting, Budapest, Hungary

**May 2015**

***Invited Chair and Member***, National Research Funding Agency OTKA Molecular Biology Study Section, Hungary.

***Invited Speaker/Moderator***, SBP La Jolla Faculty Retreat, CA  
“Epigenetic control of neuronal cell type specification with implication to neuropathologies”

**June 2015**

***Invited Speaker***, Focus on Metaflammation Conference, Lausanne, Switzerland  
“Cistromic and Long-Range Interactions of Lineage-and Signal Specific Transcription Factors Integrate Macrophage Specification, and Control of Lipid Signaling”

***Invited Member***, NR/NET mid-term meeting, Lausanne, Switzerland

**July 2015**

***Invited Member***, FEBS Editorial Board Meeting, Berlin, Germany

**October 2015**

***Invited Speaker***, Congress of Hungarian Society for Immunology Meeting, Budapest, Hungary  
“Next Generation Sequencing in Immunological Research: Challenges & Opportunities”

***Invited Speaker***, International Symposium on Inflammation & Health, UCF College of Medicine  
“Defining the Healing Macrophage Phenotype Using Genomic Approaches”

**January 2016**

*Invited Member*, Center for Stem Cell & Regenerative Medicine Retreat – SBP-San Diego, CA

**February 2016**

*Invited Speaker*, Chromatin 3D Workshop, Milan, Italy

“Cistromic and long range interactions of lineage and signal specific transcription factors integrate macrophage specification and control lipid signaling”

**March 2016**

*Invited Chair and Member*, FEBS Prize Committee Meeting, Madrid, Spain

**April 2016**

*Invited Member*, EMBO Council Meeting, Heidelberg, Germany

*Invited Speaker*, Institute of Enzymology, Budapest, Hungary

“Defining the “healing macrophage” phenotype using genomic and epigenomic approaches”

**May 2016**

*Invited Speaker*, SBP La Jolla Faculty Retreat, San Diego, CA.

“Epigenomic and cistromic determinants of cell-type specific gene expression “

**June 2016**

*Invited Speaker*, UF Myology Institute Seminar Series, Gainesville, FL.

“Epigenomics to identify novel pathways to control skeletal muscle repair and survival”

*Invited Speaker*, FASEB Conference on Retinoids, West Palm Beach, FL.

“Roles for RXR signaling in macrophage polarization, angiogenesis and lung metastasis formation”

*Invited Speaker*, UF New Directions in Biology and Disease of Skeletal Muscle Conference, Orlando, FL. “PPARgamma regulated GDF15: A unique role in macrophage mediated muscle regeneration”

**September 2016**

*Invited Speaker*, University of Virginia Pharmacology Seminar Series, Charlottesville, Virginia.

“Defining the healing macrophage phenotype using genomic approaches”

**November 2016**

*Invited Speaker*, Weill Cornell Medical College Pharmacology Seminar Series, New York, NY.

“Epigenomic determinants of cell type specification in embryonic stem cells and macrophages”

**March 2017**

*Invited Speaker*, University of Vienna, Department of Pharmacognosy seminar series, Vienna, Austria.

“Re-opening the X-files: the Retinoid X Receptor in macrophage polarization and function in metastasis and tissue repair”

*Invited Speaker*, 3D-Chromatin, Cancer Epigenomics Conference, Nobel Forum, Karolinska Institutet, Sweden. “Identification of ligand insensitive bookmarking and architectural functions for nuclear hormone receptors in gene expression regulation”

*Invited Speaker/Moderator*, Genomics Medicine Symposium, Sanford-Burnham-Prebys Medical Discovery Institute at Lake Nona, FL.

“Re-opening the X-files: nuclear receptor regulated macrophage gene expression and metastasis control”

**April 2017**

*Invited Speaker*, Glaxo Smith Kline, Philadelphia, PA.

“System level approaches to identify novel pathways to control skeletal muscle regeneration and metabolism”

*Invited Speaker* Diabetes and Metabolism Research Center Seminars Ohio State University, Columbus, Ohio.

“Transcriptional and epigenomic regulation of cell fate decisions and cellular interactions in health and disease”

**May 2017**

*Invited Speaker*, University of Florida, Topics in Cancer Seminar- Visiting Professor

“Breaking the dogma of nuclear hormone receptor signaling using epigenomics approaches”

**June 2017**

*Invited Speaker*, American Diabetes Association Annual Meeting, San Diego, CA

“System-level analyses to identify macrophage-specific mechanisms controlling skeletal muscle repair and metabolism”

**August 2017**

*Invited Speaker*, TGase 40 Years, University of Debrecen, Hungary

“The gene regulation of tissue transglutaminase as a model of the interaction between lineage and signal-specific transcription control.”

*Invited Speaker*, FEBS Advanced Course//ITN Meeting on Nuclear Receptors in Human Health and Diseases, Spetses, Greece

“Nuclear receptors as regulators of cell type specification: ligand dependent and architectural roles”

**September 2017**

*Invited Speaker*, Johns Hopkins University, School of Medicine, Department of Physiology seminar series

“System-level analyses to identify macrophage-specific mechanisms controlling skeletal muscle repair and metabolism”

**October 2017**

*Invited Speaker*, Brazilian Society for Immunology Annual Meeting, Salvador, Brazil

“PPAR $\gamma$  as a lipid activated transcription factor”

*Invited Speaker*, Yale University, School of Medicine, Department of Comparative Medicine, Special seminar

“System-level analyses to identify macrophage-specific mechanisms controlling skeletal muscle repair and metabolism”

**November 2017**

*Invited Speaker*, 70<sup>th</sup> Birthday Symposium of Professor Laszlo Fesus, Hungarian Academy of Sciences, Debrecen, Hungary

“The epigenomic basis of cell type specification in “healing macrophages”

**December 2017**

*Invited Speaker*, Epigenetics Day, University of California-Irving  
“Epigenomics of macrophage polarization and novel chromatin architectural roles of nuclear receptors”

**January 2018**

*Invited Speaker*, UCF Burnett School of Biomedical Sciences Seminar Series, Orlando, FL

**February 2018**

*Invited Speaker*, 3D-Chromatin Annual Meeting, “The dynamic lipid signaling landscape underpinning sterile inflammatory response and skeletal muscle regeneration/repair”, Lisbon, Portugal

**April 2018**

*Invited Speaker*, Johns Hopkins All Children’s Hospital, Research Advisory and Mentorship Forum,  
“System-level analyses to identify macrophage-specific mechanisms controlling skeletal muscle repair and metabolism”, St. Petersburg, FL

**May 2018**

*Invited Keynote Speaker* Virginia Tech School of Veterinary Medicine Seminar Series  
“System level analyses of macrophages to control skeletal muscle regeneration and repair”, Blacksburg, VA

**June 2018**

*Invited Speaker*, FASEB Science Research Conference, “The epigenomic roles of RXR heterodimers in macrophage polarization in cancer and tissue regeneration”, Steamboat Springs, CO

**October 2018**

*Invited Speaker*, Johns Hopkins All Children’s Hospital 7th Annual Research Symposium,  
“Understanding and harnessing the healing power of macrophages using multi-omics technologies”, St. Petersburg, FL

*Invited Speaker*, FEBS Advanced Lecture Course, 3rd Danube Conference on Epigenetics, “The nuclear receptor PPAR $\gamma$  controls progressive macrophage polarization as a ligand-insensitive epigenomic ratchet of transcriptional memory”, Budapest, Hungary

*Invited Speaker*, Technical University of Munich, Translational Oncology Seminar Series, “Defining the healing macrophage phenotype in tissue regeneration and metastasis control using epigenomic approaches”, Munich, Germany

*Invited Speaker*, Helmholtz Zentrum München, Translational Oncology Seminar Series, “System-level analysis to identify macrophage-specific mechanisms controlling skeletal muscle repair and metabolism”, Munich, Germany

**November 2018**

*Invited Speaker*, 50th Annual Conference of the Hungarian Medical Association of America,  
“Understanding and harnessing the healing power of macrophages using multi-omics technologies”, Sarasota, FL

**December 2018**

***Invited Speaker***, Memorial Sloan Kettering Cancer Center and the Hospital for Special Surgery, Immunology & Microbial Pathogenesis Program Research Seminar Series, “Novel epigenomic mechanisms of macrophage polarization in health and disease”, New York, NY

**February 2019**

***Invited Speaker***, Central European University, Stadium28 Lecture series: How to evaluate research institutes and programs? “Science under the pressure”, Budapest, Hungary

**March 2019**

***Invited Speaker***, Department of Biochemistry and Molecular Genetics (BMG) Seminar Series, University of Alabama at Birmingham, “RXR, an enigmatic nuclear receptor integrating metabolism and inflammation in macrophages”, Birmingham, AL

***Invited Speaker***, ENDO 2019, “RXR/PPAR- $\gamma$  dendritic cells and macrophages”, New Orleans, LA

**April 2019**

***Invited Speaker***, KAIST, “System-level analysis to identify macrophage-specific mechanisms controlling skeletal muscle repair and metabolism”, Seoul, Korea

***Invited Speaker***, The 7th Seoul International Congress of Endocrinology and Metabolism, “Systemlevel analysis to identify macrophage-specific mechanisms controlling skeletal muscle repair and metabolism”, Seoul, Korea

***Invited Speaker***, Department of Genetic and Complex Diseases Seminar Series, Harvard T.H. Chan School of Public Health, “Novel epigenomic mechanisms of macrophage polarization in health and disease from cancer to tissue regeneration”, Boston, MA

***Invited Speaker***, 2019 Rachmiel Levine-Arthur Riggs Diabetes Research Symposium, Department of Translational Research and Cellular Therapeutics, Diabetes and Metabolism Research Institute, City of Hope, “System-level analyses to identify macrophage-specific mechanisms controlling skeletal muscle repair and metabolism”, Duarte, CA

***Invited Speaker***, MD Anderson Cancer Center, The University of Texas, “Novel epigenomic mechanisms of macrophage polarization in health and disease from cancer to tissue regeneration”, Houston, TX

**May 2019**

***Invited Speaker***, The 87th European Atherosclerosis Society (EAS) Congress, “System-level analysis of inflammatory and repair macrophages reveal an integrated circuitry of lipid and epigenomic changes”, Maastricht, The Netherlands

**June 2019**

***Invited Speaker***, Immunometabolism Satellite Conference, “Dynamic changes to lipid mediators support transitions among macrophage subtypes during muscle regeneration”, Maastricht, The Netherlands

**September 2019**

***Invited Speaker***, ICGEB Workshop on Epigenetics of Infectious and Non-Communicable Diseases, “System-level analyses help identify macrophage specific mechanisms controlling skeletal muscle repair and metabolism”, Cape Town, South Africa

***Invited Speaker***, University of Cape Town, “Novel epigenomic mechanisms of macrophage polarization in health and disease”, Cape Town, South Africa

**October 2019**

***Invited Speaker***, Biological Research Center, “Novel epigenomic mechanisms of macrophage polarization in health and disease”, Szeged, Hungary

***Invited Speaker***, Szeged Scientists Academy, University of Szeged, “Identifying the healing phenotype of macrophages”, Szeged, Hungary

***Invited Speaker***, Hungarian Scientific Academy, Department of Biological Sciences, “Identifying the healing phenotype of macrophages”, Budapest, Hungary

***Invited Speaker***, University of South Florida Research Conference, “System-level analyses help identify macrophage-specific mechanisms controlling skeletal muscle repair and metabolism”, Tampa, FL