CURRICULUM VITAE

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EDUCATION AND TRAINING

Undergraduate

1982-1987	Saint Petersburg State University, Saint-Petersburg, Russia	B.S., 1987	Biochemistry

Graduate

1987-1988	Saint-Petersburg State University, Saint-Petersburg, Russia	M.S., 1988	Biochemistry
1990-1995	Russian Academy of Sciences, Institute of Evolutionary Physiology and Biochemistry Saint-Petersburg, Russia	Ph.D., 1995	Biochemistry

Post-Graduate

1997-2000 2002-2004	Department of Environmental and Occupational Health, University of Pittsburgh, PA, USA	Postdoctoral Fellow	Kagan V.E. Biochemistry

APPOINTMENTS AND POSITIONS

Academic

1995-1997	Research Biochemist Biochemistry	Institute of Evolutionary Physiology and Biochemistry Russian Academy of Sciences, Saint-Petersburg, Russia

1997-2004	Post-Doctoral Fellow Department of Environmental and Occupational Health	University of Pittsburgh Pittsburgh, PA, USA
2004-2005	Research Associate Department of Environmental and Occupational Health	University of Pittsburgh Pittsburgh, PA, USA
2005-2011	Research Assistant Professor Department of Environmental and Occupational Health	University of Pittsburgh Pittsburgh, PA, USA
2011-2015	Research Associate Professor Department of Environmental and Occupational Health	University of Pittsburgh Pittsburgh, PA, USA
2015-Present	Research Professor Department of Environmental and Occupational Health	University of Pittsburgh Pittsburgh, PA, USA

Non-Academic

1991-1992	Visiting Researcher	Pharmaceutical Company Sigma-Tau, Pomezia, Rome, Italy

MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

2002-2008	Society for Experimental Biology and Medicine
2002-2018	Society for Toxicology
2006-2010	Radiation Research Society
2008-2010	American Association for the Advancement of Science
2014-Present	American Society for Mass Spectrometry

HONORS

1995-1996	Grant from the British Physiological Society - Support Scheme for Centers of Excellence in Eastern Europe and Third World Countries
1997-1998	Grant from Committee for Aid for Neurochemistry (International Society for Neurochemistry)
1998-1999	International Neurological Science Fellowship (F05 NS 10669) from the NIH/NINDS in collaboration with WHO, Unit of Neuroscience, Division of Mental Health and Prevention Abuse.
2000-2001	Fellowship from Leukemia Research Foundation Inc.
2001-2002	IBRO Scholarship against Brain-Drain

2006-2006 Alice Hamilton Award for Excellence in Occupational Safety and Health.

PROFESSIONAL ACTIVITIES

Research and Training

Grants and Contracts Received

Principal Investigator

Years Inclusive	Grant and/or Contract Number and Title	Source	Annual Direct Costs	% Effort
2015-2020	Mechanism-Directed Sequential Delivery of Radiation Mitigators, Lipidomics and Bioanalytical Core – Core F, U19 AI068021	NIAID	$170,000	30.0
2011-2017	Oxygenated species of cardiolipins as biomarkers of mitochondrial dysfunction, ES020693	NIEHS	$225,000	30.0
2010-2012	Assessment of submitochondrial localization and binding of GS-TEMPO conjugates. U19 AI068021/CMCR/Pilot project	NIAID	$82,000	
2012-2013	Design and development of nano-formulation of mitochondria-targeted TPP-IOA as radiomitigator. U19 AI068021/CMCR/Pilot project	NIAID	$65,000	
2013-2014	A new metabolic target for radiomitigation: hydrolysis of oxidized cardiolipins in small intestine of irradiated mice. U19 AI068021/CMCR/Pilot project	NIAID	$53,000	
2014-2015	Hepoxilin A – a new metabolic target for radiomitigation. U19 AI068021/CMCR/Pilot project	NIAID	$75,000	

Co-Investigator on Grants

Years Inclusive	Grant and/or Contract Number and Title	Source	Annual Direct Costs	% Effort
2003-2012	Regulation of Autophagy in Dopaminergic Cell Death			

2005-2010	Mitochondrial Targeting Against Radiation Damage, CMRC; U19 AI068021	NIAID	$144,938	20.0
2005-2008	Oxidative Lipidomics of Programmed Cell Clearance: from Nanotubes to Humans, RGP0019/2005-C	HFSP	$90,909	5.0
2007-2011	Lung Oxidative Stress Inflammation by Carbon Nanotubes,	NIOSH	$249,514	25.0
2008-2013	Oxidative Lipidomics of pulmonary endothelial apoptosis in hyperoxia, HL070755	NHLBI	$222,440	15.0
2009-2011	Irradiation Da-mage and Protection of Pulmonary Endothelium Oxidative Lipidomics, HL094488	NHLBI	$250,000	25.0
2010-2015	Investigation and Mitigation of Carbon Nanomaterial Toxicity, ES 019304	NIEHS	$32.000	10.0
2011-2016	Carbon Nanotube Biodegradation by Neutrophil Myeloperoxidase, OH008282	NIOSH	$250,000	55.0
2011-2013	Phosphatidylserine and its peroxidized and Lp-PLA2-hydrolyzed species on cell surface: Role in clearance of apoptotic cells by macrophages.	GSK	$112,382	20.0
2013-2018	Intra- and Extra-Cellular Signaling by Cardiolipin in Lung Injury, PO1 HL114453	NHLBI	$188,574	35.0
2018-2022	Caspase-2 and inflammasome activation in trauma-hemorrhagic shock, R01GM102146	NIH	$5.614	7.0
2019-2024	Ferroptosis as a Death Mechanism in Lung Injury, PO1HL114453-06	NIH	$150,519	25.0

2020-2025	Protein-oxidized phospholipid interactions determine epithelial cell fate and asthma control. 1R01AI145406-01A1	NIH	$74,620	25.0
2020-2022	Redox Lipidomics Development of Ferroptosis Biomarkers in Cancer	Leidos Biomedical Research, Inc.		10.0
2020-2022	Controlling monolysocardiolipin/cytochrome c peroxidase complexes in Barth syndrome, RO1 GM134715	NIH		
2020-2025	Novel Selective Inhibitors of Pro-Ferroptotic Activity of 15-LOX as Next Generation of Radiomitigators, U01 AI156924	NIH		
2020-2025	Radiation Mitigators Targeting Regulated Necrosis Pathways of Parthanatos and Pyroptosis, U01AI156923	NIH		

Invited Lectureships and Major Seminars Related to Your Research

Date	Title of Presentation	Venue
March, 1999	Bcl-2 enhances redox impact of neocarzinostatin in PC12 rat pheochromocytoma cells.	38th Annual Meeting of the Society of Toxicology, New Orleans
March, 2006	Nitrosative stress induces phosphatidylserine externalization: Signaling role in phagocytosis.	45th Annual Meeting, Society of Toxicology, San Diego, CA
December, 2007	Oxidative lipidomics of γ-irradiation induced injury	Annual CMCR Meeting, University of Pittsburgh.
February, 2007	Oxidative lipidomics of gamma-irradiation induced intestinal injury	Dean Junior Faculty Seminar, GSPH
March, 2008	Oxidative lipidomics of hyperoxic lung injury	47th Annual Meeting, Society of Toxicology, Seattle, WA.

July, 2008	Oxidative Lipidomics of Neuronal Injury in vitro	CFRAH Saturday Seminar Series
March, 2009	Oxidative lipidomics of acute lung injury induced by hyperoxia and gamma-irradiation.	48th Annual Meeting for Society of Toxicology, Baltimore, MA.
March, 2010	Oxidative lipidomics of gamma-irradiation induced lung injury.	49th Annual Meeting for Society of Toxicology, Salt Lake City, UT.
December, 2010	Phosphatidylserine and its peroxidized and Lp-PLA$_2$-hydrolyzed species on cell surface: Role in clearance of apoptotic cells by macrophages.	CFRAH Saturday Seminar Series
March, 2011	Oxidative Lipidomics Reveals Selective (but not Random) Pulmonary Phospholipid Peroxidation After Inhalation of Carbon Nanotubes	50th Annual Meeting for Society of Toxicology, Washington DC.
March, 2012	Headache from oxygenated octadecanoids, eicosanoids and docosanoids	CFRAH Saturday Seminar Series
March, 2012	Development of a protocol for identification and quantitation of oxygenated phospholipid molecular species in cells and tissues.	CFRAH Saturday Seminar Series
June, 2012	Cardiolipin - a biomarker of mitochondrial dysfunction associated with Parkinson Disease	CFRAH Saturday Seminar Series
October, 2013	A Novel Mitochondrial Pathway for Biosynthesis of Lipid Mediators Via Cardiolipin Peroxidaton by Cytochrome c.	CFRAH Saturday Seminar Series
October, 2014	Cardiolipin Crossroads: Oxidation, Hydrolysis, (Re)acylation.	CFRAH Saturday Seminar Series
February, 2015	LC-MS Characterization of Ferroptotic Lipid Signals	International Workshop Munich/Padova/Pittsburgh /Warwick, NewPort Beach Hotel, Sunny Isles, Florida
April, 2015	Desperate search for death signal	CFRAH Saturday Seminar Series

April, 2016	New MS technology: Orbitrap Fusion Lumos	CFRAH Saturday Seminar Series
June, 2016	Lipidomics of small intestine.	CMCR onsite visit meeting
March, 2018	Improvement of lipid isolation and separation. Solid phase extraction and oxidative lipidomics.	CFRAH Saturday Seminar Series
April, 2018	Oxidative lipidomics of irradiated ileum.	CFRAH Saturday Seminar Series
October, 2019	High-resolution LC-MS deciphers lipid signal of ferroptosis	2019 North America mass spec User's meeting, ThermoFisher, October 30, 2019, Wyndam Pittsburgh University Center, Pittsburgh.
May, 2020	New pathway of generation lysophospholipids, phosphatidic acid and endocannabinoid 2-arachidonoyl-glycerol during inflammation.	CFRAH seminars series
February, 2021	"Every weakness contains within itself a strength". Discovery of new metabolic pathways and unknown signaling functions of ancient phospholipids - plasmalogens.	EOH seminar

Other Research and Training Activities

Date	Position	Description of Activity
2007-2008	Trainee	Radiation Biology program funded by CMCR/NIAID

PUBLICATIONS

Refereed Articles

1. **Tiurina IuIu (Tyurina YY),** Tiurin VA, Avrova NF, Kagan VE. [Ganglioside-dependent factor inhibiting lipid peroxidation in synaptosomal membranes]. Biulleten' eksperimental'noi biologii i meditsiny. 1990; 109 (6):553-5, [Article in Russian]. PMID: 2397291.
2. Tiurin VA, Kuznetsova LA, **Tiurina IuIu (Tyurina YY),** Erin AN, Avrova NF, Pertseva MN, Kagan VE. [Participation of gangliosides in protection of beta adrenergic receptors from damaging effect induced by lipid peroxidation in

synaptosome membranes]. Biulleten' eksperimental'noi biologii i meditsiny. 1991; 111 (6):597-9, [Article in Russian]. PMID:1654162.

3. Tyurin VA, **Tyurina YY**, Avrova NF. Ganglioside-dependent factor, inhibiting lipid peroxidation in rat brain synaptosomes. Neurochemistry international. 1992; 20 (3):401-7. PMID: 1304335.
4. Tiurin VA, Bagrov AIa, Fedorova OV, Zhabko EP, **Tiurina IuIu (Tyurina YY),** Avrova NF, Das DK, Kagan VE. [Ganglioside protection of the erythrocyte membranes in myocardial ischemia]. Biulleten' eksperimental'noi biologii i meditsiny. 1992; 114 (10):366-8, [Article in Russian]. PMID: 1337704.
5. Tiurin VA, Erin AN, **Tiurina IuIu (Tyurina YY),** Avrova NF, Kagan VE. [Ganglioside participation in the regulation of free-radical reactions in brain membranes]. Biulleten' eksperimental'noi biologii i meditsiny. 1992; 114 (12):592-4, [Article in Russian]. PMID: 1292681.
6. **Tyurina YY**, Tyurin VA, Avrova NF. Ganglioside GM1 protects cAMP 3'5':phosphodiesterase from inactivation caused by lipid peroxidation in brain synaptosomes of rats. Molecular and chemical neuropathology. 1993; 19 (3):205-17. PMID: 8397583.
7. Avrova NF, Nalivaeva NN, Tiurin VA, Vetosh AN, **Tiurina IuIu (Tyurina YY),** Baev VA, Vasil'va IV. [Ability of gangliosides to improve the functional state of the body and normalize the biochemical structure of cell membranes in hypoxia]. Fiziologiia cheloveka. 1993;19(6):109-20, [Article in Russian]. PMID: 8138079.
8. Avrova NF, Ivanova VP, Tiurin VA, Gamalei IA, Kliubin IV, Shchepetkin IA, Borunov EV, **Tiurina IuIu (Tyurina YY).** [Modulation by super-low concentrations of ganglioside GM1 of oxidative burst in murine macrophages and human neutrophils]. Biulleten' eksperimental'noi biologii i meditsiny. 1994; 117 (1):44-6, [Article in Russian]. PMID: 8193328.
9. **Tyurina YY**, Tyurin VA, Yalowich JC, Quinn PJ, Claycamp HG, Schor NF, Pitt BR, Kagan VE. Phenoxyl radicals of etoposide (VP-16) can directly oxidize intracellular thiols: protective versus damaging effects of phenolic antioxidants. Toxicology and Applied Pharmacology. 1995; 131 (2):277-88. PMID: 7716769.
10. Elsayed NM, **Tyurina YY**, Tyurin VA, Menshikova EV, Kisin ER, Kagan VE. Antioxidant depletion, lipid peroxidation, and impairment of calcium transport induced by air-blast overpressure in rat lungs. Experimental Lung Research. 1996;22(2):179-200. PMID: 8706635.
11. Tiurin VA, Arduini A, **Tiurina IuIu (Tyurina YY),** Sokolova TV, Furaev VV, Rychkova MP, Arrigoni-Martelli E. [The repair of the membrane lipid bilayer in oxidative stress: phosphatidylethanolamine reacylation in synaptosome, photoreceptor and erythrocyte membranes]. Zhurnal evoliutsionnoi biokhimii i fiziologii. 1996;32(3):248-55, [Article in Russian] PMID: 9148613.

12. Tyurin VA, Carta G, **Tyurina YY**, Banni S, Day BW, Corongiu FP, Kagan VE. Peroxidase-catalyzed oxidation of beta-carotene in HL-60 cells and in model systems: involvement of phenoxyl radicals. Lipids. 1997; 32 (2):131-42. PMID: 9075202.
13. **Tyurina YY**, Tyurin VA, Carta G, Quinn PJ, Schor NF, Kagan VE. Direct evidence for antioxidant effect of Bcl-2 in PC12 rat pheochromocytoma cells. Archives of biochemistry and biophysics. 1997; 344 (2):413-23. PMID: 9264556.
14. Pitt BR, Schwarz M, Woo ES, Yee E, Wasserloos K, Tran S, Weng W, Mannix RJ, Watkins SA, **Tyurina YY**, Tyurin VA, Kagan VE, Lazo JS. Overexpression of metallothionein decreases sensitivity of pulmonary endothelial cells to oxidant injury. The American Journal of Physiology. 1997; 273:L856-65. PMID: 9357862.
15. Osaka K, **Tyurina YY**, Dubey RK, Tyurin VA, Ritov VB, Quinn PJ, Branch RA, Kagan VE. Amphotericin B as an intracellular antioxidant: protection against 2,2'-azobis(2,4-dimethylvaleronitrile)-induced peroxidation of membrane phospholipids in rat aortic smooth muscle cells. Biochemical Pharmacology. 1997; 54 (8):937-45. PMID: 9354594.
16. Tiurin VA, **Tiurina IuIu (Tyurina YY),** Sokolova TV, Arduini A. [The participation of palmitic acid in repair of synaptosome membranes during oxidative stress. The role of palmitoylcarnitine in adaptation mechanism]. Zhurnal evoliutsionnoi biokhimii i fiziologii, 1998; 34(1):3-10, [Article in Russian]. PMID: 9720146.
17. **Tiurina IuIu (Tyurina YY),** Tiurin VA, Furaev VV, Rychkova MP, Etingof RN. [The role of saturated and unsaturated fatty acids in the repair of the lipid bilayer of photoreceptor membranes in photodamage: the possible mechanism of adaptation]. Zhurnal evoliutsionnoi biokhimii i fiziologii. 1998; 34(2):185-90, [Article in Russian] PMID: 9703665.
18. Kagan VE, **Tyurina YY**, Witt E. Role of coenzyme Q and superoxide in vitamin E cycling. Sub-cellular biochemistry. 1998; 30:491-507. PMID: 9932527.
19. Kagan VE, Ritov VB, **Tyurina YY**, Tyurin VA. Sensitive and specific fluorescent probing of oxidative stress in different classes of membrane phospholipids in live cells using metabolically integrated cis-parinaric acid. Methods in molecular biology (Clifton, N.J.). 1998; 108:71-87. PMID: 9921517.
20. Day BW, Bergamini S, **Tyurina YY**, Carta G, Tyurin VA, Kagan VE. beta-Carotene. An antioxidant or a target of oxidative stress in cells? Sub-cellular Biochemistry. 1998; 30:209-17. PMID: 9932516.
21. Gorbunov NV, **Tyurina YY**, Salama G, Day BW, Claycamp HG, Argyros G, Elsayed NM, Kagan VE. Nitric oxide protects cardiomyocytes against tert-butyl hydroperoxide-induced formation of alkoxyl and peroxyl radicals and peroxidation of phosphatidylserine. Biochemical and Biophysical Research Communications. 1998; 244 (3):647-51. PMID: 9535719.
22. Fabisiak JP, Kagan VE, **Tyurina YY**, Tyurin VA, Lazo JS. Paraquat-induced phosphatidylserine oxidation and apoptosis are independent of activation of

PLA2. The American Journal of Physiology. 1998; 274:L793-802. PMID: 9612295.

23. Kagan VE, Arroyo A, Tyurin VA, **Tyurina YY,** Villalba JM, Navas P. Plasma membrane NADH-coenzyme Q0 reductase generates semiquinone radicals and recycles vitamin E homologue in a superoxide-dependent reaction. FEBS Letters. 1998 May; 428:43-6. PMID: 9645471.
24. **Tiurina IuIu (Tyurina YY),** Sokolova TV, Gonchar VS, Furaev VV, Avrova NF, Tiurin VA. [Inhibition of Na, K-adenosine triphosphatase by glutamate in cerebral cortex synaptosomes. Protective effect of alpha-tocopherol and superoxide dismutase]. Zhurnal evoliutsionnoi biokhimii i fiziologii. 1998; 34(3):325-32, [Article in Russian]. PMID: 9783381
25. Tyurin VA, **Tyurina YY**, Quinn PJ, Schor NF, Balachandran R, Day BW, Kagan VE. Glutamate-induced cytotoxicity in PC12 pheochromocytoma cells: role of oxidation of phospholipids, glutathione and protein sulfhydryls revealed by bcl-2 transfection. Brain Research. Molecular Brain Research. 1998; 60 (2):270-81. PMID: 9757062.
26. Kagan VE, **Tyurina YY**. Recycling and redox cycling of phenolic antioxidants. Annals of The New York Academy of Sciences. 1998; 854:425-34. PMID: 9928449.
27. Day BW, Tyurin VA, **Tyurina YY**, Liu M, Facey JA, Carta G, Kisin ER, Dubey RK, Kagan VE. Peroxidase-catalyzed pro- versus antioxidant effects of 4-hydroxytamoxifen: enzyme specificity and biochemical sequelae. Chemical Research in Toxicology. 1999; 12 (1):28-37. PMID: 9894015.
28. Dubey RK, **Tyurina YY**, Tyurin VA, Gillespie DG, Branch RA, Jackson EK, Kagan VE. Estrogen and tamoxifen metabolites protect smooth muscle cell membrane phospholipids against peroxidation and inhibit cell growth. Circulation Research. 1999; 84 (2):229-39. PMID: 9933255.
29. Fabisiak JP, Tyurin VA, **Tyurina YY**, Borisenko GG, Korotaeva A, Pitt BR, Lazo JS, Kagan VE. Redox regulation of copper-metallothionein. Archives of Biochemistry and Biophysics. 1999; 363 (1):171-81. PMID: 10049512.
30. Avrova NF, Shestak KI, Zakharova IO, Sokolova TV, **Tiurina IuIu (Tyurina YY)**, Tiurin VA. [The antioxidant prevention of disorders in calcium ion metabolism under the action of glutamate on the synaptosomes of the rat cerebral cortex]. Rossiiskii fiziologicheskii zhurnal imeni I.M. Sechenova / Rossiiskaia akademiia nauk. 1999; 85 (4):488-96 [Article in Russian]. PMID: 10513381.
31. Shvedova AA, **Tyurina YY**, Gorbunov NV, Tyurin VA, Castranova V, Kommineni C, Ojimba J, Gandley R, McLaughlin MK, Kagan VE. tert-butyl hydroperoxide/hemoglobin-induced oxidative stress and damage to vascular smooth muscle cells: different effects of nitric oxide and nitrosothiols. Biochemical Pharmacology. 1999; 57 (9):989-1001. PMID: 10796069.
32. Schor NF, **Tyurina YY**, Fabisiak JP, Tyurin VA, Lazo JS, Kagan VE. Selective oxidation and externalization of membrane phosphatidylserine: Bcl-2-induced potentiation of the final common pathway for apoptosis. Brain research. 1999;

831:125-30. PMID: 10411991.

33. Schor NF, **Tyurina YY**, Tyurin VA, Kagan VE. Differential membrane antioxidant effects of immediate and long-term estradiol treatment of MCF-7 breast cancer cells. Biochemical and Biophysical Research Communications. 1999; 260 (2):410-5. PMID: 10403783.
34. Kagan VE, Yalowich JC, Borisenko GG, **Tyurina YY**, Tyurin VA, Thampatty P, Fabisiak JP. Mechanism-based chemopreventive strategies against etoposide-induced acute myeloid leukemia: free radical/antioxidant approach. Molecular pharmacology. 1999; 56 (3):494-506. PMID: 10462537.
35. Goldman R, Claycamp GH, Sweetland MA, Sedlov AV, Tyurin VA, Kisin ER, **Tyurina YY**, Ritov VB, Wenger SL, Grant SG, Kagan VE. Myeloperoxidase-catalyzed redox-cycling of phenol promotes lipid peroxidation and thiol oxidation in HL-60 cells. Free Radical Biology & Medicine. 1999; 27:1050-63. PMID: 10569638.
36. Fabisiak JP, Tyurin VA, **Tyurina YY**, Sedlov A, Lazo JS, Kagan VE. Nitric oxide dissociates lipid oxidation from apoptosis and phosphatidylserine externalization during oxidative stress. Biochemistry. 2000; 39 (1):127-38. PMID: 10625487.
37. Schor NF, Rudin CM, Hartman AR, Thompson CB, **Tyurina YY**, Kagan VE. Cell line dependence of Bcl-2-induced alteration of glutathione handling. Oncogene. 2000; 19 (3):472-6. PMID: 10656697.
38. Shvedova AA, Kommineni C, Jeffries BA, Castranova V, **Tyurina YY**, Tyurin VA, Serbinova EA, Fabisiak JP, Kagan VE. Redox cycling of phenol induces oxidative stress in human epidermal keratinocytes. The Journal of Investigative Dermatology. 2000; 114 (2):354-64. PMID: 10651998.
39. Kagan VE, Kuzmenko AI, Shvedova AA, Kisin ER, **Tyurina YY**, Yalowich JC. Myeloperoxidase-catalyzed phenoxyl radicals of vitamin E homologue, 2,2,5,7,8-pentamethyl- 6-hydroxychromane, do not induce oxidative stress in live HL-60 cells. Biochemical and Biophysical Research Communications. 2000; 270 (3):1086-92. PMID: 10772954.
40. Kagan VE, Fabisiak JP, Shvedova AA, **Tyurina YY,** Tyurin VA, Schor NF, Kawai K. Oxidative signaling pathway for externalization of plasma membrane phosphatidylserine during apoptosis. FEBS Letters. 2000; 477:1-7. PMID: 10899301.
41. **Tyurina YY**, Shvedova AA, Kawai K, Tyurin VA, Kommineni C, Quinn PJ, Schor NF, Fabisiak JP, Kagan VE. Phospholipid signaling in apoptosis: peroxidation and externalization of phosphatidylserine. Toxicology. 2000; 148:93-101. PMID: 10962127.
42. Avrova NF, Shestak KI, Zakharova IO, Sokolova TV, **Tyurina YY**, Tyurin VA. The use of antioxidants to prevent glutamate-induced derangement of calcium ion metabolism in rat cerebral cortex synaptosomes. Neuroscience and behavioral physiology 2000;30(5):535-41. PMID: 11037144.

43. Tyurin VA, **Tyurina YY**, Borisenko GG, Sokolova TV, Ritov VB, Quinn PJ, Rose M, Kochanek P, Graham SH, Kagan VE. Oxidative stress following traumatic brain injury in rats: quantitation of biomarkers and detection of free radical intermediates. Journal of Neurochemistry. 2000; 75 (5):2178-89. PMID: 11032908.
44. Kawai K, Liu SX, Tyurin VA, **Tyurina YY,** Borisenko GG, Jiang JF, St Croix CM, Fabisiak JP, Pitt BR, Kagan VE. Antioxidant and antiapoptotic function of metallothioneins in HL-60 cells challenged with copper nitrilotriacetate. Chemical research in toxicology. 2000; 13 (12):1275-86. PMID: 11123969.
45. Vladimirov YA, Arroyo A, Taylor JM, **Tyurina YY**, Matsura T, Tyurin VA, Kagan VE. Quinolizin-coumarins as physical enhancers of chemiluminescence during lipid peroxidation in live HL-60 cells. Archives of Biochemistry and Biophysics. 2000; 384 (1):154-62. PMID: 11147826.
46. Shvedova AA, **Tyurina YY**, Tyurin VA, Kikuchi Y, Kagan VE, Quinn PJ. Quantitative analysis of phospholipid peroxidation and antioxidant protection in live human epidermal keratinocytes. Bioscience reports. 2001; 21 (1):33-43. PMID: 11508692.
47. Liu S, Kawai K, Tyurin VA, **Tyurina YY**, Borisenko GG, Fabisiak JP, Quinn PJ, Pitt BR, Kagan VE. Nitric oxide-dependent pro-oxidant and pro-apoptotic effect of metallothioneins in HL-60 cells challenged with cupric nitrilotriacetate. The Biochemical Journal. 2001; 354:397-406. PMCID: PMC1221668. PMID: 11171119.
48. Kagan VE, Kozlov AV, **Tyurina YY**, Shvedova AA, Yalowich JC. Antioxidant mechanisms of nitric oxide against iron-catalyzed oxidative stress in cells. Antioxidants & Redox Signaling. 2001; 3 (2):189-202. PMID: 11396475.
49. Greenberger JS, Kagan VE, Pearce L, Boriseniao G, **Tyurina Y**, Epperly MW. Modulation of redox signal transduction pathways in the treatment of cancer. Antioxidants & Redox Signaling. 2001; 3 (3):347-59. PMID: 11491649.
50. Tyurin VA, Liu SX, **Tyurina YY**, Sussman NB, Hubel CA, Roberts JM, Taylor RN, Kagan VE. Elevated levels of S-nitrosoalbumin in preeclampsia plasma. Circulation Research. 2001; 88 (11):1210-5. PMID: 11397789.
51. Kagan VE, Kuzmenko AI, **Tyurina YY**, Shvedova AA, Matsura T, Yalowich JC. Pro-oxidant and antioxidant mechanisms of etoposide in HL-60 cells: role of myeloperoxidase. Cancer Research. 2001; 61 (21):7777-84. PMID: 11691792.
52. **Tyurina YY**, Tyurin VA, Shvedova AA, Fabisiak JP, Kagan VE. Peroxidation of phosphatidylserine in mechanisms of apoptotic signaling. Methods in enzymology. 2002; 352:159-74. PMID: 12125344.
53. **Tyurina YY**, Tyurin VA, Liu SX, Smith CA, Shvedova AA, Schor NF, Kagan VE. Phosphatidylserine peroxidation during apoptosis. A signaling pathway for phagocyte clearance. Sub-cellular biochemistry. 2002; 36:79-96. PMID: 12037991.

54. Tyurin VA, **Tyurina YY**, Liu SX, Bayir H, Hubel CA, Kagan VE. Quantitation of S-nitrosothiols in cells and biological fluids. Methods in Enzymology. 2002; 352:347-60. PMID: 12125362.

55. Behringer W, Safar P, Kentner R, Wu X, Kagan VE, Radovsky A, Clark RS, Kochanek PM, Subramanian M, Tyurin VA, **Tyurina YY**, Tisherman SA. Antioxidant Tempol enhances hypothermic cerebral preservation during prolonged cardiac arrest in dogs. Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism. 2002; 22 (1):105-17. PMID: 11807400.

56. Bayir H, Kagan VE, **Tyurina YY**, Tyurin V, Ruppel RA, Adelson PD, Graham SH, Janesko K, Clark RS, Kochanek PM. Assessment of antioxidant reserves and oxidative stress in cerebrospinal fluid after severe traumatic brain injury in infants and children. Pediatric research. 2002; 51 (5):571-8. PMID: 11978879.

57. Koty PP, **Tyurina YY,** Tyurin VA, Li SX, Kagan VE. Depletion of Bcl-2 by an antisense oligonucleotide induces apoptosis accompanied by oxidation and externalization of phosphatidylserine in NCI-H226 lung carcinoma cells. Molecular and cellular biochemistry. 2002;234-235(1-2):125-33. PMID: 12162425.

58. Shvedova AA, **Tyurina JY,** Kawai K, Tyurin VA, Kommineni C, Castranova V, Fabisiak JP, Kagan VE. Selective peroxidation and externalization of phosphatidylserine in normal human epidermal keratinocytes during oxidative stress induced by cumene hydroperoxide. The Journal of Investigative Dermatology. 2002; 118 (6):1008-18. PMID: 12060396.

59. Kagan VE, Gleiss B, **Tyurina YY**, Tyurin VA, Elenström-Magnusson C, Liu SX, Serinkan FB, Arroyo A, Chandra J, Orrenius S, Fadeel B. A role for oxidative stress in apoptosis: oxidation and externalization of phosphatidylserine is required for macrophage clearance of cells undergoing Fas-mediated apoptosis. Journal of immunology (Baltimore, Md.: 1950). 2002; 169 (1):487-99. PMID: 12077280.

60. Avrova NF, Zakharova IO, Tyurin VA, **Tyurina YY,** Gamaley IA, Schepetkin IA. Different metabolic effects of ganglioside GM1 in brain synaptosomes and phagocytic cells. Neurochemical research. 2002; 27:751-9. PMID: 12374210.

61. Modriansky M, **Tyurina YY,** Tyurin VA, Matsura T, Shvedova AA, Yalowich JC, Kagan VE. Anti-/pro-oxidant effects of phenolic compounds in cells: are colchicine metabolites chain-breaking antioxidants? Toxicology. 2002; 177 (1):105-17. PMID: 12126799.

62. Kentner R, Safar P, Behringer W, Wu X, Kagan VE, **Tyurina YY**, Henchir J, Ma L, Hsia CJ, Tisherman SA. Early antioxidant therapy with Tempol during hemorrhagic shock increases survival in rats. The Journal of trauma. 2002; 53 (5):968-77. PMID: 12435951.

63. Arroyo A, Modrianský M, Serinkan FB, Bello RI, Matsura T, Jiang J, Tyurin VA, *Tyurina YY*, Fadeel B, Kagan VE. NADPH oxidase-dependent oxidation and externalization of phosphatidylserine during apoptosis in Me2SO-differentiated HL-60 cells. Role in phagocytic clearance. The Journal of Biological Chemistry. 2002; 277 (51):49965-75. PMID: 12376550.

64. Kagan VE, Kuzmenko AI, Shvedova AA, Kisin ER, Li R, Martin I, Quinn PJ, Tyurin VA, **Tyurina YY,** Yalowich JC. Direct evidence for recycling of myeloperoxidase-catalyzed phenoxyl radicals of a vitamin E homologue, 2,2,5,7,8-pentamethyl-6-hydroxy chromane, by ascorbate/dihydrolipoate in living HL-60 cells. Biochimica Et Biophysica Acta. 2003; 1620:72-84. PMID: 12595076.

65. Kagan VE, Borisenko GG, Serinkan BF, **Tyurina YY**, Tyurin VA, Jiang J, Liu SX, Shvedova AA, Fabisiak JP, Uthaisang W, Fadeel B. Appetizing rancidity of apoptotic cells for macrophages: oxidation, externalization, and recognition of phosphatidylserine. American journal of physiology. Lung cellular and molecular physiology. 2003; 285 (1):L1-17. PMID: 12788785.

66. Jiang J, Serinkan BF, **Tyurina YY**, Borisenko GG, Mi Z, Robbins PD, Schroit AJ, Kagan VE. Peroxidation and externalization of phosphatidylserine associated with release of cytochrome c from mitochondria. Free Radical Biology & Medicine. 2003; 35 (7):814-25. PMID: 14583346.

67. Schor NF, Kagan VE, Liang Y, Yan Ch, **Tyurina Y**, Tyurin V, Nylander KD. Exploiting oxidative stress and signaling in chemotherapy of resistant neoplasms. Biochemistry. Biokhimiia. 2004; 69 (1):38-44. PMID: 14972016.

68. Avrova NF, Molchanova SM, Iurlova LA, **Tiurina IuIu (Tyurina YY)**, Novoselova NIu, Zakharova IO. [Influence of glutamate and inhibitors of different pathways of free radicals synthesis on activity Na,K-atpase and accumulation of lipids peroxidation products in synaptosomes in rat cerebellum]. Zhurnal evoliutsionnoi biokhimii i fiziologii. 2004; 40(1):39-46, [Article in Russian]. PMID: 15174337.

69. **Tyurina YY**, Serinkan FB, Tyurin VA, Kini V, Yalowich JC, Schroit AJ, Fadeel B, Kagan VE. Lipid antioxidant, etoposide, inhibits phosphatidylserine externalization and macrophage clearance of apoptotic cells by preventing phosphatidylserine oxidation. The Journal of Biological Chemistry. 2004; 279 (7):6056-64. PMID: 14630936.

70. Epperly MW, Osipov AN, Martin I, Kawai KK, Borisenko GG, **Tyurina YY**, Jefferson M, Bernarding M, Greenberger JS, Kagan VE. Ascorbate as a "redox sensor" and protector against irradiation-induced oxidative stress in 32D CL 3 hematopoietic cells and subclones overexpressing human manganese superoxide dismutase. International Journal of Radiation Oncology, Biology, Physics. 2004; 58 (3):851-61. PMID: 14967442.

71. Serinkan BF, **Tyurina YY**, Babu H, Djukic M, Quinn PJ, Schroit A, Kagan VE. Vitamin E inhibits anti-Fas-induced phosphatidylserine oxidation but does not affect its externalization during apoptosis in Jurkat T cells and their phagocytosis by J774A.1 macrophages. Antioxidants & Redox Signaling. 2004; 6 (2):227-36. PMID: 15025924.
72. **Tyurina YY**, Kawai K, Tyurin VA, Liu SX, Kagan VE, Fabisiak JP. The plasma membrane is the site of selective phosphatidylserine oxidation during apoptosis: role of cytochrome C. Antioxidants & Redox Signaling. 2004; 6 (2):209-25. PMID: 15025923.
73. Borisenko GG, Martin I, Zhao Q, Amoscato AA, **Tyurina YY**, Kagan VE. Glutathione propagates oxidative stress triggered by myeloperoxidase in HL-60 cells. Evidence for glutathionyl radical-induced peroxidation of phospholipids and cytotoxicity. The Journal of Biological Chemistry. 2004; 279 (22):23453-62. PMID: 15039448.
74. Jiang J, Borisenko GG, Osipov A, Martin I, Chen R, Shvedova AA, Sorokin A, **Tyurina YY**, Potapovich A, Tyurin VA, Graham SH, Kagan VE. Arachidonic acid-induced carbon-centered radicals and phospholipid peroxidation in cyclo-oxygenase-2-transfected PC12 cells. Journal of Neurochemistry. 2004; 90 (5):1036-49. PMID: 15312159.
75. Jiang J, Kini V, Belikova N, Serinkan BF, Borisenko GG, **Tyurina YY**, Tyurin VA, Kagan VE. Cytochrome c release is required for phosphatidylserine peroxidation during Fas-triggered apoptosis in lung epithelial A549 cells. Lipids. 2004; 39 (11):1133-42. PMID: 15726829.
76. **Tyurina YY**, Tyurin VA, Zhao Q, Djukic M, Quinn PJ, Pitt BR, Kagan VE. Oxidation of phosphatidylserine: a mechanism for plasma membrane phospholipid scrambling during apoptosis? Biochemical and Biophysical Research Communications. 2004; 324 (3):1059-64. PMID: 15485662.
77. Kagan VE, Borisenko GG, **Tyurina YY**, Tyurin VA, Jiang J, Potapovich AI, Kini V, Amoscato AA, Fujii Y. Oxidative lipidomics of apoptosis: redox catalytic interactions of cytochrome c with cardiolipin and phosphatidylserine. Free radical biology & medicine. 2004; 37 (12):1963-85. PMID: 15544916.
78. Fabisiak JP, **Tyurina YY,** Tyurin VA, Kagan VE. Quantification of selective phosphatidylserine oxidation during apoptosis. Methods in molecular biology (Clifton, N.J.). 2005; 291:449-56. PMID: 15502241.
79. Bayir H, Kagan VE, Borisenko GG, **Tyurina YY**, Janesko KL, Vagni VA, Billiar TR, Williams DL, Kochanek PM. Enhanced oxidative stress in iNOS-deficient mice after traumatic brain injury: support for a neuroprotective role of iNOS. Journal of Cerebral Blood Flow and Metabolism: Official Journal of The International Society of Cerebral Blood Flow and Metabolism. 2005; 25 (6):673-84. PMID: 15716856.
80. **Tyurina YY**, Nylander KD, Mirnics ZK, Portugal C, Yan C, Zaccaro C, Saragovi HU, Kagan VE, Schor NF. The intracellular domain of p75NTR as a determinant of cellular reducing potential and response to oxidant stress. Aging Cell. 2005; 4 (4):187-96. PMID: 16026333.

81. Kagan VE, Tyurin VA, Jiang J, **Tyurina YY**, Ritov VB, Amoscato AA, Osipov AN, Belikova NA, Kapralov AA, Kini V, Vlasova II, Zhao Q, Zou M, Di P, Svistunenko DA, Kurnikov IV, Borisenko GG. Cytochrome c acts as a cardiolipin oxygenase required for release of proapoptotic factors. Nature chemical biology. 2005; 1 (4):223-32. PMID: 16408039.

82. Shvedova AA, Kisin ER, Mercer R, Murray AR, Johnson VJ, Potapovich AI, **Tyurina YY**, Gorelik O, Arepalli S, Schwegler-Berry D, Hubbs AF, Antonini J, Evans DE, Ku BK, Ramsey D, Maynard A, Kagan VE, Castranova V, Baron P. Unusual inflammatory and fibrogenic pulmonary responses to single-walled carbon nanotubes in mice. American Journal of Physiology. Lung Cellular and Molecular Physiology. 2005; 289 (5):L698-708. PMID: 15951334.

83. Stoyanovsky DA, **Tyurina YY,** Tyurin VA, Anand D, Mandavia DN, Gius D, Ivanova J, Pitt B, Billiar TR, Kagan VE. Thioredoxin and lipoic acid catalyze the denitrosation of low molecular weight and protein S-nitrosothiols. Journal of the American Chemical Society. 2005; 127 (45):15815-23. PMID: 16277524.

84. Epperly MW, **Tyurina YY**, Nie S, Niu YY, Zhang X, Kagan V, Greenberger JS. MnSOD-plasmid liposome gene therapy decreases ionizing irradiation-induced lipid peroxidation of the esophagus. In Vivo 2005; 19(6):997-1004. PMID: 16277013.

85. Mi Z, Hong B, Mirnics ZK, **Tyurina YY**, Kagan VE, Liang Y, Schor NF. Bcl-2-mediated potentiation of neocarzinostatin-induced apoptosis: requirement for caspase-3, sulfhydryl groups, and cleavable Bcl-2. Cancer Chemotherapy and Pharmacology. 2006; 57 (3):357-67. PMID: 16001169.

86. Bayir H, Fadeel B, Palladino MJ, Witasp E, Kurnikov IV, **Tyurina YY**, Tyurin VA, Amoscato AA, Jiang J, Kochanek PM, DeKosky ST, Greenberger JS, Shvedova AA, Kagan VE. Apoptotic interactions of cytochrome c: redox flirting with anionic phospholipids within and outside of mitochondria. Biochimica et biophysica acta. 2006;1757(5-6):648-59.PMID: 16740248

87. **Tyurina YY**, Kapralov AA, Jiang J, Borisenko GG, Potapovich AI, Sorokin A, Kochanek PM, Graham SH, Schor NF, Kagan VE. Oxidation and cytotoxicity of 6-OHDA are mediated by reactive intermediates of COX-2 overexpressed in PC12 cells. Brain research. 2006; 1093 (1):71-82. PMID: 16712820.

88. **Tyurina YY**, Kini V, Tyurin VA, Vlasova II, Jiang J, Kapralov AA, Belikova NA, Yalowich JC, Kurnikov IV, Kagan VE. Mechanisms of cardiolipin oxidation by cytochrome c: relevance to pro- and antiapoptotic functions of etoposide. Molecular pharmacology. 2006; 70 (2):706-17. PMID: 16690782.

89. Kagan VE, **Tyurina YY**, Tyurin VA, Konduru NV, Potapovich AI, Osipov AN, Kisin ER, Schwegler-Berry D, Mercer R, Castranova V, Shvedova AA. Direct and indirect effects of single walled carbon nanotubes on RAW 264.7 macrophages: role of iron. Toxicology Letters. 2006; 165 (1):88-100. PMID: 16527436.

90. Kagan VE, **Tyurina YY**, Bayir H, Chu CT, Kapralov AA, Vlasova II, Belikova NA, Tyurin VA, Amoscato A, Epperly M, Greenberger J, Dekosky S, Shvedova AA, Jiang J. The "pro-apoptotic genies" get out of mitochondria: oxidative lipidomics and redox activity of cytochrome c/cardiolipin complexes. Chemico-biological interactions. 2006; 163:15-28. PMID: 16797512.

91. Costacou T, Zgibor JC, Evans RW, **Tyurina YY,** Kagan VE, Orchard TJ. Antioxidants and coronary artery disease among individuals with type 1 diabetes: Findings from the Pittsburgh Epidemiology of Diabetes Complications Study. Journal of Diabetes and Its Complications. 2006; 20(6):387-94. PMID: 17070445.

92. Macias CA, Chiao JW, Xiao J, Arora DS, **Tyurina YY**, Delude RL, Wipf P, Kagan VE, Fink MP. Treatment with a novel hemigramicidin-TEMPO conjugate prolongs survival in a rat model of lethal hemorrhagic shock. Annals of surgery. 2007; 245 (2):305-14. PMCID: PMC1876982. PMID: 17245186.

93. **Tyurina YY**, Basova LV, Konduru NV, Tyurin VA, Potapovich AI, Cai P, Bayir H, Stoyanovsky D, Pitt BR, Shvedova AA, Fadeel B, Kagan VE. Nitrosative stress inhibits the aminophospholipid translocase resulting in phosphatidylserine externalization and macrophage engulfment: implications for the resolution of inflammation. The Journal of biological chemistry. 2007; 282 (11):8498-509. PMID: 17229723.

94. Tyurin VA, **Tyurina YY,** Osipov AN, Belikova NA, Basova LV, Kapralov AA, Bayir H, Kagan VE. Interactions of cardiolipin and lyso-cardiolipins with cytochrome c and tBid: conflict or assistance in apoptosis. Cell Death Differ. 2007; 14(4): 872-5.

95. Shvedova AA, Kisin ER, Murray AR, Gorelik O, Arepalli S, Castranova V, Young SH, Gao F, Tyurina YY, Oury TD, Kagan VE. Vitamin E deficiency enhances pulmonary inflammatory response and oxidative stress induced by single-walled carbon nanotubes in C57BL/6 mice. Toxicology and Applied Pharmacology. 2007; 221 (3):339-48. PMCID: PMC2266092. PMID: 17482224.

96. Bayir H, Tyurin VA, **Tyurina YY,** Viner R, Ritov V, Amoscato AA, Zhao Q, Zhang XJ, Janesko-Feldman KL, Alexander H, Basova LV, Clark RS, Kochanek PM, Kagan VE. Selective early cardiolipin peroxidation after traumatic brain injury: an oxidative lipidomics analysis. Annals of neurology. 2007; 62 (2):154-69. PMID: 17685468.

97. Fink MP, Macias CA, Xiao J, **Tyurina YY**, Delude RL, Greenberger JS, Kagan VE, Wipf P. Hemigramicidin-TEMPO conjugates: novel mitochondria-targeted antioxidants. Critical care medicine. 2007; 35:S461-7. PMID: 17713394.

98. Belikova NA, Jiang J, Tyurina YY, Zhao Q, Epperly MW, Greenberger J, Kagan VE. Cardiolipin-specific peroxidase reactions of cytochrome C in mitochondria during irradiation-induced apoptosis. International journal of radiation oncology, biology, physics. 2007; 69 (1):176-86. PMID: 17707271.

99. Fink MP, Macias CA, Xiao J, **Tyurina YY**, Jiang J, Belikova N, Delude RL, Greenberger JS, Kagan VE, Wipf P. Hemigramicidin-TEMPO conjugates: novel mitochondria-targeted anti-oxidants. Biochemical pharmacology. 2007; 74 (6):801-9. PMID: 17601494.

100. Kapralov AA, Kurnikov IV, Vlasova II, Belikova NA, Tyurin VA, Basova LV, Zhao Q, **Tyurina YY**, Jiang J, Bayir H, Vladimirov YA, Kagan VE. The hierarchy of structural transitions induced in cytochrome c by anionic phospholipids determines its peroxidase activation and selective peroxidation during apoptosis in cells. Biochemistry. 2007; 46 (49):14232-44. PMID: 18004876.
101. Tyurin VA, **Tyurina YY**, Kochanek PM, Hamilton R, DeKosky ST, Greenberger JS, Bayir H, Kagan VE. Oxidative lipidomics of programmed cell death. Methods in enzymology. 2008; 442:375-93. PMID: 18662580.
102. **Tyurina YY**, Tyurin VA, Epperly MW, Greenberger JS, Kagan VE. Oxidative lipidomics of gamma-irradiation-induced intestinal injury. Free radical biology & medicine. 2008; 44 (3):299-314. PMID: 18215738.
103. Shvedova AA, Fabisiak JP, Kisin ER, Murray AR, Roberts JR, **Tyurina YY**, Antonini JM, Feng WH, Kommineni C, Reynolds J, Barchowsky A, Castranova V, Kagan VE. Sequential exposure to carbon nanotubes and bacteria enhances pulmonary inflammation and infectivity. American journal of respiratory cell and molecular biology. 2008; 38 (5):579-90. PMCID: PMC2335338. PMID: 18096873.
104. Tyurin VA, **Tyurina YY**, Feng W, Mnuskin A, Jiang J, Tang M, Zhang X, Zhao Q, Kochanek PM, Clark RS, Bayir H, Kagan VE. Mass-spectrometric characterization of phospholipids and their primary peroxidation products in rat cortical neurons during staurosporine-induced apoptosis. Journal of Neurochemistry. 2008; 107 (6):1614-33. PMCID: PMC2760311. PMID: 19014376.
105. **Tyurina YY**, Tyurin VA, Kapralova VI, Amoscato AA, Epperly MW, Greenberger JS, Kagan VE. Mass-spectrometric characterization of phospholipids and their hydroperoxide derivatives in vivo: effects of total body irradiation. Methods in molecular biology (Clifton, N.J.). 2009; 580:153-83. PMID: 19784599.
106. Konduru NV, **Tyurina YY**, Feng W, Basova LV, Belikova NA, Bayir H, Clark K, Rubin M, Stolz D, Vallhov H, Scheynius A, Witasp E, Fadeel B, Kichambare PD, Star A, Kisin ER, Murray AR, Shvedova AA, Kagan VE. Phosphatidylserine targets single-walled carbon nanotubes to professional phagocytes in vitro and in vivo. PloS one. 2009; 4 (2):e4398. PMCID: PMC2634966. PMID: 19198650.
107. Kagan VE, Bayir A, Bayir H, Stoyanovsky D, Borisenko GG, **Tyurina YY**, Wipf P, Atkinson J, Greenberger JS, Chapkin RS, Belikova NA. Mitochondria-targeted disruptors and inhibitors of cytochrome c/cardiolipin peroxidase complexes: a new strategy in anti-apoptotic drug discovery. Molecular nutrition & food research. 2009; 53 (1):104-14. PMCID: PMC2659540. PMID: 18979502.
108. Shurin MR, Potapovich AI, **Tyurina YY**, Tourkova IL, Shurin GV, Kagan VE. Recognition of live phosphatidylserine-labeled tumor cells by dendritic cells: a novel approach to immunotherapy of skin cancer. Cancer Research. 2009; 69 (6):2487-96. PMCID: PMC4006359. PMID: 19276376.
109. Kagan VE, Bayir HA, Belikova NA, Kapralov O, **Tyurina YY**, Tyurin VA, Jiang J, Stoyanovsky DA, Wipf P, Kochanek PM, Greenberger JS, Pitt B, Shvedova AA, Borisenko G. Cytochrome c/cardiolipin relations in mitochondria: a kiss of death. Free radical biology & medicine. 2009; 46 (11):1439-53. PMCID: PMC2732771. PMID: 19285551.

110. Bayir H, Kapralov AA, Jiang J, Huang Z, **Tyurina YY**, Tyurin VA, Zhao Q, Belikova NA, Vlasova II, Maeda A, Zhu J, Na HM, Mastroberardino PG, Sparvero LJ, Amoscato AA, Chu CT, Greenamyre JT, Kagan VE. Peroxidase mechanism of lipid-dependent cross-linking of synuclein with cytochrome C: protection against apoptosis versus delayed oxidative stress in Parkinson disease. The Journal of biological chemistry. 2009; 284 (23):15951-69. PMCID: PMC2708890. PMID: 19351880.
111. Belikova NA, **Tyurina YY**, Borisenko G, Tyurin V, Samhan Arias AK, Yanamala N, Furtmüller PG, Klein-Seetharaman J, Obinger C, Kagan VE. Heterolytic reduction of fatty acid hydroperoxides by cytochrome c/cardiolipin complexes: antioxidant function in mitochondria. Journal of the American Chemical Society. 2009; 131 (32):11288-9. PMID: 19627079.
112. Sanmun D, Witasp E, Jitkaew S, **Tyurina YY**, Kagan VE, Ahlin A, Palmblad J, Fadeel B. Involvement of a functional NADPH oxidase in neutrophils and macrophages during programmed cell clearance: implications for chronic granulomatous disease. American journal of physiology. Cell physiology. 2009; 297 (3):C621-31. PMID: 19570889.
113. Tyurin VA, **Tyurina YY**, Jung MY, Tungekar MA, Wasserloos KJ, Bayir H, Greenberger JS, Kochanek PM, Shvedova AA, Pitt B, Kagan VE. Mass-spectrometric analysis of hydroperoxy- and hydroxy-derivatives of cardiolipin and phosphatidylserine in cells and tissues induced by pro-apoptotic and pro-inflammatory stimuli. Journal of chromatography. B, Analytical technologies in the biomedical and life sciences. 2009; 877 (26):2863-72. PMCID: PMC2723191. PMID: 19328050.
114. Kagan VE, Wipf P, Stoyanovsky D, Greenberger JS, Borisenko G, Belikova NA, Yanamala N, Samhan Arias AK, Tungekar MA, Jiang J, **Tyurina YY**, Ji J, Klein-Seetharaman J, Pitt BR, Shvedova AA, Bayir H. Mitochondrial targeting of electron scavenging antioxidants: Regulation of selective oxidation vs random chain reactions. Advanced drug delivery reviews. 2009; 61 (14):1375-85. PMCID: PMC2784017. PMID: 19716396.
115. Jiang J, Stoyanovsky DA, Belikova NA, **Tyurina YY**, Zhao Q, Tungekar MA, Kapralova V, Huang Z, Mintz AH, Greenberger JS, Kagan VE. A mitochondria-targeted triphenylphosphonium-conjugated nitroxide functions as a radioprotector/mitigator. Radiation research. 2009; 172 (6):706-17. PMCID: PMC2804962. PMID: 19929417.
116. Tyurin VA, **Tyurina YY**, Ritov VB, Lysytsya A, Amoscato AA, Kochanek PM, Hamilton R, Dekosky ST, Greenberger JS, Bayir H, Kagan VE. Oxidative lipidomics of apoptosis: quantitative assessment of phospholipid hydroperoxides in cells and tissues. Methods in molecular biology (Clifton, N.J.). 2010; 610:353-74. PMID: 20013189.

117. Kagan VE, Konduru NV, Feng W, Allen BL, Conroy J, Volkov Y, Vlasova II, Belikova NA, Yanamala N, Kapralov A, **Tyurina YY**, Shi J, Kisin ER, Murray AR, Franks J, Stolz D, Gou P, Klein-Seetharaman J, Fadeel B, Star A, Shvedova AA. Carbon nanotubes degraded by neutrophil myeloperoxidase induce less pulmonary inflammation. Nature nanotechnology. 2010; 5 (5):354-9. PMID: 20364135.

118. Li W, Wu S, Ahmad M, Jiang J, Liu H, Nagayama T, Rose ME, Tyurin VA, **Tyurina YY**, Borisenko GG, Belikova N, Chen J, Kagan VE, Graham SH. The cyclooxygenase site, but not the peroxidase site of cyclooxygenase-2 is required for neurotoxicity in hypoxic and ischemic injury. Journal of Neurochemistry. 2010; 113 (4):965-77. PMCID: PMC2860550. PMID: 20236388.

119. **Tyurina YY**, Tyurin VA, Kaynar AM, Kapralova VI, Wasserloos K, Li J, Mosher M, Wright L, Wipf P, Watkins S, Pitt BR, Kagan VE. Oxidative lipidomics of hyperoxic acute lung injury: mass spectrometric characterization of cardiolipin and phosphatidylserine peroxidation. American journal of physiology. Lung cellular and molecular physiology. 2010; 299 (1):L73-85. PMCID: PMC2904094. PMID: 20418384.

120. Hilmi IA, Peng Z, Planinsic RM, Damian D, Dai F, **Tyurina YY**, Kagan VE, Kellum JA. N-acetylcysteine does not prevent hepatorenal ischaemia-reperfusion injury in patients undergoing orthotopic liver transplantation. Nephrology, Dialysis, Transplantation: Official Publication of The European Dialysis and Transplant Association - European Renal Association. 2010; 25 (7):2328-33. PMID: 20179007.

121. Pecina P, Borisenko GG, Belikova NA, **Tyurina YY**, Pecinova A, Lee I, Samhan-Arias AK, Przyklenk K, Kagan VE, Hüttemann M. Phosphomimetic substitution of cytochrome C tyrosine 48 decreases respiration and binding to cardiolipin and abolishes ability to trigger downstream caspase activation. Biochemistry. 2010; 49 (31):6705-14. PMID: 20586425.

122. Ray NB, Durairaj L, Chen BB, McVerry BJ, Ryan AJ, Donahoe M, Waltenbaugh AK, O'Donnell CP, Henderson FC, Etscheidt CA, McCoy DM, Agassandian M, Hayes-Rowan EC, Coon TA, Butler PL, Gakhar L, Mathur SN, Sieren JC, **Tyurina YY**, Kagan VE, McLennan G, Mallampalli RK. Dynamic regulation of cardiolipin by the lipid pump Atp8b1 determines the severity of lung injury in experimental pneumonia. Nature medicine. 2010; 16 (10):1120-7. PMID: 20852622.

123. Atkinson J, Kapralov AA, Yanamala N, **Tyurina YY**, Amoscato AA, Pearce L, Peterson J, Huang Z, Jiang J, Samhan-Arias AK, Maeda A, Feng W, Wasserloos K, Belikova NA, Tyurin VA, Wang H, Fletcher J, Wang Y, Vlasova II, Klein-Seetharaman J, Stoyanovsky DA, Bayîr H, Pitt BR, Epperly MW, Greenberger JS, Kagan VE. A mitochondria-targeted inhibitor of cytochrome c peroxidase mitigates radiation-induced death. Nature communications. 2011; 2:497. PMCID: PMC3557495. PMID: 21988913.

124. Samhan-Arias AK, **Tyurina YY**, Kagan VE. Lipid antioxidants: free radical scavenging versus regulation of enzymatic lipid peroxidation. Journal of clinical biochemistry and nutrition. 2011; 48 (1):91-5. PMCID: PMC3022072. PMID: 21297919.
125. Kotchey GP, Allen BL, Vedala H, Yanamala N, Kapralov AA, **Tyurina YY**, Klein-Seetharaman J, Kagan VE, Star A. The enzymatic oxidation of graphene oxide. ACS nano. 2011; 5 (3):2098-108. PMCID: PMC3062704. PMID: 21344859.
126. Li HH, Xu J, Wasserloos KJ, Li J, **Tyurina YY**, Kagan VE, Wang X, Chen AF, Liu ZQ, Stoyanovsky D, Pitt BR, Zhang LM. Cytoprotective effects of albumin, nitrosated or reduced, in cultured rat pulmonary vascular cells. American journal of physiology. Lung cellular and molecular physiology. 2011; 300 (4):L526-33. PMCID: PMC3075101. PMID: 21239532.
127. **Tyurina YY**, Tyurin VA, Kapralova VI, Wasserloos K, Mosher M, Epperly MW, Greenberger JS, Pitt BR, Kagan VE. Oxidative lipidomics of ¿-radiation-induced lung injury: mass spectrometric characterization of cardiolipin and phosphatidylserine peroxidation. Radiation research. 2011; 175 (5):610-21. PMCID: PMC3321728. PMID: 21338246.
128. Rwigema JC, Beck B, Wang W, Doemling A, Epperly MW, Shields D, Goff JP, Franicola D, Dixon T, Frantz MC, Wipf P, **Tyurina Y**, Kagan VE, Wang H, Greenberger JS. Two strategies for the development of mitochondrion-targeted small molecule radiation damage mitigators. International journal of radiation oncology, biology, physics. 2011; 80 (3):860-8. PMCID: PMC3104115. PMID: 21493014.
129. Kapralov AA, Yanamala N, **Tyurina YY**, Castro L, Samhan-Arias A, Vladimirov YA, Maeda A, Weitz AA, Peterson J, Mylnikov D, Demicheli V, Tortora V, Klein-Seetharaman J, Radi R, Kagan VE. Topography of tyrosine residues and their involvement in peroxidation of polyunsaturated cardiolipin in cytochrome c/cardiolipin peroxidase complexes. Biochimica et biophysica acta. 2011; 1808 (9):2147-55. PMCID: PMC3321730. PMID: 21550335.
130. Tyurin VA, Cao W, **Tyurina YY**, Gabrilovich DI, Kagan VE. Mass-spectrometric characterization of peroxidized and hydrolyzed lipids in plasma and dendritic cells of tumor-bearing animals. Biochemical and biophysical research communications. 2011; 413 (1):149-53. PMCID: PMC3356782. PMID: 21872574.
131. **Tyurina YY**, Kisin ER, Murray A, Tyurin VA, Kapralova VI, Sparvero LJ, Amoscato AA, Samhan-Arias AK, Swedin L, Lahesmaa R, Fadeel B, Shvedova AA, Kagan VE. Global phospholipidomics analysis reveals selective pulmonary peroxidation profiles upon inhalation of single-walled carbon nanotubes. ACS nano. 2011; 5 (9):7342-53. PMCID: PMC3321726. PMID: 21800898.
132. Belikova NA, Glumac AL, Kapralova V, Cheikhi A, **Tyurina YY**, Vagni VA, Kochanek PM, Kagan VE, Bayir H. A high-throughput screening assay of ascorbate in brain samples. Journal of Neuroscience Methods. 2011; 201 (1):185-90. PMCID: PMC3276367. PMID: 21855575.

133. **Tyurina YY**, Tungekar MA, Jung MY, Tyurin VA, Greenberger JS, Stoyanovsky DA, Kagan VE. Mitochondria targeting of non-peroxidizable triphenylphosphonium conjugated oleic acid protects mouse embryonic cells against apoptosis: role of cardiolipin remodeling. FEBS letters. 2012; 586 (3):235-41. PMCID: PMC3273856. PMID: 22210054.
134. Midwinter RG, Maghzal GJ, Dennis JM, Wu BJ, Cai H, Kapralov AA, Belikova NA, **Tyurina YY,** Dong LF, Khachigian L, Neuzil J, Kagan VE, Stocker R. Succinobucol induces apoptosis in vascular smooth muscle cells. Free radical biology & medicine. 2012; 52 (5):871-9. PMID: 22203369.
135. Ji J, **Tyurina YY**, Tang M, Feng W, Stolz DB, Clark RS, Meaney DF, Kochanek PM, Kagan VE, Bayir H. Mitochondrial injury after mechanical stretch of cortical neurons in vitro: biomarkers of apoptosis and selective peroxidation of anionic phospholipids. Journal of neurotrauma. 2012; 29 (5):776-88. PMCID: PMC3303096. PMID: 21895519.
136. Samhan-Arias AK, Ji J, Demidova OM, Sparvero LJ, Feng W, Tyurin V, **Tyurina YY**, Epperly MW, Shvedova AA, Greenberger JS, Bayir H, Kagan VE, Amoscato AA. Oxidized phospholipids as biomarkers of tissue and cell damage with a focus on cardiolipin. Biochimica et biophysica acta. 2012; 1818 (10):2413-23. PMCID: PMC3398793. PMID: 22464971.
137. Ji J, Kline AE, Amoscato A, Samhan-Arias AK, Sparvero LJ, Tyurin VA, **Tyurina YY**, Fink B, Manole MD, Puccio AM, Okonkwo DO, Cheng JP, Alexander H, Clark RS, Kochanek PM, Wipf P, Kagan VE, Bayir H. Lipidomics identifies cardiolipin oxidation as a mitochondrial target for redox therapy of brain injury. Nature Neuroscience. 2012; 15 (10):1407-13. PMCID: PMC3697869. PMID: 22922784.
138. Tyurin VA, Yanamala N, **Tyurina YY**, Klein-Seetharaman J, Macphee CH, Kagan VE. Specificity of lipoprotein-associated phospholipase A(2) toward oxidized phosphatidylserines: liquid chromatography-electrospray ionization mass spectrometry characterization of products and computer modeling of interactions. Biochemistry. 2012; 51 (48):9736-50. PMCID: PMC3567262. PMID: 23148485.
139. Schlattner U, Tokarska-Schlattner M, Ramirez S, **Tyurina YY**, Amoscato AA, Mohammadyani D, Huang Z, Jiang J, Yanamala N, Seffouh A, Boissan M, Epand RF, Epand RM, Klein-Seetharaman J, Lacombe ML, Kagan VE. Dual function of mitochondrial Nm23-H4 protein in phosphotransfer and intermembrane lipid transfer: a cardiolipin-dependent switch. The Journal of Biological Chemistry. 2013; 288 (1):111-21. PMCID: PMC3537004. PMID: 23150663.
140. **Tyurina YY**, Winnica DE, Kapralova VI, Kapralov AA, Tyurin VA, Kagan VE. LC/MS characterization of rotenone induced cardiolipin oxidation in human lymphocytes: implications for mitochondrial dysfunction associated with Parkinson's disease. Molecular Nutrition & Food Research. 2013; 57 (8):1410-22. PMCID: PMC3810210. PMID: 23650208.

141. Chu CT, Ji J, Dagda RK, Jiang JF, **Tyurina YY**, Kapralov AA, Tyurin VA, Yanamala N, Shrivastava IH, Mohammadyani D, Qiang Wang KZ, Zhu J, Klein-Seetharaman J, Balasubramanian K, Amoscato AA, Borisenko G, Huang Z, Gusdon AM, Cheikhi A, Steer EK, Wang R, Baty C, Watkins S, Bahar I, Bayir H, Kagan VE. Cardiolipin externalization to the outer mitochondrial membrane acts as an elimination signal for mitophagy in neuronal cells. Nature Cell Biology. 2013; 15 (10):1197-205. PMCID: PMC3806088. PMID: 24036476.
142. **Tyurina YY**, Domingues RM, Tyurin VA, Maciel E, Domingues P, Amoscato AA, Bayir H, Kagan VE. Characterization of cardiolipins and their oxidation products by LC-MS analysis. Chemistry and Physics of Lipids. 2014; 179:3-10. PMID: 24333544.
143. Kagan VE, Chu CT, **Tyurina YY**, Cheikhi A, Bayir H. Cardiolipin asymmetry, oxidation and signaling. Chemistry and Physics of Lipids. 2014; 179:64-9. PMCID: PMC3973441. PMID: 24300280.
144. Goetzman ES, Alcorn JF, Bharathi SS, Uppala R, McHugh KJ, Kosmider B, Chen R, Zuo YY, Beck ME, McKinney RW, Skilling H, Suhrie KR, Karunanidhi A, Yeasted R, Otsubo C, Ellis B, **Tyurina YY**, Kagan VE, Mallampalli RK, Vockley J. Long-chain Acyl-CoA Dehydrogenase Deficiency as a Cause of Pulmonary Surfactant Dysfunction. The Journal of Biological Chemistry. 2014; 289 (15):10668-79. PMID: 24591516.
145. Chen BB, Coon TA, Glasser JR, Zou C, Ellis B, Das T, McKelvey AC, Rajbhandari S, Lear T, Kamga C, Shiva S, Li C, Pilewski JM, Callio J, Chu CT, Ray A, Ray P, **Tyurina YY**, Kagan VE, Mallampalli RK. E3 Ligase Subunit Fbxo15 and PINK1 Kinase Regulate Cardiolipin Synthase 1 Stability and Mitochondrial Function in Pneumonia. Cell Reports. 2014; 7 (2):476-87. PMID: 24703837.
146. Tyurin VA, Balasubramanian K, Winnica D, **Tyurina YY**, Vikulina AS, He RR, Kapralov AA, Macphee CH, Kagan VE. Oxidatively modified phosphatidylserines on the surface of apoptotic cells are essential phagocytic 'eat-me' signals: cleavage and inhibition of phagocytosis by Lp-PLA2. Cell Death and Differentiation. 2014; 21 (5):825-35. PMCID: PMC3978307. PMID: 24464221.
147. **Tyurina YY**, Poloyac SM, Tyurin VA, Kapralov AA, Jiang J, Anthonymuthu TS, Kapralova VI, Vikulina AS, Jung MY, Epperly MW, Mohammadyani D, Klein-Seetharaman J, Jackson TC, Kochanek PM, Pitt BR, Greenberger JS, Vladimirov YA, Bayir H, Kagan VE. A mitochondrial pathway for biosynthesis of lipid mediators. Nature Chemistry. 2014; 6 (6):542-52. PMID: 24848241.
148. Friedmann Angeli JP, Schneider M, Proneth B, **Tyurina YY**, Tyurin VA, Hammond VJ, Herbach N, Aichler M, Walch A, Eggenhofer E, Basavarajappa D, Rådmark O, Kobayashi S, Seibt T, Beck H, Neff F, Esposito I, Wanke R, Förster H, Yefremova O, Heinrichmeyer M, Bornkamm GW, Geissler EK, Thomas SB, Stockwell BR, O'Donnell VB, Kagan VE, Schick JA, Conrad M. Inactivation of the ferroptosis regulator Gpx4 triggers acute renal failure in mice. Nature Cell Biology, 2014; 16(12):1180-91. doi: 10.1038/ncb3064. PMID:24703837.

149. Ji J, Baart S, Vikulina AS, Clark RS, Anthonymuthu TS, Tyurin VA, Du L, St Croix CM, **Tyurina YY**, Lewis J, Skoda EM, Kline AE, Kochanek PM, Wipf P, Kagan VE, Bayır H. Deciphering of mitochondrial cardiolipin oxidative signaling in cerebral ischemia-reperfusion. J Cereb Blood Flow Metab. 2015; 35(2):319-28. doi: 10.1038/jcbfm.2014.204.PMID: 25407268; PMCID: PMC4426750

150. Kagan VE, **Tyurina YY**, Tyurin VA, Mohammadyani D, Angeli JP, Baranov SV, Klein-Seetharaman J, Friedlander RM, Mallampalli RK, Conrad M, Bayir H. Cardiolipin Signaling Mechanisms: Collapse of Asymmetry and Oxidation. Antioxid Redox Signal. 2015; 22(18):1667-80. doi: 10.1089/ars.2014.6219. PMID: 25566681, PMCID: PMC4486147

151. **Tyurina YY**, Polimova AM, Maciel E, Tyurin VA, Kapralova VI, Winnica DE, Vikulina AS, Domingues MR, McCoy J, Sanders LH, Bayır H, Greenamyre JT, Kagan VE. LC/MS analysis of cardiolipins in substantia nigra and plasma of rotenone-treated rats: Implication for mitochondrial dysfunction in Parkinson's disease. Free Radical Research. 2015; 49(5):681-91. doi: 10.3109/10715762.2015.1005085. PMID:25740198, PMCID:PMC4430340

152. Rolyan H, **Tyurina YY**, Hernandez M, Amoscato AA, Sparvero LJ, Nmezi BC, Lu Y, Estécio MR, Lin K, Chen J, He RR, Gong P, Rigatti LH, Dupree J, Bayır H, Kagan VE, Casaccia P, Padiath QS. Defects of Lipid Synthesis Are Linked to the Age-Dependent Demyelination Caused by Lamin B1 Overexpression. J Neurosci. 2015; 35(34):12002-17. doi: 10.1523/JNEUROSCI.1668-15.2015. PMID:26311780, PMCID:PMC4549407

153. Balasubramanian K, Maeda A, Lee JS, Mohammadyani D, Dar HH, Jiang JF, St Croix CM, Watkins S, Tyurin VA, **Tyurina YY**, Klöditz K, Polimova A, Kapralova VI, Xiong Z, Ray P, Klein-Seetharaman J, Mallampalli RK, Bayir H, Fadeel B, Kagan VE. Dichotomous roles for externalized cardiolipin in extracellular signaling: Promotion of phagocytosis and attenuation of innate immunity. Sci Signal. 2015; 8(395):ra95. doi: 10.1126/scisignal.aaa6179. PMID:26396268, PMCID:PMC4760701

154. Zou C, Synan MJ, Li J, Xiong S, Manni ML, Liu Y, Chen BB, Zhao Y, Shiva S, **Tyurina YY**, Jiang J, Lee JS, Das S, Ray A, Ray P, Kagan VE, Mallampalli RK. LPS impairs oxygen utilization in epithelia by triggering degradation of the mitochondrial enzyme Alcat1. J Cell Sci. 2016;129(1):51-64. doi: 10.1242/jcs.176701. Epub 2015 Nov 24. PMID:26604221, PMCID: PMC4732295

155. Kagan VE, Jiang J, Huang Z, **Tyurina YY**, Desbourdes C, Cottet-Rousselle C, Dar HH, Verma M, Tyurin VA, Kapralov AA, Cheikhi A, Mao G, Stolz D, St Croix CM, Watkins S, Shen Z, Li Y, Greenberg ML, Tokarska-Schlattner M, Boissan M, Lacombe ML, Epand RM, Chu CT, Mallampalli RK, Bayır H, Schlattner U. NDPK-D (NM23-H4)-mediated externalization of cardiolipin enables elimination of depolarized mitochondria by mitophagy. Cell Death Differ. 2016; 23(7):1140-51. doi: 10.1038/cdd.2015.160. PMID:26742431, PMCID:PMC4946882

156. Mao G, Qu F, St Croix CM, **Tyurina YY**, Planas-Iglesias J, Jiang J, Huang Z, Amoscato AA, Tyurin VA, Kapralov AA, Cheikhi A, Maguire J, Kl ein-Seetharaman J, Bayır H, Kagan VE. Mitochondrial Redox Opto-Lipidomics Reveals Mono-Oxygenated Cardiolipins as Pro-Apoptotic Death Signals. ACS Chem Biol. 2016;11(2):530-40. doi: 10.1021/acschembio.5b00737. Epub 2016 Jan 5.PMID:26697918, PMCID: PMC5741079

157. Banerjee K, Munshi S, Xu H, Frank DE, Chen HL, Chu CT, Yang J, Cho S, Kagan VE, Denton TT, **Tyurina YY**, Jiang JF, Gibson GE. Mild mitochondrial metabolic deficits by α-ketoglutarate dehydrogenase inhibition cause prominent changes in intracellular autophagic signaling: Potential role in the pathobiology of Alzheimer's disease. Neurochem Int. 2016; 96:32-45. doi: 10.1016/j.neuint. 2016.02.011.PMID:26923918, PMCID:PMC4860123

158. Buland JR, Wasserloos KJ, Tyurin VA, **Tyurina YY**, Amoscato AA, Mallampalli RK, Chen BB, Zhao J, Zhao Y, Ofori-Acquah S, Kagan VE, Pitt BR. Biosynthesis of Oxidized Lipid Mediators via Lipoprotein Associated Phospholipase A2 Hydrolysis of Extracellular Cardiolipin Induces Endothelial Toxicity. Am J Physiol Lung Cell Mol Physiol. 2016; 311(2):L303-16, PMID:27233995, PMCID:PMC5142456

159. Maguire JJ, **Tyurina YY**, Mohammadyani D, Kapralov AA, Anthonymuthu TS, Qu F, Amoscato AA, Sparvero LJ, Tyurin VA, Planas-Iglesias J, He RR, Klein-Seetharaman J, Bayır H, Kagan VE. Known unknowns of cardiolipin signaling: The best is yet to come. Biochim Biophys Acta. 2017;1862(1):8-24. doi: 10.1016/j.bbalip.2016.08.001. PMID:27498292, PMCID:PMC5323096

160. Kagan VE, Mao G, Qu F, Angeli JP, Doll S, Croix CS, Dar HH, Liu B, Tyurin VA, Ritov VB, Kapralov AA, Amoscato AA, Jiang J, Anthonymuthu T, Mohammadyani D, Yang Q, Proneth B, Klein-Seetharaman J, Watkins S, Bahar I, Greenberger J, Mallampalli RK, Stockwell BR, **Tyurina YY**, Conrad M, Bayır H. Oxidized arachidonic and adrenic PEs navigate cells to ferroptosis. Nat Chem Biol. 2017;13(1):81-90. doi: 10.1038/nchembio.2238. PMID:27842066. PMCID:PMC5506843

161. Doll S, Proneth B, **Tyurina YY**, Panzilius E, Kobayashi S, Ingold I, Irmler M, Beckers J, Aichler M, Walch A, Prokisch H, Trümbach D, Mao G, Qu F, Bayir H, Füllekrug J, Scheel CH, Wurst W, Schick JA, Kagan VE, Angeli JP, Conrad M. ACSL4 dictates ferroptosis sensitivity by shaping cellular lipid composition. Nat Chem Biol. 2017;13(1):91-98. doi: 10.1038/nchembio.2239. Epub 2016 Nov 14.PMID:27842070, PMCID:PMC5610546

162. **Tyurina YY**, Lou W, Qu F, Tyurin VA, Mohammadyani D, Liu J, Hüttemann M, Frasso MA, Wipf P, Bayir H, Greenberg ML, Kagan VE. Lipidomics Characterization of Biosynthetic and Remodeling Pathways of Cardiolipins in Genetically and Nutritionally Manipulated Yeast Cells. ACS Chem Biol. 2017; 12(1):265-281. doi: 10.1021/acschembio.6b00995.PMID:27982579, PMCID:PMC5578713

163. Kooijman EE, Swim LA, Graber ZT, **Tyurina YY**, Bayır H, Kagan VE. Magic angle spinning ^{31}P NMR spectroscopy reveals two essentially identical ionization states for the cardiolipin phosphates in phospholipid liposomes. Biochim Biophys Acta. 2017 Jan;1859(1):61-68. doi: 10.1016/j.bbamem.2016.10.013. Epub 2016 Oct 27. PMID:27984017, PMCID:PMC5362297

164. Chakraborty K, Raundhal M, Chen BB, Morse C, **Tyurina YY**, Khare A, Oriss TB, Huff R, Lee JS, St Croix CM, Watkins S, Mallampalli RK, Kagan VE, Ray A, Ray P. The mito-DAMP cardiolipin blocks IL-10 production causing persistent inflammation during bacterial pneumonia. Nat Commun. 2017; 8:13944. doi: 10.1038/ncomms13944. PMID:28074841, PMCID: PMC5241690

165. Kagan VE, Bayır H, **Tyurina YY**, Bolevich SB, Maguire JJ, Fadeel B, Balasubramanian K. Elimination of the unnecessary: Intra- and extracellular signaling by anionic phospholipids. Biochem Biophys Res Commun. 2017 Jan 15;482(3):482-490. doi: 10.1016/j.bbrc.2016.11.005. Epub 2017 Feb 3. PMID: 28212735, PMCID:PMC5319735

166. **Tyurina YY**, Shrivastava I, Tyurin VA, Mao G, Dar HH, Watkins S, Epperly M, Bahar I, Shvedova AA, Pitt B, Wenzel SE, Mallampalli RK, Sadovsky Y, Gabrilovich D, Greenberger JS, Bayır H, Kagan VE., "Only a Life Lived for Others Is Worth Living": Redox Signaling by Oxygenated Phospholipids in Cell Fate Decisions. Antioxid Redox Signal. 2017 Oct 16. doi: 10.1089/ars.2017.7124. PMID: 28212735, PMCID:PMC5319735

167. Geric I, **Tyurina YY**, Krysko O, Krysko DV, De Schryver E, Kagan VE, Van Veldhoven PP, Baes M, Verheijden S. Lipid homeostasis and inflammatory activation are disturbed in classically activated macrophages with peroxisomal β-oxidation deficiency. Immunology. 2018;153(3):342-356. doi: 10.1111/imm. 12844PMID: 28835115; PMCID:PMC6157439

168. Wenzel SE, **Tyurina YY**, Zhao J, St Croix CM, Dar HH, Mao G, Tyurin VA, Anthonymuthu TS, Kapralov AA, Amoscato AA, Mikulska-Ruminska K, Shrivastava IH, Kenny EM, Yang Q, Rosenbaum JC, Sparvero LJ, Emlet DR, Wen X, Minami Y, Qu F, Watkins SC, Holman TR, VanDemark AP, Kellum JA, Bahar I, Bayır H, Kagan VE. PEBP1 Wardens Ferroptosis by Enabling Lipoxygenase Generation of Lipid Death Signals. Cell. 2017;171(3):628-641.e26. doi: 10.1016/j.cell.2017.09.044. PMID: 29053969; PMCID: PMC5683852

169. Gaschler MM, Andia AA, Liu H, Csuka JM, Hurlocker B, Vaiana CA, Heindel DW, Zuckerman DS, Bos PH, Reznik E, Ye LF, **Tyurina YY**, Lin AJ, Shchepinov MS, Chan AY, Peguero-Pereira E, Fomich MA, Daniels JD, Bekish AV, Shmanai VV, Kagan VE, Mahal LK, Woerpel KA, Stockwell BR. $FINO_2$ initiates ferroptosis through GPX4 inactivation and iron oxidation. Nat Chem Biol. 2018; 14(5):507-515. doi: 10.1038/s41589-018-0031-6. PMID:29610484; PMCID: PMC5899674

170. Lou W, Ting HC, Reynolds CA, **Tyurina YY**, Tyurin VA, Li Y, Ji J, Yu W, Liang Z, Stoyanovsky DA, Anthonymuthu TS, Frasso MA, Wipf P, Greenberger JS, Bayır H, Kagan VE, Greenberg ML. Genetic re-engineering of polyunsaturated phospholipid profile of Saccharomyces cerevisiae identifies a novel role for Cld1 in mitigating the effects of cardiolipin peroxidation. Biochim Biophys Acta Mol Cell Biol Lipids. 2018;1863(10):1354-1368. doi: 10.1016/ j.bbalip.2018.06.016. PMID: 29935382; PMCID: PMC6641546

171. Hassannia B, Wiernicki B, Ingold I, Qu F, Van Herck S, **Tyurina YY,** Bayır H, Abhari BA, Angeli JPF, Choi SM, Meul E, Heyninck K, Declerck K, Chirumamilla CS, Lahtela-Kakkonen M, Van Camp G, Krysko DV, Ekert PG, Fulda S, De Geest BG, Conrad M, Kagan VE, Vanden Berghe W, Vandenabeele P, Vanden Berghe T. Nano-targeted induction of dual ferroptotic mechanisms eradicates high-risk neuroblastoma.J Clin Invest. 2018;128(8):3341-3355. doi: 10.1172/JCI99032. PMID: 29939160; PMCID: PMC6063467

172. Cole LK, Kim JH, Amoscato AA, **Tyurina YY,** Bay R H, Karimi B, Siddiqui TJ, Kagan VE, Hatch GM, Kauppinen TM. Aberrant cardiolipin metabolism is associated with cognitive deficiency and hippocampal alteration in tafazzin knockdown mice. Biochim Biophys Acta Mol Basis Dis. 2018;1864(10):3353-3367. doi: 10.1016/j.bbadis.2018.07.022. PMID:30055293; PMCID: PMC6532065

173. Dar HH, **Tyurina YY,** Mikulska-Ruminska K, Shrivastava I, Ting HC, Tyurin VA, Krieger J, St Croix CM, Watkins S, Bayir E, Mao G, Armbruster CR, Kapralov A, Wang H, Parsek MR, Anthonymuthu TS, Ogunsola AF, Flitter BA, Freedman CJ, Gaston JR, Holman TR, Pilewski JM, Greenberger JS, Mallampalli RK, Doi Y, Lee JS, Bahar I, Bomberger JM, Bayır H, Kagan VE. Pseudomonas aeruginosa utilizes host polyunsaturated phosphatidylethanolamines to trigger theft-ferroptosis in bronchial epithelium. J Clin Invest. 2018;128(10):4639-4653. doi: 10.1172/JCI99490. PMID: 30198910; PMCID: PMC6159971

174. Anthonymuthu TS, Kenny EM, Shrivastava I, **Tyurina YY**, Hier ZE, Ting HC, Dar HH, Tyurin VA, Nesterova A, Amoscato AA, Mikulska-Ruminska K, Rosenbaum JC, Mao G, Zhao J, Conrad M, Kellum JA, Wenzel SE, VanDemark AP, Bahar I, Kagan VE, Bayır H. Empowerment of 15-Lipoxygenase Catalytic Competence in Selective Oxidation of Membrane ETE-PE to Ferroptotic Death Signals, HpETE-PE. J Am Chem Soc. 2018;140(51):17835-17839. doi: 10.1021/jacs.8b09913. PMID: 30525572; PMCID: PMC6622169

175. Baranov SV, Baranova OV, Yablonska S, Suofu Y, Vazquez AL, Kozai TDY, Cui XT, Ferrando LM, Larkin TM, **Tyurina YY**, Kagan VE, Carlisle DL, Kristal BS, Friedlander RM. Mitochondria modulate programmed neuritic retraction. Proc Natl Acad Sci U S A. 2019;116(2):650-659. doi: 10.1073/pnas.1811021116. PMID: 30584104; PMCID: PMC6329959

176. Li W, Feng G, Gauthier JM, Lokshina I, Higashikubo R, Evans S, Liu X, Hassan A, Tanaka S, Cicka M, Hsiao HM, Ruiz-Perez D, Bredemeyer A, Gross RW, Mann DL, **Tyurina YY**, Gelman AE, Kagan VE, Linkermann A, Lavine KJ, Kreisel D. Ferroptotic cell death and TLR4/Trif signaling initiate neutrophil recruitment after heart transplantation. J Clin Invest. 2019;130:2293-2304. doi: 10.1172/JCI126428. PMID: 30830879; PMCID: PMC6546457

177. Stoyanovsky DA, **Tyurina YY**, Shrivastava I, Bahar I, Tyurin VA, Protchenko O, Jadhav S, Bolevich SB, Kozlov AV, Vladimirov YA, Shvedova AA, Philpott CC, Bayir H, Kagan VE. Iron catalysis of lipid peroxidation in ferroptosis: Regulated enzymatic or random free radical reaction? Free Radic Biol Med. 2019;133:153-161. doi:10.1016/ j.freeradbiomed. 2018.09.008. Review. PMID:30217775; PMCID: PMC6555767

178. **Tyurina YY**, Tyurin VA, Anthonymuthu T, Amoscato AA, Sparvero LJ, Nesterova AM, Baynard ML, Sun W, He R, Khaitovich P, Vladimirov YA, Gabrilovich DI, Bayır H, Kagan VE. "Redox lipidomics technology: Looking for a needle in a haystack". Chem Phys Lipids. 2019 Jul;221:93-107. doi: 10.1016/j.chemphyslip.2019.03.012.PMID:30928338, PMCID:PMC6714565

179. **Tyurina YY**, St Croix CM, Watkins SC, Watson AM, Epperly MW, Anthonymuthu TS, Kisin ER, Vlasova II, Krysko O, Krysko DV, Kapralov AA, Dar HH, Tyurin VA, Amoscato AA, Popova EN, Bolevich SB, Timashev PS, Kellum JA, Wenzel SE, Mallampalli RK, Greenberger JS, Bayir H, Shvedova AA, Kagan VE. Redox (phospho)lipidomics of signaling in inflammation and programmed cell death. J Leukoc Biol. 2019 Jul;106(1):57-81. doi: 10.1002/JLB.3MIR0119-004RR. PMID:31071242, PMCID:PMC6626990

180. Artyukhova MA, **Tyurina YY**, Chu CT, Zharikova TM, Bayir H, Kagan VE, Timashev PS. Interrogating Parkinson's disease associated redox targets: Potential application of CRISPR editing. Free Radic Biol Med. 2019 Nov 20;144:279-292. doi: 10.1016/j.freeradbiomed.2019.06.007. PMID:31201850, PMCID:PMC6832799

181. Kagan VE, **Tyurina YY**, Sun WY, Vlasova II, Dar H, Tyurin VA, Amoscato AA, Mallampalli R, van der Wel PCA, He RR, Shvedova AA, Gabrilovich DI, Bayir H. Redox phospholipidomics of enzymatically generated oxygenated phospholipids as specific signals of programmed cell death. Free Radic Biol Med. 2020 Feb 1;147:231-241. doi:10.1016/j.freeradbiomed.2019.12.028. PMID:31883467; PMCID: PMC7037592

182. Kapralov AA, Yang Q, Dar HH, **Tyurina YY**, Anthonymuthu TS, Kim R, St Croix CM, Mikulska-Ruminska K, Liu B, Shrivastava IH, Tyurin VA, Ting HC, Wu YL, Gao Y, Shurin GV, Artyukhova MA, Ponomareva LA, Timashev PS, Domingues RM, Stoyanovsky DA, Greenberger JS, Mallampalli RK, Bahar I, Gabrilovich DI, Bayır H, Kagan VE. Redox lipid reprogramming commands susceptibility of macrophages and microglia to ferroptotic death. Nat Chem Biol. 2020;16(3):278-290. doi: 10.1038/s41589-019-0462-8. PMID: 32080625

183. Hussey GS, Pineda Molina C, Cramer MC, **Tyurina YY**, Tyurin VA, Lee YC, El-Mossier SO, Murdock MH, Timashev PS, Kagan VE, Badylak SF. Lipidomics and RNA sequencing reveal a novel subpopulation of nanovesicle within extracellular matrix biomaterials. Sci Adv. 2020 Mar 20;6(12):eaay4361. doi: 10.1126/sciadv.aay4361. eCollection 2020 Mar. PMID: 32219161, PMCID: PMC7083606

184. Bayır H, Anthonymuthu TS, **Tyurina YY**, Patel SJ, Amoscato AA, Lamade AM, Yang Q, Vladimirov GK, Philpott CC, Kagan VE. Achieving Life through Death: Redox Biology of Lipid Peroxidation in Ferroptosis. Cell Chem Biol. 2020 Apr 16;27(4):387-408. doi: 10.1016/j.chembiol.2020.03.014. Review. PMID: 32275865

185. Perego M, Tyurin VA, **Tyurina YY**, Yellets J, Nacarelli T, Lin C, Nefedova Y, Kossenkov A, Liu Q, Sreedhar S, Pass H, Roth J, Vogl T, Feldser D, Zhang R, Kagan VE, Gabrilovich DI. Reactivation of dormant tumor cells by modified lipids derived from stress-activated neutrophils. Sci Transl Med. 2020 Dec 2;12(572):eabb5817. doi: 10.1126/scitranslmed.abb5817

186. Beharier O, Tyurin VA, Goff JP, Guerrero-Santoro J, Kajiwara K, Chu T, **Tyurina YY**, St Croix CM, Wallace CT, Parry S, Parks WT, Kagan VE, Sadovsky Y. PLA2G6 guards placental trophoblasts against ferroptotic injury. Proc Natl Acad Sci U S A. 2020 Nov 3;117(44):27319-27328. doi: 10.1073/pnas.2009201117.

187. Protchenko O, Baratz E, Jadhav S, Li F, Shakoury-Elizeh M, Gavrilova O, Ghosh MC, Cox JE, Maschek JA, Tyurin VA, **Tyurina YY**, Bayir H, Aron AT, Chang CJ, Kagan VE, Philpott CC. Iron Chaperone Poly rC Binding Protein 1 Protects Mouse Liver From Lipid Peroxidation and Steatosis. Hepatology. 2021 Mar;73(3):1176-1193. doi: 10.1002/hep.31328.

188. Ugolini A, Tyurin VA, **Tyurina YY**, Tcyganov EN, Donthireddy L, Kagan VE, Gabrilovich DI, Veglia F. Polymorphonuclear myeloid-derived suppressor cells limit antigen cross-presentation by dendritic cells in cancer. JCI Insight. 2020 Aug 6;5(15):e138581. doi: 10.1172/jci.insight.138581.

189. Wiernicki B, Dubois H, **Tyurina YY**, Hassannia B, Bayir H, Kagan VE, Vandenabeele P, Wullaert A, Vanden Berghe T. Excessive phospholipid peroxidation distinguishes ferroptosis from other cell death modes including pyroptosis. Cell Death Dis. 2020 Oct 27;11(10):922. doi: 10.1038/s41419-020-03118-0.

190. Anthonymuthu TS, **Tyurina YY**, Sun WY, Mikulska-Ruminska K, Shrivastava IH, Tyurin VA, Cinemre FB, Dar HH, VanDemark AP, Holman TR, Sadovsky Y, Stockwell BR, He RR, Bahar I, Bayır H, Kagan VE. Resolving the paradox of ferroptotic cell death: Ferrostatin-1 binds to 15LOX/PEBP1 complex, suppresses generation of peroxidized ETE-PE, and protects against ferroptosis. Redox Biol. 2021 Jan;38:101744. doi: 10.1016/j.redox.2020.101744.

191. Huang LS, Kotha SR, Avasarala S, VanScoyk M, Winn RA, Pennathur A, Yashaswini PS, Bandela M, Salgia R, **Tyurina YY**, Kagan VE, Zhu X, Reddy SP, Sudhadevi T, Punathil-Kannan PK, Harijith A, Ramchandran R, Bikkavilli RK, Natarajan V. Lysocardiolipin acyltransferase regulates NSCLC cell proliferation and migration by modulating mitochondrial dynamics. J Biol Chem. 2020 Sep 18;295(38):13393-13406. doi: 10.1074/jbc.RA120.012680.

192. Olonisakin TF, Suber T, Gonzalez-Ferrer S, Xiong Z, Peñaloza HF, van der Geest R, Xiong Y, Osei-Hwedieh DO, Tejero J, Rosengart MR, Mars WM, Van Tyne D, Perlegas A, Brashears S, Kim-Shapiro DB, Gladwin MT, Bachman MA, Hod EA, St Croix C, **Tyurina YY**, Kagan VE, Mallampalli RK, Ray A, Ray P, Lee JS. Stressed erythrophagocytosis induces immunosuppression during sepsis through heme-mediated STAT1 dysregulation. J Clin Invest. 2021 Jan 4;131(1):e137468. doi: 10.1172/JCI137468.

193. Sparvero LJ, Tian H, Amoscato AA, Sun WY, Anthonymuthu TS, **Tyurina YY**, Kapralov O, Javadov S, He RR, Watkins SC, Winograd N, Kagan VE, Bayır H. Direct Mapping of Phospholipid Ferroptotic Death Signals in Cells and Tissues by Gas Cluster Ion Beam Secondary Ion Mass Spectrometry (GCIB-SIMS). Angew Chem Int Ed Engl. 2021 May 17;60(21):11784-11788. doi: 10.1002/anie.202102001.

194. Beatty A, Singh T, **Tyurina YY**, Tyurin VA, Samovich S, Nicolas E, Maslar K, Zhou Y, Cai KQ, Tan Y, Doll S, Conrad M, Subramanian A, Bayır H, Kagan VE, Rennefahrt U, Peterson JR. Ferroptotic cell death triggered by conjugated linolenic acids is mediated by ACSL1. Nat Commun. 2021 Apr 14;12(1):2244. doi: 10.1038/s41467-021-22471-y.

195. Sun WY, Tyurin VA, Mikulska-Ruminska K, Shrivastava IH, Anthonymuthu TS, Zhai YJ, Pan MH, Gong HB, Lu DH, Sun J, Duan WJ, Korolev S, Abramov AY, Angelova PR, Miller I, Beharier O, Mao GW, Dar HH, Kapralov AA, Amoscato AA, Hastings TG, Greenamyre TJ, Chu CT, Sadovsky Y, Bahar I, Bayır H, **Tyurina YY**, He RR, Kagan VE. Phospholipase iPLA$_2$β averts ferroptosis by eliminating a redox lipid death signal. Nat Chem Biol. 2021 Apr;17(4):465-476. doi: 10.1038/s41589-020-00734-x.

196. Vats K, Kruglov O, Mizes A, Samovich SN, Amoscato AA, Tyurin VA, **Tyurina YY**, Kagan VE, Bunimovich YL. Keratinocyte death by ferroptosis initiates skin inflammation after UVB exposure. Redox Biol. 2021 Nov;47:102143. doi: 10.1016/j.redox.2021.102143. Epub 2021 Sep 25.PMID: 34592565, PMCID: PMC8487085**.**

197. Jang S, Chapa-Dubocq XR, **Tyurina YY**, St Croix CM, Kapralov AA, Tyurin VA, Bayır H, Kagan VE, Javadov S. Elucidating the contribution of mitochondrial glutathione to ferroptosis in cardiomyocytes. Redox Biol. 2021 Sep;45:102021. doi: 10.1016/j.redox.2021.102021. Epub 2021 Jun 1.PMID: 34102574, PMCID: PMC8187237.

198. Bednash JS, Kagan VE, Englert JA, Farkas D, **Tyurina YY**, Tyurin VA, Samovich SN, Farkas L, Elhance A, Johns F, Lee H, Cheng L, Majumdar A, Jones D, Mejia OR, Ruane-Foster M, Londino JD, Mallampalli RK, Robinson RT. Syrian hamsters as a model of lung injury with SARS-CoV-2 infection: Pathologic, physiologic, and detailed molecular profiling. Transl Res. 2022 Feb;240:1-16. doi: 10.1016/j.trsl.2021.10.007. Epub 2021 Nov 2. PMID: 34740873, PMCID: PMC8562047**.**

199. Dar HH, Epperly MW, Tyurin VA, Amoscato AA, Anthonymuthu TS, Souryavong AB, Kapralov AA, Shurin GV, Samovich SN, St Croix CM, Watkins SC, Wenzel SE, Mallampalli RK, Greenberger JS, Bayır H, Kagan VE, **Tyurina YY**. P. aeruginosa augments irradiation injury via 15-lipoxygenase-catalyzed generation of 15-HpETE-PE and induction of theft-ferroptosis. JCI Insight. 2022 Feb 22;7(4):e156013. doi: 10.1172/jci.insight.156013. PMID: 35041620, PMCID: PMC8876480**.**

200. Hicks KC, **Tyurina YY**, Kagan VE, Gabrilovich DI. Myeloid Cell-Derived Oxidized Lipids and Regulation of the Tumor Microenvironment. Cancer Res. 2022 Jan 15;82(2):187-194. doi: 10.1158/0008-5472.CAN-21-3054. Epub 2021 Nov 11. PMID: 34764204, PMCID: PMC8770601.

201. Li W, Terada Y, **Tyurina YY**, Tyurin VA, Bery AI, Gauthier JM, Higashikubo R, Tong AY, Zhou D, Nunez-Santana F, Lecuona E, Hassan A, Hashimoto K, Scozzi D, Puri V, Nava RG, Krupnick AS, Lavine KJ, Gelman AE, Miller MJ, Kagan VE, Bharat A, Kreisel D. Necroptosis triggers spatially restricted neutrophil-mediated vascular damage during lung ischemia reperfusion injury. Proc Natl Acad Sci U S A. 2022 Mar 8;119(10):e2111537119. doi: 10.1073/pnas.2111537119. Epub 2022 Mar 1.PMID: 35238643, PMCID: PMC8917381.

202. Aguilera A, Berdun F, Bartoli C, Steelheart C, Alegre M, Bayir H, **Tyurina YY**, Kagan VE, Salerno G, Pagnussat G, Martin MV. C-ferroptosis is an iron-dependent form of regulated cell death in cyanobacteria. J Cell Biol. 2022 Feb 7;221(2):e201911005. doi: 10.1083/jcb.201911005. Epub 2021 Nov 24. PMID: 34817556, PMCID: PMC8624678.

203. Lamade AM, Wu L, Dar HH, Mentrup HL, Shrivastava IH, Epperly MW, St Croix CM, **Tyurina YY**, Anthonymuthu TS, Yang Q, Kapralov AA, Huang Z, Mao G, Amoscato AA, Hier ZE, Artyukhova MA, Shurin G, Rosenbaum JC, Gough PJ, Bertin J, VanDemark AP, Watkins SC, Mollen KP, Bahar I, Greenberger JS, Kagan VE, Whalen MJ, Bayır H. Inactivation of RIP3 kinase sensitizes to 15LOX/PEBP1-mediated ferroptotic death. Redox Biol. 2022 Apr;50:102232. doi: 10.1016/j.redox.2022.102232. Epub 2022 Jan 10. PMID: 35101798 PMCID: PMC8804265**.**

204. Nagasaki T, Schuyler AJ, Zhao J, Samovich SN, Yamada K, Deng Y, Ginebaugh SP, Christenson SA, Woodruff PG, Fahy JV, Trudeau JB, Stoyanovsky D, Ray A, **Tyurina YY**, Kagan VE, Wenzel SE. 15LO1 dictates glutathione redox changes in asthmatic airway epithelium to worsen type 2 inflammation. J Clin Invest. 2022 Jan 4;132(1):e151685. doi: 10.1172/JCI151685. PMID: 34762602, PMCID: PMC8718153.

205. Kim R, Hashimoto A, Markosyan N, Tyurin VA, **Tyurina YY**, Kar G, Fu S, Sehgal M, Garcia-Gerique L, Kossenkov A, Gebregziabher BA, Tobias JW, Hicks K, Halpin RA, Cvetesic N, Deng H, Donthireddy L, Greenberg A, Nam B, Vonderheide RH, Nefedova Y, Kagan VE, Gabrilovich DI. Ferroptosis of tumour neutrophils causes immune suppression in cancer. Nature. 2022 Dec;612(7939):338-346. doi: 10.1038/s41586-022-05443-0. Epub 2022 Nov 16. PMID: 36385526; PMCID: PMC9875862.

206. van Vlerken-Ysla L, **Tyurina YY**, Kagan VE, Gabrilovich DI. Functional states of myeloid cells in cancer. Cancer Cell. 2023 Mar 13;41(3):490-504. doi: 10.1016/j.ccell.2023.02.009. Epub 2023 Mar 2. PMID: 36868224; PMCID: PMC10023509

207. Bayır H, Dixon SJ, **Tyurina YY**, Kellum JA, Kagan VE. Ferroptotic mechanisms and therapeutic targeting of iron metabolism and lipid peroxidation in the kidney. Nat Rev Nephrol. 2023 May;19(5):315-336. doi: 10.1038/s41581-023-00689-x. Epub 2023 Mar 15. PMID: 36922653

208. Kruglov O, Vats K, Soman V, Tyurin VA, **Tyurina YY**, Wang J, Williams L, Zhang J, Donahue Carey C, Jaklitsch E, Chandran UR, Bayir H, Kagan VE, Bunimovich YL. Melanoma-associated repair-like Schwann cells suppress anti-tumor T-cells via 12/15-LOX/COX2-associated eicosanoid production. Oncoimmunology. 2023 Mar 25;12(1):2192098. doi: 10.1080/2162402X.2023.2192098. eCollection 2023. PMID: 36998620; PMCID: PMC10044150

209. **Tyurina YY**, Kapralov AA, Tyurin VA, Shurin G, Amoscato AA, Rajasundaram D, Tian H, Bunimovich YL, Nefedova Y, Herrick WG, Parchment RE, Doroshow JH, Bayir H, Srivastava AK, Kagan VE. Redox phospholipidomics discovers pro-ferroptotic death signals in A375 melanoma cells in vitro and in vivo. Redox Biol. 2023 May;61:102650. doi: 10.1016/j.redox.2023.102650. PMID: 36870109; PMCID: PMC9996109

210. Kagan VE, Straub AC, **Tyurina YY**, Kapralov AA, Hall R, Wenzel SE, Mallampalli R, Bayır H. Vitamin E/Coenzyme Q-Dependent "Free Radical Reductases:" Redox Regulators in Ferroptosis. Antioxid Redox Signal. 2023 May 8. doi: 10.1089/ars.2022.0154. Online ahead of print. PMID: 37154783

211. Guerrero-Santoro J., Morizane M., Oh S.Y., Mishima T., Goff J., Bildirici I., Sadovsky E., Ouyang Y., Tyurin V., **Tyurina Y.,** Kagan V., Sadovsky Y. The lipase co-facor CGI58 controls placental lipolysis. JCI insight, 2023, May 22;8(10):e168717. doi: 10.1172/jci.insight.168717. PMID: 37212279.

212. Dar HH, Karolina Mikulska-Ruminska K, **Tyurina YY**, Luci DK., Yasgar A, Samovich SN, Kapralov A, Tyurin VA,Amoscato AA, Epperly M, Shurin G, Holman TR, VanDemark AP, Rana R, Zakharov AV, Simeonov A, Marugan J, Mallampalli RK, Wenzel SE, Greenberger JS, Rai G, Bayir H, Bahar I, Kagan VE. Discovering Selective Anti-Ferroptotic Inhibitors of the 15LOX/PEBP1 Complex Non-Interfering with Biosynthesis of Lipid Mediators. PNAS, 2023, in press

213. Amoscato AA, Anthonymuthu T, Kapralov O, Sparvero LJ, Shrivastava IH, Mikulska-Ruminska K, Tyurin VA, Shvedova AA, **Tyurina YY**, Bahar I, Wenzel S, Bayir H, Kagan VE. Formation of protein adducts with Hydroperoxy-PE electrophilic cleavage products during ferroptosis. Redox Biol. 2023 May 22;63:102758. doi: 10.1016/j.redox.2023.102758. PMID: 37245287; PMCID: PMC9996109.

Books and Book Chapters

1. Avrova NF, Tyurin VA, Zakharova IO, Sokolova TV, **Tyurina YY.** The Effect of glutamate, antioxidants and gangliosides on Na^+,K^+-ATPase activity in rat brain cortex synaptosomes. *Neurochemistry: Cellular, Molecular and Clinical Aspects* (Eds. By Tulken A., and Korf J.) - Section 35: Free radicals, NO and brain pathology, Plenum Press, NY. 1997, pp. 973-976.
2. Kagan VE, Ritov VB, **Tyurina YY,** Tyurin VA. Sensitive and specific fluorescent probing of oxidative stress in different classes of membrane phospholipids in live cells using metabolically integrated *cis*-parinaric acid. *Meth Mol. Biol.* 108 (Free Radical and Antioxidant Protocols, Ed. By Armstrong D.), Humana Press Inc., Totowa, NJ,.1998, pp.71-87.
3. Day BW, Bergamini S, **Tyurina YY**, Carta G, Tyurin VA, Kagan VE. Beta-carotene: An antioxidant or target of oxidative stress in cells? *Subcell. Biochem.,* Vol.30: Fat-Soluble Vitamins (Eds. By Quinn P., and Kagan V.) Plenum Press, New York, 1998, p. 209-217.
4. Kagan VE, **Tyurina YY**, Witt E. Role of coenzyme Q and superoxide in vitamin E cycling. *Subcell. Biochem*. Vol.30: Fat-Soluble Vitamins (Eds. By Quinn P., and Kagan V.) Plenum Press, New York, 1998, p. 209-217.
5. Kagan VE, **Tyurina YY**. Recycling and redox cycling of phenolic antioxidant. *Ann. New York Acad. Sci. (Towards Prolongation of the Healthy Live Span: Practical Approach to Intervention),* 1998, 854: 425-434.
6. Kagan VE, Fabisiak JP, **Tyurina YY**. Independent and concerted antioxidant functions of coenzyme Q. *Coenzyme Q: from Molecular Mechanisms to Nutrition and Health.* (Eds. By Quinn P., and Kagan V.) CRC Press, Boca Raton, London, New York, Washington, D.C., 2000, p.119-130.
7. **Tyurina YY,** Tyurin V, Liu SX, Smith CA, Shvedova AA, Schor NF, Kagan VE. Phosphatidylserine peroxidation during apoptosis: A Signaling Pathway for Phagocyte Clearance by Macrophages. *Subcell. Biochem*., Vol.36: Phospholipid metabolism in apoptosis. (Eds. By Quinn P., and Kagan V.) Plenum Press, New York, 2002, p.79-96.
8. Tyurin VA, **Tyurina YY**, Liu SX, Hubel CA, Bayir H, Kagan VE. Quantitation of S-nitrosothiols in cells and biological fluids. *Meth. Enzymol.* 352: 347-360, 2002.
9. **Tyurina YY**, Tyurin VA, Shvedova AA, Fabisiak JP, Kagan VE. Peroxidation of phosphatidylserine in mechanism of apoptotic signaling. *Meth. Enzymol.* 352: 159-174, 2002.
10. Kagan VE, Rao KMK, Kisin ER, Young SH, Meighan T, Murray AR, **Tyurina YY**, Castranova V, Shvedova AA. Pulmonary effects of sungle-walled carbon nanotubes: Inflammation response, oxidative stress/signaling, and recognition by macrophages. *In: Nanotrchnology-Toxicological Issues and Environmental Safety,* (P.P. Simeonova et al. (eds.), p.65-75.

11. Fabisiak JP, **Tyurina YY,** Tyurin VA, Kagan VE. Quantification of selective phosphatidylserine oxidation during apoptosis. *Methods Mol Biol*. 2005, 291:449-456.
12. **Tyurina YY**, Tyurin VA, Kapralova VI, Amoscato AA, Epperly MW, Greenberger JS, Kagan VE. Mass-spectrometric characterization of phospholipids and their hydroperoxide derivatives in vivo: effects of total body irradiation. Methods in molecular biology (Clifton, N.J.). 2009; 580:153-83. PMID: 19784599.
13. V. E. Kagan, A. A. Shvedova, and **Y. Y. Tyurina.** A Healthy Free Radical Pessimism: A Glance from an Oxidative Lipidomics Corner. In: Mitochondrial Signaling in Health and Disease. (Eds. By Orrenius S., and Cadenas E.) CRC Press, p.3-13, 2012
14. **Tyurina YY,** Tyurin VA, Kapralova AA, Hussey GS, Timashev PS, Shvedova AA, Badylak SF, Kagan VE. Lipids as regulators of inflammation and tissue regeneration. *Immunomodulatory Biomaterials* (Ed by Badylak S), Elsevier Pless, 2021.

Invited Articles

1. Kagan VE, **Tyurina YY**. Recycling and redox cycling of phenolic antioxidant. *Ann. New York Acad. Sci. (Towards Prolongation of the Healthy Live Span: Practical Approach to Intervention),* 1998, 854: 425-434.
2. Kagan VE, Fabisiak JM, Shvedova AA, **Tyurina YY**, Tyurin VA, Schor NF, Kawai K. Oxidative stress pathway for externalization of plasma membrane phosphatidylserine during apoptosis. *FEBS Lett*. 2000, 477: 1-7.
3. Kagan VE, Borisenko GG, Serinkan BF, **Tyurina YY**, Tyurin VA, Jiang J, Liu SX, Shvedova AA, Fabisiak JP, Uthaisang W, Fadeel B. Appetizing rancidity of apoptotic cells for macrophages: oxidation, externalization, and recognition of phosphatidylserine. 2003, *Am. J Physiol. Lung Cell Mol. Physiol.* 285:L1-L17.
4. Kagan VE, Borisenko GG, **Tyurina YY**, Tyurin VA, Jiang J, Potapovich AI, Kini V, Amoscato AA, Fujii Y. Oxidative lipidomics of apoptosis: redox catalytic interactions of cytochrome c with cardiolipin and phosphatidylserine. *Free Radic Biol Med*. 2004, 37:1963-1985.
5. Bayir H, Fadeel B, Palladino MJ, Witasp E, Kurnikov IV, **Tyurina YY,** Tyurin VA, Amoscato AA, Jiang J, Kochanek PM, DeKosky ST, Greenberger JS, Shvedova AA, Kagan VE. Apoptotic interactions of cytochrome c: Redox flirting with anionic phospholipids within and outside of mitochondria *Biochim. Biophys. Acta,* 2006, 1757(5-6):648-659.

6. Kagan VE, **Tyurina YY,** Bayir H, Chu CT, Kapralov AA, Vlasova II , Belikova NA, Tyurin VA, Amoscato A, Epperly M, Greenberger J, DeKosky S, Shvedova AA, Jiang J. The "pro-apoptotic genies" get out of mitochondria: Oxidative lipidomics and redox activity of cytochrome *c*/cardiolipin complexes. *Chem. Biol. Interactions* 2006, 163(1-2):15-28.

7. Kagan VE, Bayir A, Bayir H, Stoyanovsky D, Borisenko GG, **Tyurina YY**, Wipf P, Atkinson J, Greenberger JS, Chapkin RS, Belikova NA. Mitochondria-targeted disruptors and inhinitors of cytochrome c/cardiolipin peroxidase complexes: A new strategy in anti-apoptotic drug discovery. *Mol. Nutr. Food Res.* 2008:1:104-14.

8. Kagan VE, Bayir HA, Belikova NA, Kapralov O, **Tyurina YY,** Tyurin VA, Jiang J,Stoyanovsky DA, Wipf P, Kochanek PM, Greenberger JS, Pitt B, Shvedova AA,Borisenko G. Cytochrome c/cardiolipin relations in mitochondria: a kiss of death. *Free Radic Biol Med.* 2009;46(11):1439-53.

9. Samhan-Arias AK, Ji J, Demidova OM, Sparvero LJ, Feng W, Tyurin V, **Tyurina YY**, Epperly MW, Shvedova AA, Greenberger JS, Bayır H, Kagan VE, Amoscato AA. Oxidized phospholipids as biomarkers of tissue and cell damage with a focus on cardiolipin. Biochimica et biophysica acta. 2012; 1818 (10):2413-23. PMID: 22464971; PMCID: PMC3398793.

10. **Tyurina YY**, Winnica DE, Kapralova VI, Kapralov AA, Tyurin VA, Kagan VE. LC/MS characterization of rotenone induced cardiolipin oxidation in human lymphocytes: implications for mitochondrial dysfunction associated with Parkinson's disease. Molecular Nutrition & Food Research. 2013 Aug; 57 (8):1410-22. PMCID: PMC3810210. PMID: 23650208.

11. **Tyurina YY**, Domingues RM, Tyurin VA, Maciel E, Domingues P, Amoscato AA, Bayir H, Kagan VE. Characterization of cardiolipins and their oxidation products by LC-MS analysis. Chemistry and Physics of Lipids. 2014 Apr; 179:3-10. PMID: 24333544.

12. Kagan VE, Chu CT, **Tyurina YY**, Cheikhi A, Bayir H. Cardiolipin asymmetry, oxidation and signaling. Chemistry and Physics of Lipids. 2014, 179:64-9. PMCID: PMC3973441. PMID: 24300280.

13. Kagan VE, **Tyurina YY**, Tyurin VA, Mohammadyani D, Angeli JP, Baranov SV, Klein-Seetharaman J, Friedlander RM, Mallampalli RK, Conrad M, Bayir H. Cardiolipin Signaling Mechanisms: Collapse of Asymmetry and Oxidation., Antioxid Redox Signal. 2015; 22(18):1667-80. doi: 10.1089/ars.2014.6219. PMID: 25566681, PMCID: PMC4486147

14. **Tyurina YY**, Polimova AM, Maciel E, Tyurin VA, Kapralova VI, Winnica DE, Vikulina AS, Domingues MR, McCoy J, Sanders LH, Bayır H, Greenamyre JT, Kagan VE. LC/MS analysis of cardiolipins in substantia nigra and plasma of rotenone-treated rats: Implication for mitochondrial dysfunction in Parkinson's disease. Free Radical Research. 2015;49(5):681-91. doi: 10.3109/10715762.2015.1005085. PMID:25740198, PMCID:PMC4430340

15. Stoyanovsky DA, **Tyurina YY**, Shrivastava I, Bahar I, Tyurin VA, Protchenko O, Jadhav S, Bolevich SB, Kozlov AV, Vladimirov YA, Shvedova AA, Philpott CC, Bayir H, Kagan VE. Iron catalysis of lipid peroxidation in ferroptosis: Regulated enzymatic or random free radical reaction? Free Radic Biol Med. 2019;133:153-161. doi:10.1016/ j.freeradbiomed. 2018.09.008. PMID:30217775
16. **Tyurina YY**, St Croix CM, Watkins SC, Watson AM, Epperly MW, Anthonymuthu TS, Kisin ER, Vlasova II, Krysko O, Krysko DV, Kapralov AA, Dar HH, Tyurin VA, Amoscato AA, Popova EN, Bolevich SB, Timashev PS, Kellum JA, Wenzel SE, Mallampalli RK, Greenberger JS, Bayir H, Shvedova AA, Kagan VE. Redox (phospho)lipidomics of signaling in inflammation and programmed cell death. J Leukoc Biol. 2019;106(1):57-81. doi: 10.1002/JLB.3MIR0119-004RR. PMID:31071242, PMCID:PMC6626990
17. **Tyurina YY**, Tyurin VA, Anthonymuthu T, Amoscato AA, Sparvero LJ, Nesterova AM, Baynard ML, Sun W, He R, Khaitovich P, Vladimirov YA, Gabrilovich DI, Bayır H, Kagan VE. "Redox lipidomics technology: Looking for a needle in a haystack". Chem Phys Lipids. 2019;221:93-107. doi: 10.1016/j.chemphyslip.2019.03.012. PMID:30928338, PMCID:PMC6714565
18. Artyukhova MA, **Tyurina YY**, Chu CT, Zharikova TM, Bayir H, Kagan VE, Timashev PS. Interrogating Parkinson's disease associated redox targets: Potential application of CRISPR editing. Free Radic Biol Med. 2019; pii: S0891-5849(19)30251-5. doi: 10.1016/j.freeradbiomed.2019.06.007. PMID: 31201850, PMCID:PMC6832799
19. Kagan VE, **Tyurina YY**, Sun WY, Vlasova II, Dar H, Tyurin VA, Amoscato AA, Mallampalli R, van der Wel PCA, He RR, Shvedova AA, Gabrilovich DI, Bayir H. Redox phospholipidomics of enzymatically generated oxygenated phospholipids as specific signals of programmed cell death. Free Radic Biol Med. 2020;147:231-241. doi:10.1016/j.freeradbiomed.2019.12.028. Review. PMID:31883467 PMCID: PMC7037592
20. Bayır H, Anthonymuthu TS, **Tyurina YY**, Patel SJ, Amoscato AA, Lamade AM, Yang Q, Vladimirov GK, Philpott CC, Kagan VE. Achieving Life through Death: Redox Biology of Lipid Peroxidation in Ferroptosis. Cell Chem Biol. 2020;27(4):387-408. doi: 10.1016/j.chembiol.2020.03.014. Review. PMID: 3227586
21. Kagan VE, **Tyurina YY**, Sun WY, Vlasova II, Dar H, Tyurin VA, Amoscato AA, Mallampalli R, van der Wel PCA, He RR, Shvedova AA, Gabrilovich DI, Bayir H. Redox phospholipidomics of enzymatically generated oxygenated phospholipids as specific signals of programmed cell death. Free Radic Biol Med.;147:231-241. doi:10.1016/j.freeradbiomed.2019.12.028. Review. PMID:31883467 PMCID: PMC7037592

22. Kagan VE, **Tyurina YY**, Vlasova II, Kapralov AA, Amoscato AA, Anthonymuthu TS, Tyurin VA, Shrivastava IH, Cinemre FB, Lamade A, Epperly MW, Greenberger JS, Beezhold DH, Mallampalli RK, Srivastava AK, Bayir H, Shvedova AA. Redox Epiphospholipidome in Programmed Cell Death Signaling: Catalytic Mechanisms and Regulation. Front Endocrinol (Lausanne). 2021 Feb 19;11:628079. doi: 10.3389/fendo.2020.628079. eCollection 2020.
23. van Vlerken-Ysla L, **Tyurina YY**, Kagan VE, Gabrilovich DI. Functional states of myeloid cells in cancer. Cancer Cell. 2023 Mar 13;41(3):490-504. doi: 10.1016/j.ccell.2023.02.009. Epub 2023 Mar 2. PMID: 36868224; PMCID: PMC10023509
24. Bayır H, Dixon SJ, **Tyurina YY**, Kellum JA, Kagan VE. Ferroptotic mechanisms and therapeutic targeting of iron metabolism and lipid peroxidation in the kidney. Nat Rev Nephrol. 2023 May;19(5):315-336. doi: 10.1038/s41581-023-00689-x. Epub 2023 Mar 15. PMID: 36922653
25. Kagan VE, Straub AC, **Tyurina YY**, Kapralov AA, Hall R, Wenzel SE, Mallampalli R, Bayır H. Vitamin E/Coenzyme Q-Dependent "Free Radical Reductases:" Redox Regulators in Ferroptosis. Antioxid Redox Signal. 2023 May 8. doi: 10.1089/ars.2022.0154. Online ahead of print. PMID: 37154783

Review Articles

1. **Tyurina YY**, Shvedova AA, Kawai K, Tyurin VA, Kommineni C, Quinn PJ, Schor NF, Fabisiak JP, Kagan VE. Phospholipid signaling in apoptosis: peroxidation and externalization of phosphatidylserine. Toxicology. 2000 Aug 7; 148:93-101. PMID: 10962127.
2. Kagan VE, Fabisiak JP, Shvedova AA, **Tyurina YY**, Tyurin VA, Schor NF, Kawai K. Oxidative signaling pathway for externalization of plasma membrane phosphatidylserine during apoptosis. FEBS Letters. 2000 Jul 14; 477:1-7. PMID: 10899301.
3. Kagan VE, Borisenko GG, Serinkan BF, **Tyurina YY**, Tyurin VA, Jiang J, Liu SX, Shvedova AA, Fabisiak JP, Uthaisang W, Fadeel B. Appetizing rancidity of apoptotic cells for macrophages: oxidation, externalization, and recognition of phosphatidylserine. American journal of physiology. Lung cellular and molecular physiology. 2003 Jul; 285 (1):L1-17. PMID: 12788785.
4. Kagan VE, Borisenko GG, **Tyurina YY**, Tyurin VA, Jiang J, Potapovich AI, Kini V, Amoscato AA, Fujii Y. Oxidative lipidomics of apoptosis: redox catalytic interactions of cytochrome c with cardiolipin and phosphatidylserine. Free radical biology & medicine. 2004 Dec 15; 37 (12):1963-85. PMID: 15544916.
5. Bayir H, Fadeel B, Palladino MJ, Witasp E, Kurnikov IV, **Tyurina YY**, Tyurin VA, Amoscato AA, Jiang J, Kochanek PM, DeKosky ST, Greenberger JS, Shvedova AA, Kagan VE. Apoptotic interactions of cytochrome c: redox flirting with anionic phospholipids within and outside of mitochondria. Biochimica et biophysica acta. 2006 May-Jun;1757(5-6):648-59.PMID: 16740248

6. Kagan VE, **Tyurina YY**, Bayir H, Chu CT, Kapralov AA, Vlasova II, Belikova NA, Tyurin VA, Amoscato A, Epperly M, Greenberger J, Dekosky S, Shvedova AA, Jiang J. The "pro-apoptotic genies" get out of mitochondria: oxidative lipidomics and redox activity of cytochrome c/cardiolipin complexes. Chemico-biological interactions. 2006 Oct 27; 163:15-28. PMID: 16797512.
7. Kagan VE, Wipf P, Stoyanovsky D, Greenberger JS, Borisenko G, Belikova NA, Yanamala N, Samhan Arias AK, Tungekar MA, Jiang J, **Tyurina YY**, Ji J, Klein-Seetharaman J, Pitt BR, Shvedova AA, Bayir H. Mitochondrial targeting of electron scavenging antioxidants: Regulation of selective oxidation vs random chain reactions. Advanced drug delivery reviews. 2009 Nov 30; 61 (14):1375-85. PMCID: PMC2784017. PMID: 19716396.
8. Kagan VE, Bayir A, Bayir H, Stoyanovsky D, Borisenko GG, **Tyurina YY**, Wipf P, Atkinson J, Greenberger JS, Chapkin RS, Belikova NA. Mitochondria-targeted disruptors and inhibitors of cytochrome c/cardiolipin peroxidase complexes: a new strategy in anti-apoptotic drug discovery. Molecular nutrition & food research. 2009; 53 (1):104-14. PMCID: PMC2659540. PMID: 18979502.
9. Maguire JJ, **Tyurina YY**, Mohammadyani D, Kapralov AA, Anthonymuthu TS, Qu F, Amoscato AA, Sparvero LJ, Tyurin VA, Planas-Iglesias J, He RR, Klein-Seetharaman J, Bayır H, Kagan VE. Known unknowns of cardiolipin signaling: The best is yet to come. Biochim Biophys Acta. 2017; 1862(1):8-24. doi: 10.1016/j.bbalip.2016.08.001. PMID:27498292, PMCID:PMC5323096
10. Kagan VE, Bayır H, **Tyurina YY**, Bolevich SB, Maguire JJ, Fadeel B, Balasubramanian K. Elimination of the unnecessary: Intra- and extracellular signaling by anionic phospholipids. Biochem Biophys Res Commun. 2017, 482(3):482-490. doi: 10.1016/j.bbrc.2016.11.005. PMID: 28212735, PMCID:PMC5319735
11. Stoyanovsky DA, **Tyurina YY,** Shrivastava I, Bahar I, Tyurin VA, Protchenko O, Jadhav S, Bolevich SB, Kozlov AV, Vladimirov YA, Shvedova AA, Philpott CC, Bayir H, Kagan VE. Iron catalysis of lipid peroxidation in ferroptosis: Regulated enzymatic or random free radical reaction? Free Radic Biol Med. 2019 Mar;133:153-161. doi:10.1016/ j.freeradbiomed. 2018.09.008. PMID:30217775
12. **Tyurina YY**, Tyurin VA, Anthonymuthu T, Amoscato AA, Sparvero LJ, Nesterova AM, Baynard ML, Sun W, He R, Khaitovich P, Vladimirov YA, Gabrilovich DI, Bayır H, Kagan VE. "Redox lipidomics technology: Looking for a needle in a haystack". Chem. Phys. Lipids. 2019, 221:93-107. doi: 10.1016/j.chemphyslip.2019.03.012. PMID:30928338

13. **Tyurina YY**, St Croix CM, Watkins SC, Watson AM, Epperly MW, Anthonymuthu TS, Kisin ER, Vlasova II, Krysko O, Krysko DV, Kapralov AA, Dar HH, Tyurin VA, Amoscato AA, Popova EN, Bolevich SB, Timashev PS, Kellum JA, Wenzel SE, Mallampalli RK, Greenberger JS, Bayir H, Shvedova AA, Kagan VE. Redox (phospho)lipidomics of signaling in inflammation and programmed cell death. J Leukoc Biol. 2019; doi: 10.1002/JLB.3MIR0119-004RR. PMID:31071242
14. Artyukhova MA, **Tyurina YY**, Chu CT, Zharikova TM, Bayir H, Kagan VE, Timashev PS. Interrogating Parkinson's disease associated redox targets: Potential application of CRISPR editing. Free Radic Biol Med. 2019: pii: S0891-5849(19)30251-5. doi: 10.1016/j.freeradbiomed.2019.06.007.PMID: 31201850
15. Kagan VE, **Tyurina YY**, Sun WY, Vlasova II, Dar H, Tyurin VA, Amoscato AA, Mallampalli R, van der Wel PCA, He RR, Shvedova AA, Gabrilovich DI, Bayir H. Redox phospholipidomics of enzymatically generated oxygenated phospholipids as specific signals of programmed cell death. Free Radic Biol Med. 2020;147:231-241. doi:10.1016/j.freeradbiomed.2019.12.028. Review. PMID:31883467 PMCID: PMC7037592
16. Bayır H, Anthonymuthu TS, **Tyurina YY**, Patel SJ, Amoscato AA, Lamade AM, Yang Q, Vladimirov GK, Philpott CC, Kagan VE. Achieving Life through Death: Redox Biology of Lipid Peroxidation in Ferroptosis. Cell Chem Biol. 2020;27(4):387-408. doi: 10.1016/j.chembiol.2020.03.014. Review. PMID: 3227586
17. Kagan VE, **Tyurina YY**, Sun WY, Vlasova II, Dar H, Tyurin VA, Amoscato AA, Mallampalli R, van der Wel PCA, He RR, Shvedova AA, Gabrilovich DI, Bayir H. Redox phospholipidomics of enzymatically generated oxygenated phospholipids as specific signals of programmed cell death. Free Radic Biol Med.;147:231-241. doi:10.1016/j.freeradbiomed.2019.12.028. Review. PMID:31883467 PMCID: PMC7037592
18. Kagan VE, **Tyurina YY**, Vlasova II, Kapralov AA, Amoscato AA, Anthonymuthu TS, Tyurin VA, Shrivastava IH, Cinemre FB, Lamade A, Epperly MW, Greenberger JS, Beezhold DH, Mallampalli RK, Srivastava AK, Bayir H, Shvedova AA. Redox Epiphospholipidome in Programmed Cell Death Signaling: Catalytic Mechanisms and Regulation. Front Endocrinol (Lausanne). 2021 Feb 19;11:628079. doi: 10.3389/fendo.2020.628079. eCollection 2020.
19. Hicks KC, **Tyurina YY**, Kagan VE, Gabrilovich DI. Myeloid Cell-Derived Oxidized Lipids and Regulation of the Tumor Microenvironment. Cancer Res. 2022 Jan 15;82(2):187-194. doi: 10.1158/0008-5472.CAN-21-3054. Epub 2021 Nov 11. PMID: 34764204, PMCID: PMC8770601, Review.
20. van Vlerken-Ysla L, **Tyurina YY**, Kagan VE, Gabrilovich DI. Functional states of myeloid cells in cancer. Cancer Cell. 2023 Mar 13;41(3):490-504. doi: 10.1016/j.ccell.2023.02.009. Epub 2023 Mar 2. PMID: 36868224; PMCID: PMC10023509

21. Bayır H, Dixon SJ, **Tyurina YY**, Kellum JA, Kagan VE. Ferroptotic mechanisms and therapeutic targeting of iron metabolism and lipid peroxidation in the kidney. Nat Rev Nephrol. 2023 May;19(5):315-336. doi: 10.1038/s41581-023-00689-x. Epub 2023 Mar 15. PMID: 36922653
22. Kagan VE, Straub AC, **Tyurina YY**, Kapralov AA, Hall R, Wenzel SE, Mallampalli R, Bayır H. Vitamin E/Coenzyme Q-Dependent "Free Radical Reductases:" Redox Regulators in Ferroptosis. Antioxid Redox Signal. 2023 May 8. doi: 10.1089/ars.2022.0154. Online ahead of print. PMID: 37154783

Published Abstracts

1. Arduini A, Tyurin VA, **Tyurina Y**, Dottori S, Malojoni F, Ramsay RR. Potential role of acyl-carnitines in the membrane phospholipid repair process. [abstract]. In: 37o Conresso Nazionale, Soc, Italy of Biochemistry, Italian Biochemical Society Transactions 3. 1992 Sep 23-26 ; Perugia, Italy . 20.
2. Avrova NF, **Tyurina Y**, Tyurin VA, Kagan VE. Gangliosides in post-Ischemic cellular dysfunctions. [abstract]. In: Cellular, Biochemical, and Molecular Aspects of Reperfusion Injury; Ann N Y Acad Sci.;723. 1993 Jul 11-14; New YorK, NY. 1-502.
3. **Tyurina Y**, Tyurin VA, Yalowich JC, Kagan VE. Both glutathione and protein thiols reduce phenoxyl radicals of antitumor drug, etoposide (VP-16), in cell homogenates. [abstract]. In: 34th Annual Meeting for Society of Toxicology; Fund. Appl. Toxicol., The Toxicologist, 15 (Suppl.1). 1995 Mar; Baltimore, MD 1995 Mar. 304.
4. Serbinova EA, **Tyurina Y**, Tyurin VA, Kagan VE. Interaction of phenoxyl radical with lipids and proteins thiols in human low density lipoproteins. [abstract]. In: The VII International Congress of Toxicology; The International Toxicologist 11-PF-7. 1995 Jul.
5. Stoyanovsky D*, **Tyurina Y**, Osipov AN, Kagan VE. Antioxidant interactions of vitamin E and coenzyme Q: Role of superoxide. [abstract]. In: The VII International Congress of Toxicology; The International Toxicologist 11-PF-7. 1995 Jul;.
6. **Tyurina Y**, Tyurin VA, Carta G, Quinn PJ, Schor NF, Kagan VE. Antioxidant effect of Bcl-2 against phospholipid peroxidation in PC12 rat pheochromocytoma cells. [abstract]. In: 36th Annual Meeting for Society of Toxicology; Fund. Appl.Toxicol., 36 (Suppl.1, Part2). 1997 Mar; Cincinnati, OH 1997 Mar. 536.
7. Arroyo A, Tyurin VA, **Tyurina Y**, Vilalba JM, Navas P, Kagan VE. Antioxidant enhancement by free radical reductase: NADH-dependent recycling of vitamin E by plasma membrane coenzyme Q reducatse. [abstract]. In: 37th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist, 42(1-S). 1998 Mar; Seattle, WA . 301.

8. Tyurin VA, Korotaeva A, **Tyurina Y**, Sokolova TV, Pitt BR, Lazo JS, Kagan VE. Matallothionein prevents copper-catalyzed redox-cyclong and protects against copper-induced oxidative stress and cytotoxicity. [abstract]. In: 37th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist, 42(1-S). 1998 Mar; Seattle, WA . 300.
9. Day BW, Tyurin VA, **Tyurina Y**, Liu M, Facey J, Kagan VE. The pro- versus anti-oxidant effects of 4-hydroxytamoxifen - peroxidase specificity and biochemical sequeale. [abstract]. In: 37th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist, 42(1-S). 1998 Mar; Seattle, WA . 152.
10. Shvedova AA, **Tyurina Y**, Tyurin VA, Gorbunov NV, Castranova V, McLaughlin M, Ojimba J, Gandley RE, Kagan VE. Nitric oxide but not nitrosothiols inhibit tert-butyl hydroperoxide/hemoglobin-induced oxidative stress and cytotoxicity. [abstract]. In: 37th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist, 42(1-S). 1998 Mar; Seattle, WA 1998 Mar. 149.
11. Shvedova AA, **Tyurina Y**, Tyurin VA, Kommineni C, Castranova V, Kagan VE. Redox-cycling and cytotoxicity of phenol in keratinocytes: Evidence for enhanced lipid and thiol oxidation and antioxidant depletion. [abstract]. In: III Int. Congress of Pathophysiology; Pathophysiology, 5 (Suppl.1). 1998 Jun-Jul; Lahti, Finland 1998 Jul. 63.
12. Kagan VE, Fabisiak JP, **Tyurina Y**, Tyurin VA, Schor NF, Lazo JS. Phosphatidylserine signaling in apoptosis. [abstract]. In: III Int. Congress of Pathophysiology; Pathophysiology, 5 (Suppl.1). 1998 Jun-Jul; Lahti, Finland 1998 Jul. 64.
13. Avrova NF, Tyurin VA, **Tyurina Y**, Zakharova IO, Sokolova TV, Shestak KI, Leont'ev VA. Regulation of oxidative stress by gangliosides. [abstract]. In: III Int. Congress of Pathophysiology; Pathophysiology, 5 (Suppl.1). 1998 Jun-Jul; Lahti, Finland 1998 Jul. 64.
14. Prueckner S, Kagan VE, **Tyurina Y**, SAFAR PJ, Tisherman SA, Stezoski J, Stezoski SW. Reduction of overall antioxidant reserve in liver and small intestine after uncontrolled hemorrhagic shock and resuscitation in rats. [abstract]. In: Critical Care Medicine; Critical Care Medicine 27:Suppl. S-1. 1999; 233.
15. Fabisiak JP, Tyurin VA, **Tyurina Y**, Borisenko GG, Korotaeva A, Pitt BR, Lazo JS, Kagan VE. Redox regulation of copper-metallothionein interactions. [abstract]. In: 38th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist, 48 (Suppl. 1-S):. 1999 Mar; New Orleans, LA 1999 Mar. 293.
16. **Tyurina Y**, Tyurin VA, Fabisiak JP, Schor NF, Kagan VE. Bcl-2 enhances redox impact of neocarzinostatin in PC12 rat pheochromocytoma cells. [abstract]. In: 38th Annual Meeting for Society of Toxicology,; Toxicol. Sci., The Toxicologist, 48 (Suppl. 1-S). 1999 Mar; New Orleans, LA.

17. Shvedova AA, **Tyurina Y**, Tyurin VA, Kommineni C, Castranova V, Kagan VE. Combination of phenolic compounds with arachidonic acid induces "Futile thiol pumping" and oxidative stress in epidermal human keratinocytes. [abstract]. In: 38th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist, 48 (Suppl. 1-S). 1999 Mar; New Orleans, LA . 205.
18. Borisenko GG, **Tyurina Y**, Tyurin VA, Yalowich JC, Fabisiak JP, Kagan VE. Free radical/antioxidant approach to chemoprevention of etoposide-iduced acute myeloid leukemia. [abstract]. In: 38th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist, 48(1-S). 1999 Mar; New Orleans, LA 1999 Mar. 107.
19. Hubel CA, Tyurin VA, **Tyurina Y**, Ness RB, Crombleholme WR, Roberts JM, Kagan VE. Plasma S-nitrosothiols are increased in normal pregnancy relative to non-pregnancy and are further increased in preeclampsia. [abstract]. In: The GSI Year 2000 Annual Meeting; J. Soc. Gynecol. Invest.,7. 2000; . 151A.
20. **Tyurina Y**, Tyurin VA, Schor NF, Kagan VE. Free radical scavenging vs. Bcl-2 induction in antiapoptotic effect of estrogens in MCF-7 breast cancer Cells. [abstract]. In: 39th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist. 2000 Mar; Philadelphia, PA . 168.
21. Kisin ER, Kommineni C, **Tyurina Y**, Tyurin VA, Schwegler-Berry D, Castranova V, Kagan VE, Shvedova AA. Redox-cycling of phenols caused depletion of GSH, oxidative stress and cytotoxicity in normal human epidermal keratinocytes (NHEKs). [abstract]. In: 39th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist, 54. 2000 Mar; Philadelphia, PA . 168.
22. Tyurin VA, **Tyurina Y**, Borisenko GG, Rose M, Graham S.H., Kagan VE. Oxidative stress following traumatic brain injury in rats: ascorbate radical as a tool to detect free radical activity. [abstract]. In: 39th Annual Meeting for Society of Toxicology; Toxicol. Sci., The Toxicologist, 54. 2000 Mar; Philadelphia, PA . 168.
23. Bayir HH, Kagan VE, **Tyurina Y**, Tyurin VA, Ruppel RR, Adelson P, Graham S.H., Janesco K, Clark RS, Kochanek PM. Oxidative stress in cerebrospinal fluid after severe traumatic brain injury in infants and children. [abstract]. In: Annual meeting of the Society for Critic Care Medicine; Crit. Care Med. 28. 2000 Dec; San Francisco, CA.
24. Avrova NF, Zakharova IO, Shestak KI, Tyurin VA, **Tyurina Y**, Sokolova TV, Lavrenova SA, Nosova IY. The role of free radical reactions in the disturbance of ionic homeostasis in synaptosomes from various brain regions caused by exposure to glutamate. [abstract]. In: Free radicals and antioxidants in the development and functions of the central nervous system: from fetus to aging; Adv. Gerontol. 2001, 6: 21-22. 2001 Apr 18-20 ; Saint-Petersburg, Russia 2001.
25. Serinkan F, Smith C, **Tyurina Y**, Kagan VE. Vitamin E and recognition/clearance of apoptotic Jurkat cells by macrophages. [abstract]. In: 41st Annual Meeting for Society of Toxicology; The Toxicologist, v.66. 2002 Mar 17-21 ; Nashville, TN 2002. 93.

26. Tyurin VA, **Tyurina Y**, Graham S.H., Kagan VE. Cyclooxigenase-2 contributes to oxidative stress induced by temporary focal ischemia. [abstract]. In: 41st Annual Meeting for Society of Toxicology,; The Toxicologist, v.66. 2002 Mar 17-21 ; Nashville, TN 2002. 93.
27. **Tyurina Y**, Koty PP, Tyurin VA, Kagan VE. Antisense bcl-2 selected oxidation of phosphatidylserine in NCI-H226 carcinoma cells: Role in apoptotic signaling. [abstract]. In: 41st Annual Meeting for Society of Toxicology,; The Toxicologist, v. 66. 2002 Mar 17-21 ; Nashville, TN 2002. 118.
28. Arroyo A, Modriansky M, Serinkan F, Bello R, Matsura T, Tyurin VA, **Tyurina Y**, Kagan VE. Oxidation and externalization of phosphatidylserine in activated neutrophil-like cells: Role in apoptosis and phagocytic clearance. [abstract]. In: 41st Annual Meeting for Society of Toxicology; The Toxicologist, v. 66. 2002 Mar 17-21 ; Nashville, TN 2002. 225.
29. **Tyurina Y**, Serinkan B, Tyurin V, Yalowich J, Fadeel B, Kagan VE. Lack of phosphatidylserine externalization in etoposide-induced apoptotic cells is related to its antioxidant protection of phosphatidylserine oxidation. [abstract]. In: 42nd Annual Meeting for Society of Toxicology; Toxicol. Sci., v.72, (S-1). 2003 Mar 9-13 ; Salt Lake City, UT 2003. 353.
30. Kini V, **Tyurina Y**, Borisenko G, Kagan VE. Phosphatidylserine is required along with oxidized phospholipids on cell surface for synergistic enhancement of phagocytosis by macrophages [abstract]. In: 42nd Annual Meeting for Society of Toxicology; Toxicol. Sci., v.72 (S-1). 2003 Mar 9-13 ; Salt Lake City, UT 2003. 355.
31. **Tyurina Y**, Serinkan F, Tyurin V, Yalowich J, Kagan VE. Etoposide inhibits phosphatidylserine oxidation, externalization and recognition of apoptotic HL-60 cells by macrophages. [abstract]. In: 94th Annual Meeting of American Association for Cancer Research; Proceeding of American Association for Cancer Research 2nd edition. 2003 Jul 11-14 ; Washington, DC 2003. 1016.
32. Bayir H, Kagan VE, **Tyurina Y**, Alexander H, Clark RS, Jenkins LD, Adelson P, Kochanek PM. Antioxidant and DNA damage following traumatic brain injury in immature rats. [abstract]. In: The 21st Annual National Neurotrauma Society Symposium; J. Neurotrauma 20 (10). 2003.
33. Kochanek PM, Bayir H, Billiar TR, **Tyurina Y**, Borisenko G, Janesko K, Vagni V, Kagan VE. The contribution of inducible nitric oxide synthase to nitrosative and oxidative stress after controlled cortical impact in mice. [abstract]. In: The 21st Annual National Neurotrauma Society Symposium; J. Neurotrauma 20 (10). 2003.
34. **Tyurina Y**, Mirnics Z, yan C, Saragovi H, Kagan VE, Schor N. Low-affinity nerve growth factor receptor, p75, as a modulator of resistance to oxidant stress. [abstract]. In: Annals of Neurology, v.56 (S8). 2004; . S129.

35. Kapralov A, **Tyurina Y**, Borisenko G, Schor N, Graham S.H., Kagan VE. Cyclooxygenase-2 catalized oxidation of 6-hydroxydopamine in PC12 pheochromocytoma cells. Implication for Parkinson's desease. [abstract]. In: 43rd Annual Meeting for Society of Toxicology; Toxicol. Sci., v. 78 (NS-1). 2004 Mar 21-25 ; Baltimore, MD 2004. 4.
36. Kisin J, **Tyurina Y**, Kisin E, Horwitz C, Collins T, Kagan VE, Castranova V, Shvedova A. Green chemistry catalyst causes depletion of GSH, oxidative stress and cytotoxicity in keratinocytes in the presence of H2O2. [abstract]. In: 43rd Annual Meeting for Society of Toxicology; Toxicol. Sci. , v.78 (NS-1). 2004 Mar 21-25 ; Baltimore, MD 2004. 4.
37. Ritov V, Tyurin V, **Tyurina Y**, Kagan VE. Quantitative analysis of phospholipids peroxidation: appearance of oxidized phosphatidylserine on the surface of HL-60 cells during intrinsic apoptosis. [abstract]. In: 43rd Annual Meeting for Society of Toxicology; Toxicol. Sci., v.78 (NS-1). 2004 Mar 21-25 ; Baltimore, MD 2004. 411.
38. **Tyurina Y**, Zhao Q, Tyurin V, Djukic M, Kagan VE. Enhancement of transbilayer diffusion of phosphatidylserine by its oxidation products: mechanism of phosphatidylserine externalization during apoptosis. [abstract]. In: 43rd Annual Meeting for Society of Toxicology; Toxicol. Sci., v.78 (NS-1). 2004 Mar 21-25 ; Baltimore, MD 2004. 411.
39. Jiang J, Kini V, **Tyurina Y**, Borisenko G, Shroit A, Kagan VE. Cytochrome c -/- cells fall to trigger phosphatidylserine signaling during apoptosis [abstract]. In: 43rd Annual Meeting for Society of Toxicology; Toxicol. Sci., v.78 (NS-1). 2004 Mar 21-25 ; Baltimore, MD 2004. 411.
40. Tyurin VA, Zhao Q, Jiang J, Borisenko G, Gandley RE, **Tyurina Y**, Bayir H, Kapralov A, Shvedova A, Komarov A, Hubel CA, Taylor R, Stoyanovsky D*, Kagan VE. Assesment of S-nitrosothiols in biological fluids: Content of S-niretosothiols in plasma. [abstract]. In: 43rd Annual Meeting for Society of Toxicology; Toxicol. Sci., 78 (NS-1). 2004 Mar 21-25 ; Baltimore, MD 2004. 411.
41. Osipov A, Kurnikov IV, Vladimirov Y, Belikova N, Stoyanovsky D*, Potapovich A, Borisenko G, Kapralov A, **Tyurina Y**, Tyurin V, Jiang AND Kagan VE, Kini V, Lysytsya A, Ritov V, Choi AM, Ryter S, Kagan VE. Cardiolipin destabilizes cytochrome c in mitochondria and makes its catalytic site accessible to small ligands: Role in apoptosis. [abstract]. In: 44th Annual Meeting for Society of Toxicology; The Toxicologist, v. 84. 2005 Mar 6-10 ; New Orleans, LA 2005. 468.
42. Tyurin V, **Tyurina Y**, Lysytsya A, Amoscato AA, Jiang AND Kagan VE, Zhao Q, Zou M, Ritov V, Kagan VE. Cardiolipin is a preferred substrate for cyrochrome c induced oxidation during intrinsic apoptosis [abstract]. In: 44th Annual Meeting for Society of Toxicology; The Toxicologist, v. 84. 2005 Mar 6-10 ; New Orleans, LA 2005. 470.

43. Kini V, **Tyurina Y**, Tyurin V, Lysytsya A, Yalowich J, Kagan VE. Two facets of etoposide: Pro-apoptotic agent and antioxidant. [abstract]. In: 44th Annual Meeting foe Society of Toxicology; The Toxicologist, v.84. 2005 Mar 6-10 ; New Orleans, LA 2005. 471.
44. **Tyurina Y**, Tyurin V, Fujii Y, Kagan VE. HL-60 cells with metabolically bioengineered polyunsaturated cardiolipin molecular species exert increased sensitivity to apoptosis [abstract]. In: 44th Annual Meeting for Society of Toxicology; The Toxicologist, v.84. 2005 Mar 6-10 ; New Orleans, LA 2005. 471.
45. Jiang J, Tyurin VA, **Tyurina Y**, Kini V, Cai P, Ritov V, Kagan VE. Cytochrome c catalyzed cardiolipin oxidation is essential for the release of proapoptotic factors from mitochondria. [abstract]. In: 44th Annual Meeting for Society of Toxicology; The Toxicologist. v. 84. 2005 Mar 6-10 ; New Orleans, LA 2005. 471.
46. Tyurin V, Osipov A, **Tyurina Y**, Bayir H, Belikova N, Kapralov A, Zhao Q, Jiang AND Kagan VE, Gill P, Waldeck DH, Kagan VE. Lysocardiolipins in apoptosis: interactions with cytochrome c, tBid and asymmetry of distribution in mitochondria [abstract]. In: 45th Annual Meeting for Society of Toxicology; The Toxicologist, v90. 2006 Mar 5-9 ; San Diego, CA 2006. 410.
47. **Tyurina Y**, Potapovich A, Tyurin V, Cai P, Konduru N, Bayir H, Fadeel B, Stoyanovsky D*, Shvedova A, Kagan VE. Nitrosative stress induces phosphatidylserine externalization: Signaling role in phagocytosis. [abstract]. In: 45th Annual Meeting or Society of Toxicology; The Toxicologist, v.90. 2006 Mar 5-9 ; San Diego, CA 2006. 237.
48. Shvedova A, Poyapovich A, Osipov A, **Tyurina Y**, Kisin E, Schwegler-Berry D, Mercer R, Castranova V, Kagan VE. Oxidative interactions of single walled carbon nanotubes with RAW 264.7 macrophages: Role of iron. [abstract]. In: 45th Annual Meeting for Society of Toxicology; The Toxicologist, v. 90. 2006 Mar 5-9 ; San Diego, CA 2006. 318.
49. Bayir H, Tyurin V, **Tyurina Y**, Jiang AND Kagan VE, Ritov V, Zhang X, Zhao Q, Kochanek PM, Clark RS, Dekosky ST, Kagan VE. A new biomarker of early apoptosis in the brain: Cardiolipin oxidation. [abstract]. In: 45th Annual Meeting for Society of Toxicology; The Toxicologist, v. 90. 2006 Mar 5-9 ; San Diego, CA 2006. 410.
50. Shvedova A, Kisin E, Murray A, Schwegler-Berry D, Castranova V, Kagan VE, **Tyurina Y**. Carbon nanotubes exposure caused induction of oxidative stress, pulmonary injury and fibrosis. [abstract]. In: 13th Biennial meeting of the Society for Free Radical Research; Free Radic. Res, v.40, S.1. 2006 Aug 15-19 ; Davos, Switzerland 2006. S114.
51. Kagan VE, **Tyurina Y**, Konduru N, Basova L, Stolz D, Kisin E, Murray A, Fadeel B, Shvedova A. Targeted delivery of phosphatidylserine-coated single walled carbon nanotubes to macrophages [abstract]. In: 46th Annual Meeting for Society of Toxicology; The Toxicologist, v. 96. 2007 Mar 25-29 ; Charlotte, NC 2007. 223.

52. Shvedova A, Kisin E, Murray A, Gorelik O, Aperalli S, Castranova V, Young S, Gao F, **Tyurina Y**, Oury TD, Kagan VE. Vitamin E deficiency enhances pulmonary inflammatory response and oxidative stress induced by single walled carbon nanotubes in C57BL/6 mice. [abstract]. In: 46th Annual Meeting for Society of Toxicology; The Toxicologist, v. 96. 2007 Mar 25-29 ; Charlotte, NC 2007. 37.
53. Feng W, **Tyurina Y**, Bayir H, Shvedova A, Kagan VE. Phosphatidylserine enhances recognition and uptake of single walled carbon nanotubes by rat brain microglial cells [abstract]. In: 46th Annual Meeteng for Society of Toxicology; The Toxicologist, v. 96. 2007 Mar 25-29 ; Charlotte, NC 2007. 289.
54. Vlasova I, Kapralov A, Jiang AND Kagan VE, Basova L, Belikova N, Tyurin V, **Tyurina Y**, Martin J, Glumac A, Bayir H, Kagan VE. Peroxidase complexes of cytochrome c with anionic lipids: Structural pre-requisites, mechanism, and cytotoxic effects [abstract]. In: 46th Annual Meeting for Society of Toxicology; The Toxicologist, v. 96. 2007 Mar 25-29 ; Charlotte, NC 2007. 61.
55. Tyurin V, Bayir H, **Tyurina Y**, Feng W, Viner R, Amoscato AA, Zhao Q, Janesko-Feldman K, Alexander H, Kochanek PM, Dekosky ST, Kagan VE. Mass spectrometric analysis of phospholipid molecular species and their hydroperoxides in apoptotic neurons and injured rat brain [abstract]. In: 46th Annual Meeting for Society of Toxicology; The Toxicologist, v. 96. 2007 Mar 25-29 ; Cha 2007. 187.
56. Belikova N, Jiang AND Kagan VE, **Tyurina Y**, Zhao Q, Epperly M, Greenberger JS, Kagan VE. Redox regulation of gamma-irradiation induced apoptosis by cytochrome c-cardiolipin complex in HeLa cells [abstract]. In: 46th Annual Meeting for Society of Toxicology; The Toxicologist, v. 96. 2007 Mar 25-29 ; Charlotte, NC 2007. 61.
57. **Tyurina Y**, Tyurin VA, Epperly M, Greenberger JS, Kagan VE. Oxidized cardiolipin as a new biomarker of gamma-irradiation-induced apoptosis [abstract]. In: 46th Annual Meetin for Society of Toxicology; The Toxicologist, v. 96. 2007 Mar 25-29 ; Charlotte, NC 2007. 61.
58. **Tyurina Y**, Wasserloos K, Stewart R, Stitt-Fischer M S, Kaynar A, Pitt BR, Kagan VE. Oxidative lipidomics of hyperoxic lung injury [abstract]. In: 47th Annual Meeteing for Society of Toxicology; The Txicologist, v. 102. 2008 Mar 16-20 ; Seattle, WA 2008. 213.
59. Feng W, Konduru N, **Tyurina Y**, Clark K, Stolz D, Bayir H, FAdeel B, Shvedova A, Kagan VE. Involvement of endocytosis in uptake of phosphatidylserine-coated single-walled carbon nanotubes by Rae 264.7 macrophages [abstract]. In: 47th Annual Meeteing for Society of Toxicology; The Toxicologist, v. 102. 2008 Mar 16-20 ; Seattle, WA 2008. 411.
60. **Tyurina Y**, Tyurin V, Kaprlova V, Tungekar M, Kaynar A, Wasserloos K, Mosher M, Epperly M, Greenberger JS, Pitt BR, Kagan VE. Oxidative lipidomics of acute lung injury induced by hyperoxia and gamma-irradiation [abstract]. In: 48th Annual Meeting for Society of Toxicology; The Toxicologist, v.108. 2009 Mar 15-19 ; Baltimore, MD 2009. 196.

61. Belikova N, Jiang AND Kagan VE, Kapralova V, **Tyurina Y**, Greenberger JS, Stoyanovsky D*, Kagan VE. Peroxidase-actvated mitochondria-targeted NO-donor protects mouse embryonic cells against irradiation-induced injury. [abstract]. In: 48th Annual Meeting for Society of Toxicology; The Toxicologist, v. 108. 2009 Mar 15-19 ; Balti 2009. 321.
62. Jiang AND Kagan VE, Stoyanovsky D*, Belikova N, Zhao H, **Tyurina Y**, Tungekar M, Kapralova V, Greenberger JS, Kagan VE. Mitochondria-targeted triphenylphosphonium conjugated nitroxide function as a radioprotector. [abstract]. In: 48th Annual Meeting for Society of Toxicology; The Toxicologist, v. 108. 2009 Mar 15-19 ; Baltimore, MD 2009. 321.
63. Feng W, Tyurin V, Go K, **Tyurina Y**, Stewart NA, Fazzi F, Kisin E, Murray A, Shvedova A, Pitt BR, Ortiz LA, Kagan VE. Oxidative lipidmics of macrophage activation and apoptosis induced by phagocytosis of particles and pathogens. [abstract]. In: 48th Annual Meeting for Society of Toxicology; The Toxicologist, v. 108. 2009 Mar 15-19 ; Baltimore, MD 2009. 194.
64. Tyurin V, Jung M, **Tyurina Y**, Prieto T, Zhao Q, Kapralov A, Belikova N, Nantes I, Kagan VE. Cardiolipin oxidation, hydrolysis and accumulation of monolysocardiolipins and oxidized free fatty acids during apoptosis: Role of cytochrome c. [abstract]. In: 48th Annual Meeting for Society of Toxicology; The Toxicologist, v.108. 2009 Mar 15-19 ; Baltimore, MD 2009. 62.
65. Kagan VE, Tyurin V, Kapralova V, Kaynar A, Wasseeloos K, Mosher M, Wipf P, Pitt BR, **Tyurina Y**. Oxidative lipidomics of hyperoxia-induced acute lung injury. [abstract]. In: 49th Annual Meeting for Society of Toxicology; The Toxicologist, v.114. 2010 Mar 8-11 ; Salt Lake City, UT 2010. 128.
66. **Tyurina Y**, Tyurin V, Kapralova V, Wassreloos K, Mosher M, Epperly M, Greenberger JS, Pitt BR, Kagan VE. Oxidative lipidomics of gamma-radiation induced lung injury. [abstract]. In: 49th Annual Meeting for Society of Toxicology; The Toxicologist, v.114. 2010 Mar 8-11 ; Salt Lake City, UT 2010. 597.
67. Tyurin V, Winnica D, Fazzi F, Feng W, **Tyurina Y**, Stewart NA, Kisin E, Murray A, Shvedova A, Pitt BR, Kagan VE, Ortiz LA. Phospholiopid oxidative metabolism during macrophage response to environmental agents. [abstract]. In: 49th Annual Meeting for Society of Toxicology; The Toxicologist, v. 114. 2010 Mar 8-11 ; Salt Lake City, UT 2010. 128.
68. Tyurin V, **Tyurina Y**, Macphee C, Kagan VE. LC-ESI/MS reveales unusual oxygenated lysophosphatidylserines prodiced after oxidation and hydrolysis by plasma lipoprotein-associated phopsholipase A2 of sn-1, sn-2-2-dilinoleoyl-PS. [abstract]. In: 50th Annual Meeting for Society of Toxicology; The Toxicologist, 120. 2011 Mar 6-10 ; Washington DC 2011. 359.

69. **Tyurina Y**, Tyurin V, Sparvero L, Amoscato AA, Kapralova V, Kisin E, Murray A, Shi J, Fadeel B, Shvedova A, Kagan VE. Oxidative lipidomics reveals selective, but not random, pulmonary phopsholipid peroxidation after inhalation of carbon nanotubes. [abstract]. In: 50th Annual Meeting for Society of Toxicology; The Toxicologist, v. 120. 2011 Mar 6-10 ; Washington DC 2011. 252.
70. Samhan Arias A, Tyurin V, **Tyurina Y**, Bayir H, Kagan VE, Amoscato AA. 2D-LC-MS analysis of oxidized lipid species: Application to the study of cardiolipin in apoptosis and damaged tissue. [abstract]. In: 51th Annual Meeting for Society of Toxicology; The Toxicologist, v. 126. 2012 Mar 10-15 ; San Francisco, CA 2012. 254.
71. Amoscato AA, Feng W, Kagan VE, **Tyurina Y**. Rotenone-induced oxidized molecular species of cardiolipin in human lymphocytes: can they be used as biomarkers of mitochondrial dysfunction associated with Parkinson's disease? [abstract]. In: 51th Annual Meeting for Society of Toxicology; The Toxicologist, v.126. 2012 Mar 10-15 ; San Francisco, CA 2012. 528.
72. **Tyurina Y**, Tungekar M, Jung M, Tyurin V, Stoyanovsky D*, Kagan VE. Mitochondria targeting of non-peroxidizable triphenylphosphonium conjugated oleic acid protects mouse embryonic cells against apoptosis: Role of cardiolipin remodeling. [abstract]. In: 51th Annual Meeting for Society of Toxicology; The Toxicologist, v. 126. 2012 Mar 11-15 ; San Francisco, CA 2012. 438.
73. Frostegård J, Tyurin V, **Tyurina Y**, Amoscato AA, Su J, Balasubramanian K, Maeda A, Fadeel B, Greenberger JS, Mallampalli R, Kagan VE. Interrelationships of peroxidation and immunogenicity of cardiolipin: an oxidative lipidomics approach. [abstract]. In: 51th Annual Meeting for Society of Toxicology; The Toxicologist, v.126. 2012 Mar 11-15 ; San Francisco, CA 2012.
74. Kagan VE, Tyurin V, Balasubramanian K, Winnica D, **Tyurina Y**, Macphee C. Role of oxygenated phosphatidylserine and its metabolitis - lyso-phosphatidylserines produced after oxidation and hydrolysis by plasma lipoprotein-associated phospholipase A2 in clearance of apoptotic cells by macrophages: LC-ESI-MS study. [abstract]. In: 51th Annual Meeting for Society of Toxicology; The Toxicologist, v.126. 2012 Mar 11-15 ; San Francisco, CA 2012. 443.
75. Tyurin V, Zhao H, **Tyurina Y**, Epperly M, Greenberger JS, Kagan VE. Monolyso-cardiolipin - biomarker of mitochondrial dysfunction induced by total body irradiation. LC-ESI-MS study. [abstract]. In: 51th Annual Meeting for Society of Toxicology; The Toxicologist, v.126. 2012 Mar 11-15 ; San Francisco, CA 2012. 438.
76. Cao W, Tyurin V, **Tyurina Y**, Gabrilovich D, Kagan VE. Oxygenated fatty acids in plasma of tumor-bearing animals stimulate their scavenger receptor A1-mediatd up-take by dendritic cells: Mass-spectrometric evidence. [abstract]. In: 51th Annual Meeting for Society of Toxicology; The Toxicologist, v.126. 2012 Mar 11-15 ; San Francisco, CA 2012. 351.

77. Atkinson J, Kapralov AA, Yanamala N, **Tyurina YY**, Amoscato AA, Pearce L, Peterson J, Huang Z, Jiang J, Samhan-Arias AK, Maeda A, Feng W, Wasserloos K, Belikova N, Tyurin VA, Wang H, Fletcher J, Wang Y, Vlasova II, Klein-Seetharaman J, Stoyanovsky DA, Bayîr H, Pitt BR, Epperly MW, Greenberger JS, Kagan VE, A mitochondria-targeted imidazole-substituted fatty acids inhibit cytochrome c peroxidase and mitigate radiation induced death. 51th Annual Meeting for Society of Toxicology; The Toxicologist: Suppl. V.126, Suppl. 1, Abstract No. 2036, p.439, March 11-15, 2012, San Francisco CA.
78. **Tyurina Y**, Winnica DE, Kapralova VI, Tyurin VA, Kagan VE. Cardiolipin as a biomarker of mitochondrial dysfunction associated with Parkinson's disease. [abstract]. In: 52nd Annual Meeting for Society of Toxicology; The Toxicologist, v.132. 2013 Mar 10-14; San Antonio, TX 2013. 401.
79. Star A, Kapralov A, Amoscato AA, Tyurin V, Seo W, Epperly M, Greenberger JS, **Tyurina Y**, Kagan VE. Development of a Mitochondria-Targeted Nano-Complex of Imidazole-Substituted Oleic Acid As a Radiomitigator [abstract]. In: 52nd Annual Meeting for Society of Toxicology; The Toxicologist, v.132. 2013 Mar 10-14; San Antonio, TX 2013. 428.
80. Kagan VE, Tyurin V, Poloyac SM, Epperly M, Greenberger JS, Bayir H, **Tyurina Y**. Mitochondrial cardiolipin as a substrate for cytochrome c-catalyzed production of oxygenated lipid mediators [abstract]. In: 52nd Annual Meeting for Society of Toxicology; The Toxicologist, v.132. 2013 Mar 10-14 ; San Antonio, TX 2013. 428.
81. Huang Z, **Tyurina Y**, Jiang AND Kagan VE, Cheikhi A, Tokarska-Schlattner M, Boissan M, Lacombe M, Epand R, Schlattner U, Epand RM, Kagan VE. EXTERNALIZATION OF CARDIOLIPIN AS AN "EAT-ME" MITOPHAGEAL SIGNAL IS FACILITATED BY NDPK-D. Poster presented at: 58th Biophysical Annual Meeting; 2014 Feb 15-19; San Francisco, California.
82. **Tyurina Y**, Vikulina A, Kapralova VI, Winnica D, Sanders L, Greenamyre J, Tyurin VA, Kagan VE. Oxidized Cardiolipins As a Biomarker of Mitochondrial Dysfunction Triggered by Pesticide, Rotenone. Poster presented at: 53rd Annual Meeting for Society of Toxicology; [abstract]. In: The Toxicologist, v.138, Issue 1, 2014 Mar 23-27; Phoenix, Arizona.
83. Kagan VE, Jiang AND Kagan VE, Huang Z, Tyurin VA, **Tyurina Y**, Stolz D, Watkins S, Mallampalli R. Signaling Role of Cardiolipin Externalization in Elimination of Damaged Mitochondria in Lung Epithelial Cells. Poster presented at: 53rd Annual Meeting for Society of Toxicology; [abstract]. In: The Toxicologist, v.138, Issue 1, 2014 Mar 23-27; Phoenix, Arizona.
84. Schlattner U, Boissan M, Montagnac G, Tokarska-Schlattner M, Cottet-Rousselle C, Desbourdes C, Lacombe M-L, Griparic L, Huang Z, **Tyurina YY**, Jiang J, van der Bliek AM, Roux A, Chavrier P, Kagan VE Mitochondrial NM23-H4/NDPk-D is Multifunctional: Fueling Mitochondrial GTPase OPA1 and Triggering Mitophagy [abstract]. In: Biophysical Journal 01/2015; 108(2):369a. DOI:10.1016/j.bpj.2014.11.2020

85. **Tyurina Y**, Polimova A, Maciel E, Tyurin VA, Kapralova V, Winnica D, Vikulina A, Domingues R, Sanders L, Bayir H, Greenamyre T, Kagan VE .Analysis of Cardiolipins in Substantia Nigra and Plasma of Rotenone-Treated Rats: Implication for Mitochondrial Dysfunction in Parkinson's Disease. [abstract]. In: The Toxicologist: Supplement to Toxicological Sciences; (2015); V. 144, Issue 1, Abstract 1533, p. 329.
86. Tyurin VA, Polimova A, Sanders L, Greenamyre T, **Tyurina Y**, Kagan VE. Aberrant Lipid Metabolism in Rotenone-Induced Mitochondrial Dysfunction. [abstract]. In; The Toxicologist: Supplement to Toxicological Sciences; (2015); V. 144, Issue 1, Abstract 1535, p. 330.
87. **Tyurina Yulia**, Amoscato Andrew, Tyurin Vladimir, Qu Feng, Mao Gaowei, Hulya Bayir, Valerian Kagan. Identification and quantification of oxygenated arachidonoyl- and adrenoyl-phosphatidylethanolamines as ferroptotic death signals using oxidative phospholipidomic. 64th American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics June 5 - 9, 2016, San Antonio, TX.
88. **Yulia Y Tyurina**, Vladimir A Tyurin, Michael, Epperly, Simon Watkins, Joel Greenberger, Hulya Bayir, Valerian E Kagan. Identification and quantification of hepoxilin A3-phosphatidylethanolamine in ileum of mice exposed to total body irradiation using oxidative phospholipidomics. 65th ASMS Conference on Mass Spectrometry and Allied Topics June 4 - 8, 2017, Indianapolis, IN.
89. Feng Qu, **Yulia Y Tyurina**, J .Zhao, Gaowei Mao, Vladimir A Tyurin, Tamil Anthonymuthu, Andy A. Amoscato, David R Emlet, John A Kellum, Sally E Wenzel, Hulya Bayir, Valerian E Kagan. Accumulation of oxygenated phosphatidylethanolamines as ferroptotic death signals characterized by oxidative phospholipidomics. 65th ASMS Conference on Mass Spectrometry and Allied Topics June 4 - 8, 2017, Indianapolis, IN.
90. Vladimir A. Tyurin, **Yulia Y Tyurina**, Weinji Lou, Feng Qu, Jenney Liu, Maik Hüttemann, Dariush Mohammadyani, Michael A Frasso, Peter Wipf, Hulya Bayir, Miriam L Greenberg and Valerian E Kagan. Contribution of biosynthesis vs remodeling to the diversity of cardiolipins in genetically and nutritionally manipulated yeast cells: differential LC-MS assessments, 65th ASMS Conference on Mass Spectrometry and Allied Topics, June 4 - 8, 2017, Indianapolis, IN.
91. Gaowei Mao, Feng Qu, Jose Pedro Angeli, Claudette St Croix, Haider Dar, Vladimir Tyurin, Vladimir Ritov, Alexandr Kapralov, Andrew Amoscato, Tamil Anthonymuthu, Dariush Mohammadyani, Qin Yang, Brent Stockwell, **Yulia Tyurina**, Marcus Conrad, Hülya Bayır and Valerian Kagan. (2017) Tocopherols and tocotrienols prevent lipoxygenase-driven phospholipid oxidation in ferroptosis. Experimental Biology 2017. April 22-26, 2017. Chicago, IL.
92. **Tyurina Y**, Zhao J, St. Croix CM, Watkins SC, Tyurin VA, Anthonymuthu TS, Amoscato AA, Haider D, Rosenbaum J, VanDemark AP, Bayır H, Wenzel SE, Kagan VE. PEBP1 enables 15-lipoxygenase 1 to generate ferroptotic cell death signals in primary human airway epithelial cells. LC/MS study. 66th Conference on Mass Spectrometry and Allied Topics, June 3-7, 2018, San Diego, CA.

93. Tyurin VA, Ting HC, Lou W, Reynolds CA, **Tyurina YY**, Yu W, Liang Z, Stoyanovsky DA,. Greenberger JS, Bayir H, Anthonymuthu TS, Greenberg ML and Kagan VE. Differential LC-MS study of CLD1-driven diversification of cardiolipins in Δ12-desaturase transfected yeast cells. 66th Conference on Mass Spectrometry and Allied Topics, June 3-7, 2018, San Diego, CA.
94. Tyurin V, **Tyurina Y**, Amoscato AA, Sparvero LJ, Epperly MW, St. Croix CM, Watson AM, St. Croix CM, Watkins SC, Greenberger JS, Bayır H, Kagan VE. An inhibitor of iPLA$_2$γ, R-BEL, prevents lipid mediator generation in the ileum and leads to radiomitigation after total body irradiation. 67th Conference on Mass Spectrometry and Allied Topics, June 2 - 6, 2019, Atlanta, GA.
95. **Tyurina YY**, Dar H, Tyurin VA, Amoscato AA, Pilewski JM, Mallampalli RK, Bayir H, Kagan VE. Differential *P. aeruginosa* lipoxygenase (pLoxA) generates ferroptotic cell death signals in host human bronchial epithelial cells: LC/MS study. 67th Conference on Mass Spectrometry and Allied Topics, June 2 - 7, 2019, Atlanta, GA.

Presentations

1. Avrova NF, **Tyurina Y**, Tyurin VA, Kagan VE. Ganglioside-dependent factor, inhibiting lipid peroxidation in rat brain synaptosomal membranes. Presented at: Conference: "Regulation of Free Radical Reactions" (Biomedical Aspects); 1989; Varna, Bulgaria.
2. **Tyurina Y**, Antipov AD, Tyurin VA, Avrova NF. Effect of gangliosides on the monoamine oxidase activity in rat brain synaptosomes. Presented at: Conference: "The Mechanism of Mediator and Hormone Effect on the Effector Cells"; 1989 Sep 25-28; Suzdal, Russia.
3. Kuznetzova LA, Tyurin VA, **Tyurina Y**, Pertseva MN, Avrova NF. Ganglioside GM1 protects beta-adrenoreceptor from desensitization caused by induction of lipid peroxidation in rat brain synaptosomes. Presented at: 8th General Meeting of European Society for Neurochemistry; 1990 Jul; Leipzig, Germany.
4. **Tyurina Y**, Tyurin VA, Avrova NF. Preincubation of rat synaptosomes with ganglioside GM1 protects cAMP-phosphodiesterase against inactivation by induction of lipid peroxidation. Presented at: 8th General Meeting of European Society for Neurochemistry; 1990 Jul; Leipzig, Germany.
5. Tyurin VA, **Tyurina Y**, Avrova NF. Ganglioside-dependent factor, inhibiting lipid peroxidation in nervous system. Presented at: 8th General Meeting of European Society for Neurochemistry; 1990 Jul; Leipzig, Germany.
6. Avrova NF, Tyurin VA, **Tyurina Y**. Ganglioside-dependent factor, inhibiting lipid peroxidation: Evidences possible protein kinase nature. Presented at: Satellite Symposium "Clinical and Behavioral Aspects of Ganglioside Research" of 8th General Meeting of European Society for Neurochemistry; 1990 July; Magdeburg, Germany.

7. Avrova NF, Tyurin VA, **Tyurina Y**, Denisova NA. Preincubation of synaptosomes with gangliosides protects membrane lipids, receptor and enzymes from oxidative destruction. Presented at: International Meeting; 1991 Feb 20-23; Universita Cattolica del Sacro Cuore, Roma, Italy.
8. Tyurin VA, **Tyurina Y**, Avrova NF. Protection of cAMP-phosphodiesterase of brain synaptosomes against lipid peroxidation damage by nanomolar concentration of ganglioside GM1. Poster presented at: Constituent Congress International Society for Pathophysiology; 1991 May-Jun; Moskow, Russia.
9. Arduini A, Tyurin VA, **Tyurina Y**, Dottori S, Malojoni F, Ramsay RR. Carnitine palmitoyltransferase, a key modulator of the acyl-trafficking in the course of the secondary antioxidant response of oxidative stress. Presented at: VI Biennial Meeting of International Society of Free Radical Research "Free Radicals: From Basic Science of Medicine"; 1992 Jul; Torino, Italy.
10. **Tyurina Y**, Arduini A, Tyurin VA, Sokolova TV, Furaev VV, Rychkova MP, Arrigoni-Martelli E. Comparative study of phospholipid repair mechanism in membranes of synaptosomes, photoreceptors and erythrocytes during oxidative stress. Poster presented at: XI International Meeting for Evolutionary Physiology; 1996 Apr 22-26; St.-Petersburg, Russia.
11. Fabisiak JP, Lazo JS, **Tyurina Y**, Kagan VE. Selective oxidation of phosphatidylserine (PS) is associated with PS externalization and down-regulation of amino-phospholipid translocase during apoptosis following lipid peroxidation. Poster presented at: 2nd International Meeting on Oxygen/Nitrogen Radicals and Cellular Injury; 1996 Sep 7-10; Durham, NC.
12. **Tyurina Y**, Sokolova TV, Tyurin VA, Gonchar VS, Zakharova IO, Furaev VV, Avrova NF. Protective effect of alpha-tocopherol and superoxide dismutase against glutamate neurotoxicity. Poster presented at: 1st Russian Congress for Pathophysiology; 1996 Oct 17-19; Moskow, Russia.
13. Tyurin VA, **Tyurina Y**, Sokolova TV, Arrigoni-Martelli E, Arduini A. Repair of lipid bilayer of synaptosomal membrane during oxidative stress. Poster presented at: 1st Russian Congress for Pathophysiology; 1996 Oct 17-19; Moskow, Russia.
14. Shvedova AA, Kisin ER, Kommineni C, Schweger-Berry D, **Tyurina Y**, Tyurin VA, Castranova V, Kagan VE. Redox-cycling of occupational phenolic compounds induces oxidative stress and cytotoxicity in human epidermal keratinocytes. Poster presented at: SFRR Europe Winter Meeting "Bio-Flavonoids and Polyphenols in Health and Disease; 1999 Dec 2-5; Dinard - France.
15. Kagan VE, **Tyurina Y**, Tyurin V, Kawai K, Fabisiak JP, Kommineni C, Castranova V, Shvedova AA. Oxidative stress in keratinocytes: role in apoptotic signaling. Poster presented at: 39th Annual Meeting for Society of Toxicology; 2000 Mar; Philadelphia, PA.
16. Kawai K, **Tyurina Y**, Tyurin VA, Kagan VE, Fabisiak JP. Peroxidation and externalization of phosphatidylserine in plasma membrane of HL-60 cells during tert-butyl hydroperoxide-induced apoptosis: Role of cytochrome c. Poster presented at: 39th Annual Meeting for Society of Toxicology; 2000 Mar; Philadelphia, PA.

17. Bayir HB, Kagan VE, **Tyurina Y**, Tyurin VA, Ruppel RA, Adelson PD, Graham S.H., Janesko K, Clark RS, Kochanek PM. Assessment of antioxidant reserve and oxidative stress in cerebrospinal fluid after severe traumatic brain injury in infants and children. Poster presented at: Society of Critical Care Medicine 30th International Educational and Scientific Symposium; 2001.
18. Yalowich JC, Kuzmenko OI, **Tyurina Y**, Kisin ER, Shvedova AA, Kagan VE. Myeloperoxidase-catalyzed oxidation of etoposide is prevented by vitamin E homologues in HL-60 cells. Poster presented at: AICR Meeting; 2001 Mar; New Orleans, LA.
19. Tyurin VA, Liu SX, **Tyurina Y**, Hubel CA, Roberts JM, Taylor RN, Kagan VE. S-Nitrosylation of albumin is increased in preeclampsia. Poster presented at: 48th Annual Meeting for Society of Gynecological Investigation; 2001 Mar 14-17; Toronto, Ontario, Canada.
20. Ramirez RJ, Novak J, **Tyurina Y**, Kagan VE, Gandley RE, Hubel CA. Increased myogenic reactivity in small mesemteric arteries from ascorbic acid depleted, inherently scurvy-prone pregnant rats. Poster presented at: 48th Annual Meeting for Society of Gynecological Investigation; 2001 Mar 14-17; Toronto, Ontario, Canada.
21. Tyurin VA, Liu S, **Tyurina Y**, Hubel CA, Roberts J, Kagan VE. Nitrosative/oxidative stress in preeclampsia: Elevated S-nitrosylation of albumin. Poster presented at: 40th Annual Meeting for Society of Toxicology; 2001 Mar 25-29; San Francisco, CA.
22. Yalowich J, Kuzmenko O, **Tyurina Y**, Kisin ER, Shvedova AA, Kagan VE. Lipoate/ascorbate-dependent recycling prevents myeloperoxidase-catalyzed oxidation of vitamin E homologues' phenoxyl radical in live HL-60 cells. Poster presented at: 40th Annual Meeting for Society of Toxicology; 2001 Mar 25-29; San Francisco, CA.
23. Shvedova AA, **Tyurina Y**, Tyurin VA, Kisin ER, Kikuci Y, Quinn PJ, Kagan VE. Superoxide-induced reduction of coenzyme Q and its interaction with vitamin E synergistically protects human keratinocytes against oxidative stress. Poster presented at: 40th Annual Meeting for Society of Toxicology; 2001 Mar 25-29; San Francisco, CA.
24. Bayir HB, Kagan VE, **Tyurina Y**, Tyurin VA, Ruppel RA, Adelson PD, Graham S.H., Janesko K, Clark RS, Kochanek PM. Assessment of antioxidant reserve and oxidative stress in cerebrospinal fluid after severe traumatic brain injury in infants and children. Poster presented at: Annual Meeting of the Society for Pediatric Research; 2001 May; Baltimore, MD.
25. Kagan VE, **Tyurina Y**, Forrest KZ, Orchard TJ. Association between low molecular weight thiols and protein SH-groups and coronary artery disease (CAD) among type I diabetes patients. Poster presented at: 61st Scientific Sessions; 2001 Jun; Philadelphia, PA.
26. Arroyo A, Modriansky M, Serinkan FB, Bello RI, Matsura T, Tyurin VA, **Tyurina Y**, Kagan VE. NADPH oxidase in neutrophils: Murder & suicide. Poster presented at: 8th Annual Meeting for the Oxygen Society; 2001 Nov; Triangle Park, NC.

27. **Tyurina Y**, Arroyo A, Modriansky M, Serinkan F, Bello R, Matsuura T, Jiang J, Tyurin VA, Kagan VE. Phosphatidylserine oxidation is specially related to NADPH-oxidase induced apoptosis in DMSO-differentiated HL-60 cells. Presented at: International Symposium "Reactive oxygen and nitrogen species: Diagnostic, preventive, and therapeutic values"; 2002 Jul; St.-Petersburg, Russia.
28. Bayir H, Janesko K, Vagni V, Kagan VE, **Tyurina Y**, Kochanek PM. The contribution of inducible nitric oxide synthase to nitrosative stress after controlled cortical impact in mice. Presented at: 32nd Critical Care Congress; 2003 Jan 28-Feb 2; San Antonio, TX.
29. Tyurin VA, **Tyurina Y**, Ritov V, Du L, Jiang J, Zou M, Zhang X, Clark RS, Kochanek PM, Kagan VE, Bayir H. Cytochrome c functions as peroxidase catalyzing cardiolipin peroxidase duting apoptosis. Presented at: Neuroscience 2005; 2005 Nov 12-16; Washington, DC.
30. Konduru N, **Tyurina Y**, Shvedovs A, Star A, Bayir H, Kagan VE. Phosphatidylserine Functionalization of Single Walled Carbon Nano-Tubes Confers a Recognition Signal for Macrophages. Presented at: 1st International Conference on Nanotoxicology: Biomedical Aspects.; 2006 Jan 29-Feb 1; Miami, FL.
31. Tyurin V, **Tyurina Y**, Potapovich A, Cai P, Konduru N, Bayir H, Fadeel B, Stoyanovsky D*, Shvedova A, Kagan VE. S-Nitosation and phosphatidylserine externalization on the cell surface: A new signaling role in apoptosis and phagocytosis. Presented at: 1st International Conference on Nanotoxicology: Biomedical Aspects.; 2006 Jan 29-Feb 1; Miami, FL.
32. **Tyurina Y**, Osipov A, Tyurin V, Potapovich A, Kisin E, Schwegler-Berry D, Mercer R, Castranova V, Shvedova A, Kagan VE. Redox Effects of Single Walled Carbon Nanotubes on RAW264.7 Macrophages: Role of Iron. Presented at: 1st International Conference on Nanotoxicology: Biomedical Aspects.; 2006 Jan 29-Feb 1; Miami, FL.
33. Kagan VE, Tyurin V, Amoscato AA, Viner R, Miller K, **Tyurina Y**, Sparvero L, Kochanek PM, Bayir H. Mass-spectrometric analysis of phospholipids oxidation after experimental brain trauma. Presented at: Neuroscience 2006; 2006 Oct 14-18; Atlanta, GA.
34. Belikova N, Jiang AND Kagan VE, **Tyurina Y**, Zhao Q, Epperly M, Greenberger JS, Kagan VE. Redox catalysis by cytochrome c regulates irradiation induced apoptosis in HeLa cells. Presented at: 53rd Annual Meeting of the Radiation Research Society; 2006 Nov 6-9; Philadelphia, PA.
35. **Tyurina Y**. Oxidative lipidomics of gamma-irradiation induced intestinal injury. Presented at: Dean Junior Seminar, GSPH.; 2007 Feb; GSPH.
36. Feng W, **Tyurina Y**, Bayir H, Shvedova A, Kagan VE. Phosphatidylserine functionalization targets single-walled carbon nanotubes to microglial cells. Poster presented at: Neuroscience 2007; 2007 Nov 12-16; San Diego, CA.
37. **Tyurina Y**. Oxidative lipidomics of gamma-irradiation induced injury. Presented at: Annual CMCR Meeteing, University of Pittsburgh.; 2007 Dec; University of Pittsburgh.

38. Jiang J, Stoyanovsky D, Belikova NA, **Tyurina YY**, Zhao Q, Tungekar MA, Kapralova V, Huang Z, Mintz AH, Greenberger JS, Kagan VE. A Mitochondria-Targeted Triphenylphosphonium-Conjugated Nitroxide Functions as a Radioprotector/Mitigator. Poster presented at: 48th Annual Meeting of the Society of Toxicology; 2008 Mar 18-23; Philadelphia, PA.
39. Huang Z, **Tyurina Y**, Jiang AND Kagan VE, Cheikhi A, Tokarska-Schlattner M, Boissan M, Lacombe M, Epand R, Schlattner U, Epand RM, Kagan VE. EXTERNALIZATION OF CARDIOLIPIN AS AN "EAT-ME" MITOPHAGEAL SIGNAL IS FACILITATED BY NDPK-D. Poster presented at: 58th Biophysical Annual Meething; 2014 Feb 15-19; San Francisco, California.
40. **Tyurina Y**, Vikulina A, Kapralova VI, Winnica D, Sanders L, Greenamyre J, Tyurin VA, Kagan VE. Oxidized Cardiolipins as a Biomarker of Mitochondrial Dysfunction Triggered by Pesticide, Rotenone. Poster presented at: 53rd Annual Meeting for Society of Toxicology; 2014 Mar 23-27; Phoenix, Arizona.
41. Kagan VE, Jiang AND Kagan VE, Huang Z, Tyurin VA, **Tyurina Y**, Stolz D, Watkins S, Mallampalli R. Signaling Role of Cardiolipin Externalization in Elimination of Damaged Mitochondria in Lung Epithelial Cells. Poster presented at: 53rd Annual Meeting for Society of Toxicology; 2014 Mar 23-27; Phoenix, Arizona.
42. **Tyurina Y**, Polimova A, Maciel E, Tyurin VA, Kapralova V, Winnica D, Vikulina A, Domingues R, Sanders L, Bayir H, Greenamyre T, Kagan VE. Analysis of Cardiolipins in Substantia Nigra and Plasma of Rotenone-Treated Rats: Implication for Mitochondrial Dysfunction in Parkinson's Disease. 54th Annual Meeting for Society of Toxicology; 2014 Mar 22-26; San Diego, California
43. Tyurin VA, Polimova A, Sanders L, Greenamyre T, **Tyurina Y**, Kagan VE. Aberrant Lipid Metabolism in Rotenone-Induced Mitochondrial Dysfunction. 54th Annual Meeting for Society of Toxicology; 2014 Mar 22-26; San Diego, California.
44. **Tyurina Y**, Amoscato A, Tyurin V, Qu F, Mao G, Bayir H, Kagan V. Identification and quantification of oxygenated arachidonoyl- and adrenoyl-phosphatidylethanolamines as ferroptotic death signals using oxidative phospholipidomic. 64th American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics June 5 - 9, 2016, San Antonio, TX.
45. Mao G, Qu F, Angeli JP, St Croix C, Dar H, Tyurin V, Ritov V, Kapralov A, Amoscato A, Anthonymuthu T, Mohammadyani D, Yang Q, Stockwell B, **Tyurina Y**, Conrad M, Bayır H, Kagan V. (2017) Tocopherols and tocotrienols prevent lipoxygenase-driven phospholipid oxidation in ferroptosis. Experimental Biology 2017. April 22-26, 2017. Chicago, IL.
46. **Tyurina YY**, Tyurin VA, Epperly M, Watkins S, Greenberger J, Bayir H, Kagan V. Identification and quantification of hepoxilin A3-phosphatidylethanolamine in ileum of mice exposed to total body irradiation using oxidative phospholipidomics. 65th ASMS Conference on Mass Spectrometry and Allied Topics June 4 - 8, 2017, Indianapolis, IN**.**

47. Qu F, **Tyurina Y**Y, Zhao J, Mao G, Tyurin VA, Anthonymuthu T, Amoscato AA, Emlet DR, Kellum JA, Wenzel SE, Bayir H, Kagan VE. Accumulation of oxygenated phosphatidylethanolamines as ferroptotic death signals characterized by oxidative phospholipidomics**.** 65th ASMS Conference on Mass Spectrometry and Allied Topics June 4 - 8, 2017, Indianapolis, IN**.**
48. Tyurin VA, **Tyurina Y**Y, Lou W, Qu F, Liu J, Hüttemann M, Mohammadyani D, Frasso MA, Wipf P, Bayir H, Greenberg ML, Kagan VE. Contribution of biosynthesis vs remodeling to the diversity of cardiolipins in genetically and nutritionally manipulated yeast cells: differential LC-MS assessments, 65th ASMS Conference on Mass Spectrometry and Allied Topics, June 4 - 8, 2017, Indianapolis, IN**.**
49. **Tyurina Y**, Zhao J, St. Croix CM, Watkins SC, Tyurin VA, Anthonymuthu TS, Amoscato AA, Haider D, Rosenbaum J, VanDemark AP, Bayır H, Wenzel SE, Kagan VE. PEBP1 enables 15-lipoxygenase 1 to generate ferroptotic cell death signals in primary human airway epithelial cells. LC/MS study. 66th Conference on Mass Spectrometry and Allied Topics, June 3-7, 2018, San Diego, CA.
50. Tyurin VA, Ting HC, Lou W, Reynolds CA, **Tyurina YY**, Yu W, Liang Z, Stoyanovsky DA,. Greenberger JS, Bayir H, Anthonymuthu TS, Greenberg ML and Kagan VE. Differential LC-MS study of CLD1-driven diversification of cardiolipins in Δ12-desaturase transfected yeast cells. 66th Conference on Mass Spectrometry and Allied Topics, June 3-7, 2018, San Diego, CA.
51. Ting HC, Zhai Y, **Tyurina YY**, Kapralov OO, Bayir H, He RR, and Kagan VE. LC-MS analysis of oxidized phosphatidylethanolamine in ferroptosis-sensitive PLA2G6 mutant human fibroblast. 66th Conference on Mass Spectrometry and Allied Topics, June 3-7, 2018, San Diego, CA.
52. Tyurin V, **Tyurina Y**, Amoscato AA, Sparvero LJ, Epperly MW, St. Croix CM, Watson AM, St. Croix CM, Watkins SC, Greenberger JS, Bayır H, Kagan VE. An inhibitor of iPLA$_2\gamma$, R-BEL, prevents lipid mediator generation in the ileum and leads to radiomitigation after total body irradiation. 67th Conference on Mass Spectrometry and Allied Topics, June 2 - 6, 2019, Atlanta, GA.
53. **Tyurina YY**, Dar H, Tyurin VA, Amoscato AA, Pilewski JM, Mallampalli RK, Bayir H, Kagan VE. Differential *P. aeruginosa* lipoxygenase (pLoxA) generates ferroptotic cell death signals in host human bronchial epithelial cells: LC/MS study. 67th Conference on Mass Spectrometry and Allied Topics, June 2 - 7, 2019, Atlanta, GA.
54. **Tyurina YY**, Tyurin VA Hussey GS Cramer MC Timashev PS, Badylak SF, Kagan VE. Lipidome-specific features of matrix-bound nanovesicles define their anti-inflammatory and macrophage M2-polarization capacities. ASMS 2020 Reboot, June 2020.

55. Sun WY, Tyurin VA, Mikulska-Ruminska K, Shrivastava IH, Anthonymuthu TS, Zhai YJ, Pan MH, Gong HB, Lu DH, Sun J, Duan WJ, Korolev S, Abramov AY, Angelova PR, Miller I, Beharier O, Mao GW, Dar HH, Kapralov AA, Amoscato AA, Hastings TG, Greenamyre TJ, Chu CT, Sadovsky Y, Bahar I, Bayır H, **Tyurina YY**, He RR, Kagan VE. iPLA2β Protects Cells Against Ferroptosis by Hydrolyzing the Lipid Signal of Death, 15-HpETE-PE: Relevance to Parkinson's Disease". AD/PD 2021, The 15th International Conference on Alzheimer's & Parkinson's Diseases. March 9-10, 2021, Barcelona, Spain.

SERVICE

Service to School and University

Years	Committee	Position
5/2014	The 2014 Dean's Day student research competition	Judge
2018-2021	Major Equipment Committee, EOH	Member
2020-2021	Research Excellence Committee, EOH	Member

Manuscript and Other Document/Publication Review

Dates	Journal Title
2007	Archives Biochem and Biophysics Bioscience Reports Cell Death and Differentiation Molecular Biology of the Cell
2008	Free radical Biology and Medicine Free Radical Research American Journal of Respiratory Cell and Molecular Biology
2009	Free Radical Biology and Medicine American Journal of Respiratory Cell and Molecular Biology Antioxidant & Redox Signaling Archives of Biochemistry and Biophysics Rejuvenation Research
2010	Free Radical Biology and Medicine OMICS PUBLISHING GROUP/OMICS American Journal of Physiology Rapid Communications in Mass Spectrometry
2011	American Journal of Physiology Journal of Lipid Research BBA – Biomembranes
2012	Chemistry and Physics of Lipids Cell Biochemistry and Biophysics BBA - Biomembranes

2013	Journal of Lipid Research Free Radical Biology and Medicine Journal of Mass Spectrometry
2014	Journal of Lipid Research
2015-2016	Journal of Lipids Free Radical Research BBA – Molecular and Cell Biology of Lipids Free Radical Biology and Medicine PLOS One International Journal of Molecular Science
2017	BBA - Molecular and Cell Biology of Lipid
2018	Journal of Lipid Research
2019	Free Radical Biology and Medicine Nature Communication
2020	Free Radical Biology and Medicine Frontiers in Oncology The Journal of Nutritional Biochemistry
2021	Nature Chemistry
2022	Nature Chemistry
2023	Free Radical Biology and Medicine

Study Sections, Review Panels, and Advisory Boards

Date	Position	Organization and Nature of Activity
2009	External reviewer for the research project	The Austrian Science Fund (FWF)
2009	External peer reviewer for the application for a Senior Research Fellowship	Parkinson's Disease Society
2013	External reviewer for the research project	The Estonian Research Council
2016	External reviewer for the research project	Worldwide Cancer Research
2021	Reviewer for the research project	Children's Neuroscience Institute, University of Pittsburgh