UNIVERSITY OF PENNSYLVANIA - PERELMAN SCHOOL OF MEDICINE Curriculum Vitae

Date: 07/14/2014

Amit Maity, MD, PhD

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Education:

1985	MD	Boston University (Medicine)
1985	BA	Boston University (Mathematics)
1995	PhD	University of Pennsylvania (Pathology)

Postgraduate Training and Fellowship Appointments:

uning and Fellowship Appointments:		
1985-1986	Intern in Internal Medicine, Mount Sinai Hospital, New York,	
	NY	
1986-1988	Resident in Internal Medicine, Mount Sinai Hospital, New	
	York, NY	
1988-1991	Resident in Radiation Oncology, Hospital of the University of	
	Pennsylvania	
1991-1992	Fellow in Radiation Oncology, Hospital of the University of	
	Pennsylvania	
1992-1995	Postdoctoral Trainee, University of Pennsylvania School of	
	Medicine, Department of Radiation Oncology	
1995-1997	Postdoctoral Researcher, Johns Hopkins University School of	
	Medicine	
2011	Leadership Development Program, Harvard School of Public	
	Health	

Military Service:

[none]

Faculty Appointments:

1997-2006	Assistant Professor of Radiation Oncology at the Hospital of
	the University of Pennsylvania, University of Pennsylvania
	School of Medicine
2006-2013	Associate Professor of Radiation Oncology at the Hospital of
	the University of Pennsylvania, University of Pennsylvania
	School of Medicine
2013-present	Professor of Radiation Oncology at the Hospital of the
_	University of Pennsylvania, University of Pennsylvania

School of Medicine

<u>Hospital and/or Administrative Appointments:</u>

	1997-present	Attending Physician, Radiation Oncology, Hospital of the
		University of Pennsylvania
	1998-present	Staff Physician, Radiation Oncology, Philadelphia Veteran's Administration Medical Center
	1998-present	Staff Physician, Radiation Oncology, Pennsylvania Hospital
	1999-present	Staff Physician, Radiation Oncology, Presbyterian Medical Center
	2000-present	Consulting Staff, Phoenixville Hospital
	2001-present	Consulting Staff, Children's Hospital of Philadelphia
	2006-present	Courtesy Staff, Chester County Hospital
	2007-2011	Chief, Radiation Oncology, Philadelphia Veterans
	2007-2011	Administration Medical Center
	2010-present	Consulting Staff, Kennedy Health System
	2011-present	Consulting Staff, Doylestown Hospital
	2011-present	Director of Quality Assurance/ Quality Improvement, Dept. of
	2011-present	Radiation Oncology, Hospital of the University of Pennsylvania
	2011-2012	Director of Satellites, Dept. of Radiation Oncology, Hospital
	2011-2012	of the University of Pennsylvania
Other Appointm	nents:	
	[none]	
Specialty Certif	<u>ication:</u>	
	1988	American Board of Internal Medicine
	1991	American Board of Radiology
Licensure:		
	1986	New York
	1988	Pennsylvania
	1992	New Jersey
Awards, Honors	s and Membership in Ho	onorary Societies:
	1984	Alpha Omega Alpha (Boston University School of Medicine)
	1985	Phi Beta Kappa (Boston University)
	1985	BA, summa cum laude (Boston University)
	1985	MD, cum laude (Boston University School of Medicine)
	1990	American Cancer Society Clinical Oncology Fellowship
	1991	American Society for Therapeutic Radiology and Oncology
	1995	Travel Award, 10th International Congress of Radiation
	1995	Saul Winegrad, M.D. Prize for Outstanding Ph.D. Thesis
	1995	Student Travel Award, 43rd Annual Meeting of the
	2005	Senior Investigator Travel Award, 47th Annual ASTRO
		Meeting
	2013	Giulio J. D'Angio Teaching Award, Department of Radiation Oncology, University of Pennsylvania School of Medicine

Memberships in Professional and Scientific Societies and Other Professional Activities:

National: 1997-present	American Association for Cancer Research
1997-present	Radiation Research Society
2003	American Heart Association, Cellular and Molecular Biology Study Section, ad hoc member
2005	NIH study section, Experimental Therapeutics Cluster P01 review panel
2005	NIH study section, Therapeutic Target Development Cluster P01 review panel
2006-2007	NIH Radiation Therapeutics and Biology (RTB) Study Section, ad hoc member
2006	NIH Rapid Access to Intervention Development (RAID) review section

Editorial Positions:

2007-2011

2007-present	ad hoc reviewer: Biochim Biophys Acta, Br J Cancer, Br J Urol,
	Cancer Letters, Cancer Biol Ther, Cancer Res, Cell Growth
	Differ, Clin Cancer Res, EMBO Reports, Genes Chromosomes
	Cancer, Horm Metab Res, Int J Cancer, Int J Radiat Biol,
	Int J Radiat Oncol Biol Phys, J Biol Chem, J Clin Invest, J Clin
	Oncol, Lancet Oncol, Med Pediatr Oncol, Mol Cancer Res, Mol
	Cancer Ther, Mol Cell Biol, Molecular Medicine, Oncogene,
	Radiat Res, Retina

NIH Radiation Therapeutics and Biology (RTB) Study Section, standing member

Academic and Institutional Committees:

1999	Member, Search Committee, Director of Clinical Physics, Dept. of
	Radiation Oncology
2003	Member, Cancer Care Committee, Children's Hospital of
	Philadelphia
2005-2007	Member, Compensation Committee, Dept. of Radiation Oncology
2005-2008	Member, Quality Assurance Committee, Dept. of Radiation
	Oncology
2006-2007	Member, Internal Review Committee for Dept. of
	Biostatistics/Epidemiology
2006-present	Member, Residency Education Committee, Dept. of Radiation
_	Oncology

2006-2007	Member, Residency Selection Committee, Dept. of Radiation
2007-2009	Oncology Member, Faculty Recruitment Committee, Dept. of Radiation Oncology
2007-2009	Member, Executive Committee, Dept. of Radiation Oncology
2007-2011	Member, Radiation Safety Committee, Philadelphia VA Medical Center
2011-present	Chairman, Quality Assurance/Quality Improvement Committee, Dept. of Radiation Oncology
2011-present	Member, Chairman's Quality Care Committee, Dept. of Radiation Oncology
2011-present	Member, Radiation Safety Committee, Perelman School of Medicine, University of Pennsylvania
2011-present	Member, Operations Oversight Committee, Dept. of Radiation Oncology
2011	Member, Compensation Committee, Dept. of Radiation Oncology
2011-2012	Member, Residency Selection Committee, Dept. of Radiation Oncology
2012-2013	Member, Search Committee, Director of Physics, Dept. of Radiation Oncology
2012-2013	Member, Search Committee for Satellite physician, Dept. of Radiation Oncology
2012-2013	Member, Search Committee, Tenure-track Assistant Professor, Biology Division, Dept. of Radiation Oncology
2012-2013	Member, Departmental Committee on Appointments and Promotions (COAP)
2012-present	Member, Cancer Service Line Quality Committee
2012-present	Member, Departmental Radiation Oncology Protocol Committee (ROPC)
2013-present	Chair, Departmental Committee on Appointments and Promotions (COAP)

Major Academic and Clinical Teaching Responsibilities:

Lecturer for Radiobiology/ Cancer Biology course given to
Radiation Oncology residents; 1 lecture/year
Mentor for post-doctoral fellow (Dr. Nabendu Pore)
Attending Physician at VA Hospital, Department of Radiation
Oncology; in charge of treating patients and teaching residents on
service (8-12 residents/year); gives 3 didactic lectures/rotation; also
responsible for participating in weekly chart rounds at VA and
PCAM during which new patients are presented; responsible for
conducting oral exam at end of each rotation
Lecturer for Resident Didactic Lecture Series; 1-2 lectures/year
(rhabdomyosarcoma, Ewing's sarcoma, low-grade lymphoma, etc.)

2006-present	Mentor for Resident Didactic series; responsible for supervising resident lectures/case conferences/journal clubs on lymphoma, pediatric cancer blocks; ~10 hour long sessions/year
2006	Mentor for medical student (Anne Marie Fernandes); summer lab research
2006-2008	Mentor for Penn undergraduate (Mahesh Madhavan) as part of Undergraduate Honors Thesis Project and Independent Study Biology 399
2008-present	Lecturer for Cell and Molecular Biology CAMB512 graduate course (Cancer Biology and Genetics graduate course), 1 lecture/year
2008-2009	Mentor for medical student (Charles Weber); lab research rotation
2009	Member, PhD thesis defense committee for Prashanti Javvadi (advisor: Dr. Constantinos Koumenis)
2009-2012	Mentor for postdoctoral fellow (Dr. Jayashree Karar)
2010-present	Lecturer for Masters in Medical Physics MMP512 course; 1 lecture/year
2010-present	Lecturer for Summer Undergraduate Program for Educating Radiation Scientists (SUPERS) course; 1 lecture/year
2010	Mentor for undergraduate (Michael Verano); summer lab research
2010-present	Mentor for junior faculty (Dr. Alexander Lin, Dr. Jay Dorsey)
2010-2012	Mentor for junior faculty (Dr. Smith Apisarnthanarax)
2011	Mentor for undergraduate (James Ruggero); summer lab research
2011	Family Practice Grand Rounds, Presbyterian Hospital
2012-2013	Mentor for pre-medical student (Rohil Shekhar); laboratory research
2012	Lecturer on "Penn Radiation Oncology Safety Journey" for Continuing Education Day for Radiation Therapy Technologists
2013	Member, Masters in Translational Research thesis defense committee for David Guttman (advisor: Dr. Constantinos Koumenis)
2014-Present	Mentor for Physics Masters (MMP) student, Janice Lau

Lectures by Invitation (Last 5 years): Jun 2009 "Ir

Jun, 2009	"Improving Response to Cancer Therapy by Modulating the Tumor
	Microenvironment"
	2nd Annual World Congress of Cancer
	Beijing, China
Nov, 2009	"The PI3 kinase pathway, tumor microenvironment and radiation
	response"
	Lankenau Institute for Medical Research
	Wynnewood, PA
Mar, 2010	"PI3 kinase pathway and radiation response"
	University of Wisconsin School of Medicine
	Madison, WI

Jun, 2010	"Analysis of the in vivo hypoxia gene expression profile of glioma using the hypoxia sensitive dye EF5 and laser capture microdissection" Plenary Session 7th Annual Meeting, Asian Society for Neuro- Oncology
Jun, 2010	Seoul, Korea "Using Biological Agents to Improve the Radiation Response"
·	Meet the Experts Session
	7th Annual Meeting
	Asian Society for Neuro-Oncology
Jun, 2010	Seoul, Korea "Improving the Radiation Response with Biological Agents"
Jun, 2010	Cancer Research Institute
	Seoul National University
	Seoul, Korea
Jul, 2010	"Anti-angiogenic agents in cancer therapy"
	Symposium on Tumor vasculature and angiogenesis: biology, MR
	imaging, and anti-angiogenic therapies
	52nd Annual Meeting of American Association of Physicists in Medicine
Mar, 2011	"Biological Issues with IMRT and SRS"
Widi, 2011	16th Annual Oncology Symposium
	Uludag. Turkey
Mar, 2011	"IMRT and SBRT for Lung Cancer"
	16th Annual Oncology Symposium
	Uludag. Turkey
Mar, 2011	"Molecular Targets and Radiotherapy Interactions: Radiobiologic
	Basis"
	16th Annual Oncology Symposium Uludag. Turkey
Oct, 2012	"Tumor Microenvironment and Radiation Response"
301, 2012	Aegean Conference on Tumor Microenvironment and Cellular
	Stress: Signaling, Metabolism, Imaging and Therapeutic Targets
	Crete, Greece
Feb, 2013	"Improving the Radiation Response Using Biological Agents"
	Sunnybrook Cancer Center Grand Rounds
Eab 2012	Toronto, Canada
Feb, 2013	"Penn Radiation Oncology Safety Journey" National Proton Conference: Improving Cancer Outcomes with
	Proton Therapy
	Washington, D.C.
Apr, 2014	"RADVAXTM: Using Radiotherapy to Stimulate the Immune
	System"

Organizing Roles in Scientific Meetings:

2003	Moderator, Poster Discussion Session: Radiobiology/Radiation Oncology, Society for Neuro-oncology, Eighth Annual Meeting
2004	Keystone, CO Moderator, Hypoxia and Vascular Targeting Session, American Society for Therapeutic Radiology and Oncology, 46th Annual Meeting
2005	Atlanta, GE Co-moderator, Hypoxia and Vascular Targeting Session, American Society for Therapeutic Radiology and Oncology, 47th
2005	Annual Meeting Denver, CO Invited Discussant, CNS (central nervous system) Tumors Session, American Society for Therapeutic Radiology and Oncology, 47th Annual Meeting
2005	Denver, CO Abstract Reviewer (Biology), American Society for Therapeutic Radiology and Oncology, 47th Annual Meeting Denver, CO
2006	Reviewer for Postdoctoral Fellowship Awards, 97th Annual Meeting, American Association for Cancer Research Washington, DC
2006	Invited Discussant, Hypoxia Session, American Society for Therapeutic Radiology and Oncology, 48th Annual Meeting
2006	Philadelphia, PA Abstract Reviewer (Biology), American Society for Therapeutic Radiology and Oncology, 48th Annual Meeting
2006	Philadelphia, PA Member of Scientific Program Committee, American Society for Therapeutic Radiology and Oncology, 48th Annual Meeting
2007	Philadelphia, PA Moderator, Biology II Oral Session: Biomarkers/Predictive Markers, American Society for Therapeutic Radiology and Oncology, 49th Annual Meeting
2007	Los Angeles, CA Moderator/Discussant, Biology Poster Discussion Session, American Society for Therapeutic Radiology and Oncology, 49th Annual Meeting
2007	Los Angeles, CA Member of the Preclinical Radiotherapeutics Subcommittee of the Experimental and Molecular Therapeutics Section (abstract reviewer), 98th Annual Meeting, American Association for Cancer Research
2007	Los Angeles, CA Member of Scientific Program Committee, American Society for Therapeutic Radiology and Oncology, 49th Annual Meeting Los Angeles, CA

2007	Abstract Reviewer (Biology), American Society for Therapeutic Radiology and Oncology, 49th Annual Meeting
2008	Los Angeles, CA Abstract reviewer, 54th Annual Meeting of the Radiation Research Society
2008	Boston, MA Member of Scientific Program Committee, American Society for Therapeutic Radiology and Oncology, 50th Annual Meeting Boston, MA
2008	Co-organizer Eli Glatstein, M.D New Paradigms in Radiation Oncology: Focus on Translational Research meeting Philadelphia, PA
2008	Abstract Reviewer (Biology), American Society for Therapeutic Radiology and Oncology, 50th Annual Meeting Boston, MA
2009	Abstract Reviewer, 55th Annual Meeting of the Radiation Research Society Savannah, GE
2009	Member of Scientific Program Committee, American Society for Therapeutic Radiology and Oncology, 51th Annual Meeting Chicago, IL
2010	Abstract Reviewer, Chicago Multidisciplinary Symposium on Thoracic Oncology Chicago, IL
2010	Member of Scientific Program Committee, American Society for Therapeutic Radiology and Oncology, 52th Annual Meeting San Diego, CA
2011	Chair, Head and Neck and Lung Cancer subgroup of Scientific Program Committee for American Society for Therapeutic Radiology and Oncology, 53th Annual Meeting Miami. FL
2011	Moderator, Biology Session, Particle Therapy Co-Operative Group (PTCOG), 50th Annual Meeting Philadelphia, PA
2011	Co-moderator, Biology Oral Session: DNA Repair and Radiation Oncology, American Society for Therapeutic Radiology and Oncology, 53rd Annual Meeting Miami, FL
2011	Chair, Radiation Biology Subcommittee (abstract reviews), 2011 American Association for Cancer Research Program Committee Orlando, FL
2011	Member of Scientific Program Committee, American Society for Therapeutic Radiology and Oncology, 53th Annual Meeting Miami, FL

2012

Co-moderator, Biology Oral Session: Biologic Radiosensitizers I, American Society for Therapeutic Radiology and Oncology, 54th Annual Meeting Boston, MA

Bibliography:

Research Publications, peer reviewed (print or other media):

- 1. Maity A, Goldwein J W, Lange B, D'Angio G J: Comparison of high-dose and low-dose radiation with and without chemotherapy for children with Hodgkin's disease: an analysis of the experience at the Children's Hospital of Philadelphia and the Hospital of the University of Pennsylvania. <u>Journal of clinical oncology</u> 10(6): 929-35, Jun 1992.
- 2. Maity A, Goldwein J W, Lange B, D'Angio G J: Mediastinal masses in children with Hodgkin's disease. An analysis of the Children's Hospital of Philadelphia and the Hospital of the University of Pennsylvania experience. <u>Cancer</u> 69(11): 2755-60, Jun 1992.
- 3. Markiewicz D A, McKenna W G, Flick M B, Maity A, Muschel R J: The effects of radiation on the expression of a newly cloned and characterized rat cyclin B mRNA. <u>International journal of radiation oncology, biology, physics</u> 28(1): 135-44, Jan 1994.
- 4. Maity A, McKenna W G, Markiewicz D A, Kunig A, Muschel R J: Alternate polyadenylation in rodent cells results in two differentially expressed cyclin B1 mRNAs. <u>Biochemical and biophysical research communications</u> 202(2): 908-14, Jul 1994.
- 5. Bernhard E J, Maity A, Muschel R J, McKenna W G: Increased expression of cyclin B1 mRNA coincides with diminished G2-phase arrest in irradiated HeLa cells treated with staurosporine or caffeine. Radiation research 140(3): 393-400, Dec 1994.
- Maity A, McKenna W G, Muschel R J: Evidence for post-transcriptional regulation of cyclin B1 mRNA in the cell cycle and following irradiation in HeLa cells. <u>The</u> <u>EMBO journal</u> 14(3): 603-9, Feb 1995.
- 7. Hwang A, Maity A, McKenna W G, Muschel R J: Cell cycle-dependent regulation of the cyclin B1 promoter. <u>The journal of biological chemistry</u> 270(47): 28419-24, Nov 1995.
- 8. McKenna W G, Bernhard E J, Markiewicz D A, Rudoltz M S, Maity A, Muschel R J: Regulation of radiation-induced apoptosis in oncogene-transfected fibroblasts: influence of H-ras on the G2 delay. Oncogene 12(2): 237-45, Jan 1996.

- 9. Maity A, Hwang A, Janss A, Phillips P, McKenna W G, Muschel R J: Delayed cyclin B1 expression during the G2 arrest following DNA damage. <u>Oncogene</u> 13(8): 1647-57, Oct 1996.
- 10. Kao G D, McKenna W G, Maity A, Blank K, Muschel R J: Cyclin B1 availability is a rate-limiting component of the radiation-induced G2 delay in HeLa cells. <u>Cancer</u> research 57(4): 753-8, Feb 1997.
- 11. Maity A, McKenna W G, Muschel R J: Cyclin A message stability varies with the cell cycle. Cell growth & differentiation 8(3): 311-8, Mar 1997.
- 12. Lewis B C, Shim H, Li Q, Wu C S, Lee L A, Maity A, Dang C V: Identification of putative c-Myc-responsive genes: characterization of rcl, a novel growth-related gene. Molecular and cellular biology 17(9): 4967-78, Sep 1997.
- 13. Maity A, Solomon D: Both increased stability and transcription contribute to the induction of the urokinase plasminogen activator receptor (uPAR) message by hypoxia. Experimental cell research 255(2): 250-7, Mar 2000.
- 14. Maity A, Pore N, Lee J, Solomon D, O'Rourke D M: Epidermal growth factor receptor transcriptionally up-regulates vascular endothelial growth factor expression in human glioblastoma cells via a pathway involving phosphatidylinositol 3'-kinase and distinct from that induced by hypoxia. Cancer research 60(20): 5879-86, Oct 2000.
- 15. Janss A J, Maity A, Tang C B, Muschel R J, McKenna W G, Sutton L, Phillips P C: Decreased cyclin B1 expression contributes to G2 delay in human brain tumor cells after treatment with camptothecin. Neuro-oncology 3(1): 11-21, Jan 2001.
- 16. Chen C, Pore N, Behrooz A, Ismail-Beigi F, Maity A: Regulation of glut1 mRNA by hypoxia-inducible factor-1. Interaction between H-ras and hypoxia. <u>The journal of biological chemistry</u> 276(12): 9519-25, Mar 2001.
- 17. Maity A, Sall W, Koch C J, Oprysko P R, Evans S M: Low pO2 and beta-estradiol induce VEGF in MCF-7 and MCF-7-5C cells: relationship to in vivo hypoxia.

 Breast cancer research and treatment 67(1): 51-60, May 2001.
- 18. Ziemer L S, Koch C J, Maity A, Magarelli D P, Horan A M, Evans S M: Hypoxia and VEGF mRNA expression in human tumors. Neoplasia 3(6): 500-8, Nov-Dec 2001.
- 19. Pore, N, Liu, S, Haas-Kogan, D A, O'Rourke, D M, Maity, A: PTEN mutation and epidermal growth factor receptor activation regulate vascular endothelial growth factor (VEGF) mRNA expression in human glioblastoma cells by transactivating the proximal VEGF promoter. <u>Cancer research</u> 63(1): 36, Jan 2003.

- 20. Chen C, Shu H-K G, Goldwein J W, Womer R B, Maity A: Volumetric considerations in radiotherapy for pediatric parameningeal rhabdomyosarcomas. <u>International journal of radiation oncology, biology, physics</u> 55(5): 1294-9, Apr 2003.
- 21. Maity A, Shu H-K, Janss A, Belasco J B, Rorke L, Phillips P C, Sutton L N, Goldwein J W: Craniospinal radiation in the treatment of biopsy-proven intracranial germinomas: twenty-five years' experience in a single center.

 International journal of radiation oncology, biology, physics 58(4): 1165-70, Mar 2004.
- 22. Stripp D C H, Maity A, Janss A J, Belasco J B, Tochner Z A, Goldwein J W, Moshang T, Rorke L B, Phillips P C, Sutton L N, Shu H-K G: Surgery with or without radiation therapy in the management of craniopharyngiomas in children and young adults. <u>International journal of radiation oncology, biology, physics</u> 58(3): 714-20, Mar 2004.
- 23. Bucci M K, Maity A, Janss A J, Belasco J B, Fisher M J, Tochner Z A, Rorke L, Sutton L N, Phillips P C, Shu H-K G: Near complete surgical resection predicts a favorable outcome in pediatric patients with nonbrainstem, malignant gliomas: results from a single center in the magnetic resonance imaging era. Cancer 101(4): 817-24, Aug 2004.
- 24. Maity A, Shu H-K G, Tan J E, Ruffer J, Sutton L N, Tochner Z, Lustig R: Treatment of pediatric intracranial arteriovenous malformations with linear-accelerator-based stereotactic radiosurgery: the University of Pennsylvania experience. Pediatric neurosurgery 40(5): 207-14, Sep-Oct 2004.
- 25. Maity A, Shu H-K G, Judkins A R, Fisher M J, Dwyer-Joyce L E A, Vaughn D J: Testicular seminoma 16 years after treatment for CNS germinoma. <u>Journal of neuro-oncology</u> 70(1): 83-5, Oct 2004.
- 26. Pore N, Liu S, Shu H-K, Li B, Haas-Kogan D, Stokoe D, Milanini-Mongiat J, Pages G, O'Rourke D M, Bernhard E, Maity A: Sp1 is involved in Akt-mediated induction of VEGF expression through an HIF-1-independent mechanism.

 Molecular biology of the cell 15(11): 4841-53, Nov 2004.
- 27. Shi Y, Lee C S, Wu J, Koch C J, Thom S R, Maity A, Bernhard E J: Effects of hyperbaric oxygen exposure on experimental head and neck tumor growth, oxygenation, and vasculature. <u>Head & neck</u> 27(5): 362-9, May 2005.
- 28. Tsai J H, Makonnen S, Feldman M, Sehgal C M, Maity A, Lee W M F: Ionizing radiation inhibits tumor neovascularization by inducing ineffective angiogenesis. Cancer biology & therapy 4(12): 1395-1400, Dec 2005.

- 29. Liu F, Pore N, Kim M, Voong K R, Dowling M, Maity A, Kao G D: Regulation of histone deacetylase 4 expression by the SP family of transcription factors. Molecular biology of the cell 17(2): 585-97, Feb 2006.
- 30. Weiner D J, Maity A, Carlson C A, Ginsberg J P: Pulmonary function abnormalities in children treated with whole lung irradiation. <u>Pediatric blood & cancer</u> 46(2): 222-7, Feb 2006.
- 31. Pore N, Jiang Z, Gupta A, Cerniglia G, Kao G D, Maity A: EGFR tyrosine kinase inhibitors decrease VEGF expression by both hypoxia-inducible factor (HIF)-1-independent and HIF-1-dependent mechanisms. <u>Cancer research</u> 66(6): 3197-204, Mar 2006.
- 32. Pore N, Jiang Z, Shu H-K, Bernhard E, Kao G D, Maity A: Akt1 activation can augment hypoxia-inducible factor-1alpha expression by increasing protein translation through a mammalian target of rapamycin-independent pathway. Molecular cancer research 4(7): 471-9, Jul 2006.
- 33. Pore N, Gupta A K, Cerniglia G J, Jiang Z, Bernhard E J, Evans S M, Koch C J, Hahn S M, Maity A: Nelfinavir down-regulates hypoxia-inducible factor 1alpha and VEGF expression and increases tumor oxygenation: implications for radiotherapy. Cancer research 66(18): 9252-9, Sep 2006.
- 34. Pore N, Gupta A K, Cerniglia G J, Maity A: HIV protease inhibitors decrease VEGF/HIF-1alpha expression and angiogenesis in glioblastoma cells. Neoplasia 8(11): 889-95, Nov 2006.
- 35. Weber C N, Cerniglia G J, Maity A, Gupta A K: Bortezomib sensitizes human head and neck carcinoma cells SQ20B to radiation. <u>Cancer biology & therapy</u> 6(2): 156-9, Feb 2007.
- 36. Gupta A K, Li B, Cerniglia G J, Ahmed M S, Hahn S M, Maity A: The HIV protease inhibitor nelfinavir downregulates Akt phosphorylation by inhibiting proteasomal activity and inducing the unfolded protein response. Neoplasia 9(4): 271-8, Apr 2007.
- 37. Jiang Z, Pore N, Cerniglia G J, Mick R, Georgescu M-M, Bernhard E J, Hahn S M, Gupta A K, Maity A: Phosphatase and tensin homologue deficiency in glioblastoma confers resistance to radiation and temozolomide that is reversed by the protease inhibitor nelfinavir. Cancer research 67(9): 4467-73, May 2007.
- 38. Kao G D, Jiang Z, Fernandes A M, Gupta A K, Maity A: Inhibition of phosphatidylinositol-3-OH kinase/Akt signaling impairs DNA repair in glioblastoma cells following ionizing radiation. The journal of biological chemistry 282(29): 21206-12, Jul 2007.

- 39. Shu H-K G, Sall W F, Maity A, Tochner Z A, Janss A J, Belasco J B, Rorke-Adams L B, Phillips P C, Sutton L N, Fisher M J: Childhood intracranial ependymoma: twenty-year experience from a single institution. <u>Cancer</u> 110(2): 432-41, Jul 2007.
- 40. Tuttle S W, Maity A, Oprysko P R, Kachur A V, Ayene I S, Biaglow J E, Koch C J: Detection of reactive oxygen species via endogenous oxidative pentose phosphate cycle activity in response to oxygen concentration: implications for the mechanism of HIF-1alpha stabilization under moderate hypoxia. The journal of biological chemistry 282(51): 36790-6, Dec 2007.
- 41. Curry J M, Eubank T D, Roberts R D, Wang Y, Pore N, Maity A, Marsh C B: M-CSF signals through the MAPK/ERK pathway via Sp1 to induce VEGF production and induces angiogenesis in vivo. <u>PloS one</u> 3(10): e3405, Oct 2008.
- 42. Shinohara E T, Maity A, Jha N, Lustig R A: Sirolimus as a potential radiosensitizer in squamous cell cancer of the head and neck. <u>Head & neck</u> 31(3): 406-11, Mar 2009.
- 43. Gupta A K, Lee J H, Wilke W W, Quon H, Smith G, Maity A, Buatti J M, Spitz D R: Radiation response in two HPV-infected head-and-neck cancer cell lines in comparison to a non-HPV-infected cell line and relationship to signaling through AKT. <u>International journal of radiation oncology, biology, physics</u> 74(3): 928-33, Jul 2009.
- 44. Cerniglia G J, Pore N, Tsai J H, Schultz S, Mick R, Choe R, Xing Z, Durduran T, Yodh A G, Evans S M, Koch C J, Hahn S M, Quon H, Sehgal C M, Lee W M F, Maity A: Epidermal growth factor receptor inhibition modulates the microenvironment by vascular normalization to improve chemotherapy and radiotherapy efficacy. PloS one 4(8): e6539, Aug 2009.
- 45. Marotta A, Karar J, Jenkins W T, Kumanova M, Jenkins K W, Tobias J W, Baldwin D, Hatzigeorgiou A, Alexiou P, Evans S M, Alarcon R, Maity A*, Koch C*, Koumenis C*: In vivo profiling of hypoxic gene expression in gliomas using the hypoxia marker EF5 and laser-capture microdissection. <u>Cancer research</u> 71(3): 779-89, Feb 2011 Notes: *joint corresponding authors.
- 46. Rengan R, Mick R, Pryma D, Rosen MA, Lin L, Maity A, Evans TL, Stevenson JP, Langer CJ, Kucharczuk J, Friedberg J, Prendergast S, Sharkoski T, Hahn SM: A phase I trial of the HIV protease inhibitor nelfinavir with concurrent chemoradiotherapy for unresectable stage IIIA/IIIB non-small cell lung cancer: a report of toxicities and clinical response. Journal of Thoracic Oncology 7(4): 709-15, Apr 2012

- 47. Karar J, Cerniglia GJ, Lindsten T, Koumenis C, Maity A: Dual PI3K/mTOR inhibitor NVP-BEZ235 suppresses hypoxia-inducible factor (HIF)-1α expression by blocking protein translation and increases cell death under hypoxia. Cancer biology & therapy 13(11): 1102-11, Sep 2012.
- 48. Cerniglia GJ, Karar J, Tyagi S, Christofidou-Solomidou M, Rengan R, Koumenis C, Maity A: Inhibition of autophagy as a strategy to augument radiosensitization by the dual PI3K/mTOR inhibitor NVP-BEZ235. Molecular pharmacology 82(6): 1230-40, Dec 2012.
- 49. Hart LS, Cunningham JT, Datta T, Dey S, Tameire F, Lehman SL, Qiu B, Zhang H, Cerniglia G, Bi M, Li Y, Gao Y, Liu H, Li C, Maity A, Thomas-Tikhonenko A, Perl AE, Koong A, Fuchs SY, Diehl JA, Mills IG, Ruggero D, Koumenis C.: ER stress-mediated autophagy promotes Myc-dependent transformation and tumor growth. <u>Journal of Clinical Investigation</u> 122(12): 4621-34, Dec 3 2012.
- 50. Damek-Poprawa M, Both S, Wright A C, Maity A, Akintoye SQ: Onset of mandible and tibia osteoradionecrosis a comparative pilot study in the rat. <u>Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology</u> 115(2): 201-11, Feb 2013.
- 51. Alonso-Basanta M, Fang P, Maity A, Hahn SM, Lustig RA, Dorsey JF: A Phase I Study of Nelfinavir Concurrent with Temozolomide and Radiotherapy in Patients with Glioblastoma Multiforme. <u>Journal of Neurooncology</u> 116(2): 365-72, Jan 2014.

Research Publications, peer-reviewed reviews:

- 1. Maity A, McKenna W G, Muschel R J: The molecular basis for cell cycle delays following ionizing radiation: a review. Radiotherapy and oncology 31(1): 1-13, Apr 1994.
- 2. Bernhard E J, Maity A, Muschel R J, McKenna W G: Effects of ionizing radiation on cell cycle progression. A review. <u>Radiation and environmental biophysics</u> 34(2): 79-83, Jun 1995.
- 3. Maity A, Kao G D, Muschel R J, McKenna W G: Potential molecular targets for manipulating the radiation response. <u>International journal of radiation oncology, biology, physics</u> 37(3): 639-53, Feb 1997.
- 4. Dutta P R, Maity A: Cellular responses to EGFR inhibitors and their relevance to cancer therapy. Cancer letters 254(2): 165-77, Sep 2007.
- 5. Karar J, Maity A: Modulating the tumor microenvironment to increase radiation responsiveness. <u>Cancer biology & therapy</u> 8(21): 1994-2001, Nov 2009.

- 6. Shinohara E T, Maity A: Increasing sensitivity to radiotherapy and chemotherapy by using novel biological agents that alter the tumor microenvironment. <u>Current molecular medicine</u> 9(9): 1034-45, Dec 2009.
- 7. Maity A, Bernhard EJ: Modulating tumor vasculature through signaling inhibition to improve cytotoxic therapy. <u>Cancer research</u> 70(6): 2141-5, Mar 2010.
- 8. Graves E E, Maity A, Le Q-T: The tumor microenvironment in non-small-cell lung cancer. Seminars in radiation oncology 20(3): 156-63, Jul 2010.
- 9. Rengan R, Maity A, Stevenson J P, Hahn S M: New strategies in non-small cell lung cancer: improving outcomes in chemoradiotherapy for locally advanced disease. Clinical cancer research 17(13): 4192-9, Jul 2011.
- 10. Karar J, Maity A: PI3K/Akt/mTOR pathway in angiogenesis <u>Frontiers in molecular</u> neuroscience 4: 315-320, Dec 2011.
- 11. Thompson RF, Maity A: Radiotherapy and the tumor microenvironment: mutual influence and clinical implications. <u>Advances in Experimental Medicine and Biology</u> 772: 147-65, 2014.

<u>Contributions to peer-reviewed clinical research publications, participation cited but not by</u> authorship:

[none]

Research Publications, non-peer reviewed:

[none]

Abstracts (Last 3 years):

- Karar J, Marotta D, Jenkins W T, Kumanova M, Jenkins K, Tobias J W, Baldwin D, Hatzigeorgiou A, Alexiou P, Evans S M, Alarcon R, Koch C J, Maity A, Koumenis C: In vivo profiling of hypoxic mRNA and miRNA expression in gliomas and head and neck tumors. Proceedings of the american association for cancer research annual meeting 2011 Notes: poster presentation at 102nd annual meeting, American Association for Cancer Research.
- 2. Maity A, Cerniglia, C J, Karar J: Radiosensitization by the dual PI3K/mTOR inhibitor NVP-BEZ235. <u>International journal of radiation oncology, biology, physics</u> 81(2, suppl.): S84-S85, 2011 Notes: oral presentation at 53rd annual meeting of American Society for Therapeutic Radiology and Oncology.
- 3. Karar J, Cerniglia GJ, Koumenis C, Maity A: Dual PI3K/mTOR inhibitor NVP BEZ-235 suppresses translation of hypoxia-inducible factor (HIF)-1α and increases cell death under hypoxia. Proceedings of the american association for cancer research annual meeting 2012 Notes: poster presentation at 103rd annual meeting, American Association for Cancer Research.

- 4. Cerniglia G, Karar J, Koumenis C, Maity A: Radiosensitization by the dual PI3K/mTOR inhibitor NVP-BEZ235. Proceedings of the american association for cancer research annual meeting 2012 Notes: poster presentation at 103rd annual meeting, American Association for Cancer Research.
- 5. Cerniglia GJ, Karar J, Koumenis C, Maity A: Inhibition of autophagy as a strategy to augment radiosensitization by the dual PI3K/mTOR Inhibitor NVP-BEZ235.
 <u>International journal of radiation oncology, biology and physics</u> 84(3): S127, 2012 Notes: oral presentation at 54th meeting of American Society for Therapeutic Radiology and Oncology
- 6. Volz E, Gabriel P, Bergendahl WH, Maity A, Hahn S: Improving safety culture through incident reporting. <u>International journal of radiation oncology, biology, physics</u> 84(3): S100-S101, 2012 Notes: oral presentation at 54th meeting of American Society for Therapeutic Radiology and Oncology
- 7. George J. Cerniglia, Natalie Daurio, Shannon M. Gallagher-Colombo, Theresa M. Busch, Stephen W. Tuttle, Cameron J. Koch, Alexander Lin, Constantinos Koumenis, Amit Maity: Targeting the PI3K/mTOR pathway decreases oxygen consumption and reduces tumor hypoxia <u>International journal of radiation oncology, biology, physics</u> 2013 Notes: accepted for Poster Discussion Session presentation at 55th meeting of American Society for Therapeutic Radiology and Oncology
- 8. George J. Cerniglia, Natalie Daurio, Shannon M. Gallagher-Colombo, Theresa M. Busch, Stephen W. Tuttle, Cameron J. Koch, Alexander Lin, Constantinos Koumenis, Amit Maity,: Agents that target the PI3K/mTOR pathway decrease oxygen consumption and reduce tumor hypoxia Proceedings of the american association for cancer research annual meeting 2013 Notes: poster presentation at 104th annual meeting, American Association for Cancer Research.

Editorials, Reviews, Chapters, including participation in committee reports (print or other media):

- 1. Kao G, Maity A, McKenna W G, Glatstein E: Radiation Oncology <u>Encyclopedia of Cancer</u>. Bertino J (eds.). Academic Press, 1996.
- 2. A Maity: co-chairperson drafting the Basic Biology section of report: Young Investigators Workshop Participants and Coleman, CN.: Young Investigators Workshop-Radiation Research program, Radiation Oncology Sciences Program, National Cancer Institute, NIH, August 1-2, 2000. <u>International journal of radiation oncology, biology, physics</u> 49: 1505-16, 2001.
- 3. Ginsberg J, Maity A: Testicular late effects. <u>Survivors of Childhood Cancer</u>

 <u>Assessment and Management, 2nd ed.</u> Schwartz C L, Constine L S, Hobbie W S, Ruccione K S (eds.). Springer 2005.

- 4. Maity A, Tuttle S W: 2-Deoxyglucose and radiosensitization: teaching an old DOG new tricks? Cancer biology & therapy 5(7): 824-6, Jul 2006.
- 5. Pore N, Maity A: The chemokine receptor CXCR4: a homing device for hypoxic cancer cells? <u>Cancer biology & therapy</u> 5(11): 1563-5, Nov 2006.
- 6. Maity A, Koumenis C: HIF and MIF--a nifty way to delay senescence? Genes & development 20(24): 3337-41, Dec 2006.
- 7. Chung E Y, Dews M, Maity A, Thomas-Tikhonenko A: Aiding and ABT'ing Treatment for Glioblastoma. <u>Cancer biology & therapy</u> 6(5): 802-4, May 2007.
- 8. Maity A, Pruitt AA, Judy KD, Phillips PC, Lustig R: Cancer of the Central Nervous System. Clinical Oncology. Abeloff M D, Armitage J O, Niederhuber J E, Kastan M B, McKenna W G (eds.). Churchill Livingstone, 2008.
- 9. Hahn S M, Maity A: General principles of radiation and chemoradiation. <u>Retina</u> 29(6 Suppl): S30-1, Jun 2009.
- 10. Maity A: Modulating the tumor microenvironment to improve radiotherapy. Retina 29(6 Suppl): S32-3, Jun 2009.
- 11. Maity A: Radiation Therapy for Sarcomas Bone Pathology, 2nd ed. Khurana J (eds.). Humana Press, 2009.
- 12. Shu H-K, Maity A, Tochner Z: Treatment Modalities: Radiation Therapy. <u>Requisites in Pediatrics: Pediatric Hematology/ Oncology</u>. Brodeur, G, Manno, C.S. (eds.). Mosby, St. Louis 2009.
- 13. Maity A, Koumenis C: Location, location, location-makes all the difference for hypoxia in lung tumors. <u>Clinical cancer research</u> 16(19): 4685-7, Oct 2010.