CURRICULUM VITAE

NAME:	**Iliya Lefterov, MD, PhD** Professor
BUSINESS ADDRESS:	Department of Environmental and Occupational Health Graduate School of Public Health University of Pittsburgh 130 De Soto Street 4134 PUBHL Pittsburgh, PA 15261 Office: 412 383 6906 Lab: 412 624 8662 Fax: 412 624 9361 Email: iliyal@pitt.edu

EDUCATION AND TRAINING

1973 – 1979	Medical Academy, Sofia, Bulgaria	MD	General Medicine
1989 - 1993	Medical Academy, Sofia, BULGARIA & Bulgarian Academy of Sciences, Sofia, BULGARIA	PhD	Mol. Biology & Genetics
1986	Institute of Medical Genetics, University of Copenhagen, Copenhagen, DENMARK	WHO Predoctoral Fellowship	Molecular techniques for prenatal diagnosis of metabolic and inherited diseases
1994	Institute of Human Genetics, University of Gottingen, Gottingen, GERMANY	DFG Postdoctoral fellowship	Approaches for Positional cloning
1995	Institute of Human Genetics, University of Gottingen, Gottingen, GERMANY	European Community Individual Mobility Grant	Course development in Medical Genetics

1995-1997	Department of Pharmacology, University of Pittsburgh, Pittsburgh, PA, USA	Fogarty International Foundation Research Grant	Molecular Biology and Biochemistry

APPOINTMENTS AND POSITIONS

Academic

1983 - 1994	Lecturer, Instructor, Assistant professor	Department of Molecular Biology and Immunology, School of Medicine, Stara Zagora, BULGARIA
1995 – 1998	NIH/Fogarty Foundation Fellow	Department of Pharmacology, University of Pittsburgh, Pittsburgh, PA
1998 – 2002	Instructor	Department of Pharmacology, University of Pittsburgh, Pittsburgh, PA
2002 – 2003	Res. Assistant Professor	Department of Pharmacology, University of Pittsburgh, Pittsburgh, PA
2004 – 2005	Res. Assistant Professor	Department of Neurology, University of Pittsburgh, Pittsburgh, PA
2005 – 2011	Res. Assistant Professor	Department of Environmental and Occupational Health, University of Pittsburgh, Pittsburgh, PA
2011 – 2016	Res. Associate Professor	Department of Environmental and Occupational Health, University of Pittsburgh, Pittsburgh, PA
2015 – Present time	Adjunct Professor	Department of Anatomy, Histology and Embryology, Medical University Varna, Bulgaria
2016 – Present time	Res. Professor	Department of Environmental and Occupational Health, University of Pittsburgh, Pittsburgh, PA

Non-Academic

1979 – 1982	General Practitioner	Strazhitca, Bulgaria
1982 – 1983	Physician/Pathologist	Regional Cancer Hospital, Stara Zagora, Bulgaria
1992 - 1994	Head, Cytogenetics laboratory	School of Medicine, Stara Zagora, Bulgaria

CERTIFICATION AND LICENSURE

Specialty Certification

1990	Board certified in Medical Genetics	Medical Academy, Sofia, BULGARIA.

MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

2004 – Present time	Society for Neuroscience
2008 – Present time	International Society to Advance Alzheimer Research and Treatment

PROFESSIONAL ACTIVITIES

Courses Taught

2015 – present time (The course is scheduled twice a year)	Medical University Varna, BULGARIA 2^{ND} and 4^{TH} Year Medical Students	Molecular Mechanisms of Alzheimer's Disease pathogenesis. Fundamentals of Epigenetics
2013 – present time	Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA	Molecular Fundamentals EOH Course #3210
1983-1995	School of Medicine, St. Zagora, BULGARIA	Medical Genetics; Second year medical students
1983-1990; School of Medicine, St. Zagora, BULGARIA	School of Medicine, St. Zagora, BULGARIA	Fundamentals of Immunology; Human Parasitology First year medical students

Graduate Student Essays, Theses, and Dissertations

Name of Student	**Degree Awarded, Year**	**Notes**
Alexis Y. Carter	PhD, 2016	Graduated
Emilie Castranio	PhD, 2018	Graduated
Cody M. Wolfe		Fourth year PhD student

Service on Comprehensive or Qualifying Examination Committees:

Dates Served	Name of Student	Degree Awarded	Title of Dissertation/Essay
2014 - 2018	Emilie Castranio	PhD	The role of apolipoprotein e in traumatic brain injury as determined by isoform and abca1 haplodeficiency
2014 - 2018	Diana Campbell	PhD	Cellular cholesterol regulation of HIV-1 trafficking during macrophage-mediated trans infection
2013 - 2016	Alexis Y. Carter	PhD	Role of High Fat Diet on epigenetic changes in the brain of Alzheimer's disease model mice
2011-2013	Sangita Suresh	PhD	Biological function and transcriptional control of ApoH

Supervision of Post-Doctoral Students, Residents, and Fellows

Dates Supervised	Name of Student	Position of Student
2007 – 2013	Nicholas F. Fitz, PhD	Postdoctoral fellow
2007 – 2013	Andrea A. Cronican, PhD	Postdoctoral fellow
March 2014 – January 2017	Kyong Nam, PhD	Postdoctoral fellow
April 2014 – April 2015	Danko Georgiev MD, PhD	Postdoctoral fellow
April 2014 – April 2016	Anais Mounier PhD	Postdoctoral fellow
January 2015 – June 2016	Valerie L. Reeves, PhD	Postdoctoral fellow
July 2016 – 2017	Hafsa Kamboh, MD	Postdoctoral fellow
April 2016-present	Florent Letronne, PhD	Postdoctoral fellow

Mentoring of Graduate Students

Dates Supervised	Name of Student	Position of Student
2014	Cody M. Wolfe	Master in PH

Other Teaching and Training: Pre-doctoral students and University of Pittsburgh Undergraduate Training

Dates	Name of Student	Program/Description
2019 - April	Thomas Thullen	Undergraduate

Dates	Name of Student	Program/Description
2018 – November	Tatyana Muriel	Undergraduate
2017- May 2018	Heather Wells	Pre-doctoral fellow
2016-2018	Britany E. Playso	Pre-doctoral fellow
2015-2016	Jackson Towers B.S.	Pre-doctoral fellow
2014-2015	Saad Ahmed B.S.	Pre-doctoral fellow
2013-2014	Emilie Castranio B.S.	Pre-doctoral fellow
Dec 2012-July 2013	Sai Pratyusha Kancherla B.S	Pre-doctoral fellow
2011-2013	Muzamil Saleem M.S	Pre-doctoral fellow
June 2015 – 2016	Emily Jacobetz	Undergraduate, Department of Neuroscience
2012-2013	Iana Vodianova	Undergraduate, Department of Neuroscience
2012-2013	Luv Purohit	Undergraduate, Department of Neuroscience
2011-2013	Hiral Patel	Undergraduate, Department of Neuroscience
2011-2012	Sai Pratyusha Kancherla	Undergraduate, Department of Neuroscience
June -Aug 2009	Sean Egglestone	EOH Summer Undergraduate Research Program
June -Aug 2008	Mitchell Thompson III	EOH Summer Undergraduate Research Program
June -Aug 2008	Alexis Carter	Pitt STEER Program for High School Students
1998-2001	Skoko Jhon	Undergraduate, Department of Chemistry
1999-2000	Schwartz DR,	Graduate program, Department of Pharmacology, University of Pittsburgh, Pittsburgh, PA
1997-2000	DiSabella MT	Undergraduate, Department of Biological Sciences

Dates	Name of Student	Program/Description
1996-1998	Dellapiazza D	Graduate program, Department of Pharmacology, University of Pittsburgh, Pittsburgh, PA

Extramural Grants Support
Active:

R01 AG066198-01 Koldamova R, Ambrosio F. (MPI), **Lefterov I. (Co-I)**
NIH/NIA 01/01/2020-2025 Total amount $3,912,375
"Physical exercise and Blood-brain communication: exosomes, Klotho and choroid plexus"

R01 AG057565-01A1 Koldamova, R. and **Lefterov, I. (MPI)**
NIH/NIA 09/01/2018 – 08/31/2023 Total amount $3,291,796.00
"APOE Orchestrated Molecular Signatures in Aging Brain and AD-the Contribution of APOE2"

R01 AG056371 Koldamova R, **Lefterov I. (MPI)**
NIH/NIA 06/01/2017 – 05/31/2022 Annual direct cost, $250,000
"Age dependent APOE isoform specific effect on immune receptor mediated phagocytosis in brain

R01ES024233 Koldamova R and **Lefterov I. (MPI)**
NIH/NIA 2014 – 2020 (NCE) At no cost extension: $525,000
"Epigenetic and phenotypic effects of arsenic: impact on cognition and AD"
Extramural Grant Support – Pending:

Pending:

R13 AG069350-01 **Lefterov I. (PI)**
NIH/NIA 09/01/2020 – 08/31/2021 Total cost: $60,000
"Identifying dysregulated inflammatory and metabolic pathways in aging brain and Alzheimer's disease. International Conference - October 2020, Varna, BULGARIA"
Awaiting Advisory Council Meeting, May 26, 2020.

Prior Support:

R13 AG056129 **Lefterov I. (PI)**
NIH/NIA 10/01/2017 – 09/30/2018 Total cost: $45,000 (NCE)
"Aging, Alzheimer's Disease & Epigenetics - Opportunities for Therapeutic Interventions International Conference - October 2017, Varna, BULGARIA"

1R56 AG057565A1 Koldamova R, **Lefterov I. (MPI)**
NIH/NIA 09/01/2017 – 08/31/2018 Direct cost, $300,000
APOE Orchestrated Molecular Signatures in Aging Brain and AD – the Contribution of APOE2

W81XWH-13-1-0384
Research Grant **Lefterov I.,** J Schug **(MPI)**
Department of Defense 09/30/2013 – 09/30/2017 Total amount $750,000
"Role of APOE isoforms in the pathogenesis of TBI induced Alzheimer's disease
At no cost extension

R01AG037919 **Lefterov I. (PI)**
NIH/NIEHS 08/01/2012 – 07/31/2017 Total amount $2,375,000.
"Genome wide analysis of LXR binding - metabolic and epigenetic regulation in AD"
At No cost extension

R21ES021243 **Lefterov I.**, Barchowsky A. **(MPI)**
2012 – 2015
NIH/NIEHS
"Epigenomic impact of diet and toxicant exposure in Alzheimer's disease etiology"

Investigator Initiated Grant **Lefterov I. (PI)**
2010-2011
Institute for the Study of Aging (ISOA)
"Anti-amyloidogenic and anti-inflammatory effects of proton pump inhibitors in AD model"

R21, AG031956 **Lefterov I. (PI)**
2008 – 2010
NIH/NIA
"Screening for LXR agonists-inhibitors of brain amyloidosis and inflammation"

Investigator Initiated Grant **Lefterov I. (PI)**
2008 – 2010
Institute for the Study of Aging (ISOA)
"Identifying LXR activators for potential treatment of Alzheimer's Disease"

R03, NIH/NIA **Lefterov I. (PI)**
2006 – 2008
"ABCA1 knock-in mouse model to study molecular pathology of AD"

R03, NIH/NIA **Lefterov I. (PI)**
2004 – 2006
"Therapeutic potential of LXR ligands in Alzheimer's Disease"

TW, NIH/Fogarty Foundation **Lefterov I. (PI)**
1995 – 1997
"BCL-2, intracellular signals and drug mediated apoptosis"

Lectures and Major Seminars

- April 2019: CONy, Controversies in Neurology, Madrid, Spain: “Is APOE4 really toxic in AD”
- May 2019, Medical University Varna, Bulgaria:
    - Molecular and Cellular aspects of Neurodegeneration;
    - Biology of APOE and its role as a risk factor for Alzheimer's Disease
- October 2018: International Clinical Research Center, Brno, Czech Republic: APOE-allele associated lipid and gene expression patterns in Alzheimer's disease: multi – omics approach.
- March 2018: Hong Kong University of Science and Technology: “Role of native APOE lipoproteins in microglia response to A□”
- February 2018: CWRU: “APOE-allele associated lipid and gene expression patterns in Alzheimer's disease brain”
- April 2018, LA: Society for Brain Mapping and Therapeutics (SBMT) Alzheimer’s Disease Conference 2018: “Multi-omics profiling identifies APOE-allele associated lipid and gene expression patterns in Alzheimer's disease”
- June 27-28, 2018, THE 26th TEL AVIV UNIVERSITY AD CONFERENCE: “APOE-allele associated lipid and gene expression patterns in Alzheimer's disease brain”
- October 2017: AAIC satellite symposia, Varna, Bulgaria: “Multi-omics profiling identifies APOE-allele associated lipid and gene expression patterns in Alzheimer's disease”
- Differential Role of APOE in AD and Neurodegeneration” Romanian Alzheimer Society, 2017 National Alzheimer Conference
- December 2015, “Therapeutic potential of activated Nuclear Receptors in brain”, Meeting “TransportDementia”, Oslo Norway (December 9-11, 2015)
- November 23, 2015, “NUCLEAR RECEPTORS RXR and LXR IN BRAIN much more than lipid metabolism”, Galveston, Department of Neurology, University of Texas Medical Branch
- November, 2015, Nuclear receptors in brain, November 18, 2015, Department of Human Genetics, GSPH Pittsburgh
- April, 2015, “Modeling Alzheimer's Disease using transgenic mice Biomedical Forum 25 (2014-2015), organized by the Bulgarian Society for Cell Biology and Medical University, Varna, Bulgaria; included in CME series of lectures
- March, 2014, Transcriptional regulation and role of cholesterol transport in Alzheimer’s disease: How much do we know about ABCA1 and APOE 10 years later; Annual Black Sea Symposium for Young Biomedical Scientists. Medical University Varna, Varna, Bulgaria
- February, 2014, Regulation of APOE and its function in Alzheimer's disease by ABCA1 and nuclear receptors - a decade of research: what have we learned?, Merck Sharp & Dohme Corp. West Point, Pennsylvania
- July,2013, Genome-wide mapping of RXR binding and expression profiling in brain of AD mice - Next Generation Sequencing data and therapeutic implications, Annual Alzheimer’s Disease meeting, Tel-Aviv University, Israel

- April, 2012, "Differential Role of ABCA1 on Alzheimer's disease phenotype in APOEε3 and APOEε4 targeted replacement mice, Biomedical Forum 22 (2011-2012), organized by the Bulgarian Society for Cell Biology and Medical University, Varna, Bulgaria; included in CME series of lectures
- March, 2011, Role of Abca1 and brain lipoproteins in amyloid deposition and clearance – lessons from complex animal models, Special Interest session on: "Pathogenesis and treatment strategies for Alzheimer's Disease: the role of the cerebral vasculature" 13th International Neuroscience Winter Conference; Soelden, Austria, March 29 - April 2, 2011
- November, 2010, Transcriptional control of brain cholesterol metabolism and its role for the molecular pathogenesis of Alzheimer's disease, "Environmental factors, transcriptional regulation and their role in the pathogenesis of common diseases", School of Medicine, Stara Zagora, Bulgaria, November 29 – December 01, 2010.
- November, 2010, LXR and the dietary challenges of the Western world: effects on memory and therapeutic implications for AD, Georgetown University, Washington, DC, November 8-9, 2010
- July, 2009, Role of APOE, Abca1 and APOA-I in AD Pathogenesis: lessons from complex animal models, International Conference on Alzheimer Disease, Vienna, Austria
- November, 2006, Effect of LXR ligands on Aβ amyloidosis and inflammatory response induced by Aβ, "Nuclear receptors – bench to bedside" Cold Spring Harbor Laboratory, November 2006
- October 2006, ABCA1: animal models for Alzheimer's disease, Washington University in St Luis, Department of Neurology, David M. Holtzman laboratory
- August 1994, Chromosomal aberrations in chorionic villi of human placenta in response to in vitro Bleomycin treatment, , Department of Pharmacology, University of Pittsburgh

Peer-Reviewed Publications

1. Iliya **Lefterov**, Cody M. Wolfe, Nicholas F. Fitz, Kyong Nyon Nam, Florent Letronne, Julia Kofler, Xianlin Han, Jianing Wang, Jonathan Schug, Radosveta Koldamova. APOE2 orchestrated differences in transcriptomic and lipidomic profiles of postmortem AD brain. *Alzheimer's Res Ther*. 2019 Dec 30;11(1):113. doi: 10.1186/s13195-019-0558-0.
2. Fitz NF, Nam KN, Koldamova R, & **Lefterov** I (2019). Therapeutic targeting of nuclear receptors, liver X and retinoid X receptors, for Alzheimer's disease. Br J Pharmacol (available online).
3. Cody Wolfe, Nicholas Fitz, Kyong Nyon Nam, Iliya **Lefterov**, Radosveta Koldamova. The Role of APOE and TREM2 in Alzheimer's Disease – Current Understanding and Perspectives. International Journal of Molecular Sciences, 2018, 20.
4. Castranio EL, Wolfe CM, Letronne F, Nam KN, Fitz NF, Koldamova R, **Lefterov** I. ABCA1 haplodeficiency affects the brain transcriptome following traumatic brain injury in mice expressing human APOE isoforms. July 8 2018, Acta Neuropathol Commun 6: 69
5. Nam KN, Wolfe C, Fitz NF, Letronne F, Carter AY, Castranio EL, Schug J, **Lefterov** I, Koldamova R. Integrated approach reveals diet, APOE genotype and gender affect immune response in APP mice. BBA: 2018 Jan;1864(1):152-161. doi: 10.1016/j.bbadis.2017.10.018. Epub 2017 Oct 14.

6. Nam KN, Mounier A, Wolfe C, Fitz NF, Carter AY, Castranio EL, Kamboh HI, Reeves VL, Wang J, Han X, Schug J, **Lefterov** I, Koldamova R. Effect of high fat diet on phenotype, brain transcriptome and lipidome in Alzheimer's model mice. Sci Rep. 2017 Jun 27;7(1):4307. doi: 10.1038/s41598-017-04412-2.
7. Castranio EL, Mounier A, Wolfe CM, Nam KN, Fitz NF, Letronne F, Schug J, Koldamova R, **Lefterov** I. Gene co-expression networks identify Trem2 and Tyrobp as major hubs in human APOE expressing mice following traumatic brain injury. Neurobiol Dis. 2017 Sep;105:1-14. doi: 10.1016/j.nbd.2017.05.006. Epub 2017 May 11.
8. Carter AY, Letronne F, Fitz NF, Mounier A, Wolfe CM, Nam KN, Reeves VL, Kamboh H, **Lefterov** I, Koldamova R. Liver X receptor agonist treatment significantly affects phenotype and transcriptome of APOE3 and APOE4 Abca1 haplo-deficient mice. PLoS One. 2017 Feb 27;12(2):e0172161. doi: 10.1371/journal.pone.0172161. eCollection 2017.
9. Fitz, N. F., et al. (2017) "Abca1 deficiency affects dendritic density and cognitive function in mice". *Journal of Alzheimer's Disease*, doi:10.3233/jad-161056 (2017)
10. Kyong Nyon Nam, Anais Mounier, Nicholas F. Fitz, Cody Wolfe, Jonathan Schug, Iliya **Lefterov** and Radosveta Koldamova. RXR controlled regulatory networks identified in mouse brain counteract deleterious effects of Aβ oligomers. Sci Rep. 2016 Apr 7;6:24048. doi: 10.1038/srep24048.
11. Nicholas F. Fitz, Victor Tapias, Andrea A. Cronican, Emilie Castranio, Muzamil Salem, Alexis Y. Carter, Martina Lefterova, Iliya **Lefterov** & Radosveta Koldamova, Opposing effects of Apoe/Apoa1 double deletion on amyloid β pathology and cognitive performance in APP mice. Brain. 2015 Dec;138(Pt 12):3699-715. doi: 10.1093/brain/awv293. Epub 2015 Oct 28.
12. Anais Mounier, Danko Georgiev, Kyong Nyon Nam, Nicholas F. Fitz, Emilie Castranio, Cody Wolfe, Andrea Cronican, Jonathan Schug, Iliya **Lefterov** and Radosveta Koldamova, Bexarotene activated Retinoid X Receptors regulate neuronal differentiation and dendritic complexity. J Neurosci. 2015 Aug 26;35(34):11862-76. doi: 10.1523/JNEUROSCI.1001-15.2015.
13. **Lefterov**, I., Jonathan Schug, Anais Mounier, Kyong Nyon Nam, Nicholas F. Fitz, and Radosveta Koldamova, *Neurobiology of Disease* "RNA-sequencing reveals transcriptional up-regulation of Trem2 in response to bexarotene treatment" (2015 Jun 10. pii: S0969-9961(15)00194-1).
14. Koldamova R., Fitz FN, **Lefterov** I, ATP-binding cassette transporter A1: from metabolism to neurodegeneration. Neurobiol Dis. 2014 Dec;72 Pt A:13-21. doi: 10.1016/j.nbd.2014.05.007
15. Koldamova R., Fitz FN, **Lefterov** I, Metabolic Disorders and Neurodegeneration, introduction to the special issue, Neurobiol Dis. 2014 Dec;72 Pt A:1-2.
16. Nicholas F. Fitz, Emilie L. Castranio, Alexis Y. Carter, Ravindra Kodali, Iliya **Lefterov** & Radosveta Koldamova: Improvement of memory deficits and Aβ clearance in aged APP23 mice treated with a combination of anti-Aβ antibody and LXR agonist. *J Alzheimer's Disease* 2014 Mar 18. [Epub ahead of print]
17. Koldamova R, Schug J, Lefterova M, Cronican AA, Fitz NF, Davenport FA, Carter A, Castranio EL, **Lefterov** I: "Genome-wide approaches reveal EGR1-controlled regulatory networks associated with neurodegeneration". *Neurobiology Dis* 2014 Mar;63:107-14. doi: 10.1016/j.nbd.2013.11.005. Epub 2013 Nov 20.

18. Fitz NF, Cronican AA, **Lefterov** I, Koldamova R. Comment on "ApoE-directed therapeutics rapidly clear β-amyloid and reverse deficits in AD mouse models". *Science.* 2013 May 24;340(6135):924-c. doi: 10.1126/science.123580
19. Cronican AA, Fitz NF, Carter A, Saleem M, Shiva S, Barchowsky A, Koldamova R, Schug J, **Lefterov** I. Genome-wide alteration of histone H3K9 acetylation pattern in mouse offspring prenatally exposed to arsenic. *PLoS One*. 2013;8(2):e53478. doi:10.1371/journal.pone.0053478. Epub 2013 Feb 6
20. Fitz NF, Cronican AA, Saleem M, Fauq AH, Chapman R, **Lefterov** I, Koldamova R. Abca1 deficiency affects Alzheimer's disease-like phenotype in human ApoE4 but not in ApoE3-targeted replacement mice. *J Neuroscience*. 2012 Sep 19;32(38):13125-36
21. **Lefterov** I, Fitz NF, Cronican AA, Fogg A, Kodali R, Wetzel R, Radosveta Koldamova (2010) Apolipoprotein A-I deficiency increases cerebral amyloid angiopathy and cognitive deficits in APP/PS1dE9 mice. *J Biol Chem*. 285: 36945-36957.
22. Fitz Nicholas, Andrea Cronican, Tam Pham, Allison Fogg, Abdul H. Fauq, Robert Chapman, Iliya **Lefterov** & Radosveta Koldamova (2010). LXR agonist treatment ameliorates amyloid pathology and memory deficits caused by high fat diet in APP23 mice. *J Neuroscience*, 30: 6862-72.
23. Cronican, A.A., Fitz, N.F., Pham, T., Fogg, A., Kifer, B., Koldamova, R. & **Lefterov**, I. (2010) Proton pump inhibitor Lansoprazole is a nuclear Liver X Receptor agonist. *Biochemical Pharmacology*, 79: 1310-6.
24. **Lefterov** I., Fitz N., Cronican A., Lefterov P., Staufenbiel M., and Koldamova R., (2009). Memory deficits in APP23/Abca1-/- mice correlate with the level of Aβ oligomers. *ASN NEURO* (1):art:e0000x.doi:10.1042/AN20090015
25. Cohen AD, Ikonomovic MD, Abrahamson EE, Paljug WR, DeKosky ST, **Lefterov** IM, Koldamova RP, Shao L, Debnath ML, Mason NS, Mathis CA, Klunk WE (2009). Anti-Amyloid Effects Of Small Molecule Aβ-Binding Agents In PS1/APP Mice. *Letters in Drug Design and Discovery 6: 437-444*
26. **Lefterov**, I.; Bookout, A.L.; Wang, Z.; Staufenbiel, M.; Mangelsdorf, D.; Koldamova, R. (2007) Expression profiling in APP23 mouse brain: inhibition of Aβ amyloidosis and inflammation in response to LXR agonist treatment, *Mol. Neurodegeneration* 2: 20
27. Koldamova RP, Staufenbiel M, **Lefterov** I, (2005). Lack of ABCA1 considerably decreases brain ApoE level and increases amyloid deposition in APP23 mice. *J Biol Chem*. 280: 43224-35.
28. Klunk WE, Brian J. Lopresti, Milos D. Ikonomovic, Iliya M. **Lefterov**, Radosveta P. Koldamova, Eric E. Abrahamson, Manik L. Debnath, Daniel P. Holt, Guo-feng Huang, Li Shao, Steven T. DeKosky, Julie C. Price and Chester A. Mathis (2005) "Binding of the PET Tracer, Pittsburgh Compound-B (PIB), reflects the Amount of Aβ in Alzheimer's Disease Brain, but not in PS1/APP Mouse Brain". *J. Neuroscience*, 25: 10598-606.
29. William E. Klunk, Brian J. Lopresti, Milos D. Ikonomovic, Iliya M. **Lefterov**, Radosveta P. Koldamova, Eric E. Abrahamson, Manik L. Debnath, Daniel P. Holt, Guo-feng Huang, Li Shao, Steven T. DeKosky, Julie C. Price and Chester A. Mathis. (2005) Binding of the PET Tracer, Pittsburgh Compound-B (PIB), reflects the Amount of A□ in Alzheimer's Disease Brain, but not in PS1/APP Mouse Brain *J. Neuroscience*, Nov 16;25(46):10598-606
30. Koldamova RP, **Lefterov** IM, Staufenbiel M, Wolfe D, Huang S, Glorioso JC, Walter M, Roth MG, Lazo JS, (2005). "The LXR ligand T0901317 decreases amyloid beta

production in vitro and in a mouse model of Alzheimer's disease". *J Biol Chem*. 280: 4079-88.
31. Koldamova RP, **Lefterov** IM, Ikonomovic MD, Skoko J, Lefterov PI, DeKosky ST and Lazo JS (2003). "22R-Hydroxycholesterol and 9-cis-retinoic acid induce ABCA1 transporter expression and cholesterol efflux in brain cells and decrease Abeta secretion". *J Biol Chem.* 278(15):13244-56.
32. **Lefterov** IM, Koldamova RP, Lefterova MI, Schwartz DR, Lazo JS (2001). Cysteine 73 in bleomycin hydrolase is critical for amyloid precursor protein processing. *Biochem. Biophys. Res. Comm., 283 (4):994-9.*
33. Koldamova RP, **Lefterov** IM, Lefterova MI, Lazo JS (2001). Apolipoprotein A-I directly interacts with amyloid precursor protein and inhibits A beta aggregation and toxicity. *Biochemistry. 40(12):3553-60.*
34. **Lefterov** IM, Koldamova RP, Lazo JS (2000). Human bleomycin hydrolase regulates the secretion of amyloid precursor protein. *FASEB J. 14(12):1837-47*.
35. Koldamova, Radosveta P., Iliya M. **Lefterov**, Marc T. DiSabella, Simon C. Watkins, Ciprian Almonte and John S. Lazo (1999). Human bleomycin hydrolase binds ribosomal proteins. *Biochemistry, 38 (22): 7111-7117.*
36. Koldamova, R. P. **Lefterov**, I. M., Gadjeva. V., Lazo, J. S., (1998) Essential Binding and Functional Domains of Human Bleomycin Hydrolase. *Biochemistry 37 (8): 2282-2290.*
37. Koldamova R., **Lefterov** I., DiSabella M., and Lazo J. S., (1998). Evolutionarily conserved cysteine protease, human bleomycin hydrolase, binds to the human homologue of UBC9. *Molecular Pharmacology, 54: 954-961*.
38. **Lefterov**, Iliya M., Radosveta P. Koldamova, Jeremy King, John S. Lazo (1998) The C-terminus of human bleomycin hydrolase is required for protection against bleomycin-induced chromosomal damage, *Mutation Res. (421) 1 pp. 1-7*
39. **Lefterov** I. and R. Koldamova (1992) Schedule dependent variation in lymphocyte sensitivity to Bleomycin and repair of chromosomal aberrations at G2 stage. *Mutation Res. 284: 184-195.*
40. Koldamova R. and I. **Lefterov** (1991) Synergistic effect of CCNU and Bleomycin on human lymphocytes exposed at late- G1 and G2 stage of the cell cycle. *Mutation Res. 260: 265-269*

Editorial Boards

2010 - Present Associate Editor	Frontiers in Neuroscience/Neurology
2010 - Present Associate Editor	Frontiers in Neuroscience /Psychiatry
2010 - Present Associate Editor	Frontiers in Neuroscience/Neurodegeneration
2013-2014 - Associate Editor	Neurobiology of Disease, SI

Reviewer - Manuscripts and Other Documents (During the last 6 years)
American Journal of Medical Genetics
BBA - Molecular and Cell Biology of Lipids
Biochemica & Biophysica Acta
Biochemical Pharmacology
BMC – Neuroscience
Experimental Gerontology
Expert Opinion on Therapeutic Patents

Frontiers in Neuroscience
Frontiers in Aging Neuroscience
Frontiers in Cellular Neuroscience
Journal of Alzheimer's disease
Journal of Clinical Investigation
Journal of Neurochemistry
Journal of Neuroscience
Lipids
Molecular Neurodegeneration
Neurochemistry International
Neuroscience Letters
Pharmacology, Biochemistry and Behavior
PlosOne
Toxicology
Toxicological Sciences

Study Sections, Review Panels

- 2012-2018, Consultant/Reviewer, Department of Defense, Militarily-Relevant, Peer Reviewed Alzheimer's Disease Program (MRPRA);
- 2006 – 2018, Reviewer, Alzheimer's disease Association; Grant Review Panel;
- 2018, Reviewer, Alzheimer's Association International Conference; Abstract Review Panel;
- 2004 – 2011, Reviewer, ADRC, University of Pittsburgh, Review Panel.

Clinical and Related Activities

- School of Medicine, Stara Zagora, BULGARIA, 1983-1994, ;Genetic Counseling and Clinical Cytogenetics
- Regional Cancer Hospital, Stara Zagora, BULGARIA, 1982-1983, Pathology and Histopathology;
- Regional Hospital Strazhitca, BULGARIA, 1979-1982 General Practitioner.