PERSONAL INFORMATION

Mihaela-Loredana Vlad (Antonescu)

Putna 8, Bucharest, Romania

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WORK EXPERIENCE

Present – 2019

Scientific Researcher

Institute of Cellular Biology and Pathology 'Nicolae Simionescu', Molecular and Cellular Pharmacology – Functional Genomics Laboratory, Bucharest, Romania.

2019 - 2015

Research Assistant

Institute of Cellular Biology and Pathology 'Nicolae Simionescu', Molecular and Cellular Pharmacology – Functional Genomics Laboratory, Bucharest, Romania.

2014 - 2013

Biologist

International Centre of Biodynamics, Bucharest, Romania.

EDUCATION AND TRAINING

present - 2015

PhD student. Institute of Cellular Biology and Pathology 'Nicolae Simionescu'

2014 - 2012

Masters of Neurobiology. University of Bucharest

2012 - 2009

Bachelor of Biochemistry

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	B2	B2
French	A2	A2	A2	A2	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Scientific papers

Manea SA, Vlad ML, Fenyo IM, Lazar AG, Raicu M, Muresian H, Simionescu M, Manea A (2020) Pharmacological inhibition of histone deacetylase reduces NADPH oxidase expression, oxidative stress and the progression of atherosclerotic lesions in hypercholesterolemic apolipoprotein E-deficient mice; potential implications for human atherosclerosis. Redox Biology 101338 Impact factor 9.99

Antonescu ML, Manea SA, Raicu M, Muresian H, Simionescu M, Manea A (2019) Histone acetyltransferase-dependent pathways mediate NADPH oxidase 5 up-regulation in human macrophages under inflammatory conditions: a potential mechanism of reactive oxygen species overproduction in atherosclerosis. Oxid Med Cell Longev 2:3201062. Impact factor: 4,87

Manea SA, Antonescu ML, Fenyo IM, Raicu M, Simionescu M, Manea A (2018) Epigenetic regulation of vascular NADPH oxidase expression and reactive oxygen species production by histone deacetylase-dependent mechanisms in experimental diabetes. Redox Biology 16: 332-343 Impact factor 7,8

Stanica L, Rosu-Hamzescu M, Gheorghiu M, Stan M, Antonescu ML, Polonschii C, Gheorghiu E (2017) Electro-optical sensing of cellular effects under hypoxic conditions and carbonic anhydrase inhibition. Hindawi Limited 10: 1155. Impact factor 1.34

Oral presentations

Lazar A, Cosac MT, Vlad ML, Manea A, Manea SA. Cross-communication between histone acetyltransferase and histone deacetylase epigenertic enzymes augments oxidative stress and fibrosis in the kidney of diabetic mice. "European Atherosclerosis Society Congress 2019 – 87th EAS Congress". Science at a Glance Section, Netherlands, 2019.

Antonescu ML, Manea SA, Fenyo IM, Constantin A, Simionescu M, Manea A, Epigenetic mechanisms of oxidative stress in atherosclerosis., EAS advanced course on AIL, March 22-25 2016, Amsterdam, Netherlands.

Poster presentations

Vlad ML, Manea SA, Lazar AG, Raicu M, Muresian H, Simionescu M, Manea A. Epigenetic regulation of NADPH oxidase 5 expression by histone acetyltransferase-activated mechanisms in human macrophages exposed to inflammatory conditions; potential role in atherosclerosis. "ICBP Nicolae Simionescu - 40 years, Anniversary symposium", 2019

Lazar AG, Cosac MT, Vlad ML, Raicu M, Manea A, Manea SA. Activation of p300 histone acetyltransferase-dependent signaling pathways induces NADPH oxidase expression and oxidative stress in the kidney of diabetic mice. "ICBP Nicolae Simionescu - 40 years, Anniversary symposium", 2019

Vlad ML, Manea SA, Lazar AG, Cosac MT, Raicu M, Muresian H, Simionescu M, Manea A. Activation of histone acetyltransferase-dependent signaling pathways induces macrophage polarization towards a pro-inflammatory M1-like phenotype in vitro; potential implication in human atherosclerosis. "The 11th National Congress with International Participation and the 37th Annual Scientific Session of the Romanian Society of Cell Biology", 20-23 iunie 2019, Constanta, Romania

Lazar AG, Cosac MT, Vlad ML, Raicu M, Manea A, Manea SA Activation of P300 histone acetyltransferase dependent signaling pathways induces NADPH oxidase expression and oxidative stress in the kidney of diabetic mice. "The 11th National Congress with International Participation and the 37th Annual Scientific Session of the Romanian Society of Cell Biology", 20-23 iunie 2019, Constanta, Romania

Cosac MT, Vlad ML, Manea SA, Lazar AG, Raicu M, Simionescu M, Manea A. Pharmacological inhibition of histone lysine demethylase JARID1b down-regulates the expression of pro-inflammatory molecules in cultured M1-polarized human macrophages. "The 11th National Congress with International Participation and the 37th Annual Scientific Session of the Romanian Society of Cell Biology", 20-23 iunie 2019, Constanta, Romania

Manea A, Manea SA, Vlad ML, Lazar AG, Cosac MT, Simionescu M. Histone deacetylase subtypes are part of positive feedback mechanisms controlling their own expression in the atherosclerotic aorta of hypercholesterolemic ApoE-/- mice. 2019, "29th European Meeting on Hypertension and Cardiovascular Protection"

Manea SA, Vlad ML, Lazar AG, Fenyo IM, Cosac MT, Manea A. Identification of novel microRNAs associated with atherosclerotic lesion formation in the aorta of hypercholesterolemic ApoE-/- mice; potential implications for human atherosclerosis. 2019, "29th European Meeting on Hypertension and Cardiovascular Protection"

Vlad ML, Manea SA, Lazar AG, Raicu M, Muresian H, Simionescu M, Manea A. NADPH oxidase – derived reactive oxygen species augment inflammatory macrophage responses via redox-sensitive histone deacetylase-dependent epigenetic mechanisms in experimental atherosclerosis. "European Atherosclerosis Society Congress 2019 – 87th EAS Congress" 26-29 Mai 2019, Maastricht, Olanda

Lazar AG, Cosac MT, Vlad ML, Manea A, Manea SA Cross communication between histone acetyltransferase and histone deacetylase epigenetic enzymes auguments oxidative stress and fibrosis in the kidney of diabetic mice. European Atherosclerosis Society Congress 2019 – 87th EAS Congress" 26-29 Mai 2019, Maastricht, Olanda

Manea SA, Vlad ML, Lazar AG, Cosac MT, Muresian H, Simionescu M, Manea A. Novel microRNAs associated with advanced human atherosclerotic lesions - potential biomarkers and therapeutic targets. "5th ESPT Congress - Precision Medicine and Personalised Health", 2019

Manea A, Manea SA, Vlad ML, Lazar AG, Cosac MT, Simionescu M. P300/CBP-histone acetyltransferase mediates the up-regulation of NADPH oxidase expression and oxidative stress in the aorta of diabetic mice. "7th World Congress on Controversies to Consensus in Diabetes, Obesity and Hypertension", 2019

Manea SA, Lazar AG, Vlad ML, Cosac MT, Manea A. Induction of histone deacetylase signaling pathways augments vascular inflammation and remodeling in diabetic mice. "7th World Congress on Controversies to Consensus in Diabetes, Obesity and Hypertension", 2019

Manea SA, Antonescu ML, Rebleanu D, Lazar AG, Calin M, Manea A Ultrasound-based imaging of reactive oxygen species overproduction associated with atherosclerosis in hypercholesterolemic apolipoprotein E-deficient mice. The 43rd FEBS Congress 2018, Czech Republic

Antonescu ML, Manea SA, Lazar AG, Raicu M, Muresian H, Simionescu M, Manea A. Epigenetic control of macrophage polarization by histone acetylation/deacetylation enzymes in experimental atherosclerosis. "The 36th Annual Scientific Session of the Romanian Society for Cell Biology and the 10th National Congress with International participation", 2018, Craiova, Romania

Manea SA, Antonescu ML, Rebleanu D, Lazar AG, Raicu M, Calin M, Manea A. High resolution near-infrared fluorescence imaging of reactive oxygen species overproduction associated with atherosclerosis in hypercholesterolemic apolipoprotein E-deficient mice. "The 36th Annual Scientific Session of the Romanian Society for Cell Biology and the 10th National Congress with International participation", 2018, Craiova, Romania

Lazar AG, Antonescu ML, Fenyo IM, Manea A, Manea SA. Histone acetyltransferase-dependent signaling pathways mediate endothelin-1 up-regulation and markers of vascular dysfunction in experimental diabetes. "1st Olympiad in Cardiovascular Medicine", International Symposium on Experimental & Clinical Cardiology, 17-19 Mai 2018, Athens, Greece

Antonescu ML, Lazar AG, Manea SA, Raicu M, Muresian H, Simionescu M, Manea A. Pharmacological inhibition of NADPH oxidase down-regulates the expression of pro-inflammatory markers in classically-activated macrophages in vitro: potential implication in human atherosclerosis. "1st Olympiad in Cardiovascular Medicine", International Symposium on Experimental & Clinical Cardiology, 17-19 Mai 2018, Athens, Greece

Antonescu ML, Lazar AG, Manea SA, Raicu M, Muresian H, Manea A, Simionescu M. Up-regulation of macrophage NADPH oxidase 5 expression and reactive oxygen species production by histone acetyltransferase-dependent mechanisms in atherosclerosis. "Protecting the Code: Epigenetic Impacts on Genome Stability", 28 octombrie – 02 noiembrie 2017, Berlin, Germania

Manea SA, Antonescu ML, Lazar A, Fenyo IM, Manea A. Pharmacological inhibition of histone acetyltransferase reduces endothelin-1 expression and mitigates markers of vascular dysfunction in diabetes. "European Society for Pharmacogenomics and Personalized Therapy, 4th Conference", 2017

Antonescu ML, Manea SA, Simionescu M, Manea A. NADPH oxidase 5 expression are is regulated by histone acetyltransferase 1 and P300 – dependent in human macrophages. "85th EAS Congress", 23-26 aprilie 2017, Praga

Manea A, Antonescu ML, Fenyo IM, Manea M. In vivo silencing of histone deacetylase 1 displays anti-atherosclerotic effects in hypercholesterolemic apolipoprotein E deficient mice. "Heart Failure 2017 - 4th World Congress on Acute Heart Failure", 28 aprilie - 04 mai 2017, Paris, Franta

Manea A, Manea SA, Antonescu ML, Fenyo IM, Raicu M, Simionescu M. Protein expression profiling of histone acetyltransferases and histone deacetylases in human and experimental atherosclerosis. "Heart Failure 2017 - 4th World Congress on Acute Heart Failure", 28 aprilie - 04 mai 2017, Paris, Franta

Antonescu ML, Manea SA, Muresian H, Simionescu M, Manea A. Histone acetyltransferases control macrophage-type NADPH oxidase 5 up-regulation and reactive oxygen species formation in atherosclerosis. "9th National Congress with International Participation and 35th Annual Scientific Session of the Romanian Society for Cell Biology", 06 - 12 iunie 2017, Iasi, Romania

Manea SA, Fenyo IM, Antonescu ML, Preda B, Raicu M, Muresian H, Manea A. Histone deacetylase-dependent epigenetic pathways mediate oxidative stress and inflammation in experimental atherosclerosis. "9th National Congress with International Participation and 35th Annual Scientific Session of the Romanian Society for Cell Biology", 06 - 12 iunie 2017, Iasi, Romania

Manea SA, Antonescu ML, Lazar A, Fenyo IM, Manea A. Pharmacological inhibition of histone acetyltransferase reduces endothelin-1 expression and mitigates markers of vascular dysfunction in diabetes. "European Society for Pharmacogenomics and Personalized Therapy, 4th Conference", 2017

Manea SA, Antonescu ML, Lazar AG, Fenyo IM, Manea A. Pharmacological inhibition of histone acetyltransferase reduces endothelin-1 expression and mitigates markers of vascular dysfunction in diabetes. "European Society for Pharmacogenomics and Personalized Therapy, 4th Conference", 03 - 08 octombrie 2017, Catania, Italy

Antonescu ML, Manea SA, Simionescu M, Manea A. Epigenetic regulation of NADPH oxidase 5 expression by p300/histone acetyltransferase in human macrophages. 8th National Congress with International Participation and 34rd Annual Scientific Session of the RSCB, 8-12 iunie 2016, Oradea, Bulletin of Romanian Society for Cell Biology, No. 44, June 2016, pg. 74

Manea A, Manea SA, Antonescu ML, Fenyo IM, Raicu M, Simionescu M. Pharmacological inhibition of histone deacetylase reduces vascular NADPH oxidase expression and reactive oxygen species formation in experimental diabetes. 8th National Congress with International Participation and 34rd Annual Scientific Session of the RSCB, 8-12 iunie 2016, Oradea, Bulletin of Romanian Society for Cell Biology, No. 44, June 2016, pg 80

Manea A, Manea SA, Fenyo IM, Antonescu ML, Raicu M, Simionescu M. Pharmacological inhibition of histone deacetylase reduces oxidative stress and inflammation in the aorta of diabetic mice. The 4th International Symposium on Adipobiology and Adipopharmacology (ISAA), 28-31 octombrie 2015, Bucuresti, Romanian Journal of Diabetes, Nutrition and Metabolic Diseases, Volumul 22 (2015)/Supplement 2, pg. 29

Courses **Advanced course on Atherosclerosis**, Immunology and Lipids, 22-25 March, 2016, Amsterdam.

Awards **First place at the poster presentation session. Lazar AG, Cosac MT, Vlad ML, Raicu M, Manea A, Manea SA** Activation of P300 histone acetyltransferase dependent signaling pathways induces NADPH oxidase expression and oxidative stress in the kidney of diabetic mice. "The 11th National Congress with International Participation and the 37th Annual Scientific Session of the Romanian Society of Cell Biology", 20-23 iunie 2019, Constanta, Romania

Third place at the poster presentation session. Antonescu ML, Manea SA, Lazar AG, Raicu M, Muresian H, Simionescu M, Manea A. Epigenetic control of macrophage polarization by histone acetylation/deacetylation enzymes in experimental atherosclerosis.at "The 36th Annual Scientific Session of the Romanian Society for Cell Biology and the 10th National Congress with International participation", 2018, Craiova, Romania.

UEFISCDI award: **Antonescu ML, Manea SA, Raicu M, Muresian H, Simionescu M, Manea A** (2019) Histone acetyltransferase-dependent pathways mediate NADPH oxidase 5 up-regulation in

human macrophages under inflammatory conditions: a potential mechanism of reactive oxygen species overproduction in atherosclerosis. Oxid Med Cell Longev 2:3201062. Impact factor: 4,87

UEFISCDI award: **Manea SA, Antonescu ML, Fenyo IM, Raicu M, Simionescu M, Manea A** (2018) Epigenetic regulation of vascular NADPH oxidase expression and reactive oxygen species production by histone deacetylase-dependent mechanisms in experimental diabetes. Redox Biology 16: 332-343. Impact factor 7,8

Others

Co-organizer of the international conference: European Cooperation in Science and Technology - Biomedicine and Molecular Biosciences COST Action BM1203 EU-ROS, 21-24 October 2015, Bucharest, Romania.

Projects

1. PNCDI III, Programul 4 - Cercetare fundamentala si de frontiera

Tip proiect: Proiecte complexe de cercetare de frontiera, Contract nr. 5/2018
Titlul proiectului: Tintirea mecanismelor imunitatii innascute pentru o mai buna stratificare a riscului si identificarea de noi optiuni terapeutice in infarctul de miocard
Perioada: Iulie 2018 - Iunie 2022
Director de proiect: Acad. Maya Simionescu

2. Programul Operaţional Competitivitate, Axa prioritară 1: Cercetare, dezvoltare tehnologică şi inovare (CDI) în sprijinul competitivităţii economice şi dezvoltării afacerilor

Tip proiect: Atragerea de personal cu competențe avansate din străinătate pentru consolidarea capacității de CD, Contract nr.115/2016
Titlul proiectului: Terapii tintite pentru boala valvei aortice in diabet (THERAVALDIS)
Perioada: Septembrie 2016 - Decembrie 2020
Director de proiect: Dr. Agneta Simionescu

3. PNCDI III, Programul 1 - Dezvoltarea sistemului national de cercetare dezvoltare

Tip proiect: Proiecte de cercetare pentru stimularea tinerelor echipe independente, Contract nr. 51/2018
Titlul proiectului: Strategie preclinica pentru reducerea inflamatiei vasculare si stresului oxidativ in ateroscleroza prin modularea unor noi mecanisme moleculare dependente de ARN necodant
Perioada: Mai 2018 - Iulie 2020
Director de proiect: Dr. Adrian Manea

4. PNCDI III, Programul 4 - Cercetare fundamentala si de frontiera

Tip proiect: Proiecte de cercetare exploratorie, Contract nr. 69/2017
Titlul proiectului: Noi mecanisme epigenetice implicate in activarea macrofagelor antiinflamatorii - potentiale tinte terapeutice in ateroscleroza
Perioada: Iulie 2017 - Decembrie 2019
Director de proiect: Acad. Maya Simionescu

5. PNCDI III, Programul 2 - Cresterea competitivitatii economiei romanesti prin cercetare, dezvoltare si inovare

Tip proiect: Proiect experimental - demonstrativ, Contract nr. 137/2017
Titlul proiectului: Metoda neinvaziva bazata pe nanotehnologie pentru imagistica moleculara a stresului oxidativ in bolile cardiovasculare
Perioada: Ianuarie 2017– Septembrie 2018
Director de proiect: Dr. Adrian Manea

6. PNII IDEI, Contract nr. 107/2011

Titlul proiectului: Mecanisme moleculare implicate in reglarea stresului oxidativ in ateroscleroza: dezvoltarea unor nanocomplexe functionale inovative pentru terapia antioxidanta
Perioada: Ianuarie 2012– Decembrie 2016.
Director de proiect: Acad. Maya Simionescu