EMORY UNIVERSITY SCHOOL OF MEDICINE STANDARD CURRICULUM VITAE FORMAT

[The following order is required; may omit non-applicable sections]

Revised: 04/03/2015

1. Name: Anna Marie Kenney

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3. **E-mail Address**: anna.kenney@emory.edu

4. **Citizenship:** USA

5. Current Titles and Affiliations:

- a. Academic Appointments:
 - 1. Primary Appointments:
 Associate Professor, Pediatrics, Emory School of Medicine, January 1, 2013
 - 2. Joint and Secondary Appointments:
- b. Clinical Appointments:N/A
- c. Other Administrative Appointments:

 Director, Pediatric Neuro-oncology basic research program, Emory Children's Center
- 6. Previous Academic and Professional Appointments:

Instructor in Pediatric Oncology, Dana-Farber Cancer Institute/Harvard Medical School, 2003-2005

Assistant Member, Cancer Biology and Genetics, Memorial Sloan-Kettering Cancer Center, 2005-2011

Assistant Professor, Cell Biology, Weill Cornell Medical College, 2005-2011 Assistant Professor, Neurobiology, Weill Cornell Medical College, 2007-2011 Associate Professor, Neurosurgery and Cancer Biology, Vanderbilt University, 2011-2012

- 7. Previous Administrative and/or Clinical Appointments: N/A
- 8. **Licensures / Boards:** N/A [Include state and date issued]
- 9. Specialty Boards: N/A
- 10. Education:

1988-1991 BA St. Mary's College of Maryland (Biology, Jeffrey Byrd and David Cribbs) 1991-1998 PhD Yale University (Neuroscience, Jeffrey Kocsis)

11. Postgraduate Training:

Dana Farber Cancer Institute/Harvard Medical School, David Rowitch MD, PhD 1998-2003

12. Military or Government Service: N/A

[Dates]

13. Committee Memberships:

a. National and International:

Ad-hoc member: NIH Neural Cell Fate Study Section, January 2009

Ad-hoc member: NIH Cancer and Molecular Pathology study section 2009-2011

Ad hoc member: NIH Molecular Oncology study section 2012, 2013 Ad hoc member: NIH Tumor Cell Biology study section 2012, 2013 Permanent member, NIH Tumor Cell Biology study section, June 2014-

Invited member, College of reviewers for Canada Research Chairs Program, July 2014-Proposal review committee, PBTF Early Career Development Grants September 2014,

2015

b. Regional and State: N/A

[Committee, office held if any, year(s)]

c. Institutional:

MSKCC Cancer Biology and Genetics faculty search committee, 2006-2010 MSKCC Cancer Biology and Genetics Departmental retreat committee 2008-10 Gerstner-Sloan-Kettering graduate program admissions committee, 2010 Emory Pediatrics Infrastructure Committee, 1/2013-

Winship Cancer Biology Graduate Program Recruitment Committee, 12/2014-Laney Graduate School Neuroscience Program: Oral Exams Committee, 12/2014, 2015 Director, Winship Cancer Biology Graduate Program recruitment Committee 6/2015-

Emory University Cancer Biology Graduate Program Executive Committee 6/2015-

14. Consultantships: N/A

[Company or agency, year(s)]

15. Editorships and Editorial Boards: Translational Pediatrics, Editorial Board 12/2014-

16. Manuscript Reviewer:

Cancer Research 2005-present

Genes and Development 2006-present

Development 2006-present

Oncogene 2006-present

Cell Death and Differentiation 2007-present

PNAS 2006-present

EMBO 2006-present

Cancer Cell 2007-present

Developmental Cell 2007-present

Cerebellum 2009-present

Journal of Clinical investigation 2010-present

Neurobiology of Disease, 2013-Nature, 2014-**Cell Reports, 2015-**

17. Honors and Awards:

Full scholarship, Charlotte Brent Honors Program, 1988-91 University of Maryland undergraduate research fellowship, 1990-1991 Summa Cum Laude, St. Mary's College of Maryland, 1991 American Brain Tumor Association post-doctoral fellowship, 1999-2001 The Medical Foundation, Inc. postdoctoral fellowship, 2001-2003 Dana-Farber Pediatric Oncology departmental award, 2002 The Sontag Foundation Distinguished Scientist award, 2003-2007 Phi Beta Kappa (St. Mary's College of Maryland chapter), 2005 Handler Foundation award for new investigators at MSKCC, 2006-2010 Alex's Lemonade Stand Foundation Young Investigator Award, 2006-2008 Children's Brain Tumor Foundation Award, 2007-2009 Pediatric Brain Tumor Foundation Award, 2007-2008 Childhood Brain Tumor Foundation of MD award, 2008-2009 Alex's Lemonade Stand Innovation Award 2009-2011 National Brain Tumor Society Award, 2009-2013 Childhood Brain Tumor Foundation Award, 2010-2012 James S. McDonnell Foundation 21st Century Science Initiative Award, 2010-214 Pediatric Cancer Research Foundation Award 2014-2015

18. Society Memberships:

Society for Neuroscience 1993-present
American Association for the Advancement of Science 1998-present
American Association for Cancer Research 1998-present
International Society for Stem Cell Research 2003-2005
Harvard Center for Neurodegeneration and Repair 2004-2005
Society for Neuro-oncology 2006-present

19. Organization of National or International Conferences:

a. Administrative Positions:

Organizing committee, EMBO workshop: Stemness, the bright side and the dark side. September 19-22, 2006. Catanzaro, Italy

Organizing committee, Medulloblastoma in the Mountains. December 14-17, 2011. Lake Tahoe, CA

Abstract Selection Committee, Society for Neuro-Oncology Annual Meeting Nov 2014, Miami FL

Scientific Program Committee, Pediatric Neuro-Oncology Basic and Translational Research Conference May 2015, San Diego CA

b. Sessions as chair: Pediatric Neuro-Oncology Basic and Translational Research Conference May 2015, San Diego CA, medulloblastoma session

20. Research Focus:

We investigate the mechanisms through which mitogenic signaling pathways in the

developing brain can, through aberrant activity, contribute to the transformation of pediatric brain tumor cells-of-origin. Our goal is to identify signaling networks that could be targeted by small molecule inhibitors, to improve patient survival and quality of life.

21. Patents

- a. Issued:N/A
- b. Pending:N/A

22. Grant Support:

[Investigator Status (P.I., Co-P.I.), source, title, award type, amount, year(s)]

- a. Active Support:
 - 1. Federally Funded:

PI NIH/NINDS Hedgehog:YAP:IGF2/mTOR axis in cerebellar precursor division and medulloblastoma. R01 (renewed) \$1,706,250 2012-2017

2. Private Foundation Funded:

PI CURE Childhood Cancer Foundation: YAP-mediated metabolism and mitochondrial morphology in medulloblastoma \$97,500 7/1/2015-6/30/2016

3. Contracts: N/A

4. Other: N/A

b. Previous Support

PI Sontag Foundation N-myc in brain development and medulloblastoma. Distinguished scientist award. \$500,000 2003-2007

PI Alex's Lemonade Stand Foundation Hedgehog and IGF signaling through IRS1 in brain development and medulloblastoma. \$30,000 2006-2007

PI Children's Brain Tumor Foundation TSC inactivation in cerebellar development .and medulloblastoma. \$50,000 2006-2008

PI Handler Foundation mRNA translation machinery in cerebellar development. \$160,000 2006-2010

PI Pediatric Brain Tumor Foundation TSC loss-of-function in medulloblastoma. \$50,000 2007-2008

PI Childhood Brain Tumor Foundation Consequences of inactivating the tumor suppressor TSC2 on brain development and medulloblastoma. \$50,000 2008-2009

PI Alex's Lemonade Stand Foundation. Linking mitogenic Sonic hedgehog signaling to the oncogene YAP1 in neural stem/progenitor cells and medulloblastoma. Innovation award. \$200,000 2009-2011

Co-I (PI Tim Gershon, UNC) Matthew Larson Foundation Interaction of retinoic acid and mTOR signaling pathways in cerebellar progenitors and medulloblastoma. \$50,000 2009-2010

PI National Brain Tumor Society. YAP1 as an effector of Sonic hedgehog mitogenic signaling in cerebellar development and medulloblastoma. \$200,000 2009-2012

PI James S. McDonnell Foundation Hedgehog and Hippo signaling as drivers of medulloblastoma and cell division-associated metabolic choices. Science initiative award. \$450,000 2010-2014

PI CURE Childhood Cancer Medulloblastoma/Neuroblastoma Group Image Capture Station 7/1/2013 \$52,000 for purchase of microscopes

PI CURE Childhood Cancer Targeting tumor metabolism in medulloblastoma: lipogenesis and glycolysis \$74,000 7/1/2013-6/30/2014

Pediatric Cancer Research Foundation Yes-Associated Protein: A Master Metabolic Regulator in Medulloblastoma \$25,000 1/1/2014-12/30/2015

PI CURE Childhood Cancer Foundation: Targeting medulloblastoma growth and radiation resistance: gene expression and DNA repair \$97,000 7/1/2014-6/30/2015

23. Clinical Service Contributions N/A

[Significant Accomplishments]

24. Formal Teaching:

[Activity, year(s)]

- a. Medical Student Teaching: NA
- b. Graduate Programs:
 - 1. Training Programs: Weill Cornell Biochemistry and Molecular Biology Program and Gerstner Sloan-Kettering Graduate Program 9/2005-12/2010

2006-2009 BCMP Molecular genetics course, Cancer Genetics module (1 lecture/yr). 1st year graduate students

2007-2010 GSK general course, hedgehog signaling module (1 lecture/yr). 1st year graduate students

Fall 2009 Focus group leader (GSK): "Signaling pathways and brain cancer" 2009-2010 Course director, Graduate Student Seminar Series (BCMP). 4 sessions/yr. 1st-5th year students

Emory University Neurobiology Graduate Program 11/2013-

Emory University Cancer Cell Biology Program 11/2013-

Spring 2015 Course Co-Director, IBS 522 Hypothesis Design and Scientific Writing, Emory Cancer Cell Biology Program

Spring and fall 2015 Discussant, IBS 555 Cancer Biology Small Discussion group

2. Residency Programs: N/A

c. Other Categories N/A [Physician assistant, physical therapist, etc.]

25. Supervisory Teaching:

a. PhD Students Directly Supervised:

Lori (Mainwaring) Ramkissoon 2006-2010 Weil Cornell BCMP student; Post-doctoral fellow at Brigham and Women's Hospital, Harvard Medical School (Gliomagenesis, Keith Ligon lab)

Yun Wei May 2014- Emory University Cancer Biology Program PhD candidate Hope Robinson May 2015- Emory University Cancer Biology Program PhD Candidate Nicholas Eyrich September 2015- Emory University Cancer Biology Master's student

b. Post-doctoral Fellows Directly Supervised

Susana Parathath, PhD. (National Research Service Award) 2006-2009 Medical Science Liaison, Celgene Inc.

Bipin Bhatia, PhD. (American Brain Tumor Association fellowship) 2006-2011 Field Application Scientist III, EMD Millipore

Africa Fernandez-Lopez, PhD. (Charles Revson Foundation fellowship) 2007-2010 Project coordinator in Experimental Therapeutics, Pediatric Clinical Trials Office, Memorial Sloan-Kettering

Cemile Guldal, PhD. 2008-2012 Freelance Science Editor at Bioscience Editing Solutions; Editor/Senior Technical Writer at Klasko, Rulon, Stock, and Seltzer LLP Anshu Malhotra, PhD 4/2012-present (**2016 Pediatric Cancer Research Foundation fellowship**)

Abhinav Dey,,PhD 1/2013-present (**2015-2017 Alex's Lemonade Stand Young Investigator Award**)

Victor Maximov, PhD 12/2013-present

b. Residency Program: N/A [Name, years, current position]

c. Other:

2005-2007 Supervision of Hunter College undergrad Arash Shirazi, now research assistant at Columbia University

2008 Supervision of high school student Richard Bankoff, now Anthropology major at Amherst College

2008-2010 Supervision of high school student Adiba Ahmad, now Chemical and Biomolecular Engineering major at NYU

2009 Supervision of GWU undergrad Jeff Shenfeld, went on to post-bacc program at Hofstra

2010 Supervision of high school student Kyle Malcolme, now Engineering major at University of Delaware

2011-2012 Supervision of University of Chicago undergrad Rebecca Silverberg, Psychology and Neuroscience major

2012 Supervision of Lipscomb undergrad Alex Patterson, now med student at University of Kentucky

2012 Supervision of Lipscomb undergrad Porter Maerz, now med student at University of Florida

2013 Summer supervision of high school junior Meghana Nallajerla

2014 Summer supervision of University of Warsaw Poland graduate student Jacek Neska

2014-2015, Supervisor Emory Biology undergraduate Niyathi Prasad, Research for Credit

September 2015- Jim Felcker, MD Emory Pediatrics Heme Onc fellow May 2106—Summer supervision of Theodore Virtue, GA Tech undergrad

Service as a graduate advisor on thesis and dissertation committees

2009-12/31/10 Thesis committee member, Neha Bagwat (GSK)

2008-12/31/10 Thesis committee member, Sebastian Shaffer (BCMP)

2007-12/31/10 Thesis committee member, Elizaveta Petrova (BCMP)

2008-12/31/10 Thesis committee member, Sara Kubek (BCMP)

1/1/11-12/31/12 Thesis committee member, Pritha Paul (Vanderbilt) 09/2104- Thesis committee member, Hope Robinson (Emory CB)

01/2016- Thesis committee member, Cara Schaivon (Emory CB)

-2006-2009 Weill-Cornell Advancement to Candidacy Exam committee (2nd year graduate students in Biochemistry, Cell, and Molecular Biology Program (BCMP))

26. Lectureships, Seminar Invitations, and Visiting Professorships:

Merck/IRBM, Rome Invited speaker: Sonic hedgehog signaling interactions in the developing brain and medulloblastoma. Feb 2007

St Mary's College of Maryland invited alumna seminar: Cell growth and division in the developing brain and pediatric brain cancer. March 2007

UC Davis (Paul Knoepfler): Signaling pathways regulating cerebellar development and medulloblastoma. Jan 2009

University of Calgary (Peter Forsyth): Signaling pathways regulating cerebellar development and medulloblastoma. March 2009

Molecular Embryology of the Mouse Cold Spring Harbor Course Lecturer (Kat Hadjantakis, course director) June 2009

University of Delaware (Deni Galileo): Signaling pathways regulating cerebellar development and medulloblastoma. Oct 2009

Duke University (Rob Wechsler-Reya): Signaling pathways regulating cerebellar development and medulloblastoma Nov 2009.

Harvard/MGH Cancer Center (Nabeel Bardeezy): *Interactions between proliferation-controling pathways in the developing brain and medulloblastoma*. April 2010

Millenium, Inc, Boston MA (Keisuke Kuida): *Interactions between proliferation-controling pathways in the developing brain and medulloblastoma*. April 2010

- EMBO workshop, "Hedgehog signaling: from developmental biology to anti-cancer drugs". St. Jean Cap Ferrat, Nice, France, short talk. May 2010
- UCSF neurosurgery grand rounds (M. Berger/C.D. James): Interactions between proliferation-controlling pathways in the developing brain and medulloblastoma. June 2010
- MD Anderson Cancer Center (V. Gopalakrishnan): Interactions between Sonic hedgehog mitogenic signaling and the Hippo pathway in cerebellar development and medulloblastoma. Nov 2010
- University of Toronto Hospital for Sick Children, Neurosurgery (M. Taylor): Sonic Hedgehog and Hippo Pathway cross-talk in the developing brain and brain tumors. April 2011
- HEALING International meeting on Hedgehog-Gli signaling in regeneration, stem cells, and cancer: "YAP and tumorigenesis" (Crete), short talk. June 2011
- Lipscomb University Science seminar series (B. Conway/L. Lowrance): "Signaling pathway interactions in the childhood brain tumor medulloblastoma" Jan 2012
- Emory University (T. MacDonald): Signaling pathway interactions in medulloblastoma". April 2012
- International Society for Pediatric Neuro-oncology meeting (Toronto, Ontario), short talk. June 25-27 2012
- CSHL Mechanisms of Neural Differentiation and Brain Tumors course invited lecturer, Pediatric Brain Tumors (Organizers: Eric Holland, David Gutman, Sadhan Majumder). July 21-25 2012
- NCI, Pediatric Neuro-oncology (Kathy Warren): "Regulation of mitogenic and metabolic pathways by Sonic hedgehog in medulloblastoma.". Sept 27, 2012
- Cincinnati Children's Medical Center (M. Fauladi): "Regulation of mitogenic and metabolic pathways by Sonic hedgehog in medulloblastoma". Nov 13, 2012

Society for Neuro-oncology annual meeting. "HIF1 mediated glycolysis in cerebellar progenitors and mouse medulloblastoma models". Oral platform presentation. Nov 15-18, 2012

Emory University Cancer Biology Seminar series (Erwin Van Meir): "Mitogenic and oncogenic signaling pathways in cerebellar development and medulloblastoma". December 5, 2013

Institut de Recherches Cliniques de Montreal (Fred Charron): "Regulation of mitogenic and metabolic pathways by Sonic hedgehog in medulloblastoma and cerebellar development." February 10, 2014

Emory University Neurosurgery Grand Rounds: "Sonic hedgehog and Hippo signaling in the developing cerebellum and medulloblastoma." October 9, 2014

Boston University (David Farb): "Regulation of metabolism and radiation resistance in the pediatric brain tumor medulloblastoma". March 30, 2016

26. Invitations to National or International Conferences:

- NINDS-sponsored meeting "mTOR signaling from cancer to CNS function": mTOR pathway in Sonic hedgehog-driven neural precursor proliferation. Jan 2008
- AACR meeting Major Symposium speaker, "Medulloblastoma: genetics and genomics" (M Roussel): Interactions between proliferation-controling pathways in the developing brain and medulloblastoma. April 2010
- UCSF Brain Cancer Symposium (R. Pieper): Regulation of medulloblastoma recurrence by YAP1. Oct 2010
- Preuss Foundation Symposium (closed conference), La Jolla CA (J. Rutka): Sonic hedgehog-regulated microRNAs in medulloblastoma. March 2011
- AACR meeting Major Symposium Speaker, "The Hedgehog signaling pathway: biology and therapeutics" (P. Beachy): Sonic hedgehog and mitogenic pathway interactions. April 2011
- PBTF/SNO Basic and translational research conference sunrise session: "Stem cells in pediatric cancers: translational therapeutic opportunities". May 2011
- Medulloblastoma in the Mountains: "Yes-associated protein in medulloblastoma radiation resistance" Lake Tahoe CA December 2011
- McDonnell Foundation brain cancer meeting invited seminar (Houston TX): "Progress and evolution of pediatric brain cancer research". June 5-6 2012
- 19th Annual International Brain Tumor Research and Therapy Conference, closed meeting (Niagara Falls, J. Rutka): "HIF1 downstream of Sonic hedgehog mitogenic and oncogenic signaling and brain development and medulloblastoma.". June 21-24 2012
- Society for Neuroscience annual meeting symposium on the developmental origin of brain tumors (New Orleans, D. Kaplan/L. Greene): "Signaling pathway interactions in the developing cerebellum and medulloblastoma". Oct 13-17, 2012
- Fondation des Trielles conference on "Hedgehog and Gli signaling in stem cells and cancer", closed conference (Nice, France). Invited participant and speaker, Fondation travel scholarship. April 15-18, 2013
- Medulloblastoma in the Mountains 2: "Regulation of radiation resistance in the perivascular niche". St. Moritz, Switzerland. January 13-16 2014.
- Medulloblastoma in the Mountains 3: "YB1 driven IGF2 expression and proliferation in

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medulloblastoma." Lake Tahoe, CA February 8-11, 2015

3rd Annual Hypothalamic Hamartoma International Symposium (London, UK). Invited guest speaker. September 15-16, 2016.

27. Other Activities:

Member, Winship Cancer Institute (12/2013-)

Poster judge, Emory 2015 STEM symposium

Organizer, Winship Cancer Biology Seminar Series 2014-

Emory Pediatric Neural Tumors working group 1/2013-

Miscellaneous grant reviews:

NIH R15 reviewer, September 2011

NIH SEP reviewer: Cancer Biology, Genetics and Carcinogenesis (March 2012)

NIH ZRG1 CB-L 55 reviewer July 2012

CDMRP TSC review panel member July 2012

Ad hoc grant reviewer for:

National Science Foundation (2010); Graduate women in science fellowship program (2012); Norwegian-Estonian Research Cooperation Programme (July 2013)

NCI site visit reviewer, Mouse Cancer Genetics Program, March 2012

28. **Bibliography**:

[Chronological order: authors, year, title, journal, volume, complete page numbers]

- Published and Accepted Research Articles (clinical, basic science, other) in Refereed Journals
- 1. **Kenney AM** and Kocsis JD. (1997) Temporal variability of jun family transcription factor levels in peripherally or centrally transected adult rat dorsal root ganglia. *Molecular Brain Research* 52: 53-61.
- 2. **Kenney AM** and Kocsis JD. (1997) Timing of c-jun protein induction in lumbar dorsal root ganglia after sciatic nerve transection varies with lesion distance. *Brain Research* 751: 90-95.
- 3. Dib-Hajj SD, Black JA, Cummins TR, **Kenney AM**, Kocsis JD, and Waxman SG. (1998) Rescue of a-SNS sodium channel expression by *in vivo* administration of nerve growth factor. *Journal of Neurophysiology* 79(5): 2668-2676.
- factor. Journal of Neurophysiology 79(5): 2668-2676.
 4. Kenney AM and Kocsis JD. (1998) Peripheral axotomy induces long-term JNK activation and AP-1 binding activity by c-Jun and junD in adult rat dorsal root ganglia in vivo. Journal of Neuroscience 18(4): 1318-1328.
- Kenney, AM and Rowitch, DH. (2000) Sonic hedgehog promotes G₁ cyclin expression and sustained cell cycle progression in mammalian neuronal precursors. Molecular and Cellular Biology 20:9055-9067.
- Zhao Q, Kho Ă, Kenney AM, Yuk D, Kohane I, and Rowitch DH. (2002) Identification of genes expressed with temporal-spatial restriction to developing cerebellar neuron precursors by a functional genomic approach. PNAS 99 (8): 5704-5709.
- precursors by a functional genomic approach. *PNAS* 99 (8): 5704-5709.

 7. Ciemerych MA, **Kenney AM**, Sicinska E, Kalaszczynska I, Bronson RT, Rowitch DH, Gardner H, and Sicinski P. (2002) Development of mice expressing a single D-type cyclin. *Genes and Development*, 16:3277-89
 - 8. **Kenney, AM**, Cole MD, and Rowitch, DH. (2003)* N-*myc* upregulation by Sonic hedgehog promotes proliferation in developing cerebellar granule neuron precursors. *Development* 130: 15-28.

- *Selected for "highlight" in *Nature Reviews Neuroscience* (January 2003): Nature Reviews Neuroscience 4, 8 (January 2003)
- Kenney, AM, Widlund, HR, and Rowitch, DH. (2004) Hedgehog and PI-3 kinase signaling converge upon N-myc to promote cell cycle progression in cerebellar neuronal precursors. *Development* 131: 217-228.
 Sjostrom, S, Finn, G, Hahn WC, Rowitch, DH, and Kenney, AM. (2005) Cdk1 plays a
- Sjostrom, S, Finn, G, Hahn WC, Rowitch, DH, and Kenney, AM. (2005) Cdk1 plays a prime role in regulating N-myc phosphorylation and turnover in neural precursors. Developmental Cell 9:327-338
- 11. **Kenney, AM***, Browd SR*, Gottfried, ON, Pedone, CA, Fults, DW. (2006) N-myc substitutes for IGF signaling in a mouse model of Sonic hedgehog-induced medulloblastoma formation. *Cancer Research* 66: 2666-2672. * equal contribution
- 12. Hatton BA, Knoepfler PS, **Kenney AM**, Rowitch DH, de Alboran IM, Olson JM, Eisenman RN. (2006) N-myc is an essential downstream effector of Sonic hedgehog signaling during both normal and neoplastic cerebellar growth. *Cancer Research* 66: 8655-61
- 13. CheslerL, Schlieve C, Goldenberg DD, **Kenney A**, Kim G, McMillan A, Matthay KK, Rowitch D, Weiss WA. (2006) Inhibition of phosphoinositol 3-kinase destabilizes MYCN protein and blocks malignant progression in neuroblastoma. *Cancer Research* 66: 8139-8146
- 14. Becher OJ, Hambardzumyan D, Fomchenko E, Momota H, Mainwaring L, Bleau AM, Katz AM, Edgar M, **Kenney AM**, Cardon-Cardo C, Blasberg R, Holland EC. (2008) Gli activity correlates with grade in PDGF-induced gliomas. *Cancer Research* 68: 2241-9
- 15. Parathath SR*, Mainwaring LA*, Fernandez-L A, Campbell DO, and **Kenney AM**. (2008) Insulin receptor substrate1 is an effector of Sonic hedgehog mitogenic signaling in cerebellar neural precursors. *Development* 135: 3291-3300 PMC2673703 *co-first authors
- 16. Otto T, Horn S, Brockmann M, Eilers U, Schuttrumpf L, Popov N, Kenney AM, Schulte JH, Beijersbergen R, Christiansen H, Berwanger B, Eilers M. (2009) Stabilization of N-myc is a critical function of Aurora A in human neuroblastoma. Cancer Cell 15: 67-78
- 17. Northcott PA*, Fernandez-L A*. Hagan JP*, Ellison DW, Grajkowska W, Gillespie Y, Grundy R, Van Meter T, Rutka JT, Croce CM#, **Kenney AM#**, Taylor MD#. (2009) The miR-17/92 polycistron is up-regulated in Sonic hedgehog-driven medulloblastomas and induced by N-myc in Sonic hedgehog-treated cerebellar neural precursors. *Cancer Research* 69: 3249-3255 PMC2836891

 *co-first authors; #co-corresponding authors
- 18. Bhatia B, Northcott PA, Hambardzumyan Ď, Govindarajan B, Brat DJ, Arbiser JA, Holland EC, **Kenney AM**. (2009) Tuberous sclerosis complex suppression in cerebellar development and medulloblastoma: separate regulation of mTOR activity and p27kip1 localization. *Cancer Research* 69: 7224-7234 PMC2745891
- 19. Fernandez-L A, Northcott PA, Dalton J, Fraga C, Ellison D, **Kenney AM**. (2009) YAP1 is amplified and up-regulated in hedgehog-associated medulloblastomas and mediates Sonic hedgehog-driven neural precursor proliferation. *Genes and Development*, 23: 2675-2692. PMC2788333
 - *Nature Reviews Cancer Research Highlight: Nature Reviews Cancer 10, 6 (January 2010)
- Bhatia B, Malik A, Fernandez-L A, Kenney AM. (2010) P27kip1, a Double-edged sword in Shh-mediated medulloblastoma: tumor accelerator and suppressor. *Cell Cycle*, 9 (21): 4307-14. PMC3055184
- 21. Parathath S, Mainwaring LA, Fernandez-L A, Guldal CG, Nahle Z, **Kenney AM**. (2009) β-Arrestin-1 links mitogenic Sonic hedgehog signaling to the cell cycle exit machinery in neural precursors. *Cell Cycle* 9 (19): 4013-24 PMC3047755
- 22. Bhatia B, **Kenney AM**, Náhle Z. (2011) Mitogenic Sonic hedgehog signaling drives E2F1-deoendent lipogenesis in cerebellar precursor cells and medulloblastoma. *Oncogene*, 30: (4): 410-22. PMC3072890
- 23. Mainwaring, LA and **Kenney, AM**. (2011) Divergent functions for eIF4E and S6 kinase downstream of Sonic hedgehog mitogenic signaling in the developing cerebellum. *Oncogene*, 30 (15): 1784-97 PMC3583298

- 24. Ellison, DW, Dalton, J, Kocak, M, Nicholson SL, Fraga C, Neale G, Kenney AM, Brat DJ, Perry A, Yong WH, Taylor RE, Bailey S, Clifford SC, Gilbertson RJ. (2011) Medulloblastoma: clinicopthological correlates of SHH, WNT, and non-SHH/WNT molecular subgroups. *Acta Neuropathol* 121 (3):381-96
- 25. Fernandez-L Ă, Squatrito M, Northcott PA, Awan A, Holland EC, Taylor MD, Nahle Z, Kenney AM. (2011) Oncogenic YAP promotes radioresistance and genomic instability in medulloblastoma through IGF2-mediated Akt activation. *Oncogene*, 31: 1923-37. PMC3583298
- 26. Guldal C, Ahmad a, Korshunov A, Squatrito M, Awan A, Mainwaring LA, Bhatia B, Parathath S, Nahle Z, Pfister S, **Kenney AM**. (2012) An essential role for p38 MAPK in cerebellar granule neuron precursor proliferation. *Acta Neuropathol*, 123 (4): 573-586. Pubmed 22302101; NIH MSID 365606
- 27. Bhatia B, Potts CR, Guldal C, Choi S, Korshunov A, Pfister S, **Kenney AM**, Nahle ZA. (2012) Hedgehog-mediated regulation of PPAR_γ controls metabolic patterns in neural precursors and Shh-driven medulloblastoma. *Acta Neuropathol* 123: 587-600
- 28. Lee Hy, Angelastro JM, **Kenney AM**, Mason CA, Greene LA. (2012) Reciprocal actions of ATF5 and Shh in proliferation of cerebellar granule neuron progenitor cells. *Dev Neurobiol*, 72(6):789-804
- 29. Northcott P,....Fernandez-L, **Kenney AM**,....Taylor MD. (2012) Subgroup-specific structural variation across 1000 medulloblastoma genomes. *Nature*, 488: 49-56
- 30. Malhotra A, Dey A, Prasad N, Kenney AM (2016) Sonic hedgehog signaling drives mitochondrial fragmentation by suppressing mitofusins in cerebellar granule neuron precursors and medulloblastoma. *Molecular Cancer Research* 14: 114-24
- 31. Dey a, Robitaille M, Remke M, Maier C, Malhotra A, Gregorieff A, Wrana JL, Taylor MD, Angers S, Kenney AM. (2016) YB-1 is elevated in medulloblastoma and drives proliferation in Sonic hedgehog-dependent cerebellar granule neuron progenitor cells and medulloblastoma cells. *Oncogene* January 4 (epub ahead of print) 32. Wen J, Lee J, Malhotra A, Nahta R, Arnold AR, Buss MC, Brown BD, Maier C,
- 32. Wen J, Lee J, Malhotra A, Nahta R, Arnold AR, Buss MC, Brown BD, Maier C, Kenney AM, Remke M, Ramaswamy V, Taylor MD, Castellino RC. WIP1 modulates responsiveness to Sonic Hedgehog Signaling in neuronal precursor cells and medulloblastoma. (2016) *Oncogene*, in press.
- b. Manuscripts Submitted:
- c. Review Articles:
 - Kenney AM and Segal RA. (2005) Subtracting the MATH: prominin-positive cerebellar stem cells in white matter. Nature Neuroscience 8:699-701
 - Knoepfler, PK and Kenney AM. (2006) Neural precursor cycling at Sonic speed: N-Myc pedals, GSK-3 brakes. Invited review (AMK). Cell Cycle 5:47-52
 - Fernandez-L A, Northcott PA, Taylor MD, and Kenney AM. (2009) Normal and oncogenic roles for microRNAs in the developing brain. Invited review (AMK). Cell Cycle 8: 4049-54
 - Bhatia B, Nahle Z, and **Kenney AM**. (2010) Double trouble: when Sonic hedgehog signaling meets TSC inactivation. Invited review (AMK). *Cell Cycle*, 9: 456-459
 - Fernandez-L A and Kenney AM. (2010) The Hippo in the room: A new look at a key pathway in cell growth and transformation. Invited review (AMK). Cell Cycle 9 (12).
 - Mainwaring LA, Bhatia B, and **Kenney AM**. (2010) Myc on my mind: a transcription factor family's essential role in brain development. Invited review (AMK). *Oncotarget* 2: 86-8.
- d. Symposium Contributions:

AACR meeting Major Symposium speaker, "Medulloblastoma: genetics and genomics" (M Roussel): *Interactions between proliferation-controling pathways in the developing brain and medulloblastoma*. April 2010

- AACR meeting Major Symposium Speaker, "The Hedgehog signaling pathway: biology and therapeutics" (P. Beachy): Sonic hedgehog and mitogenic pathway interactions. April 2011
- Society for Neuroscience annual meeting symposium on the developmental origin of brain tumors (New Orleans, D. Kaplan/L. Greene): "Signaling pathway interactions in the developing cerebellum and medulloblastoma". Oct 13-17, 2012
- Winshop Cancer Center Symposium, Cancer Biology Representative, 10/23/2014
- PBTF-SNO Basic and Translational Pediatric Neuro-oncology Research Conference, medulloblastoma session moderator, May 2014
- e. Book Chapters:
 - **-Kenney AM** and Rowitch DH. (2002) Regulation of early events in cell cycle progression by hedgehog signaling in CNS development and tumorigenesis. Chapter, *Hedgehog Signaling in Development and Disease*, Ariel Ruiz I Altaba, *ed*.
 - -Moots PL and **Kenney AM**. (2012) Medulloblastoma in Adults (chapter, *Textbook of Uncommon Cancer* 4th ed), in press.
 - -Dey A, Malhotra A, Bliss MC, Lee J, **Kenney AM**, Castellino RC. (2014) Genetics of Medulloblastoma. Chapter, *The Medulloblastoma Book*, Dimitris Kombogorgias, *ed*.
- f. Books Edited and Written: N/A
- g. Book Reviews:N/A
- h. Manuals, Videos, Computer Programs, and Other Teaching Aids:N/A
- Other Publications:

Published Abstracts: AACR 2007-2014, 2016; SNO 2008-2014; SFN 2005-2007, 2012, PBTF-SNO 2011,13, 15; ISPNO 2012, Hedgehog 2014, AACR meeting on brain tumor research 2015, Cold Spring Harbor stem cells course 2015, AACR metabolism meeting 2015, AACR mitochondria meeting 2016, Southeastern Pediatric Research Innovation Conference 2016 (5 from lab)