# CURRICULUM VITAE NAGI G. AYAD

1. Date: June 1, 2019

I. Personal

2. Name: Nagi George Ayad

3. Home Phone:

4. Office Phone: 305-243-7695

5. Address: 1095 NW 14<sup>th</sup> Terrace, Miami,

Florida, 33136

6. Current Academic Rank: Associate Professor

6A. Current Track of Appointment: Tenured

7. Primary Department: Psychiatry and Behavioral Sciences

8. Secondary or Joint Appointments: None

9. Citizenship: USA

10. Visa Type: N/A

II. Higher Education

11. Institutional:

Yale University; Ph.D., December, 1998

Rutgers University; B.A.; May 1992

12. Non-Institutional: N/A

13. Certification/Licensure: N/A

III. Experience

14. Academic:

University of Miami Miller School of Medicine, Miami, Florida; Associate Professor, Department of Psychiatry and Behavioral Sciences; 2011-Present

The Scripps Research Institute, Scripps Florida, Jupiter, Florida; Assistant Professor, Department of Cancer Biology; 2005-2011

- 15. Hospital Appointments: N/A
- 16. Non-Academic: Merck & Co., Inc.; Rahway NJ; Biochemist; 1992-1993
- 17. Military: N/A
- IV. Publications
- 18. Books and Monographs Published:
  - Penas, C, Stathias, V. Allen, B., **Ayad NG**, The Epigenetics of Medulloblastoma, Epigenetic Cancer Therapy, *SG Gray ed., Elsevier Inc.*, 14:317-338, 2015
- 19. Juried or Refereed Journal Articles and Exhibitions:
  - Winterbottom EF, Moroishi Y, Halchenko Y, Armstrong DA, Beach PJ, Nguyen QP, Capobianco AJ, **Ayad NG**, Marsit CJ, Li Z, Karagas MR, Robbins DJ. <u>Prenatal arsenic exposure alters the placental expression of multiple epigenetic regulators in a sex-dependent manner. *Environ Health*. 2019 Feb 28;18(1):18. doi: 10.1186/s12940-019-0455-9. PubMed PMID: 30819207; PubMed Central PMCID: PMC6396530.
    </u>
  - Stathias V, Jermakowicz AM, Maloof ME, Forlin M, Walters W, Suter RK, Durante MA, Williams SL, Harbour JW, Volmar CH, Lyons NJ, Wahlestedt C, Graham RM, Ivan ME, Komotar RJ, Sarkaria JN, Subramanian A, Golub TR, Schürer SC, **Ayad NG.** Drug and disease signature integration identifies synergistic combinations in glioblastoma. *Nature communications*, December, 2018. PMID: 30552330
  - 3. Chin C, Lunking ES, de la Fuente M, **Ayad NG**. Immunotherapy and epigenetic pathway modulation in glioblastoma multiforme. *Frontiers in Oncology*, November, 2018. PMID:30487124
  - Rodriguez-Blanco J, Li B, Long J, Shen C, Yang F, Orton D, Collins S, Kasahara N, Ayad NG, McCrea HJ, Roussel MF, Weiss WA, Capobianco AJ, Robbins DJ. A CK1a activator penetrates the brain and shows efficacy against drug-resistant metastatic medulloblastoma. *Clinical Cancer Research*, November, 2018. PMID:30487124
  - 5. Rudman MD, Choi JS, Lee HE, Tan SK, **Ayad NG\***, Lee JK\*, Bromodomain and extraterminal domain-containing protein inhibition attenuates acute inflammation after spinal cord injury. *Experimental Neurology*. November, 2018, \*Denotes equal contribution
  - Stathias, V., Koleti, A., Vidovic, D., Cooper, D., Jagodnik, K., Terryn, R., Forlin, M., Chung, C., Torre, D., Ayad, N., Medvedovic, M., Ma'ayan, A., Pillai, A., and Schurer, S., Sustainable data and metadata management at the BD2K-LINCS Data Coordination and Integration Center, *Scientific Data*, June, 2018.
  - 7. Tan SK, Jermakowicz A, Mookhtiar AK, Nemeroff CB, Schürer SC, Ayad NG.

- Drug Repositioning in Glioblastoma: A Pathway Perspective. Front Pharmacol. 2018 Mar 16;9:218. doi: 10.3389/fphar.2018.00218. eCollection 2018. Review.
- 8. Tan SK, Pastori C, Penas C, Komotar RJ, Ivan ME, Wahlestedt C, **Ayad NG**. Serum long noncoding RNA HOTAIR as a novel diagnostic and prognostic biomarker in glioblastoma multiforme. *Mol Cancer*. 2018 Mar 20;17(1):74
- 9. Allen, B.; Mehta, S., Ember, S., Zhu, JY, Schönbrunn, E., **Ayad, NG**; Schürer, S, Identification of a novel class of BRD4 inhibitors by computational screening and binding simulations, *ACS Omega*, August 2017
- Rodriguez-Blanco J, Pednekar L, Penas C, Li B, Martin V, Long J, Lee E, Weiss WA, Rodriguez C, Mehrdad N, Nguyen DM, **Ayad NG**, Rai P, Capobianco AJ, Robbins DJ. Inhibition of WNT signaling attenuates self-renewal of SHH-group medulloblastoma. *Oncogene*, 2017, Jul 17
- 11. Simanski S, Maloof ME, Sato TK, Cavett V, Caldwell Busby J, **Ayad NG**. A cell based screening approach for identifying protein degradation regulators. Cell Cycle, May 19, 2017.
- 12. **Ayad, N.,G.** Lee, J., and Lemmon, V., Casein Kinase Signaling in Axon Regeneration, *Neural Regeneration Research*, Volume 10, 2016
- 13. Allen, B., Mehta, S., Ember, S., Schronbrum, S., **Ayad, NG\***, and Schurer, S, Large-Scale Computational Screening Identifies First in Class Multitarget Inhibitor of EGFR Kinase and BRD4, *Scientific Reports*, 5:16924, 2015 \*Denotes equal contribution
- 14. Penas, C., Hatten, ME. and **Ayad, NG**., The APC/C and CK1 and the Developing Brain, *Oncotarget*, 6(19):16792-3, 2015
- 15. Pastori, C., Kapranov, P., Penas, C., Peschansky, V., Volmar, C.H., Sarkaria, J., Bregy, A., Komotar, R., St. Laurent, G., Ayad, NG\*, and Wahlestedt, CW\*, The BET bromodomain protein BRD4 controls HOTAIR, a long noncoding RNA essential for glioblastoma proliferation, *Proceedings of the National Academy of Sciences USA*, 112(27):8326-31, 2015 \*Denotes equal contribution
- Penas, C., Govek. E., Fang, Y., Ramachandran, V., Daniel, M., Wang, W., Maloof, M., Rahaim, R., Bibian, M., Kawauchi., D., Finkelstein, D., Han, J.L. Long, J., Li, B., Robbins, D.J. Malumbres, M., Roussel., M., Roush, WR., Hatten, M.E., and Ayad, N.G., CK1d is an APC/CCdh1 Substrate Regulating Cerebellar Granule Cell Progenitor Neurogenesis, Cell Reports, 11(2):249-60, 2015
- Penas C, Mishra JK, Wood SD, Schurer SC, Roush WR, Ayad NG. GSK3 inhibitors stabilize Wee1 and reduce cerebellar granule cell progenitor proliferation, *Cell Cycle*, 14(3):417-24, 2015
- 18. Trojanowsky M, Vidovic D, Simanski S, Penas C, Schurer S, Ayad NG. Screening of

- Cell Cycle Fusion proteins to identify Kinase Signaling Networks, *Cell Cycle*, 14(8):1274-81, 2015
- Allen, BK, Stathias V, Maloof ME, Vidovic D, Winterbottom EF, Capobianco AJ, Clarke J, Schurer S, Robbins D, Ayad NG. Epigenetic pathways and glioblastoma treatment: Insights from signaling cascades. *Journal of Cellular Biochemistry*, 116(3):351-63, 2015
- Stathias V, Pastori C, Griffin TZ, Komotar R, Clarke J, Zhang M, Ayad NG. Identifying glioblastoma gene networks based on hypergeometric test analysis, *PLoS One*, 9(12):e115842, 2014
- 21. Long, J., Li, B., Rodriguez-Blanco J, Pastori C, Volmar CH, Wahlestedt C, Capobianco A, Bai F, Pei XH, **Ayad NG\***, Robbins DJ\*. The BET bromodomain inhibitor I-BET151 acts downstream of smoothened to abrogate the growth of hedgehog driven cancers, *The Journal of Biological Chemistry*, 289(51):35494, 2014. Denotes equal contribution.
- 22. Plotkin A, Volmar CH, Wahlestedt C, **Ayad N**, El-Ashry D. Transcriptional repression of ER through hMAPK dependent histone deacetylation by class I HDACs, *Breast Cancer Research Treatment*, 147(2):249-63, 2014
- 23. Penas, C., Ramachandran V, Simanski S, Lee C, Madoux F, Rahaim RJ, Chauhan R, Barnaby O, Schurer S, Hodder P, Steen J, Roush WR, **Ayad NG**. Casein Kinase 1δ Dependent Wee1 Degradation, *Journal of Biological Chemistry*, 289(27):18893-903, 2014
- 24. Pastori C, Daniel M, Penas C, Volmar CH, Johnstone AL, Brothers SP, Graham RM, Allen B, Sarkaria JN, Komotar RJ, Wahlestedt C, **Ayad NG**. BET Bromodomain Proteins are Required for Glioblastoma Cell Proliferation, *Epigenetics*, 9(4):611-20, 2014
- 25. Clarke, J., Penas, C., Pastori, C., Komotar, R., bregy, A., Shah, A., Wahlestedt, C., and **Ayad, N.G.** Epigenetic Pathways and Glioblastoma Treatment, *Epigenetics*, 8(8):785-95, 2013
- 26. Penas, C., Ramachandran, V., and **Ayad, N.G.**, The APC/C Ubiquitin Ligase: from Cell Biology to Tumorigenesis, *Frontiers in Oncology, 2012*
- 27. Madoux F, Mishra J, Mercer BA, **Ayad N**, Roush W, Hodder P, Rosen HR. Small Molecule Inhibitors of Wee1 Degradation and Mitotic Entry. Probe Reports from the NIH Molecular Libraries Program [Internet], National Center for Biotechnology Information (US), 2011
- 28. Madoux F, Simanski S, Chase P, Mishra JK, Roush WR, **Ayad NG**, Hodder P. An Ultra-High Throughput Cell-Based Screen for Wee1 Degradation Inhibitors, *J Biomol Screen*, 15(8):907-17, 2010

- 29. Simanski S, Madoux F, Rahaim RJ, Chase P, Schurer S, Cameron M, Mercer BA,, Hodder P, Roush WR, **Ayad NG**. Identification of Small Molecule Inhibitors of Wee1 Degradation and Mitotic Entry. Probe Reports from the NIH Molecular Libraries Program [Internet]. Bethesda (MD): National Center for Biotechnology Information (US); 2010.
- 30. Owens, L., Simanski, S., Squire, C., Smith, A., Cartzendafner, J., Cavett, V., Busby, J, Sato, T., and **Ayad, N.G**. Activation domain dependent degradation of somatic wee1 kinase *Journal of Biological Chemistry*, 285:6761-9, 2010
- 31. Harmey, D., Smith, A., Simanski, S., Zaki, C., and **Ayad, N.G**. The Anaphase Promoting Complex induces substrate degradation during neuronal differentiation. Journal of Biological Chemistry, *Journal of Biological Chemistry*, 284:4317-4323, 2009
- 32. Smith, A, Simanski, S, Fallahi, M, and **Ayad, N.G**. Redundant ubiquitin ligase activities regulate wee1 degradation and mitotic entry, *Cell Cycle*, Volume 6, 22, 2007.
- 33. Rankin, S., **Ayad, N.G.**, and Kirschner, MW. Sororin, a substrate of the Anaphase Promoting Complex is required for sister chromatid separation in vertebrates *Molecular Cell*, 18(2):185-200, 2005
- 34. Wei, W\*, **Ayad, N.G**.\*, Wan, Y., Zhang, G., Kirschner, MW, and Kaelin, W. Destruction of the SCF component Skp2 in G1 by the Anaphase Promoting Complex, *Nature*, 428:194-198, 2004 Denotes equal contribution
- 35. **Ayad, N.G.**, Rankin, S., Murakami, M., Jebanathirajah, J., Gygi, S., and Kirschner, MW. Tome-1, a trigger of mitotic entry, is degraded during G1 via the APC, *Cell*, 113: 101-11, 2003
- 36. Ayad, N.G., Cdks Give Cdc6 a License to Drive into S phase, Cell, Vol. 122, 1-2, 2005
- 37. **Ayad, N. G.**, Rankin, S., Ooi, D., Rape, M., and Kirschner, M.W., Identification of ubiquitin ligase substrates by in vitro expression cloning. *Methods in Enzymology*, 399C:404-414, 2005.
- 38. Song, M., Song, S., **Ayad, N.G.**, Lee, J., Hong, H., Chang, J., Kim, J., Choi, E., Kirschner, M., Lim, D. The tumor suppressor RASSF1A regulates mitotic progression through interaction with Cdc20 and inhibition of the anaphase-promoting complex. *Nature Cell Biology*, 6:129-137, 2004
- 39. **Ayad, N**., Hull, M, and Mellman, I. Mitotic phosphorylation of rab4 prevents binding to a specific receptor on endosome membranes. *EMBOJ* 16, 15 pp.4497-4507, 1997
- 40. Moyle, WR., Campbell, RK., Rao, SN, **Ayad, NG**, Bernard, MP, Han, Y, and Wang, Y. Model of human chorionic gonadotropin and lutropin receptor interaction that explains signal transduction of the glycoprotein hormones. *Journal of Biological Chemistry*, 270(34):20020-31, 1995
- 41. Marko, O., Cascieri, MA., **Ayad, N**., and Strader, CD., Candelore, MR. Isolation of a preadipocyte cell line from rat bone marrow and differentiation to adipocytes. *Endocrinology*, 136(10):4582-8, 1995

# 20. Other works, publications, and abstracts

## Patent Applications:

- 1. "Novel Cell Cycle Genes Required for Mitotic Entry" Harvard case 21881
- 2. "Modulation of Protein Stability and Uses Thereof"- PCT/US08/86447
- 3. "Wee1 Degradation Inhibitors" Patent application- SLW 1361.154PV2
- 21. Other works accepted for publication:
  - 1. Penas, C., Maloof, M., Stathias, V., Long, J., Tan, S.K., Mier, J., Fang, Y., Valdes, C., Rodriguez-Blanco, J., Chiang, C-M, Robbins, D. J., Liebl, D. J., Lee, J.K., Hatten, M.E., Clarke, J., Ayad, N.G. Time series modeling of cell cycle exit identifies Brd4 dependent regulation of cerebellar neurogenesis. Nature communications. In Press.
- V. Professional
- 22. Funded Research

Current Research

W81XWH-17-1-0460 DOD

8/1/2017 - 7/31/2020

\$762.468

Ayad (PI) Epigenetic Pathways in Spinal Cord Injury, SC160139. The major goals of this project are to investigate the role of bromodomain and extraterminal proteins (BETs) in inflammation after SCI.

R56 NS102590-01

8/1/2017-7/31/2019

\$383.750

Ayad (PI) Epigenetic and Kinase Pathway Interactions in Medulloblastoma, The goal of this grant is to validate CK1 and BRD4 as therapeutic targets in medullobastoma.

SCCC funding

6/1/2018-7/31/2021

\$600,000

The Ayad laboratory is receiving \$200,000 per year for three years from the SCCC to assist in operations related to glioblastoma and medulloblastoma and the University of Miami Brain Tumor Initiative.

Completed Research

The Childhood Brain Tumor Foundation 9/1/2015 - 8/31/2017

\$60,000

Penas (PI), Ayad (PI)

A Novel CK1-Brd4 pathway for the treatment of medulloblastoma

The goal of this grant is to identify therapeutic targets in medulloblastoma.

St. Baldrick's Foundation

6/1/2017-12/31/2017

\$5.000

Tan (PI), Ayad (PI)

The goal of this grant is to identify therapeutic targets in medulloblastoma.

Women's Cancer Association 6/1/2015 - 5/30/2016 \$50,000

Ayad (PI), Zelent (Co-I), Swords (Co-I)

Identifying Dual BET-FLT3 Inhibitors for Acute Myelogenous Leukemia

The goal of this grant is to identify dual BET-FLT3 inhibitors for the treatment of leukemia. We are utilizing a chemiformatic approach to identify small molecules that inhibit both BRD4 and FLT3, two targets in leukemia.

Epigenetics Program, Sylvester Comprehensive Cancer Center \$50,000 Ayad (PI), Wahlestedt (Co-PI)

The Role of Long Noncoding RNAs in Glioblastoma

The goal of this grant is to identify the role of lncRNAs in GBM progression.

1R01NS067289-01A1 Ayad (PI) 6/1/2010-5/30/2015 \$563,676/year The Anaphase Promoting Complex and Cell Cycle Exit

The goal of this grant is to determine the contribution of the ubiquitin ligase the Anaphase Promoting Complex to cell cycle exit in the cerebellum. The Anaphase Promoting Complex has recently been shown to be required for different aspects of neuronal survival but its in vivo role in neurons has not been addressed. We are conditionally deleting Anaphase Promoting Complex subunits to determine its role in medulloblastoma and other neurological diseases. We are also identifying novel ubiquitin ligases and kinases required for cell cycle exit and neuronal survival.

IRDI University of Miami, 103328 Ayad (PI) 12/15/2012-12/14/2013 \$75,000/year Identifying Cancer Targets Based on Non-coding RNA Expression

Epigenetix, Inc. Ayad (PI) 3/08/13-3/07/14 \$167,00 per year Small Molecule Inhibitors of Epigenetic Enzymes

1 R21 NS056991-01 Ayad (PI) 06/15/2006 - 06/14/2007 NIH-NINDS \$125,000 Small Molecule Inhibitors of Wee1 Degradation and Proliferation

The goal of this grant is to discover proof of concept molecules that will inhibit wee1 degradation. Wee1 is an inhibitor of mitosis in several eukaryotic cells. Several studies have demonstrated that it is degraded in order to initiate mitotic entry

1 R21 NS056991S1 Ayad (PI) 06/15/2007 - 06/14/2008 NIH-NINDS \$25,000

1 R21 NS056991S2 Ayad (PI) 06/15/2008 - 06/14/2009 NIH-NINDS \$25,000

Landenberger Foundation Grant Ayad (PI) 11/1/07-7/30/10 \$350,000; Developing cell based screens to identify essential proteolysis sites. The goal of this grant is to develop cell-based screens to identify regions of tumor suppressor proteins required for protein turnover.

## 23. Editorial responsibilities:

Editorial Board Member, Frontiers in Genetics, 4/2013-Present

Ad hoc reviewer: 2005-present, Cell, Molecular Cell, Molecular Cell Biology, Molecular Biology of the Cell, PlosGenetics, Cancers, Molecular Brain, Endocrine Related Cancer

NSF reviewer, April 2019.

CNBT NIH study section ad hoc member, October 2018, February 2019

DOD H-NB-PBT Panel reviewer, November 2018

DOD Peer Review Cancer Research Program reviewer, November 2018

Reviewer of BBSRC grants, UK, July 2015

Reviewer of Kika pediatric brain tumor grants, Netherlands, July 2015

Reviewer or MRC grant applications, 11/2012

Reviewer for NIH grant applications, K99/R00 awards. 2/2013

24. Professional and Honorary Organizations:

Member, American Association for the Advancement of Cancer Research, 2012-present

25. Honors and Awards:

Leukemia and Lymphoma fellowship award, 2000-2003

Highest Honors, Rutgers Biology Department, 1992

Henry Rutgers Scholar, 1992

UMDNJ-Rutgers Medical School Distinguished Summer Scholar, 1991

26. Post-Doctoral Fellowships:

Postdoctoral Research Associate with Dr. Marc W. Kirschner, Harvard Medical School, 1999-2004

27. Other Professional Activities:

Abstracts and Posters:

- Trojanowsky, M., Ayad, N.G., and Lee, J. Bromodomain and Extraterminal Domain-Containing Proteins Modulate Inflammatory Signaling in Spinal Cord Injury, Miami Winter Symposium 2016, Miami, FI
- Allen, B., Mehta, S., Ember, S., Schonbrunn, E., Ayad N., Schurer, S. Identification of a novel class of BRD4 binders by high-throughput computational structural biology, Miami Winter Symposium 2016
- Trojanowsky, M., Ayad, N.G., and Lee, J. Bromodomain and Extraterminal Domain-Containing Proteins Modulate Inflammatory Signaling in Spinal Cord Injury, International Symposium on Neural Regeneration 2015, Asilomar, CA
- Trojanowsky, M., Ayad, N.G., and Lee, J. Bromodomain and Extraterminal Domain-Containing Proteins Modulate Inflammatory Signaling in Astrocytes, Neuroscience Research Day, 2015, Miami, Fl

- Trojanowsky, M., Penas, C., Ayad, N.G., and Lee, J. BET Proteins Modulate Inflammatory Signaling after Spinal Cord Injury" - MD/PhD Research Symposium 2015
- Maloof, M. and Ayad, NG. The Transcription Factor FoxP2 is Expressed During Cerebellar Granule Cell Differentiation, Neuroscience Research Day, University of Miami, 2015
- Penas, C., Hatten, ME, Ayad, NG, Cell cycle exit in the developing nervous system.
   Gordon Research Conference, Waterville Valley, NH, June, 2014, Poster
- Trojanowsky, M., Penas, C., Ayad, N.G., and Lee, J. "Epigenetic Modulation of Inflammation in Spinal Cord Injury" -Neuroscience Research Day 2014
- Penas, C., Tsouflas P, Lemmon V, Ayad NG. Brain clearing for assessment of tumor growth and therapy effectiveness. Cancer Symposium. Miami. US. March. 2014. Poster
- Penas C, Govek EE, Fang Y, Ramachandran V, Daniel M, Wang W, Maloof ME, Rahaim RJ, Bibian M Kawauchi D, Finkelstein D, Han JL, Long H, Li B, Robbins DJ, Malumbres M, Roussel M, Roush WR, Hatten ME, Ayad NG. Functional Proteomics Identifies CK1 as a Therapeutic Target in Medulloblastoma. Miami Winter Symposium. Miami. USA. January, 2015
- Allen, B., Mehta, S., Ayad, NG, Schurer, S., Ligand and Structure-Based Virtual Screening to Discover EGFR and BRD4 Inhibitors, Cancer Symposium, Miami, US, March 2014, Poster.
- Pastori, C., Penas, C., Kapranov, P., St. Laurent, G., Ayad, N.G., and Washlestedt, C., The long noncoding RNA HOTAIR promotes Glioblastoma Cell Proliferation, American Association for The Advancement of Cancer Research, San Diego, 2014
- Pastori, C., Penas, C., Kapranov, P., St. Laurent, G., Ayad, N.G., and Washlestedt, C., The Bromodomain Inhibitors regulate long noncoding RNAs controlling glioblastoma progression. University of Miami Sylvester Comprehensive Center Retreat
- Stathias, V., Pastori, C., Komotar, R., Zhang, M., Clarke, J., and Ayad NG. An Integrated Bioinformatics Approach for Identifying Novel Gene Networks in Glioblastoma Miami, 2014, Poster
- Penas, C., Daniel M, Ayad NG. The APC/CCdh1 and PTEN in neuronal differentiation.
   Society for Neuroscience. New Orleans. US. October, 2012. Poster
- Ayad, N., Hatten, ME, Roush, W., Casein Kinase 1 regulates mitotic entry and cerebellar granule cell proliferation. Society for Neuroscience Meeting, 2011, Poster, Press Release Associated with this poster

## Invited Speaker:

Invited Speaker, Systems Biology Approaches to Decoding Neurogenesis, Neuroscience Program, University of Miami, May 2018

Invited Speaker, Epigenetic and Kinase Pathway Interactions in Glioma, B2DK-LINCS Data Science Symposium 2018, February 2018

Invited Speaker, Efforts to Identify Therapeutic Combinations in Glioma, Human Genetics and Genomics Seminar, University of Miami, February 2018

Invited Speaker, A Novel Epigenetic Pathway for the Treatment of Medulloblastoma, Society for Neuro-oncology meeting, November 2016.

Invited Speaker, Modeling Cell Cycle Exit to Identify Therapeutic Combinations in Brain Cancer, The Hebrew University, Jerusalem, Israel, June 2016

Invited Speaker, St. Jude Children's Hospital, November 2015

Invited Speaker, The Past, Present, and Future of Systems Biology, Harvard medical School, Boston, MA, July 2015

Invited Speaker, The Mayo Clinic, Rochester, MN, July 2014, Efforts to Identify Druggable Targets in Brain Cancer

Invited Moderator and Presenter, 4<sup>th</sup> Cancer Targets and Therapeutics Conference, Las Vegas, Nevada, February 2013

Invited Open Ceremony Presenter and Moderator, Protein Kinases and Drug Design GTC conference, Boston, MA, November 2012

Invited Opening Ceremony Presenter and Moderator, Translational Medicine OMICS conference, September 2012

Chemical Genetics and The Ubiquitin Proteasome Pathway, Cornell University, NY, April 2011

Mitotic Entry, Exit, and Neuronal Precursors, University of Miami, Miami, Fl, April, 2008

Cell Based Screening Identifies Novel Regulators of the Anaphase Promoting Complex, The Ubiquitin Family, Cold Spring Harbor Meeting, New York, April, 2007

High Throughput Screening, Ubiquitin ligases, and Differentiation, Columbia University, New York, NY, 2006

Proteolytic Control of Differentiation: Surprising Insights from the Cell Cycle, University of Florida, Gainesville, 2006

Proteolytic Control of Differentiation: Surprising Insights from the Cell Cycle, MGH, Cancer Center, Boston, MA, 2004

Proteolytic Control of Differentiation: Surprising Insights from the Cell Cycle, Columbia, University, New York, NY, 2004

Proteolytic Control of Differentiation: Surprising Insights from the Cell Cycle, Rockefeller University, New York, NY, 2004

The Anaphase Promoting Complex: A Master Regulator of the Cell Cycle, Curie Institute, Paris, France, 2003

A Novel APC Substrate Regulates Mitotic Entry, American Society of Cell Biology Meeting, Washington D.C., USA, 2001

Identification of a Novel Substrate of the Anaphase Promoting Complex, Brooklyn College,

USA, 2001

In Vitro Expression Cloning Identifies a Novel Substrate of the APC, ELSO -European life science organization meeting, Geneva, Switzerland, 2000

FASEB Summer Research Conference, Ras GTPase Super Family, Snow Mass, USA, 1997 Yale University, Graduate Student Research Symposium, 1997

- V. Teaching
- 28. Teaching Awards Received: N/A
- 29. Teaching Specialization:

NEU600 Neuroscience Journal Club Module Moderator, Spring 2013, Fall 2014, University of Miami

Taught Module in Cancer Biology Course, Spring 2012, Spring 2014, University of Miami.

Teaching Fellow, Cell Biology, Harvard University (responsible for teaching Harvard undergraduates cell biology), 2001-2002

Teaching assistant, Histology, Yale Medical School (responsible for teaching Yale Medical School students both histology and cell biology), 1994-1996

Teaching assistant, Cell Biology, Yale Medical School, 1995-1996 Cell Biology /Histology Tutor, Yale Medical School, 1994-1995

30. Thesis and Dissertation Advising/Post-doctoral student supervision:

Dissertation Committee Chair: Lindsay Milich, University of Miami, 2018-present Veronica Peschansky, University of Miami, 2012-2015 Amber Hackett, University of Miami, 2012-2016 Hema Raju, University of Miami, 2011-2016 Matthew Danzi, University of Miami, 2013-2017

## Dissertation Committee Member:

Stephen Tapanes, University of Miami, 2018-present Lindsay Milich, University of Miami, 2018-present Amy Plotkin, University of Miami, 2013-2014 Emmanuel Perez, University of Miami, 2013-2016 Dilaria Koynuncu, University of Miami, 2013-present Ann Greene, University of Miami, 2013-2015 Hongmei Liu, University of Miami, 2017 *Qualifying Examination Committee Member:* Wen Ding, University of Miami, 2013 Lei Cao, University of Miami, 2012

External thesis committee member while on faculty at Scripps Florida: Alexandra Locovei, Department of Pharmacology, University of Miami, January 2009

LeinWeih Andrew Tseng, Department of Pharmacology, University of Miami, June, 2010

Post-doctoral advisor:

#### Past:

Brain Cancer Research, Dr. Clara Penas, currently Assistant Professor, University of Barcelona

Drug Discovery; Dr. Anthony Smith, currently Senior Scientist, Scripps Florida Drug Discovery Dr. Dympna Harmey, currently Senior Scientist, Mount Sinai, NY

#### Dissertation Advisor:

Vasileios Stathias, April 2013- 2017, Brain Cancer Research
Marie Maloof, April 2014-Present, Brain Cancer Research
Anna Jermakowicz, April 2016-Present, Brain Cancer Research
Bryce Allen, April 2014-2016, Brain Cancer Research
Michelle Trajonowsky, April 2014-2017, Spinal Cord Injury, currently medical student,
University of Miami Miller School of Medicine

#### VII. SERVICE

31. University Committee and Administrative Responsibilities:

#### Institutional:

Founding Member, Center for Therapeutic Innovation, University of Miami Miller School of Medicine (March 2011-Present)

Co-Director, University of Miami Brain Tumor Initiative laboratory, University of Miami Miller School of Medicine (March 2012-Present)

Member, M.D.-Ph.D. Program, 2012- Present

Member, SAC awards committee, September 2016-Present

Member, Mary Bunge Women in Cell Biology Committee, March 2017-Present

Member, Sylvester Comprehensive Cancer Center, November 2012-Present

Member, Epigenetics Cancer Program, November 2012-Present

Member, Sylvester Comprehensive Cancer Center Feasibility committee, September 2018-Present

Member, Pharmacology Program, Neuroscience Program, Human Genomics Program, University of Miami

Human Genomics Steering Committee, University of Miami, August 2012-2015, 2018-Present

Scripps Florida IACUC member; 2006-2008

Scripps Florida Graduate School Admissions Committee, 2006-2008

# 32. Community Activities:

Stand Up 2 Cancer High School program, Summer 2017

Miami Dade College Bridges Program, Summer 2016

High School Science Outreach: JJ Vance Summer Internship host laboratory 2011-2012

Scripps Outreach High School Internship Program, 2005-2011