

CURRICULUM VITAE

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EDUCATION AND TRAINING

Undergraduate

1968-1973	Far East State University, Vladivostok, Russia	M.S., 1973	Biophysics
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Graduate

1976-1980	Moscow State University, Moscow, Russia	Ph.D., 1980	Biophysics
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Post-Graduate

1997-2000	Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, U.S.A.	Fellowship from the NIH, NCI “Oncology Research Faculty Development Program”, The program prepares participants for careers as independent investigators and for leadership positions in cancer research.	Prof. V.E. Kagan Prof. J. Lazo
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1999-2000	Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, U.S.A.	Fellowship from the Magee-Womens Research Institute, University of Pittsburgh.	Prof. V.E. Kagan
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APPOINTMENTS AND POSITIONS

Academic

1973-1976	Research Assistant (Biochemistry, Biophysics)	Laboratory Biochemistry of Vision Research, Institute of Marine Biology Far East Scientific Center of Russian Academy of Science, Vladivostok, Russia.
1976-1980	Research scientist in Biochemistry, Biophysics	Laboratory Biochemistry of Vision Research, Institute of Marine Biology Far East Scientific Center of Russian Academy of Science, Vladivostok, Russia.
1981-1984	Research scientist in Biochemistry, Biophysics	Laboratory of Neurochemistry, Institute of Evolutionary Physiology and Biochemistry, Russian Academy of Science, St.-Petersburg, Russia.
1984-1995	Research Associate	Laboratory of Comparative Biochemistry of Nervous System, Institute of Evolutionary Physiology and Biochemistry, Russian Academy of Science, St.-Petersburg, Russia.
1995-2004	Senior Researcher	Laboratory of Comparative Biochemistry of Nervous System, Institute of Evolutionary Physiology and Biochemistry, Russian Academy of Science, St.-Petersburg, Russia.
2004-2005	Research Associate	Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, U.S.A.

2005-present	Research Assistant Professor	Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, U.S.A.
Non- Academic		
1984-1985	Visiting Scientist	Institute of Physiology, Sofia, Bulgaria.
1987-1989	Visiting Scientist	Institute of Physiology, Sofia, Bulgaria.
1991-1992	Visiting Scientist	Department of Biochemistry, Pharmaceutical Co. Sigma Tau, (Pomezia), Rome, Italy.
1993-1994	Visiting Scientist	Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, U.S.A.
1996	Visiting Scientist	Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, U.S.A.
1997-2000	Visiting Scientist	Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, U.S.A.
2002-2004	Visiting Scientist	Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, U.S.A.

HONORS

1993	Travel grant from the UNESCO Global Network for Molecular and Cell Biology.
1995-1997	PI, Grant 95-04-12050 from the Russian Foundation of Fundamental Investigation.

1994-1996	Co-PI, Project J22100 from the International Science Foundation (Long term research grants program), Moscow.
1999-2000	Fellowship from the Magee-Womens Research Institute, University of Pittsburgh.

PROFESSIONAL ACTIVITIES

Research and Training

1. Teaching N/A

a. Courses Taught

Years Taught	Course Number: Title	Hours of Lecture, credits Average Enrollment	Role in course Primary/Coordinator
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b. Other Teaching (lectures, tutorials and continuing education courses)

Date(s)	Type of Teaching	Title
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c. Major Advisor for Graduate Student Essays, Theses, and Dissertations

Name of Student	Degree Awarded, Year	Type of Document and Title	Notes
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d. Service on Masters or Doctoral Committees

Dates Served	Name of Student	Degree Awarded	Title of Dissertation/Essay
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e. Service on Comprehensive or Qualifying Examination Committees

Dates Served	Student Population	Type of Exam (Qualifying/Comprehensive)
	The student population, i.e., 1 Ph.D. Biostatistics student, 7 Masters-level M.M.P.H. students, etc.	

f. Supervision of Post-Doctoral Students, Residents, and Fellows

Dates Supervised	Name of Student	Position of Student
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g. Mentoring of Graduate Students in Field Placements

Dates	Name of Student	Degree/Program Description	Field Site Agency/Organization Location
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h. Other Teaching and Training

Dates	Teaching Activity	Program/Description
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2. Research and Training

a. Grants and Contracts Received

Principal Investigator

Years Inclusive	Grant and/or Contract Number and Title	Source	Annual Direct Costs	% Effort
2012 - 2013	XJB complexes with PEGylated carbon nanotubes (CNT) as mitigators of irradiation injury. Pilot Project;	NIAID CMCR		% Effort

2010-2012	U19 AIO68021 Regulation of lyso-phospholipids for radiomitigation. Peroxidized and phospholipase A–modified phospholipids in radiation-induced apoptosis as possible targets for radiomitigation. Pilot project; U19 AI068021	NIAID CMCR	82,500	% Effort
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Co-Principal Investigator

Co-Investigator on Grants

ACTIVE:

2015-2020	Mechanism-Directed Sequential Delivery of Radiation Mitigators, Lipidomics and Bioanalytical U19 AI068021 Project 2 (1.8 Cal), Core B (1.8 Cal) and Core F (1.8 Cal)	NIH	\$170,016	6.6 Calendar
2012-2023	Lipids and Myeloid Cell Function in Cancer R01 CA165065-0	Wistar/NIH	\$85,044	2.4 Calendar
2019-2024	Immunosuppression in Acute Lung Injury HL114453-06	OSU/NIH	\$205,705	2.4 Calendar

Completed Years Inclusive

Completed Years Inclusive	Grant and/or Contract Number and Title	Source	Annual Direct Costs	% Effort
2012-2017	Lipids and Myeloid Cell Function in Cancer 10-162826-99-01-G	H. Lee Moffitt/NIH	\$85,538	25%

Years Inclusive	Grant and/or Contract Number and Title	Source	Annual Direct Costs	% Effort
2013-2017	OXIDATIVE LIPIDOMICS CORE (Core B) 1 PO1 HL114453-01A1	NHLBI		
2010-2015	Carbon Nanotubes Biodegradation by Neutrophil Myeloperoxidase R01 OH008282-09	CDC	\$206,042	25%
2008-2013	Mechanisms of Preeclampsia Impact of Obesity P01 HD030367-17			
2011-2013	Phosphatidylserine and its peroxidized and Lp-PLA ₂ -hydrolyzed species on cell surface: Role in clearance of apoptotic cells by macrophages. 10019406	GSK	112,382	25%
2009-2011	ARRA Funded - Irradiation Damage and Protection of Pulmonary Endothelium Oxidative Lipidomics; HL094488	NIH/NHLBI	250,00	35%
2008-2013	Oxidative Lipidomics of Pulmonary Apoptosis in Hyperoxia; R01 HL070755-05	NIH/NHLBI	222,440	40%
06/01/10-05/31/11	R01 HL070755-07 Oxidative Lipidomics of Pulmonary Endothelial Apoptosis in Hyperoxia	NIH/NHBI	222,440	25%
09/01/09-08/31/10	R01 HL094488-02	NIH/NHBI	250,000	50%

ARRA Funded - Irradiation
Damage and Protection of
Pulmonary Endothelium
Oxidative Lipidomics

Years Inclusive	Grant and/or Contract Number and Title	Source	Annual Direct Costs	% Effort
2010-2011	Regulation of lyso-phospholipids for radiomitigation. Peroxidized and phospholipase A–modified phospholipids in radiation-induced apoptosis as possible targets for radiomitigation	NIAID CMCR	49,500	
9/30/2003-5/31/2008	1 P01 HL070807-03 Mechanisms of Cytoprotection in acute lung injury.	NIH	78,327	20%
6/1/2005-5/31/2009	SAP4100027294 Center for Excellence in Detection, Diagnosis and Intervention in Dementia	Dept of Health	81,129	35%
2/13/2006-2/12/2008	W81XWH-06-1-0247 Novel Strategies in Experimental Traumatic Brain Injury	US Army	30,000	15%
6/14/2002-1/31/2008	5 P01 HD030367-13 Preeclampsia Mechanisms and Post Pregnancy Implications (NCTE until 1/31/08)	NIH/Magee	17,326	15%
3/1/1997-6/30/2011	P50 NS030318-14 University of Pittsburgh Brain Trauma Research Center-Core A (replaces 108446)	NIH	13,146	15%
09/15/11	Novel Mitochondrial Targeted drugs for Treatment of the Irradiation-Induced Hematopoietic Syndrome 0100200800062C	BARDA		81%

PENDING

Years Inclusive	Grant and/or Contract Number and Title	Source	Annual Direct Costs	% Effort
2019-2024	Regulation of Myeloid Cells in Cancer by Ferroptosis	NIH	\$160,000	1.8 Calendar
2019-2024	Regulation of Tumor Recurrence by Stress Activated Neutrophils	NIH	\$80,000	2.4 Calendar
2019-2024	The Role of Cardiolipin in the TCA Cycle: Implications for Barth Syndrome	NIH	\$15,065	2.4 Calendar

b. Invited Lectureships and Major Seminars Related to Your Research

Date	Title of Presentation	Venue
June, 2019	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.
June, 2019	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.
April, 2019	Formation of Lysophospholipids by Myeloperoxidase/HOCl. LC-ESI-MS study of LysoPL in PMN-MDSC.	CFRAH Saturday Seminar Series, University of Pittsburgh, Pittsburgh, PA

June, 2018	Differential LC-MS study of CLD1-driven diversification of cardiolipins in Δ^{12} -desaturase transfected yeast cells.	66th Annual Meeting on Mass Spectrometry, San Diego, CA
June, 2018	PEBP1 enables 15-lipoxygenase 1 to generate ferroptotic cell death signals in primary human airway epithelial cells. LC/MS study	66th Annual Meeting on Mass Spectrometry, San Diego, CA
June, 2017	Contribution of biosynthesis vs remodeling to the diversity of cardiolipins in genetically and nutritionally manipulated yeast cells: differential LC-MS assessments.	65th Annual Meeting on Mass Spectrometry, Indianapolis, Indiana
June, 2017	Accumulation of oxygenated phosphatidylethanolamines as ferroptotic death signals characterized by oxidative phospholipidomics	65th Annual Meeting on Mass Spectrometry, Indianapolis, Indiana
June, 2017	Identification and quantification of esterified hepxylin A3 in the ileum of mice after total body irradiation using oxidative phospholipidomics.	65th Annual Meeting on Mass Spectrometry, Indianapolis, Indiana
June, 2016	LC-ESI-MS/MS analysis of oxygenated lipid droplets in dendritic cells treated with tumor explant supernatants.	64th Annual Meeting on Mass Spectrometry, San Antonio, Texas

June, 2016	Identification and quantification of oxygenated arachidonoyl- and adrenoyl-phosphatidylethanolamines as ferroptotic death signals using oxidative phospholipidomics.	64th Annual Meeting on Mass Spectrometry, San Antonio, Texas
March, 2015	Aberrant Lipid Metabolism in Rotenone-Induced Mitochondrial Dysfunction.	54th Annual Meeting for Society of Toxicology, San Diego, California
February, 2015	LC-MS Detection of Hydroperoxy-Phospholipids and Esterified Hepoxilins	International Workshop Munich/Padova/Pittsburgh/Warwick Newport Beach Hotel, Sunny Isles, Florida.
March, 2015	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, San Diego, California
January, 2015	Diversity of triacylglycerols molecular species in lipid droplets: A novel pathway for the generation of several classes of lipid signaling molecules in mitochondria: Role of CGI-58.	CFRAH Saturday Seminar Series, University of Pittsburgh, Pittsburgh, PA
May, 2014	Diversity of triacylglycerols molecular species in lipid droplets: A novel pathway for the generation of several classes of lipid signaling molecules.	CFRAH Saturday Seminar Series, University of Pittsburgh, Pittsburgh, PA

March, 2014	Oxidized Cardiolipins As a Biomarker of Mitochondrial Dysfunction Triggered by Pesticide, Rotenone	53rd Annual Meeting for Society of Toxicology, Phoenix, Arizona.
March, 2013	Lipid Droplets with Oxygenated Fatty Acids and Triglycerides in Dendritic Cells: Possible Role in Antigen Presentation in Cancer	52 nd Annual Meeting for Society of Toxicology, San Antonio, TX 2013.
March, 2012	Monolyso-cardiolipin – biomarker of mitochondrial dysfunction induced by total body irradiation. LC-ESI-MS study. Metabolites of	51 st Annual Meeting for Society of Toxicology, San Francisco, CA.
February, 2012	Cardiolipin degradation as biomarkers of mitochondrial dysfunction after total body gamma-irradiation.	Center for Medical Countermeasures Against Radiation, University of Pittsburgh, Pittsburgh, PA
March, 2011	LC-ESI/MS reveals unusual oxygenated lysophosphatidylserines produced after oxidation and hydrolysis by plasma lipoprotein-associated phospholipase A2 of sn-1, sn-2-2-dilinoleoyl-PS.	50 th Annual Meeting for Society of Toxicology; Washington DC.
March, 2010	Phospholipid oxidative metabolism during macrophage response to environmental agents.	49 th Annual Meeting for Society of Toxicology; Salt Lake City, UT.
March, 2009	Cardiolipin oxidation, hydrolysis and accumulation of monolysocardiolipins and	48 th Annual Meeting for Society of Toxicology, Baltimore.

	oxidized free fatty acids during apoptosis: Role of cytochrome <i>c</i> .	
March, 2008	Phospholipid peroxidation biomarkers of Alzheimer's disease in the brain: selective oxidation of phosphatidylserine.	47 th Annual Meeting, Society of Toxicology, Seattle, WA.
March, 2007	Mass spectrometric analysis of phospholipid molecular species and their hydroperoxides in apoptotic neurons and injured rat brain.	46 th Annual Meeting, Society of Toxicology, Charlotte, NC,

c. Other Research and Training Activities

Date	Position	Description of Activity
2007	Reviewer, of Free Radical Biology & Medicine	manuscript
2008-2010	Reviewer, Antioxidants & Redox Signaling	manuscript
2009	Reviewer, Journal of Pharmacy & Pharmacology	manuscript
2013-Present	Reviewer, Rapid Communications in Mass Spectrometry	manuscript
2013-Present	Reviewer, Journal of Chromatography B	manuscript
2013-Present	Reviewer, Journal of Chromatography A	manuscript
2006-Present	Reviewer, Barth Syndrome Foundation	Grant

PUBLICATIONS

1. Refereed Articles

1. Veglia F, **Tyurin VA**, Blasi M, De Leo A, Kossenkov AV, Donthireddy L, To TKJ, Schug Z, Basu S, Wang F, Ricciotti E, DiRusso C, Murphy ME, Vonderheide RH, Lieberman PM, Mulligan C, Nam B, Hockstein N, Masters G, Guarino M, Lin C, Nefedova Y, Black P, Kagan VE, Gabrilovich DI. [Fatty acid transport protein 2 reprograms neutrophils in cancer.](#) *Nature*. 2019 May;569(7754):73-78. doi: 10.1038/s41586-019-1118-2. Epub 2019 Apr 17. PMID: 30996346
2. Li M, Mandal A, **Tyurin VA**, DeLucia M, Ahn J, Kagan VE, van der Wel PCA. [Surface-Binding to Cardiolipin Nanodomains Triggers Cytochrome c Pro-apoptotic Peroxidase Activity via Localized Dynamics.](#) *Structure*. 2019 May 7;27(5):806-815.e4. doi: 10.1016/j.str.2019.02.007. Epub 2019 Mar 14. PMID: 30879887
3. 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, Bayir 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 Dec 26;140(51):17835-17839. doi: 10.1021/jacs.8b09913. Epub 2018 Dec 17. PMID: 30525572
4. Lou W, Ting H-C; Reynolds, CA, Tyurina YY, **Tyurin VA**, Li Y, Yu W, Liang Z, Stoyanovsky DA, Anthonymuthu TS, Greenberger JS, Bayir H, Kagan V., [Genetic re-engineering of polyunsaturated phospholipid profile of *Saccharomyces cerevisiae* identifies a novel role for Cld1 in mitigating the effects of cardiolipin peroxidation.](#) *BBA - Molecular and Cell Biology of Lipids*, 2018 Jun 20. pii: S1388-1981(18)30139-2. doi: 10.1016/j.bbalip.2018.06.016. [Epub ahead of print]. PMID: 29935382
5. Dar HH, Tyurina YY, Mikulska-Raminska K, Shrivastava I, **Tyurin VA**, Krieger J, St. Croix CM, Bayir E, Ting H-C, Ogunsola AF, Flitter BA, Freedman CJ, Gaston JR, Holman T, Pilewski LM, Watkins S, Greenberger JC, Mallampalli R, Bahar I, Bayir H, Bomberger J, Kagan VE. [Theft-ferroptosis by *P. aeruginosa* pLoxA via AA-PE oxidation occurs in cystic fibrosis.](#) *J Clin Invest*. 2018 Oct 1;128(10):4639-4653. doi: 10.1172/JCI99490. Epub 2018 Sep 10. PMID: 30198910
6. Wenzel SE, Tyurina YY, Zhao J, Croix CMSt, Mao G, **Tyurin VA**, Anthonymuthu TS, Kapralov AA, Amoscato AA, Mikulska-Ruminska K, Shrivastava IH, Kenny E, Yang Q, Dar HH, Rosenbaum JC, Sparvero LJ, Emlet DR, Wen X, Qu F, Watkins SC, VanDemark AP, Kellum JA, Minami Y, Bahar I, Bayir H, Kagan VE. [PEBP1 Wardens Ferroptosis by Enabling Lipoxygenase Generation of Lipid Death Signals.](#) *CELL*, 2017, Oct 19;171(3):628-641.e26. doi: 10.1016/j.cell.2017.09.044. PMID:29053969; PMCID:PMC5683852.
7. 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, Bayir

- H. [Oxidized arachidonic and adrenic PEs navigate cells to ferroptosis](#). *Nat Chem Biol*. 2017, 13(1):81-90. PMID: 27842066
8. Veglia F, **Tyurin VA**, Mohammadyani D, Donthireddy L, Blasi M, Kapralov A, Amoscato A, Angelini R, Alicea-Torres K, Pate S, Murphy ME, Klein-Seetharaman J, Celis E, Kagan VE and Gabrilovich DI. [Lipid bodies containing oxidatively truncated lipids block antigen cross-presentation by dendritic cells in cancer](#). *Nature Communications*, 2017, 8(1):2122. doi: 10.1038/s41467-017-02186-9. PMID: 29242535
 9. 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, Bayir 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. [Epub ahead of print]. PMID: 28835115
 10. Tyurina YY, Lou W, Qu F, **Tyurin VA**, Mohamedyani D, Liu J, Hüttemann M, Frasso M, Wipf P, Bayir H, Greenberg M, Kagan VE. [Geno-Nutritional Lipidomics Identifies Biosynthetic and Remodeling Pathways for Diversified vs Uniform Cardiolipins](#). *ACS Chem Biol*. 2017, 12(1):265-281. PMID: 27982579
 11. Maguire J, Tyurina YY, Mohammadyani D, Kapralov AA, Anthonymuthu TS, Qu F, Andrew A Amoscato AA, Sparvero LJ, **Tyurin VA**, Planas-Iglesias J, He RR, Klein-Seetharaman J, Bayir H, Kagan VE. [Known Unknowns of Cardiolipin Signaling: The Best Is Yet To Come](#). *Biochim Biophys Acta*, 2017, 1862(1):8-24. PMID: 27498292
 12. Ouyang Y, Bayer A, Chu T, **Tyurin VA**, Kagan VE, Morelli AE, Coyne CB, Sadovsky Y. [Isolation of human trophoblastic extracellular vesicles and characterization of their cargo and antiviral activity](#). *Placenta*. 2016, 47:86-95. PMID: 27780544
 13. 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 May 27:ajplung.00038.2016. doi: 10.1152/ajplung.00038.2016. [Epub ahead of print], PMID:27233995
 14. 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, Klein-Seetharaman J, Bayir H, Kagan VE. [Mitochondrial Redox Opto-Lipidomics Reveals Mono-Oxygenated Cardiolipins as Pro-Apoptotic Death Signals](#). *ACS Chem Biol*. 2016 Feb 19;11(2):530-40. doi: 10.1021/acscchembio.5b00737. Epub 2016 Jan 5. PMID:26697918
 15. 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, Bayir H, Schlattner U. [NDPK-D \(NM23-H4\)-mediated externalization of cardiolipin enables elimination of depolarized mitochondria by mitophagy](#). *Cell Death*

Differ. 2016 Jul;23(7):1140-51. doi: 10.1038/cdd.2015.160. Epub 2016 PMID: 26742431

16. Shinde A, Berhane H, Rhieu BH, Kalash R, Xu K, Goff J, Epperly MW, Franicola D, Zhang X, Dixon T, Shields D, Wang H, Wipf P, Parmar K, Guinan E, Kagan V, **Tyurin V**, Ferris RL, Zhang X, Li S, Greenberger JS. [Intraoral Mitochondrial-Targeted GS-Nitroxide, JP4-039, Radioprotects Normal Tissue in Tumor-Bearing Radiosensitive Fancd2\(-/-\) \(C57BL/6\) Mice.](#) *Radiat Res.* 2016 Feb;185(2):134-50. doi: 10.1667/RR14035.1. PMID: 26789701
17. 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 Sep 22;8(395):ra95. doi: 10.1126/scisignal.aaa6179. PMID:26396268
18. Tyurina YY, Polimova AM, Maciel E, **Tyurin VA**, Kapralova VI, Winnica DE, Vikulina AS, Domingues MR, McCoy J, Sanders LH, Bayir 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 Radic Res.* 2015, 49(5):681-91. PMID: 25740198
19. 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. PMID: 25566681
20. 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, Bayir H. [Deciphering of mitochondrial cardiolipin oxidative signaling in cerebral ischemia-reperfusion.](#) *J Cereb Blood Flow Metab.* 2015 Feb;35(2):319-28. PMID: 25407268
21. 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.](#) *Nat Cell Biol.* 2014 Dec;16 (12):1180-91. 17. PMID: 25402683
22. Mohammadyani D, **Tyurin VA**, O'Brien M, Sadovsky Y, Gabrilovich DI, Klein-Seetharaman J, Kagan VE. [Molecular speciation and dynamics of oxidized triacylglycerols in lipid droplets: Mass spectrometry and coarse-grained simulations.](#) *Free Radic. Biol. Med.* 2014 Nov; 76: 53-60. PMID: 25110833
23. 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 Jun; 6 (6):542-52. PMID: 24848241.

24. **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 May; 21 (5):825-35. PMCID: PMC3978307. PMID: 24464221.
25. Fazzi F, Njah J, Di Giuseppe M, Winnica DE, Go K, Sala E, St Croix CM, Watkins SC, **Tyurin VA**, Phinney DG, Fattman CL, Leikauf GD, Kagan VE, Ortiz LA. [TNFR1/phox interaction and TNFR1 mitochondrial translocation Thwart silica-induced pulmonary fibrosis.](#) *Journal of Immunology* (Baltimore, Md.: 1950). 2014 Apr 15; 192 (8):3837-46. PMCID: PMC3977215. PMID: 24623132.
26. 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. PMCID: PMC4025908. PMID: 24333544.
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63. Tyurina Y.Y., Sokolova T.V., **Tyurin V.A.**, Gonchar V.S., Zakharova I.O., Furaev V.V., Avrova N.F. Protective Effect of alpha-tocopherol and superoxide

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 66. **Tyurin V.A.**, Tyurina Y.Y., Avrova N.F. Protection of cAMP-phosphodiesterase of brain synaptosomes against lipid peroxidation damage by nanomolar concentration of ganglioside GM1. Constituent Congress International Society for Pathophysiology, Moscow, 1991.
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 72. **Tyurin V.A.**, Kagan V.E. The role of lipid peroxidation in the disassembly of liver membrane structures during adaptative stress. Symposium Drug Metabolizing enzyme systems, Sofia, Bulgaria, 1986.
 73. Serbinova E., Raikova D., **Tyurin V.**, Kagan V., Stoytchev Ts. Topography of tocopherols in lipid bilayer and their antioxidant properties. VI Balkan Biochemical and Biophysical days, Plovdiv, Bulgaria, 1985.
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76. Shukoliukov S.A., Kagan V.E., Ritov V.B., **Tyurin V.A.**, Azizova A.O. Role of lipids in thermostability of transmembrane proteins. 3rd National Symposium for "Structure, biosynthesis and metabolism of lipids in human and animal organism". Leningrad, 1978.
77. **Tyurin V.A.**, Evtushenko Z.S. The low stability of pollock rhodopsin. 3rd National Symposium "Mechanisms of sensor reception". Leningrad, 1977.
78. Chizhevich E.P., **Tyurin V.A.**, Korchagin V.P., Svetashev V.I., Chelomin V.P. Comparative study of pollock and black fish rhodopsins. 1st National Meeting for Marine Biology. Vladivostok, 1977.
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8. Non-Print Media

1. (As applicable) Authors (same order as publication). Title of Article. *Title of Media* [Indication of Media]. Publishing Company. Year and Date. Volume (Issue): pages or path.

9. Other Publications

1. Authors (same order as publication). Title of Article. *Journal Title*. Year and Date. Volume (Issue): pages.

SERVICE

1. Service to School and University

Years	Committee	Position
5/2014	The 2014 Dean's Day student research competition	Judge

2. Service to Field of Scholarship

a. Editorial Boards, Editorships

Date	Position	Organization
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b. Manuscript and Other Document/Publication Review

Dates	Journal Title
2007	Free Radical Biology & Medicine
2008	Antioxidants & Redox Signaling
2009	Antioxidants & Redox Signaling Journal of Pharmacy & Pharmacology
2010	Antioxidants & Redox Signaling
2013	Rapid Communications in Mass Spectrometry Journal of Chromatography A Journal of Chromatography B
2014	Rapid Communications in Mass Spectrometry Journal of Chromatography A Journal of Chromatography B Archives of Biochemistry and Biophysics
2015	Rapid Communications in Mass Spectrometry Journal of Chromatography A Journal of Chromatography B Archives of Biochemistry and Biophysics

c. Study Sections, Review Panels, and Advisory Boards

Date	Position	Organization and Nature of Activity
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d. Leadership in Scholarly and Professional Organizations and Honorary Societies

Date	Position	Organization
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3, Service for Practice and Policy-Making, including Consultantships

a. Governmental Organizations

Date	Position	Type of Service and/or Agency
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b. Non-Governmental and Community-Based Organizations

Date	Position	Type of Service and/or Organization
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4. Non-Professional Service N/A

Year(s)	Position and Organization	Type of Service
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5. Clinical and Related Activities (OPTIONAL - if applicable) N/A

A. Outpatient: Patient Care

<u>LOCATION/SERVICE</u>	<u>DESCRIBE ACTIVITY</u> (e.g. patient care, call, surgery, precepting, etc.)	<u>TIME DEVOTED TO ACTIVITY</u> (e.g. number of half days/week, number of days/year, etc.)
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Supporting descriptive information (if applicable)

B. Inpatient: Patient Care N/A

<u>LOCATION/SERVICE</u>	<u>DESCRIBE ACTIVITY</u> (e.g. patient care, precepting, call, surgery, etc.)	<u>TIME DEVOTED TO ACTIVITY</u> (e.g. number of half days/week, number of days/year, etc.)
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Supporting descriptive information (if applicable)

C. Other Patient Care

<u>LOCATION/SERVICE</u>	<u>DESCRIBE ACTIVITY</u> (e.g. patient care, call, surgery, etc.)	<u>TIME DEVOTED TO ACTIVITY</u> (e.g. number of half days/week, number of days/year, etc.)
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Supporting descriptive information (if applicable)