

CURRICULUM VITAE

NAME: **Nicholas Francis Fitz**
BUSINESS ADDRESS: Graduate School of Public Health
Department of Environmental and Occupational Health
University of Pittsburgh
130 DeSoto Street
4136 PUBHL
Pittsburgh, PA 15261
Office: 412-383-7818
Laboratory: 412-624-8662
Cellular: 724-331-9208
Fax: 412-624-9361
E-mail: nffitz@pitt.edu

EDUCATION AND TRAINING

Undergraduate

1997-2001	The Pennsylvania State University State College, PA	B.S., 2001	Animal Bioscience
-----------	---	------------	----------------------

Graduate

2002-2009	Duquesne University Pittsburgh, PA	Ph.D., 2008	Pharmacology and Toxicology
-----------	--	-------------	--------------------------------

Post-Graduate

2009-2012	University of Pittsburgh Pittsburgh, PA	Postdoctoral Fellow	Environmental and Occupational Health Dr. Koldamova Alzheimer's disease research
-----------	---	------------------------	---

APPOINTMENTS AND POSITIONS

Academic

2001	Undergraduate Research Assistant	Entomology, College of Agricultural Sciences, The Pennsylvania State University, State College PA
------	-------------------------------------	---

2002-2008	Graduate Research Assistant and Teaching Assistant	Pharmacology and Toxicology, Mylan School of Pharmacy, Duquesne University, Pittsburgh PA
2008-2012	Postdoctoral Fellow	EOH, Graduate School of Public Health, University of Pittsburgh, Pittsburgh PA
2016-2019	Instructor	Mylan School of Pharmacy, Duquesne University, Pittsburgh PA
2013-present	Research Assistant Professor	EOH, Graduate School of Public Health, University of Pittsburgh, Pittsburgh PA

MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

2016-present	ISTAART
2003-present	Society for Neuroscience
2008-2012	University of Pittsburgh Postdoctoral Association

HONORS

1997-1999	Penn State Honors Program The Pennsylvania State University
1997	Alpha Lambda Delta – Freshman Honors Program The Pennsylvania State University
1997-2001	Academic Tuition Scholarship The Pennsylvania State University
2002-2008	Teaching Assistant Stipend Duquesne University
2002-2008	Academic Tuition Scholarship Duquesne University
2007	Graduate Student Award for Excellence in Teaching Duquesne University
2008	Best Presentation (Post Doc) Third Annual Research on Aging University of Pittsburgh Institute on Aging
2009	Young Investigator Scholarship Alzheimer's Drug Discovery Foundation

2009 Date and Dine Travel Award
University of Pittsburgh Postdoctoral Association

2014 Charleston Conference on Alzheimer's Disease New Vison
Researcher

PROFESSIONAL ACTIVITIES

Teaching Courses Taught

Years Taught	Course Number: Title	Hours of Lecture, credits Average Enrollment	Role in course Primary / Coordinator
2002-2005	Human Anatomy and Physiology Laboratory	1 hr, 0.5 credit, 32 students	Senior Teaching Assistant
2002-2005	Microbiology Laboratory	1 hr, 0.5 credit, 32 students	Senior Teaching Assistant
2006-2008	Human Anatomy and Physiology Laboratory	1 hr, 0.5 credit, 32 students	Head Teaching Assistant
2006-2008	Microbiology Laboratory	1 hr, 0.5 credit, 32 students	Head Teaching Assistant
2016-2019	Human Anatomy and Physiology	24 hr, 3 credits, 22 students	Instructor
2018-2019	EOH 3210 Pathophysiology of Environmental Disease	4 hr, 3 credits, 15 students	Instructor
2019-present	EOH2109 EOH Journal Club	1 hr, 0.5 credit, 13 students	Primary Instructor

Other Teaching (lectures, tutorials and continuing education courses)

Date(s)	Type of Teaching	Title
February 11, 2010	Postdoctoral Professionalism Series Workshop	Getting to the Payline: Writing Successful NRSA Fellowship Applications
October 14, 2010	Postdoctoral Professionalism Series Workshop	Maximize Your Poster Presentation

Research and Training

Grants and Contracts Received

Principal Investigator

Years Inclusive	Grant and/or Contract Number and Title	Source	Annual Direct Costs	% Effort
2009-2010	Cholesterol Metabolism and Alzheimer's Pathology	Alzheimer's Art Quilt Initiative	10,000	100
2009-2010	The Potential Role of LXR Ligands to Attenuate A β Pathology	Alzheimer's Disease Research Center	30,000	100
2009-2012	Role of LXR and ABCA1 in A β Aggregation and Toxicity	NIA F32	55,000	100
2011-2012	Effects of Different Forms of ApoE on Treatment of Alzheimer's Disease	Alzheimer's Art Quilt Initiative	30,000	100
2013-2015	Effects of RXR agonist on AD phenotype in APP mice expressing ApoE3 and E4	Alzheimer's Association	60,000	25
2014-2019	Peripheral & Brain Cholesterol Metabolism in Neurodegenerative Mouse Models	NIH K01	92,587	75
2019-2021	APOE isoform specific effects on microglial mediated neuroinflammation	Alzheimer's Association	60,000	25

Invited Lectureships and Major Seminars Related to Your Research

Date	Title of Presentation	Venue
June 17, 2009	Role of Abca1 in A β Pathology	University of Pittsburgh Postdoc Lunch Live Series
May 18, 2010	Cholesterol Metabolism and Alzheimer's Disease	Duquesne University Research Days
October 11, 2013	Potential of RXR agonists to diminish amyloid pathology and reverse memory deficits	Bridgeside Research Forum
March 14, 2014	Abca1 and ApoE Axis in Alzheimer's disease	Charleston Conference on AD

Date	Title of Presentation	Venue
October 19, 2017	Impact of APOE isoform on microglial response to oligomeric amyloid-beta	Alzheimer's Association – Varna, Bulgaria
July 20, 2018	ApoE Isoform Specific Effects on Amyloid- β -induced Changes in Microglial Response	Alzheimer's Association International Conference
March 8, 2019	ApoE Isoform Specific Effects on Amyloid- β -induced Changes in Microglial Response	Friday Seminar Series - University of Pittsburgh
March 22, 2019	ABCA1 and APOE molecular interactions: from metabolism to neurodegeneration	EOH Seminar Series - University of Pittsburgh
April 22, 2019	Neuropathological correlates and genetic architecture of microglial activation in elderly brain	eBrain Journal Club - University of Pittsburgh

Other Research and Training Activities

University of Pittsburgh

- Introduction to R (February 2019)
- BD FACSARIA II/BD FACSARIA III Operator Course (August 2018)
- Grantsmanship for Success with NIH (February 2015)
- Best Practices for Hiring & Mentoring Postdocs (April 2015)
- Developing Competitive Grant Applications (December 2014)
- Becoming a More Effective Research Mentor (October 2012)
- IACUC Training Seminars: Small Animal Surgery (April 2012)
- What Employees Look For: Comparing Academia and Industry (November 2011)
- Mentoring Matters (September 2011)
- Know Your K Awards (December 2010)
- Getting to the Payline: Writing Successful NRSA Fellowship Applications (February 2009)
- Build your Research Portfolio by Utilizing New Resources (November 2008)
- Career Transitions: Exploring Your Passions and Recognizing Your Potential (November 2008)
- Responsible Conduct of Research for Emerging Investigators: Conflict of Interest and Relations with Industry (October 2008)
- Maximizing Your Postdoctoral Success (September 2008)

- Writing Successful NRSA Fellowship Applications (May 2008)
- Developing the Networking Skills to Further Your Career (January 2008)
- Research Ethics (December 2007)

Duquesne University

- Publish or Perish (November 2006)
- Academic Job: Getting Ready for an Interview (November 2006)
- Preparing the CV and Cover Letter (September 2006)
- Developing Research and Communication Skills (March 2005)
- Documenting the Impact of Your Scholarship (March 2005)

PUBLICATIONS

Refereed Articles

1. I. Lefterov, C.M. Wolfe, **N.F. Fitz**, K.N. Nam, F. Letronne, R.J. Biedrzycki, J. Kofler, X. Han, J. Wang, J. Schug, R. Koldamova. APOE2 Orchestrated Differences in Transcriptomic and Lipidomic Profiles of Postmortem AD Brain. *Alzheimer's Research and Therapy*. 2019 Dec 30;11(1):113.
2. E.L. Castranio, C.M. Wolfe, K.N. Nam, **N.F. Fitz**, F. Letronne, J. Schug, R. Koldamova, I. Lefterov. ABCA1 haplo deficiency affects the brain transcriptome following traumatic brain injury in mice expressing human APOE isoforms. *Acta Neuropathologica Communications*. 2018 Jul 26;6(1):69.
3. Nam KN, Wolfe CM, **Fitz NF**, Letronne F, Castranio EL, Mounier A, Schug J, Lefterov I, Koldamova R. Integrated approach reveals diet, APOE genotype and sex affect immune response in APP mice. *Biochim Biophys Acta*. 2018 Jan;1864(1):152-161.
4. K.N. Nam, A. Mounier, C.M. Wolfe, **N.F. Fitz**, A.Y. Carter, E.L. Castranio, H.I. Kamboh, V.L. Reeves, J. Wang, X. Han, J. Schug, I. Lefterov, R. Koldamova. Effect of high fat diet on phenotype, brain transcriptome and lipidome in Alzheimer's model mice. *Sci Rep*. 2017 Jun 27;7(1):4307.
5. E.L. Castranio, A. Mounier, C.M. Wolfe, K.N. Nam, **N.F. Fitz**, F. Letronne, J. Schug, R. Koldamova, I. Lefterov. Gene co-expression networks identify Trem2 and Tyrobp as major hubs in human APOE expressing mice following traumatic brain injury. *Neurobiology of Disease*. 2017 May 11;105:1-14
6. A.Y. Carter, F. Letronne F, **N.F. Fitz**, A. Mounier, C.M. Wolfe, K.N. Nam, V.L. Reeves, H. Kamboh, I. Lefterov, R. Koldamova. Liver X receptor agonist treatment significantly affects phenotype and transcriptome of APOE3 and APOE4 Abca1 haplo-deficient mice. *PLoS One*. 2017 Feb 27;12(2):e0172161.
7. **N.F. Fitz**, A.Y. Carter, V. Tapias, E.L. Castranio, R. Kodali, I. Lefterov, R. Koldamova. ABCA1 Deficiency Affects Basal Cognitive Deficits and Dendritic Density in Mice. *Journal of Alzheimer's Disease*. 2017 56(3):1075-1085.
8. R.A. Sweet, M.L. MacDonald, C.M. Kirkwood, Y. Ding, T. Schempf, J. Jones-Laughner, J. Kofler, M.D. Ikonovic, O.L. Lopez, **N.F. Fitz**, R. Koldamova, N.A. Yates. APOE*4 genotype is associated with altered levels of glutamate signaling proteins and synaptic co-

expression networks in the prefrontal cortex in mild to moderate Alzheimer disease. *Molecular and Cellular Proteomics*. 2016 Apr 21. pii: mcp.M115.056580.

9. K.N. Nam, A. Mounier, **N.F. Fitz**, C. Wolfe, J. Schug, I. Lefterov, R. Koldamova. RXR controlled regulatory networks identified in mouse brain counteract deleterious effects of A β oligomers. *Scientific Reports*. 2016 Apr 7;6:24048. doi: 10.1038/srep24048.
10. **N.F. Fitz**, V. Tapias, A.A. Cronican, E.L. Castranio, M. Saleem, A.Y. Carter, M. Lefterova, I. Lefterov, R. Koldamova. Opposing effects of Apoe/Apoa1 double deletion on amyloid- β pathology and cognitive performance in APP mice. *Brain*. 2015 Dec;138(Pt 12):3699-715. doi: 10.1093/brain/awv293.
11. A. Mounier, D. Georgiev, K.N. Nam, **N.F. Fitz**, E.L. Castranio, C.M. Wolfe, A.A. Cronican, J. Schug, I. Lefterov, R. Koldamova. Bexarotene-Activated Retinoid X Receptors Regulate Neuronal Differentiation and Dendritic Complexity. *Journal of Neuroscience*. 2015 Aug 26;35(34):11862-76. doi: 10.1523/JNEUROSCI.1001-15.2015.
12. I. Lefterov, J. Schug, A. Mounier, K.N. Nam, **N.F. Fitz**, R. Koldamova. RNA-sequencing reveals transcriptional up-regulation of Trem2 in response to bexarotene treatment. *Neurobiology of Disease*. 2015 Jun 10. pii: S0969-9961(15)00194-1. doi: 10.1016/j.nbd.2015.05.019.
13. N.F. Fitz, E.L. Castranio, A.Y. Carter, R. Kodali, I. Lefterov, R. Koldamova. Improvement of memory deficits and amyloid- β clearance in aged APP23 mice treated with a combination of anti-amyloid- β antibody and LXR agonist. *Journal of Alzheimer's Disease*. 2014; 41(2):535-49. doi: 10.3233/JAD-132789.
14. R. Koldamova, J. Schug, M. Lefterova, A.A Cronican, **N.F. Fitz**, F.A. Davenport, A. Carter, E.L. Castranio, I. Lefterov. Genome-wide approaches reveal EGR1-controlled regulatory networks associated with neurodegeneration. *Neurobiology of Disease*. 2014 Mar; 63:107-14. doi: 10.1016/j.nbd.2013.11.005. Epub 2013 Nov 20.
15. **N.F. Fitz**, A.A. Cronican, I. Lefterov, R. Koldamova. Comment on "ApoE-directed therapeutics rapidly clear β -amyloid and reverse deficits in AD mouse models". *Science*. 2013 May 24;340 (6135):924-c. doi: 10.1126/science.1235809.
16. A. A. Cronican, **N. F. Fitz**, A. Carter, M. Saleem, S. Shiva, A. Barchowsky, R. Koldamova, J. Schug, I. Lefterov. Genome-Wide Alteration of Histone H3K9 Acetylation Pattern in Mouse Offspring Prenatally Exposed to Arsenic. *PLOS ONE*. 2013 10.1371/journal.pone.0053478
17. P. A. Babalola, **N.F. Fitz**, R.B Gibbs, P. Flaherty, P.-K. Li, D.A. Johnson. The Effect of The Steroid Sulfatase Inhibitor (p-O-sulfamoyl)-Tetradecanoyl Tyramine (DU-14) on Learning and Memory in Rats with Selective Lesion of Septal-Hippocampal Cholinergic Tract. *Neurobiology of Learning and Memory*. 2012, pii: S1074-7427(12)00114-1
18. **N.F. Fitz**; A.A. Cronican; M. Saleem; A.H. Fauq; R. Chapman; I. Lefterov R. Koldamova. Abca1 deficiency differentially affects AD-like phenotype in human ApoE4 but not in ApoE3 targeted replacement mice. *Journal of Neuroscience*. 2012, 32(38); 13125-13136
19. I. Lefterov; **N.F. Fitz**; A.A.Cronican; A. Fogg; P. Lefterov; R. Kodali; R. Wetzel; R. Koldamova. Apolipoprotein A-I deficiency increases cerebral amyloid angiopathy and

cognitive deficits in APP/PS1DeltaE9 mice. *Journal of Biological Chemistry*. 2010, 285(47); 36945-36957

20. **N.F. Fitz**; A. Cronican; T. Pham; A. Fogg; A.H. Fauq; R. Chapman; I. Lefterov; R. Koldamova. Liver X receptor agonist treatment ameliorates amyloid pathology and memory deficits caused by high-fat diet in APP23 mice. *Journal of Neuroscience*. 2010, 30(20); 6862-6872
21. A.A. Cronican; **N.F. Fitz**; T. Pham, A. Fogg, B. Kifer, R. Koldamova, I. Lefterov. Proton pump inhibitor lansoprazole is a nuclear liver X receptor agonist. *Biochemical Pharmacology*. 2010, 79(9); 1310-1316
22. I. Lefterov; **N.F. Fitz**; A. Cronican; P. Lefterov; M. Staufenbiel; R. Koldamova. Memory deficits in APP23/Abca1^{+/-} mice correlate to the level of A β oligomers. 2009, ASN NEURO. 1(2), pii: e00006.
23. M.J. Jarzynka; D.K. Passey; D.A. Johnson; N. Konduru; **N.F. Fitz**; N.M. Radio; M. Rasenick; S. Benloucik; M.A. Melan; P.A. Witt-Enderby. Microtubules modulate melatonin receptors involved in phase-shifting circadian activity rhythms: in vitro and in vivo evidence. *Journal of Pineal Research*. 2009, 46, 161-171
24. **N.F. Fitz**; R.B. Gibbs; D.A. Johnson. Selective lesion of septal cholinergic neurons in rats impairs acquisition of a delayed matching to position T-maze task by delaying the shift from a response to a place strategy. *Brain Research Bulletin*. 2008, 77, 356-360
25. **N.F. Fitz**; R.B. Gibbs; D.A. Johnson. Aversive stimulus attenuates impairment of acquisition in a delayed match to position T-maze task caused by a selective lesion of septo-hippocampal cholinergic projections. *Brain Research Bulletin*. 2006, 69, 660-665

Review Articles

1. R. Koldamova; **N.F. Fitz**; I. Lefterov. ATP-binding cassette transporter A1: From metabolism to neurodegeneration. *Neurobiology of Disease*. 2014 Dec; 72 Pt A:13-21. doi: 10.1016/j.nbd.2014.05.007. Epub 2014 May 17.
2. R. Koldamova; **N.F. Fitz**; I. Lefterov. The role of ATP-binding cassette transporter A1 in Alzheimer's disease and neurodegeneration. *Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids*. 2010, 1801(8); 824-830
3. C.M. Wolfe; **N.F. Fitz**; K.N. Nam; I. Lefterov; R. Koldamova. The Role of APOE and TREM2 in Alzheimer's Disease-Current Understanding and Perspectives. *International Journal of Molecular Sciences*. 2018 Dec 26;20(1). pii: E81.
4. **N.F. Fitz**; K.N. Nam; R. Koldamova; I. Lefterov. Therapeutic targeting of nuclear receptors, liver X and retinoid X receptors, for Alzheimer's disease. *British Journal of Pharmacology*. 2019 Mar 29. doi: 10.1111/bph.14668.

Presentations

1. **N.F. Fitz**, B. Playso, C.M. Wolfe, K.N. Nam, F. Letronne, I. Lefterov & R. Koldamova. Lack of TREM2 affects the phenotype and Transcriptome in mice expressing human APOE3 and APOE4. 2019 AAIC, Los Angeles CA
2. **N.F. Fitz**, B. Playso, C.M. Wolfe, K.N. Nam, F. Letronne, I. Lefterov & R. Koldamova. Impact of TREM2 deficiency on the phenotype and gene expression in mice expressing human APOE3 and APOE4. 2019 AD/PD Lisbon, Portugal
3. F. Letronne, J. Milosevic, K.N. Nam, B. Playso, **N.F. Fitz**, C.M. Wolfe, I. Lefterov & R. Koldamova. Comparative cell and nuclear isolation strategies for transcriptomic analysis of neurons, microglia and astrocytes. 2018 Society for Neuroscience Meeting, San Diego CA
4. C.M. Wolfe, **N.F. Fitz**, B. Playso, K.N. Nam, F. Letronne, I. Lefterov & R. Koldamova. Effect of TREM2 deficiency on the phenotype of APP/PS1 mice expressing human APOE isoforms. 2018 Society for Neuroscience Meeting, San Diego CA
5. I. Lefterov, F. Letronne, B. Iordanova, **N.F. Fitz**, C.M. Wolfe, K.N. Nam, B. Playso, T. Kozai, & R. Koldamova. Effect of APOE lipoproteins on microglial response to intracranial infusion of A β - in vivo two-photon imaging and transcriptomic analysis. 2018 Society for Neuroscience Meeting, San Diego CA
6. K.N. Nam, **N.F. Fitz**, C.M. Wolfe, F. Letronne, I. Lefterov & R. Koldamova. Transcriptomic profiling of microglia reveals distinct gene expression changes in response to aging and APOE isoform. 2018 Society for Neuroscience Meeting, San Diego CA
7. **N.F. Fitz**, F. Letronne, B. Playso, C.M. Wolfe, K.N. Nam, J Schug, I. Lefterov & R. Koldamova. ApoE Isoform Specific Effects on Amyloid- β -induced Changes in Microglial Response. 2018 Society for Neuroscience Meeting, San Diego CA
8. R. Koldamova, **N.F. Fitz**, B. Iordanova, C.M. Wolfe, K.N. Nam, F. Letronne & I. Lefterov. Effect of APOE isoform on microglial response to amyloid-Beta. 2018 AAIC, Chicago IL
9. E.L. Castranio, C.M. Wolfe, K.N. Nam, F. Letronne, A. Mounier, J. Schug, **N.F. Fitz**, R. Koldamova & I. Lefterov. ABCA1 deficiency influences changes in the transcriptome following traumatic brain injury in APOE3 and APOE4 mice. 2017 Society for Neuroscience Meeting, Washington DC
10. K.N. Nam, **N.F. Fitz**, C.M. Wolfe, F. Letronne, I. Lefterov & R. Koldamova. Integrated system approach reveals the dynamic changes of brain transcriptome associated with aging and amyloid pathology. 2017 Society for Neuroscience Meeting, Washington DC
11. **N.F. Fitz**, F. Letronne, B. Playso, C. Wolfe, K.N. Nam, I. Lefterov & R. Koldamova. ApoE Isoform Specific Effects on Amyloid- β -induced Changes in Microglial Response. 2017 AAIC, London
12. **N.F. Fitz**, A.Y. Carter, K.N. Nam, E.L. Castranio, A Mounier, C.M. Wolfe, I Lefterov, R Koldamova. Impact of APOE Polymorphisms on Amyloid-Beta Oligomerization and Associated Cognitive Decline. 2016 AAIC, Toronto
13. **N.F. Fitz**, K.N. Nam, C.M. Wolfe, A Mounier, J Schug, I Lefterov & R Koldamova. High Fat Diet Affects Inflammation and Increases Trem2 Level in APP Mice. 2016 AAIC, Toronto

14. **N.F. Fitz**, A Mounier, C.W. Wolfe, A.Y. Carter, V.L. Reeves, J Schug, I. Lefterov, R. Koldamova. Effects of Liver X receptor agonist treatment on Alzheimer's disease-like phenotype and neuronal regulatory networks in human APOE3 and APOE4-targeted replacement mice. 2016 Society for Neuroscience Meeting, San Diego CA
15. K.N Nam, A. Mounier, C.M. Wolfe, **N.F. Fitz**, J Schug, I. Lefterov, R Koldamova. Integrated system approach identifies gene networks in APOE3 and APOE4 expressing mice in response to HFD. 2016 Society for Neuroscience Meeting, San Diego CA
16. E.L. Castranio, A. Mounier, C. M. Wolfe, J. Schug, **N.F. Fitz**, R. Koldamova, I. Lefterov. Integrated genomic approaches identify changes in interconnected networks and major pathways following traumatic brain injury in young and aged APOE3 and APOE4 mice. 2016 Society for Neuroscience Meeting, San Diego CA
17. V.L. Reeves, A.Y. Carter, **N.F. Fitz**, I. Lefterov, R. Koldamova. Effects of high fat diet on cognition and neurodegeneration in APOE3 and APOE4 mice. 2015 Society for Neuroscience Meeting, Chicago IL
18. A.Y. Carter, V.L. Reeves, **N.F. Fitz**, J. Schug, I. Lefterov, R. Koldamova. High fat diet aggravates memory deficits in APP mice and causes epigenetic changes. 2015 Society for Neuroscience Meeting, Chicago IL
19. A. Mounier, K. Nam, J. Schug, **N.F. Fitz**, I. Lefterov, R. Koldamova. Bexarotene treatment induced up-regulation of Trem2 and A β phagocytosis by microglia in APP/PS1 mice. 2015 Society for Neuroscience Meeting, Chicago IL
20. E.L. Castranio, A. Mounier, J. Schug, **N.F. Fitz**, R. Koldamova, I. Lefterov. Effect of age and APOE isoform on traumatic brain injury in mice. 2015 Society for Neuroscience Meeting, Chicago IL
21. **N.F. Fitz**, K. Nam, A. Mounier, E.L. Castranio, R. Koldamova, I. Lefterov. H3K9 acetylation profile and behavioral changes in response to arsenic exposure. 2015 Society for Neuroscience Meeting, Chicago IL
22. K. Nam, A. Mounier, J. Schug, **N.F. Fitz**, I. Lefterov, R. Koldamova. Genome-wide approaches reveal Bexarotene controlled regulatory networks in APOE3 mice. 2015 Society for Neuroscience Meeting, Chicago IL
23. A. Mounier, K. Nam, D. Georgiev, **N.F. Fitz**, A. Cronican, I. Lefterov, R. Koldamova. Bexarotene increases neuronal differentiation in vitro and in vivo. ADPD Conference. Nice, France
24. E.L. Castranio, **N.F. Fitz**, A.Y. Carter, I. Lefterov, R. Koldamova. Impact of ApoE polymorphisms on amyloid-beta oligomerization and associated cognitive decline. 2014 Society for Neuroscience Meeting, Washington D.C.
25. **N.F. Fitz**, A.Y. Carter, E.L. Castranio, I. Lefterov, R. Koldamova. Effects of global deletion of ApoA1 and ApoE on amyloid pathology and cognitive decline in a mouse model. 2014 Society for Neuroscience Meeting, Washington D.C.
26. A.Y. Carter, **N.F. Fitz**, V.M. Tapias, E.L. Castranio, I. Lefterov, R. Koldamova. Abca1 deficiency significantly affects neurite morphology and cognitive function in mice. 2014 Society for Neuroscience Meeting, Washington D.C.

27. D. Georgiev, A. Mounier, K. Nan, **N.F. Fitz**, A.A. Cronican, I. Lefterov, R. Koldamova. Comparative genome-wide analysis of RXR binding and expression profiling in Bexarotene treated APOE4 mice. 2014 Society for Neuroscience Meeting, Washington D.C.
28. **N.F. Fitz**, A. Cronican, E. Castranio, F. Davenport, I. Lefterov; R. Koldamova. The effects of immunotherapy and LXR ligand co-treatment on amyloid neuropathology and cognition in APP23 mouse model. 2013 Society for Neuroscience Meeting, San Diego, CA.
29. A.Y. Carter, A. Cronican, **N.F. Fitz**, E. Castranio, F. Davenport, R. Koldamova, I. Lefterov. Effect of apolipoprotein E on learning deficits in animal models infused with soluble β -amyloid oligomers. 2013 Society for Neuroscience Meeting, San Diego, CA.
30. A. Cronican, **N.F. Fitz**, F. Davenport, E. Castranio, J. Schug, R. Koldamova, I. Lefterov. Identification of regulatory networks controlled by Egr1 genome-wide in brain of Alzheimer's disease mouse model. 2013 Society for Neuroscience Meeting, San Diego, CA.
31. **N.F. Fitz**; A. Cronican; I. Lefterov; R. Koldamova. Abca1 deficiency affects differentially amyloid phenotype of ApoE3 and ApoE4 targeted replacement mice. 2012 Alzheimer's Association International Conference, Vancouver B.C.
32. **N.F. Fitz**; A. Cronican; I. Lefterov; R. Koldamova. Effect of Abca1 on amyloid deposition in APP mice expressing different ApoE isoforms. 2011 Society for Neuroscience Meeting, Washington D.C.
33. Cronican; **N.F. Fitz**; R. Klei, A. Barchowsky, R. Koldamova, I. Lefterov. Effects of arsenic exposure on ABCA1 gene expression, APP processing, and cognition in mice. 2011 Society for Neuroscience Meeting, Washington D.C.
34. **N.F. Fitz**; A. Cronican; A. Fogg; I. Lefterov; R. Koldamova. LXR ligand treatment in APP mice. Poster Presentation: 2009 Nuclear Receptor Conference, Pittsburgh PA
35. **N.F. Fitz**; A. Cronican; A. Fogg; S. Egglestone; T. Tulloch; I. Lefterov; R. Koldamova. LXR ligand treatment in APP mice on normal and high fat diet. Poster Presentation: 2009 Society for Neuroscience Meeting, Chicago IL
36. A. Cronican; **N.F. Fitz**; A. Fogg; T. Tulloch; S. Egglestone; P. Rajendran; I. Lefterov; R. Koldamova. Effect of ABCA1 and brain lipoproteins on in vivo $A\beta$ clearance through blood brain barrier in APP/PS1 mice. Poster Presentation: 2009 Society for Neuroscience Meeting, Chicago IL
37. A.Fogg; **N.F. Fitz**; A. Cronican; S. Egglestone; T. Tulloch; P. Rajendran; I. Lefterov; R. Koldamova. Lack of apolipoprotein A-I increases amyloid deposition and aggravates memory deficits in APP/PS mice. Poster Presentation: 2009 Society for Neuroscience Meeting, Chicago IL
38. R. Koldamova; **N.F. Fitz**; A. Cronican; A. Fogg; S. Egglestone; I. Lefterov. Critical role of Abca1 in maintaining functional ApoE and ApoA-I and their impact on $A\beta$ aggregation and clearance from brain. Poster Presentation: 2009 ICAD Vienna, Austria.
39. **N.F. Fitz**; I. Lefterov; R. Koldamova. Influence of Abca1 on Alzheimer's pathology and cognition. Poster Presentation: University of Pittsburgh Postdoctoral Association: Data and Dine, Pittsburgh PA

40. **N.F. Fitz**; I. Lefterov; R. Koldamova. Influence of Abca1 on Alzheimer's pathology and cognition. Presentation: Celebrating Research on Aging, Pittsburgh PA
41. R. Koldamova; **N.F. Fitz**; A. Cronican; P. Lefterov; I. Lefterov. Regulatory role of Abca1 and brain lipoproteins in A β oligomerization and deposition - comparative pathology in ABCA1ko and ApoA-Iko/ApoEko mice. Poster Presentation: 2008 Society for Neuroscience Meeting, Washington D.C.
42. **N.F. Fitz**; I. Lefterov; P. Lefterov; M. Staufenbiel; R. Koldamova. Amyloid beta oligomerization and fibrillization associated with working memory impairments in APP23/ABCA1+/- mice - implications for the role of ABCA1 in Alzheimer's disease. Poster Presentation: 2008 Society for Neuroscience Meeting, Washington D.C.
43. **N.F. Fitz**; I. Lefterov; P. Lefterov; R. Koldamova. Implications for the role of ABCA1 in Alzheimer's disease. Poster Presentation: SCIENCE 2008, Pittsburgh PA
44. **N.F. Fitz**; R.B. Gibbs; D.A. Johnson. Effects of selective lesioning of the septo-hippocampal cholinergic projections on learning strategies. Poster Presentation: 2006 Society for Neuroscience Meeting, Atlanta, GA
45. R.B. Gibbs; **N.F. Fitz**; D.A. Johnson. Task selective effects of ovariectomy on learning: impaired acquisition of a 12 arm radial maze task. Poster Presentation: 2006 Society for Neuroscience Meeting, Atlanta, GA
46. R.B. Gibbs; **N.F. Fitz**; D.A. Johnson. Cholinergic lesions produce selective effects on cognitive performance in rats. Poster Presentation: 2005 Society for Neuroscience Meeting, Washington D.C.
47. N. Konduru; D.A. Johnson; **N.F. Fitz**; S. Benloueif; P.A. Witt-Enderby. MT2 melatonin receptors and MEK/ERK (1/2) modulate melatonin mediated phase shift of circadian activity rhythms in Long Evans rats. Poster Presentation: 2004 Society for Neuroscience Meeting, San Diego, CA
48. S. Arshad; P. Li; **N.F. Fitz**; D.A. Johnson. Effects of dehydroepiandrosterone sulfate on retention in passive avoidance in septal hippocampal cholinergic lesioned rats. Poster Presentation: 2004 Society for Neuroscience Meeting, San Diego, CA
49. **N.F. Fitz**; P. Li; D.A. Johnson. Effects of dehydroepiandrosterone sulfate on delayed match to position T-maze task performance in 192-IgG-saporin lesioned rats. Poster Presentation: 2004 Society for Neuroscience Meeting, San Diego, CA
50. V.N. Pokala; **N.F. Fitz**; P.A. Witt-Enderby; D.A. Johnson. Septohippocampal cholinergic lesion and hippocampal alpha-secretase activity in rat. Poster Presentation: 2004 Society for Neuroscience Meeting, San Diego, CA
51. **N.F. Fitz**; R.B. Gibbs; D.A. Johnson. Arousal enhances delayed match to position T-maze performance independent of septo-hippocampal cholinergic projections. Poster Presentation: 2003 Society for Neuroscience Meeting, New Orleans, LA
52. M.A. Liberatore; N.J. Zambone; **N.F. Fitz**; V.N. Pokala; R.A. Nagle; P. Li; D.A. Johnson. Steroid sulfatase inhibition potentiates working memory deficit induced by 192 IgG-Saporin. Poster Presentation: 2002 Society for Neuroscience Meeting, Orlando, FL

SERVICE

Service to School and University

Years	Committee	Position
2017-present	Cody Wolfe's dissertation Committee member: EOH	University of Pittsburgh
2016-2019	DLAR subcommittee: Pathogens exclusion list, University of Pittsburgh	Voting Member
2016-present	Planning and Budget Policies Committee, Pitt Public Health Council	Voting Member
2014-2020	Muzamil Saleem's dissertation Committee member: School of Biological Sciences	Duquesne University
2010,2014- 2017, 2019	University of Pittsburgh Postdoctoral Association Data and Dine	Poster Judge
2014-2019	GPSH Dean's day presentation	Poster Judge
2014-2016	Mylan School of Pharmacy Graduate Student Orientation	Alumni Speaker
2013-2014	Mylan School of Pharmacy Accreditation Committee	Duquesne University
2008	Award Committee for Graduate Student Award for Excellence in Teaching	Duquesne University

Service to Field of Scholarship

Manuscript and Other Document/Publication Review

Dates	Journal Title
2018-present	Florida Department of Health Ed and Ethel Moore Alzheimer's Disease Research Program Grant Review
2016-2018	Polish Academy of Science grant review
2014-2018	CCAD grant review
2018-present	Gene
2013-present	Biochimica et Biophysica Acta
2013-present	Alzheimer's & Dementia
2013-present	Neurobiology of Disease
2011-present	Frontiers in Neurodegeneration
2012-present	Alzheimer's Association grant review

Leadership in Scholarly and Professional Organizations and Honorary Societies

Date	Position	Organization
March 2011, 2020	Science fair judge	Pittsburgh Regional Science and Engineering Fair
October 2017	Co-Organizer	DISCOVER NEW PATHWAYS IN ALZHEIMER'S AND DEMENTIA RESEARCH, Varna Bulgaria