

TRAVIS L DUNCKLEY, PHD
Curriculum Vitae

1) Personal Data

Travis L Dunckley
The Biodesign Institute
Arizona State University
NDRC/Travis Dunckley
1001 S. McAllister Ave
Tempe, AZ 85287

480-650-4423
travis.dunckley@gmail.com
Date of birth: April 3, 1973
Place of Birth: Soldotna, AK
Citizenship: USA

2) Education

University of Arizona, Tucson, AZ	B.S. 1992-1996	Biochemistry/Molecular Biology
University of Arizona, Tucson, AZ	PhD 1996-2000	Molecular and Cellular Biology
Barrow Neurological Institute, Phoenix, AZ	Fellow 2000-2002	Neurobiology
TGen, Phoenix, AZ	Fellow 2002-2004	Neurogenomics

3) Employment

01/95-05/96 University of Arizona, Research Assistant to Dean DellaPenna, PhD
08/96-07/00 University of Arizona, Graduate student with Roy R. Parker, PhD
Dissertation Title: mRNA decapping in *Saccharomyces cerevisiae*
08/00-01/02 Barrow Neurological Institute, Post-doctoral Fellow with Ronald Lukas, PhD
02/02-11/04 Translational Genomics Research Institute, Post-doctoral Fellow with
Dietrich Stephan, PhD
12/04-12/11 Associate Investigator, Translational Genomics Research Institute
1/12-12/15 Assistant Professor, Neurogenomics, Translational Genomics Research
Institute
1/16-present Assistant Research Professor, Neurodegenerative Research Center,
Biodesign Institute, Arizona State University

4) Professional Registrations, Licenses, Certificates:

American Academy of Neurology: 2004-2005
Motor Neuron Disease Association – 2006-2007
Society for Neuroscience – 2002-present

5) Societies, Honors and Awards

1991-1994	National Merit Fellowship
1994	Phi Beta Kappa
1994	Phi Kappa Phi
1995-1996	Undergraduate Fellowship, University of Arizona, Tucson, AZ
1996	B.S., summa cum laude, University of Arizona, Tucson, AZ
1996-1997	Graduate Fellowship, University of Arizona, Tucson, AZ
1998-2000	Cancer Biology Graduate Interdisciplinary Program Training Grant, University of Arizona, Tucson, AZ
2002-2003	Philip Morris Extramural Post-Doctoral Research Fellowship

6) Editorial Boards

2007-present	Editorial Board Member, Current Drug Discovery Technologies
2008-present	Editorial Board Member, Biomarker Insights
2009-present	Editorial Board Member, Gene Expression to Genetical Genomics
2011-present	Editorial Board Member, Journal Of Medical Advancements in Genetic Engineering
2011-present	Editorial Board Member, Frontiers in Neurogenomics

7) Grants Awarded or Pending:

AWARDED ACTIVE

Grant	(Travis Dunckley)	01/01/2016 – 12/31/2017
1.8 calendar mo.		
Alzheimer's Drug Discovery Foundation		\$201,000
Development of selective DYRK1A inhibitors as a treatment for Alzheimer's disease		
The goal is to characterize the pharmacodynamics and pharmacokinetics of two novel DYRK1A inhibitors.		
Role: Principal Investigator		

Grant	(Travis Dunckley)	01/01/2016 – 12/31/2017
3 calendar mo.		
Michael J Fox Foundation		\$324,000
Identification of epigenetic signatures in blood as biomarkers for Parkinson's disease		
The goal of this multi-institution proposal is to identify DNA methylation signatures specific to Parkinson's disease that may be leveraged in earlier diagnosis of this disease.		
Role: Co-Principal Investigator		

Grants Completed:

<u>Title:</u>	Validation of DNA methylation changes in PD patients
<u>Agency:</u>	Mayo Clinic
<u>Dates:</u>	06/01/2015 – 05/30/2015
<u>Yearly Direct Costs:</u>	\$20,000

Role: Co-Investigator
% Effort: 5%

Title: **Salivary miRNA sequencing to identify potential biomarkers for PD**

Agency: Michael J Fox Foundation
Dates: 10/01/2014 – 9/30/2015
Yearly Direct Costs: \$45,000
Role: Principal Investigator
% Effort: 5%

Title: **Next-Gen Profiling to identify etiologic contributors to Parkinson's dementia**

Agency: Flinn Foundation \$125,000
Dates: 03/01/2011 – 12/31/2013
Yearly Direct Costs: \$125,000
Role: Principal Investigator
% Effort: 5%

Title: **Development of DYRK1A inhibitors as a new treatment for AD**

Agency: DHS
Dates: 07/01/2013 - 06/30/2014
Yearly Direct Costs: \$130,000
Role: Co-Investigator
% Effort: 10%

Title: **DNA Methylation as a Biomarker for Parkinson's Disease**

Agency: Michael J Fox Foundation \$75,000
Dates: 09/01/2013 – 07/31/2014
Yearly Direct Costs: \$75,000
Role: Principal Investigator
% Effort: 10%

Title: **Personalized Drug Development - Crisponi Syndrome as a Model Paradigm**

Agency: Flinn Foundation
Dates: 09/01/2012 – 02/28/14
Yearly Direct Costs: \$60,850
Role: Principal Investigator
% Effort: 5%

Title: **Neurofibrillary Tangle-Induced Dementia in AD (R21AG029576)**

Agency: National Institute on Aging
Dates: 06/01/2007 - 05/31/2009
Yearly Direct Costs: \$115,000
Role: Principal Investigator

% Effort: 5%

Title: **Neurofibrillary Tangle-Induced Dementia in AD (K01AG024079)**
Agency: National Institute on Aging
Dates: 03/01/2006 - 02/28/2010
Yearly Direct Costs: \$105,000
Role: Principal Investigator
% Effort: 75%

Title: **Genetic Mechanisms leading to Dementia and Lewy Body formation in PD**
Agency: National Parkinson Foundation
Dates: 07/01/2005 - 06/30/2008
Yearly Direct Costs: \$150,000
Role: Principal Investigator
% Effort: 15%

Title: **Arizona Parkinson's Disease Center Prevention of Progression to Parkinson's Disease and Parkinson's Disease with Dementia: Development of Biomarkers**
Agency: ADCRC
Dates: 07/01/2005 - 06/30/2008
Yearly Direct Costs: \$38,594
Role: Investigator (Charles Alder – PI)
% Effort: 2.5%

Title: **Neuroanatomical Substrates of Aging & Cognitive Decline**
Agency: NIH/NINDS
Dates: 09/01/2006 - 08/31/2009
Yearly Direct Costs: \$18,883
Role: Co-Investigator (Gene Alexander – PI)
% Effort: 2.5%

Title: **Resequencing the variable human genome in sporadic ALS: A necessary prelude to diagnostics and drug development**
Agency: Muscular Dystrophy Association
Dates: 03/01/2006 - 02/28/2007
Yearly Direct Costs: \$652,000
Role: Co-Principal Investigator (Dietrich Stephan – PI)

Title: **Characterization of gene targets to treat NFT-induced neurodegeneration**
Agency: ADCC
Dates: 06/01/2005 - 05/31/2005

Yearly Direct Costs: \$25,000

Role: Principal Investigator

% Effort: 5%

8) Publications

A) Papers in Referred Journals:

1. **Dunckley T**, Parker R. Pathways of mRNA degradation in Eukaryotic Cells. In: Encyclopedia of Genetics. Academic Press, NY, 1999.
2. **Dunckley T**, Parker R. The DCP2 protein is required for mRNA decapping in *Saccharomyces cerevisiae* and contains a functional MutT motif. *EMBO J* 1999; 18: 5411-5422.
3. **Dunckley T**, Tucker M, Parker R. Two related proteins, Edc1p and Edc2p, stimulate mRNA decapping in *Saccharomyces cerevisiae*. *Genetics* 2001; 157: 27-37.
4. **Dunckley T**, Parker R. The yeast mRNA decapping enzyme. *Methods Enzymol* 2001; 342: 226-33.
5. **Dunckley T**, Lingke Z, Wu J, Lukas R. Mutational analysis of roles for extracellular cysteine residues in assembly and function of human $\alpha 7$ nicotinic acetylcholine receptors. *Biochemistry* 2002; 42: 870-876.
6. **Dunckley T**, and Lukas R. Nicotine modulates the expression of a diverse set of genes in the human neuronal SH-SY5Y cell line. *J Biol Chem* 2003; 278: 15633-15640.
7. Coon K, **Dunckley T**, Stephan DA. Biomarker Identification in Neurologic Diseases: improving diagnostics and therapeutics. *Expert Rev Mol Diagn* 2004; 4: 361-375.
8. **Dunckley T**, Coon K, Stephan DA. Genomic information and cancer. In *Encyclopedic Reference of Genomics and Proteomics in Molecular Medicine*. (In Press)
9. Puffenberger EG, Hu-Lince D, Parod JM, Craig DW, Dobrin SE, Conway AR, Donarum EA, Strauss KA, **Dunckley T**, Cardenas JF, Melmed KR, Wright CA, Liang W, Stafford PNMI, Flynn CR, Morton DH, Stephan DA. A high-density SNP genome scan identifies TSPYL loss-of-function as causative of Swaley syndrome. *Proc Nat Acad Sci USA* 2004; 101: 11689-11694.
10. **Dunckley T**, Coon K, Stephan DA. Discovery and development of biomarkers of neurological disease. *Drug Discov Today* 2005; 10: 326-334.
11. **Dunckley T**, Beach TG, Ramsey KE, Grover A, Mastroeni D, Walker DG, LaFleur BJ, Coon KD, Brown KM, Caselli R, Kukull W, Higdon R, McKeel D, Morris JC, Hulette C, Schmechel D, Reiman EM, Rogers J, Stephan DA. Gene expression correlates of neurofibrillary tangles in Alzheimer's disease. *Neurobiol Aging*. 2006; 27:1359-71.

12. Papassotiropoulos A, Fountoulakis M, **Dunckley T**, Stephan DA, Reiman EM. Genetics, Transcriptomics and Proteomics of Alzheimer's Disease. *J. Clin. Psych.* 2006; 67: 652-670.
13. Segal SP, **Dunckley T**, Parker R. Sbp1p affects translational repression and decapping in *Saccharomyces cerevisiae*. *Mol Cell Biol.* 2006; 26: 5120-5130.
14. Quantitation of heteroplasmy of mtDNA sequence variants identified in a population of AD patients and controls by array-based resequencing. *Mitochondrion.* 2006 Aug;6(4):194-210.
15. Coon KD, Siegel AM, Yee SJ, **Dunckley TL**, Mueller C, Nagra RM, Tourtellotte WW, Reiman EM. Preliminary demonstration of an allelic association of the IREB2 gene with Alzheimer's disease. *J Alzheimers Dis.* 2006; 9: 225-233.
16. **Dunckley T**, Coon K, Stephan D. (2006) Genetic Information and Cancer. In: Ganten, D & Ruckpaul, K (eds). *Encyclopedic Reference of Genomics and Proteomics in Molecular Medicine.* 2006 Springer, Berlin Heidelberg New York, pp 693-696.
17. **Dunckley T** and Lukas R. Nicotinic modulation of gene expression in SH-SY5Y neuroblastoma cells. *Brain Res.* 2006; 1116: 39-49.
18. **Dunckley T**, Liang WS, Stephan DA. Evolution of translational genomic research strategies. In Williams, CR (ed) *Trends in Genome Research.* 2006 Nova Science Publishers, Inc., Hauppauge, NY pp 1-24.
19. Liang WS*, **Dunckley T***, Beach TG, Grover A, Mastroeni D, Walker DG, Caselli RJ, Kukull WA, Morris JC, Hulette C, Schmechel D, Alexander GE, Reiman EM, Roger J, Stephan DA. Gene expression profiles in anatomically and functionally distinct regions of the normal aged human brain. *Physiol Genomics.* 2007; Feb 12; 28(3):311-22.
20. Coon KD, **Dunckley TL**, Stephan DA. A generic research paradigm for identification and validation of early molecular diagnostics and new therapeutics in common disorders. *Mol Diagn Ther.* 2007;11(1):1-14.
21. Reiman EM, Webster JA, Myers AJ, Hardy J, **Dunckley T**, Zismann VL, Joshipura KD, Pearson JV, Hu-Lince D, Huentelman MJ, Craig DW, Coon KD, Liang WS, Herbert RH, Beach T, Rohrer KC, Zhao AS, Leung D, Bryden L, Marlowe L, Kaleem M, Mastroeni D, Grover A, Heward CB, Ravid R, Rogers J, Hutton ML, Melquist S, Petersen RC, Alexander GE, Caselli RJ, Kukull W, Papassotiropoulos A, Stephan DA. GAB2 alleles modify Alzheimer's risk in APOE epsilon4 carriers. *Neuron.* 2007 Jun 7;54(5):713-20.
22. **Dunckley TL**, Huentelman MJ, Craig DW, Pearson JV, Szelinger S, Joshipura K, Halperin RF, Stamper C, Jensen KR, Letizia D, Hesterlee SE, Pestronk A, Levine T, Bertorini T, Graves MC, Mozaffar T, Jackson CE, Bosch P, McVey A, Dick A, Barohn R, Lomen-Hoerth C, Rosenfeld J, O'Connor DT, Zhang K, Crook R, Ryberg H, Hutton M, Katz J, Simpson EP, Mitsumoto H, Bowser R, Miller RG, Appel SH, Stephan DA. Whole

Genome Analysis of Persons with Sporadic Amyotrophic Lateral Sclerosis. *New Eng. J Med.* 2007; 357:775-788.

23. Robeson RR, Siegel A, **Dunckley T**. Genomic and Proteomic Biomarker Discovery in Neurological Disease. *Biomarker Insights.* 2008; 3:73-86.
24. Liang WS, **Dunckley T**, Beach TG, Grover A, Mastroeni D, Ramsey K, Caselli RJ, Kukull WA, McKeel D, Morris JC, Hulette CM, Schmechel D, Reiman EM, Rogers J, Stephan DA. Altered neuronal gene expression in brain regions differentially affected by Alzheimer's Disease: A reference data set. *Physiol Genomics.* 2008;33(2):240-56.
25. Liang WS, Reiman EM, Valla J, **Dunckley T**, Beach TG, Grover A, Niedzielko TL, Schneider LE, Mastroeni D, Caselli R, Kukull W, Morris JC, Hulette CM, Schmechel D, Rogers J, Stephan DA. Alzheimer's disease is associated with reduced expression of energy metabolism genes in posterior cingulate neurons. *Proc Natl Acad Sci U S A.* 2008; 105:4441-6.
26. Stamper C, Siegel A, Liang WS, Pearson JV, Stephan DA, Shill H, Connor D, Caviness JN, Sabbagh M, Beach TG, Adler CH, **Dunckley T**. Neuronal gene expression correlates of Parkinson's disease with dementia. *Mov Disord.* 2008; 23:1588-1595.
27. Chiò A, Schymick JC, Restagno G, Scholz SW, Lombardo F, Lai SL, Mora G, Fung HC, Britton A, Arepalli S, Gibbs JR, Nalls M, Berger S, Kwee LC, Oddone EZ, Ding J, Crews C, Rafferty I, Washecka N, Hernandez D, Ferrucci L, Bandinelli S, Guralnik J, Macciardi F, Torri F, Lupoli S, Chanock SJ, Thomas G, Hunter DJ, Gieger C, Wichmann HE, Calvo A, Mutani R, Battistini S, Giannini F, Caponnetto C, Mancardi GL, La Bella V, Valentino F, Monsurrò MR, Tedeschi G, Marinou K, Sabatelli M, Conte A, Mandrioli J, Sola P, Salvi F, Bartolomei I, Siciliano G, Carlesi C, Orrell RW, Talbot K, Simmons Z, Connor J, Piro EP, **Dunkley T**, Stephan DA, Kasperaviciute D, Fisher EM, Jabonka S, Sendtner M, Beck M, Bruijn L, Rothstein J, Schmidt S, Singleton A, Hardy J, Traynor BJ. A two-stage genome-wide association study of sporadic amyotrophic lateral sclerosis. *Hum Mol Genet.* 2009; 18:1524-1532.
28. Liang WS, **Dunckley T**, Beach TG, Grover A, Mastroeni D, Ramsey K, Caselli RJ, Kukull WA, McKeel D, Morris JC, Hulette CM, Schmechel D, Reiman EM, Rogers J, Stephan DA. Neuronal gene expression in non-demented individuals with intermediate Alzheimer's Disease neuropathology. *Neurobiol Aging.* 2010; 31:549-66.
29. Corneveaux JJ, Liang WS, Reiman EM, Webster JA, Myers AJ, Zismann VL, Joshipura KD, Pearson JV, Hu-Lince D, Craig DW, Coon KD, **Dunckley T**, Bandy D, Lee W, Chen K, Beach TG, Mastroeni D, Grover A, Ravid R, Sando SB, Aasly JO, Heun R, Jessen F, Kölsch H, Rogers J, Hutton ML, Melquist S, Petersen RC, Alexander GE, Caselli RJ, Papassotiropoulos A, Stephan DA, Huentelman MJ. Evidence for an association between KIBRA and late-onset Alzheimer's disease. *Neurobiol Aging.* 2010; 31:901-9.
30. Azorsa DO, Robeson RH, Frost D, Meechoovet B, Brautigam GR, Dickey C, Beaudry C, Basu GD, Holz DR, Hernandez JA, Bisanz KM, Gwinn L, Grover A, Rogers J, Reiman EM, Hutton M, Stephan DA, Mousses D, **Dunckley T**. High-content siRNA

screening of the kinome identifies kinases involved in Alzheimer's disease-related tau hyperphosphorylation. *BMC Genomics*. 2010 11:25.

31. Lai SL, Abramzon Y, Schymick JC, Stephan DA, **Dunckley T**, Dillman A, Cookson M, Calvo A, Battistini S, Giannini F, Caponnetto C, Mancardi GL, Spataro R, Monsurro MR, Tedeschi G, Marinou K, Sabatelli M, Conte A, Mandrioli J, Sola P, Salvi F, Bartolomei I, Lombardo F; the ITALSGEN Consortium, Mora G, Restagno G, Chiò A, Traynor BJ. FUS mutations in sporadic amyotrophic lateral sclerosis. *Neurobiol Aging*. 2010 Feb 4. [Epub ahead of print].
32. Corneveaux JJ, Myers AJ, Allen AN, Pruzin JJ, Ramirez M, Engel A, Nalls MA, Chen K, Lee W, Chewning K, Villa SE, Meechoovet HB, Gerber JD, Frost D, Benson HL, O'Reilly S, Chibnik LB, Shulman JM, Singleton AB, Craig DW, Van Keuren-Jensen KR, **Dunckley T**, Bennett DA, De Jager PL, Heward C, Hardy J, Reiman EM, Huentelman MJ. Association of CR1, CLU, and PICALM with Alzheimer's disease in a cohort of clinically characterized and neuropathologically verified individuals. *Hum Mol Genet*. 2010; 19(16):3295-301.
33. Liang WS, Chen K, Lee W, Sidhar K, Corneveaux JJ, Allen AN, Myers A, Villa S, Meechoovet B, Pruzin J, Bandy D, Fleisher AS, Langbaum JB, Huentelman MJ, Jensen K, **Dunckley T**, Caselli RJ, Kaib S, Reiman EM. Association between GAB2 haplotype and higher glucose metabolism in Alzheimer's disease-affected brain regions in cognitively normal APOE ϵ 4 carriers. *Neuroimage*. 2011; 54:1896-902.
34. Robeson RH, **Dunckley T**. High-content RNA interference assay: analysis of tau hyperphosphorylation as a generic paradigm. *Methods Mol Biol*. 2011; 700:221-38.
35. Frost D, Meechoovet B, Wang T, Gately S, Giorgetti M, Shcherbakova I, **Dunckley T**. β -Carboline Compounds, Including Harmine, Inhibit DYRK1A and Tau Phosphorylation at Multiple Alzheimer's Disease-Related Sites. *PLoS One*. 2011 May 6;6(5):e19264.
36. Majounie E, Renton AE, Mok K, Dopper EG, Waite A, Rollinson S, Chiò A, Restagno G, Nicolaou N, Simon-Sanchez J, van Swieten JC, Abramzon Y, Johnson JO, Sendtner M, Pamphlett R, Orrell RW, Mead S, Sidle KC, Houlden H, Rohrer JD, Morrison KE, Pall H, Talbot K, Ansorge O; Chromosome 9-ALS/FTD Consortium; French research network on FTLN/FTLN/ALS; ITALSGEN Consortium, Hernandez DG, Arepalli S, Sabatelli M, Mora G, Corbo M, Giannini F, Calvo A, Englund E, Borghero G, Floris GL, Remes AM, Laaksovirta H, McCluskey L, Trojanowski JQ, Van Deerlin VM, Schellenberg GD, Nalls MA, Drory VE, Lu CS, Yeh TH, Ishiura H, Takahashi Y, Tsuji S, Le Ber I, Brice A, Drepper C, Williams N, Kirby J, Shaw P, Hardy J, Tienari PJ, Heutink P, Morris HR, Pickering-Brown S, Traynor BJ. Frequency of the C9orf72 hexanucleotide repeat expansion in patients with amyotrophic lateral sclerosis and frontotemporal dementia: a cross-sectional study. *Lancet Neurol*. 2012 Apr;11(4):323-30.
37. Smith B, Medda F, Gokhale V, **Dunckley T**, Hulme C. Recent Advances in the Design, Synthesis, and Biological Evaluation of Selective DYRK1A Inhibitors: A New Avenue for

a Disease Modifying Treatment of Alzheimer's? ACS Chem Neurosci. 2012 Nov 21;3(11):857-72.

38. Henderson-Smith A, Chow D, Meechoovet B, Aziz M, Jacobson SA, Shill HA, Sabbagh MN, Caviness JN, Adler CH, Driver-Dunckley ED, Beach TG, Yin H, **Dunckley T**. SMG1 Identified as a Regulator of Parkinson's Disease-Associated alpha-Synuclein through siRNA Screening. PLoS One. 2013 Oct 30;8(10).
39. Medda F, Smith B, Gokhale, V, Shaw A, **Dunckley T**, Hulme, C. Beyond Secretases: Kinase Inhibitors for the treatment of Alzheimer's Disease. Ann. Rep. Med. Chem., 2013, 48, 57-71.
40. Mennenga SE, Gerson JE, **Dunckley T**, Bimonte-Nelson HA. Harmine treatment enhances short-term memory in old rats: Dissociation of cognition and the ability to perform the procedural requirements of maze testing. Physiol Behav. 2015 Jan;138:260-5.
41. Henderson-Smith A, Corneveaux JJ, De Both M, Cuyugan L, Liang WS, Huentelman M, Adler C, Driver-Dunckley E, Beach TG, **Dunckley TL**. Next-Generation Profiling to Identify the Molecular Etiology of Parkinson's Dementia. Neurology Genetics, Submitted.

B) Papers in Non-referred Journals: None

C) Chapters in Books:

1. **Dunckley T**, Coon K, Stephan D. Genetic Information and Cancer. In: Ganten, D & Ruckpaul, K (eds). Encyclopedic Reference of Genomics and Proteomics in Molecular Medicine. 2006 Springer, Berlin Heidelberg New York, pp 693-696.
2. **Dunckley T**, Liang WS, Stephan DA. Evolution of translational genomic research strategies. In Williams, CR (ed) Trends in Genome Research. 2006 Nova Science Publishers, Inc., Hauppauge, NY pp 1-24.
3. Robeson R, **Dunckley T**. High-Content RNA Interference Assay: Analysis of Tau Hyperphosphorylation as a Generic Paradigm. In DiStefano, J (ed) Disease Gene Identification. 2011 Springer, New York, pp 221-240.
4. Coleman P, Huentelman M, **Dunckley T**. Epigenetics of Cognition and Neurodegenerative Disorders. In Bimonte-Nelson, H (ed) The Maze Book. 2015 Springer, New York, pp 285-298.

D) Abstracts and Presentations:

1. "The Dcp2 protein is required for mRNA decapping in *Saccharomyces cerevisiae*." Translational Control, Cold Spring Harbor, NY. 1998. Oral Presentation.
2. "Effects of disulfide bond formation on the assembly and function of the $\alpha 7$ nicotinic acetylcholine receptor" Society for Neuroscience Annual Meeting, San Diego, CA. 2001. Poster Presentation.
3. "Nicotine induces alterations of gene expression in neuronal cells" Society for Neuroscience Annual Meeting, Orlando, FL 2002. Poster Presentation.
4. "High-throughput biomarker identification in neurological disease" Biomarkers, Boston, MA 2003. Oral Presentation.
5. "Mechanism of neurofibrillary tangle-induced neuronal degeneration leading to AD" Arizona Alzheimer's Research Center annual meeting, Tucson, AZ 2004. Oral Presentation.
6. "Mechanism of neurofibrillary tangle-induced neuronal degeneration leading to Alzheimer's Dementia" 9th International Conference on Alzheimer's Disease and Related Disorders, Philadelphia, PA 2004. Poster Presentation.
7. "Whole-Genome Association Analysis of Sporadic ALS: New Insights into the Pathogenesis of Disease" 17th International Symposium on ALS/MND, Yokohama, Japan 2006. Oral Presentation.
8. "Identifying the molecular mechanisms of pathogenic α -synuclein phosphorylation in Parkinson's Dementia." Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, 2008. Poster Presentation.
9. "Investigation of genes mediating β -amyloid toxicity in Alzheimer's disease." Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, 2008. Poster Presentation.
10. "Identification of DYRK1A and GRK4 as novel regulators of Alzheimer's disease related tau hyperphosphorylation." Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, 2008. Poster Presentation.
11. "High-Content siRNA Screening Identifies DYRK1A and EIF2AK2 as Novel Regulators of β -Amyloid Induced Tau Hyperphosphorylation." Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, 2008. Oral Presentation.
12. "Delineating Tau Hyperphosphorylation: A Look at Alzheimer's Diseases Through RNAi" Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, 2009. Poster Presentation.

13. "EIF2AK2 knockdown in a triple transgenic Alzheimer's disease mouse: effects on Tau pathology?" Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, 2009. Poster Presentation.
14. "Identification of multiple novel regulators of Alzheimer's disease related tau hyperphosphorylation" Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, 2009. Poster Presentation.
15. "Identification of kinases and phosphatases involved in α -synuclein phosphorylation." 13th International Congress of Parkinson's Disease and Movement Disorders, Paris, France, 2009. Poster Presentation.
16. "Application of Expression Profiling and RNAi for Target Discovery in Neurodegenerative Disorders." Neurology Grand Rounds, Barrow Neurological Institute, Phoenix, Arizona, February 2010. Oral Presentation.
17. "DYRK1A-inhibiting β -carboline alkaloids enhance hippocampal dependent working memory in vivo and alter the expression of AD-associated forms of phosphorylated tau protein in vitro." Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, 2011. Oral Presentation.
18. "DYRK1A-inhibiting β -carboline alkaloids enhance hippocampal dependent working memory in vivo and alter the expression of AD-associated forms of phosphorylated tau protein in vitro" 10th International Conference on Alzheimer's and Parkinson's Diseases, Barcelona, Spain, 2011. Oral Presentation
19. "Discovery of AD and PD therapeutic targets using RNA interference" Mayo Clinic Neurology Grand Rounds, Scottsdale, Arizona, March 2011. Oral Presentation.
20. "A potential role for mRNA surveillance in Parkinson's disease?" Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, 2012. Oral Presentation.
21. "A potential role for mRNA surveillance in Parkinson's disease?" 16th International Congress of Parkinson's Disease and Movement Disorders, Dublin, Ireland, June 2012. Poster Presentation.
22. "Comprehensive profiling of DNA methylation differences in patients with Alzheimer's and Parkinson's disease" 11th International Conference on Alzheimer's and Parkinson's Diseases, Florence, Italy, 2013. Poster Presentation.
23. "High-content, loss-of-function RNAi screening to identify regulators of pS129 α -synuclein phosphorylation" 11th International Conference on Alzheimer's and Parkinson's Diseases, Florence, Italy, 2013 Poster Presentation.
24. "Epigenetics and the Future Treatment of Neurodegenerative Disease" Mayo

Clinic Neurology Grand Rounds, Scottsdale, Arizona, April 2013, Oral Presentation.

25. "Comprehensive profiling of DNA methylation differences in patients with Alzheimer's and Parkinson's disease." Arizona Alzheimer's Consortium Annual Meeting, Phoenix, Arizona, May 2013. Oral Presentation.
26. "DNA Methylation as a Biomarker for Parkinson's Disease." Mayo Clinic Neurology Grand Rounds, Scottsdale, Arizona, December 2014. Oral Presentation.
27. "Feasibility of Peripheral Tau Detection to Determine Braak Neurofibrillary Tangle Stage" 12th International Conference on Alzheimer's and Parkinson's Diseases, Nice, France, 2015 Poster Presentation.
28. "DNA methylation as an epigenetic biomarker for Alzheimer's and Parkinson's diseases" 12th International Conference on Alzheimer's and Parkinson's Diseases, Nice, France, 2015 Poster Presentation.
29. "Comprehensive profiling of DNA methylation differences in patients with Alzheimer's disease and Parkinson's disease" Arizona Alzheimer's Consortium Annual meeting, Tempe, Arizona, 2015 Oral Presentation.