Vicky N. Yamamoto, Ph.D.

1450 Biggy Street, NRT-4509, Los Angeles, CA 90033
Phone: (310) 752-3725
E-mail: vicky.yamamoto@usc.edu

Education

Keck School of Medicine of USC, Los Angeles, California
Ph.D. in the Department of Biochemistry and Molecular Biology,
The Department of Otolaryngology/Head and Neck Surgery, May 2013.
Thesis Title: Ryk/Smek in Neurogenesis/ Mechanisms of CBP/β-Catenin Signaling Inhibitor and IL-6 Mediators in Head and Neck Squamous Cell Carcinoma
Thesis Advisors: Vijay Kalra, Ph.D/ Uttam Sinha, MD.

Mount Saint Mary's College, Los Angeles, California
B.S. 1995-1999 (Biological Sciences)
B.A. 1995-1999 (Chemistry)
Magna Cum Laude graduate

Honors and Awards

Young Investigator Award, International Brain Mapping and Intra-operative Surgical Planning Society (currently known as Society for Brain Mapping and Therapeutics, (SBMT)), The Joseph B. Martin Conference Center at Harvard Medical School. 2009
Care Extender Internship Program Award, UCLA Medical Group of Santa Monica, 2000
President's Award Medal, Mount Saint Mary's College, 1999
Sister Rebecca Doan's Award Medal, Mount Saint Mary's College, 1999
Honor's Program Certificate recipient, Mount Saint Mary's College, 1999
Overall Excellence in Biology Award, Mount Saint Mary's College, 1999
Dean's List, Mount Saint Mary's College, every semester during the years 1995-1999
Scholar Mentor Award, Annual Award, Mount Saint Mary's College, 1995-1999
Tutor of the Year, Annual Award, Mount Saint Mary's College, 1997-1999
Community Service Award, Mount Saint Mary's College, 1996
Transfer Scholarship recipient, Mount Saint Mary's College, 1996
Outstanding Freshman in Biology Award, Mount Saint Mary's College, 1996

Experience

Research Associate
Department of Otolaryngology/ Head and Neck Surgery. **Keck School of Medicine of USC;** Los Angeles, California. Project 1) Mechanisms of enhancing radiation and chemotherapy sensitivity in head and neck squamous cell carcinoma (HNSCC) by a small molecule inhibitor of Wnt signaling. I am investigating molecular mechanisms of the small molecule Wnt-inhibitor in enhancing radiation therapy, cetuximab, and cisplatin sensitivity in HNSCC, both in vitro and in vivo. The goal of the study is to obtain convincing pre-clinical data to launch a phase I/II clinical trial (PI: Uttam Sinha, Co-PI: Vicky Yamamoto)**.** Project 2) The role of α-catulin in cancer stem cell and in neurodevelopment. In the project, I am investigating the functional roles

of α-catulin, an alpha-catenin-like protein, in head and neck cancer stem cell self-renewal, differentiation, and invasion. In addition, I am investigating possible roles of α-catulin in early mammalian brain development. Project 3) Microwave ablation of head and neck cancer: a pilot clinical trial. As a co-Investigator, I am setting up a clinical trial for using microwave ablation devise in treating head and neck cancer and anaplastic thyroid carcinoma. Project 4) Phase III clinical trial. As a co-investigator, I am setting up the BMS clinical trial for the department of otolaryngology/head and neck surgery. The purpose of this study is to determine whether Nivolumab will significantly improve progression-free survival and/or overall survival as compared to therapy of investigator's choice in patients with recurrent or metastatic head and neck squamous cell carcinoma. (PI: Barbara Gitlitz, MD/ Co-PI: Uttam Sinha, MD). Project 5) The non-invasive screening of high-risk individuals for early detection of head and neck cancer using 3D quantitative DNA methylation imaging. Through collaboration between USC and Cedars-Sinai Medical Center, we are developing a novel diagnostic method to screen asymptomatic early or recurrent head and neck cancer.
September 2013 - present

Research Fellow
Department of Otolaryngology/ Head and Neck Surgery. **Keck School of Medicine of USC;** Los Angeles, California. My research is focused on both basic and translational research. Currently, I have five major projects; Project 1) Therapeutic effect of a small molecule inhibitor of Wnt signaling in head and neck squamous cell carcinoma (HNSCC). In the project, I am investigating **a)** Molecular mechanisms of the small molecule inhibitor in enhancing chemotherapy sensitivity in HNSCC, in vitro and in vivo. **b)** Molecular mechanisms of enhanced radiation-mediated cell death in vivo. The aim of the study is to obtain convincing pre-clinical data for launching phase I/II clinical trial **c)** Molecular mechanism of reversing epithelial-to-mesenchymal transition in ICG-001 treated HNSCC. Project 2) The role of post-transcriptional regulation of CXCR4/7 and CXCL12 expressions in the metastasis and tumor progression of HNSCC. In the project, I am investigating the following three aims; **a)** delineating the molecular mechanisms of post-transcriptional regulation of CXCR4/7 and CXCL12 in HNSCC. **b)** Identification and therapeutic effect of microRNA against CXCR4/7 and CXCL12 in vitro and in vivo. **c**) Identification of the transcription factors regulating the microRNA transcription in HNSCC under hypoxic condition. Project 3) the alteration of stem cell markers in HNSCC in response to Hypoxia. Project 4) Regulation of IL6R expression by microRNAs in HNSCC. Project 5) Investigation of IL6 and IL8 as a biomarker for early head and neck cancer diagnosis and development of novel IL6/IL8 detection assay (Collaboration with Rich Roberts, Ph.D.). I am also responsible in writing various internal and external funding applications, including NIH grants, and IACUC application, and IRB protocol for the projects. I am mentoring 3 medical students, including a Dean's Research Scholar, and 1 undergraduate student. PI: Uttam K. Sinha, MD. Collaborators: Michael Kahn, Ph.D., Vijay Kalra, Ph.D, Agnieszka Kobielak, Ph.D., and Richard Roberts, Ph.D. January 2013 – August 2013.

Graduate Research Fellow, Department of Otolaryngology and Department of Biochemistry and Molecular Biology, **Keck School of Medicine of USC;** Los Angeles, California. As an RA, I was involved in the following 2 major projects; 1) Therapeutic Effect of a Small Molecule

Drug, ICG-001, in HNSCC 2) Post-transcriptional and post-translational regulation of IL-6 signaling in HNSCC. I was also responsible for training master students and medical students. PI: Vijay K. Kalra, Ph.D. and Uttam K. Sinha, MD. November 2010 to December 2012.

Graduate Research Assistant**.** Center for Stem Cell and Regenerative Medicine**, Keck School of Medicine of USC,** Los Angeles, California. My responsibilities as an RA included: **1)** Carrying out various independent, complex research projects that require highly technical, specialized skills includes: neuronal progenitor cell isolation and culturing, in-utero intraventricular injection and electroporation of mouse embryos, teratoma formation/analysis, DNA cloning, and other molecular/ histological techniques. Some of my projects include **a)** Ryk mediated Wnt signaling in neural stem cell proliferation and differentiation, **b)** Roles of a Ryk associated proteins, Smek1 and Smek2, in neurogenesis, **c)** Role of beta-catenin in embryonic stem cell reprogramming efficiency and self-renewal. **2)** Training new graduate students and postdoctoral scholars and supervising undergraduate students. **3)** Managing the laboratory (ordering for the lab and handling various administrative tasks to make the lab run efficiently). August 2006 to October 2010

Research Specialist. **Keck School of Medicine of USC,** Los Angeles, California.
My primary responsibilities were to involve in independent research, manage the lab in its daily running, and train graduate students and postdoctoral scholars. I was responsible for planning, designing, and conducting highly technical, complex research projects to determine roles of Wnt signaling in stem cell proliferation, differentiation, and migration. Techniques included RT-PCR, immunohistochemistry, handling mice, neural progenitor cell culturing, isolation and culturing of mouse embryonic fibroblast (MEF) cells and derivation of immortalized MEF (3T3) cells; and other molecular/cellular biology techniques, in addition to microsurgery on mice. PI: Wange Lu, Ph.D. March 2006 to August 2006.

Research Assistant. **California Institute of Technology**, Pasadena, California.
I worked with a postdoctoral researcher to carry out research projects on Wnt Signaling. Techniques included cloning, immunohistochemistry, apoptosis assays, DNA purification and transfection, PCR, Western blotting, in-situ hybridization, yeast-two-hybridization, neurosphere/cortical cell culturing, RNA isolation, microarray, and other cell/molecular techniques. Other techniques included cryosectioning, HE staining, and small animal surgery which included dissection of mouse embryo, isolation of cortex from mouse embryo, and cardiac perfusion. I was working fairly independently, comparable to that of a graduate student. I trained and supervised undergraduate and medical students. PI: ***Nobel Prize Laureate and President of Caltech, David Baltimore, Ph. D***. February 2004 to February 2006.

Math and Chemistry Instructor. **Mount Saint Mary's College,** Los Angeles, California. I worked as a part-time faculty in the department of Math and Physical Sciences. I taught Elementary Algebra class, Elementary Number Systems class and General Chemistry and Organic Chemistry Laboratory courses. I also worked as a math and science tutor at the Learning Resource Center. January 2002 to May 2004

Teaching Assistant/Academic Coach. **Mount St. Mary's College,** Los Angeles, California. I worked as a teaching assistant in a calculus class. Job responsibility included grading homework and quizzes, facilitating study session/ workshop, and tutoring. I also worked as a math/science academic coach to help students who were struggling in science or math classes. Both were funded by James Irvine Foundation's grant. September 2002 to May 2004.

Research Associate, **Maxine Dunitz Neurosurgical Institute, Cedars-Sinai Medical Center,** Los Angeles, California. I worked with researchers with projects to investigate biochemical pathways that regulate blood-brain barrier (BBB) permeability in both tumor and ischemic models, survival rate of tumor bearing rats, and induction of apoptosis in gliomas via potassium channel modification. Laboratory techniques included tissue and cell culture work, FACS analysis, cryosectioning, cell proliferation assay, apoptosis study, Western blot and immunohistochemistry. I performed animal surgery, which included tumor implantation, intracarotid artery cannulation, and femoral artery/vein cannulation. Other duties included budgeting, ordering and organizing lab supplies. P.I. Keith L. Black, MD. October 1999 to December 2001

Care Extender Internship. **UCLA -Santa Monica Medical Center**, Santa Monica, California. Rotation through departments for purpose of observation, patient transport, office work and administration. I worked at labor and deliver, cardiac catheterization lab, emergency room (ER), and operating room (OR). I also served as a quality control member. At the end of the program, I received an award for working 314 hours. August 1999 to November 2000.

Summer Research Internship. **The Scripps Research Institute**, Vascular Biology Department, San Diego, California. The title of my project was Production and packaging of type-1 plasminogen activator inhibitor (PAI-1) in Megakaryocytic cell lines. Assays were included: Western blot, SDS-PAGE, ELISA, and differential centrifugation. PI: Raymond R. Schleef, Ph.D. June to August 1998.

Research Assistant. **Mount Saint Mary's College**, Department of Microbiology, Los Angeles, California. I investigated the germination of *Candida albicans* and its associated genes." The laboratory techniques I learned were DNA isolation, total RNA and mRNA isolation, and cell culture work. PI: Marie Zeuthen, Ph. D. August 1997 to May 1999.

Healthcare Policy:

Member of the Science Committee of the Society for Brain Mapping and Therapeutics; in this capacity, I played a role in drafting a whitepaper to the White House Office of Science, Technology and Policy urging President Obama to establish National Networks of Brain Banks, National Alliance for NanoBioElectronics and National Data Repository and Analysis for Neuroscience. The proposal was presented to the White House by the Chairman of the Board of SBMT as a part of the President Obama's Brain Mapping Initiative.

Publication

Original Articles

1. Pullarkat V, Meng Z, Donohue C, **Yamamoto VN**, Tomassetti S, Bhatia R, Krishnan A, Forman SJ, Synold TW. Iron chelators induce autophagic cell death in multiple myeloma cells. *Leukemia Research*. 2014. pii: S0145-2126(14)00184-2. PMID: 24998390
2. Lyu J, Kim HR, **Yamamoto V**, Choi SH, Wei Z, Joo CK, Lu W. Protein phosphatase 4 and Smek complex negatively regulate Par3 and promote neuronal differentiation of neural stem/progenitor cells. *Cell Reports*. 2013; 5(3):593-600. PMID: 24209749
3. Zeng L*, Zhang P*, Shi L*, **Yamamoto V**, Lu W, Wang K. Functional impacts of NRXN1 knockdown on neurodevelopment in stem cell models. *PLoS One.* 2013. *Co-first authors. PMID: 23536886
4. Lyu J, **Yamamoto V**, and Lu W; Cleavage of Wnt receptor Ryk regulates neuronal differentiation during cortical neurogenesis. *Developmental Cell*. 2008; 15(5):773-80. PMID: 19000841
5. Lu W, **Yamamoto V**, Ortega B, and Baltimore D; Mammalian Ryk is a Wnt co-receptor required for stimulation of neurite outgrowh. *Cell*, 2004; (119) 97 – 108. PMID: 15454084

Review Articles and Case Reports

1. Kateb B, Chiu K, Black KL, **Yamamoto V**, Khalsa B, Ljubimova JY, Ding H, Patil R, Portilla-Arias JA, Modo M, Moore DF, Farahani K, Okun MS, Prakash N, Neman J, Ahdoot D, Grundfest W, Nikzad S, Heiss JD. Nanoplatforms for constructing new approaches to cancer treatment, imaging, and drug delivery: What should be the policy? *Neuroimage.* Feb. 2010; PMID: 20149882 ***ScienceDirect's Top 25 Hottest Article from Feb 2010 to March 2011***.

2. Kateb B, **Yamamoto V**, Yu C, Grundfest W, and Gruen JP. Infrared thermal imaging: a review of the literature and case report. *Neuroimage*. Aug. 2009; PMID: 19332140

Book Chapters

1. **Yamamoto V**, Suffrendini G, Nikzad S, Hoenk ME, Boer MS, Teo C, Heiss JD, and Kateb B. Ch1: From Nanotechnology to Nanoneuroscience/ Nanoneurosurgery and Nanobioelectronics. A Historical Review of Milestones. The Textbook of Nanoneuroscience and Nanoneurosurgery. ISBN: 978-1-4398-4941-5. CRC Press, 2013. **Textbook chapter**
2. **Yamamoto V**, Suffrendini G, Heiss JD, Mishelevich D, Palmer G, Grundfest W, and Kateb B. Ch1: From Nanotechnology to Nanoneuroscience/ Nanoneurosurgery and Nanobioelectronics. Ch 40: Food and Drug Administration (FDA) regulatory

frame work for Nano-Drugs and Nano-Devices and the combination nano-drug. ISBN: 978-1-4398-4941-5. CRC Press, 2013. **Textbook chapter**

3. Kateb B, **Yamamoto V**, Basser P, Roy M, Levy L, Tajbakhsh J, Steinberg G, Rosen A, Black KL, Teo C, Sidhu K, Berger M, and Grundfest W. Ch41: Nanoneuroscience and Nanoneurosurgery: A key component of President Obama's Brain Mapping Initiative. ISBN: 978-1-4398-4941-5. CRC Press, 2013. **Textbook chapter**
4. Kateb B, **Yamamoto V**, Alizadeh D, Zhang L, Manohara HM, Bronikowski MJ, Badie B. Multi-walled carbon nanotube (MWCNT) synthesis, preparation, labeling, and functionalization. *Methods Mol Biol.* 2010; 651:307-17. PMID: 20686974 **Protocol/Book chapter**

Manuscript in preparation or submitted:

1. Schmale I, Kouji H, Sinha UK, and **Yamamoto V**. Enhanced cetuximab by a small molecule inhibitor of Wnt signaling is mediated by altering EGFR signaling and defective DNA repair mechanism.
   Manuscript in preparation. **Research Paper**

2. **Yamamoto V,** Thylur D, Khanna R, Bauschard M, Kahn M, Kouji H, Hill C, Kalra VK, and Sinha UK. Antagonizing CBP/beta-catenin signaling enhanced radiation sensitivity and reversed epithelial-to-mesenchymal transition in head and neck squamous cell carcinoma.
   Manuscript in preparation. **Research Paper**

3. **Yamamoto V**, Cao C, Sinha UK, and Kobielak A. Role of alpha-catulin in neural closure during mammalian mouse development.
   Manuscript in preparation **Research Paper**

4. Thylur D*, Low G*, Sinha UK, and **Yamamoto V**. The role of HPV in DNA repair/ DNA damage response in head and neck cancers.
   *co-first authors
   Submitted, Oral Oncology **Review Article**

5. **Yamamoto V***, Thylur D, Bauschard M, Schmale I, Tenkondar A and Sinha UK. Recent advancement in mechanisms and targeted therapies for radiation-therapy resistant head and neck cancers.
   Submitted, Oral Oncology **Review Article**

6. Schmale I, **Yamamoto V**, and Sinha UK. A case report on a patient with recurrent laryngeal papillomatosis who received gastric bypass surgery.
   Submitted **Case Report**

Oral / Poster Presentations

1. **Yamamoto V**, Thylur D, and Sinha UK. Abrogation of Wnt signaling enhanced radiation therapy sensitivity in head and neck cancer. The 4th Congress of Asian Society of Head and Neck (ASHNO) and the 39th Japanese Society for Head and Neck Cancer (JSHNC) meeting. Kobe, Japan. June 2015. **Oral Presentation**
2. **Yamamoto V**, Wu K, Kalra VK, and Sinha UK. Identification of IL-6 induced microRNAs for IL-6 receptor in head and neck squamous cell carcinomas. IFHNOS World Congress-AHNS Annual Meeting. New York, New York. July 2014. **Abstract/ Poster**
3. **Yamamoto V.** Small molecule based approaches for personalized medicine and adult stem cell therapy. 11th Annual Society for Brain Mapping and Therapeutics. Sydney, Australia. March 2014. **Invited Speaker**
4. Schmale I, Thylur D, **Yamamoto V,** Kalra V, and Sinha UK. Wnt Signaling Pathway Inhibition Enhances Efficacy of Cetuximab. 117th AAO-HNSF Annual Meeting and OTO Expo. Vancouver, BC, Canada. September 2013. **Oral Presentation**
5. **Yamamoto V**. Wnt signaling in neurogenesis. 10th Annual Society for Brain Mapping and Therapeutics. Baltimore, Maryland. May 2013. **Invited Speaker**
6. **Yamamoto V**, Khanna R, Kahn M, Kalra VK, and Sinha UK. Antagonizing CBP/beta-catenin signaling by ICG-001, a small molecule inhibitor, enhanced radiation sensitivity and increased sensitivity to cetuximab in head and neck squamous cell carcinoma. 8th International Conference on Head and Neck Cancer. Toronto, ON, Canada. July 2012. **Abstract/ Poster**
7. **Yamamoto V,** Khanna R, Kahn M, Kalra VK, and Sinha UK. Inhibiting CBP/beta-catenin in Head and Neck Cancer. 5th Annual QOL International Symposium. Niigata University, Niigata, Japan. February 2012 **Invited Speaker**
8. **Yamamoto V**, Khanna R, Kahn M, Kalra VK, and Sinha UK. ICG-001, a small molecule inhibitor of CBP/beta-catenin signaling enhanced radiation sensitivity in head and neck squamous cell carcinoma via apoptosis. The 22nd North American Skull Base Society Annual Meeting. Las Vegas, NV. February 2012. **Oral Presentation**
9. **Yamamoto V**, Kahn M, Kalra VK, and Sinha UK. Antagonizing CBP/beta-catenin signaling enhanced radiation sensitivity in head and neck squamous cell carcinoma. AACR-NCI-EORTC International Conference: Molecular Targets and Cancer Therapeutics. San Francisco, CA. Nov 12-16, 2011. **Abstract/ Poster**.
10. **Yamamoto V**, Lyu J, Lu W. Ryk is required for neurogenesis. 6th Annual Congress of International Brain Mapping and Intra-operative Surgical Planning Society (IBMISPS), Harvard University, Boston, MA, August 2009. **Oral Presentation**
11. N.S. Ningaraj, **Vicky Yamamoto**, Mamatha Rao, Keith L. Black; Activation of Calcium Dependent Potassium Channels Elicits Selective Glioma Cell Death. American Association for Cancer Research, Miami, Florida, October 29-November 2, 2001 **Abstract/ Poster**
12. N.S. Ningaraj, M.K. Rao, **V. Yamamoto,** E. Tsimerinov, K. Asotra, K.L. Black; Role of Kca and KATP channels in Blood-Brain Tumor Barrier permeability in Rats. Submitted for presentation to Society for Neuroscience, San Diego, California, November 10-15, 2001 **Abstract/ Poster**

13. N.S. Ningaraj, M. Uchida, **V. N. Yamamoto,** K. Asotra, K.L. Black; Nitric Oxide Donors Increase Blood-Brain Tumor Barrier Permeability in Rats via Kca. American Association of Neurological Surgeons, Toronto, Canada, April 20-26, 2001
Abstract/ Poster
14. Nagendra Ningaraj, **Vicky N. Yamamoto,** Kamlesh Asotra, Keith L. Black; Role of ATP-sensitive K+ Channels in Blood-Brain Tumor Barrier Permeability. Congress of Neurological Surgeons, San Antonio, Texas, September 23-28, 2000
Abstract/ Poster
15. N.S. Ningaraj, M. Uchida, **V. N. Yamamoto,** K. Asotra, K.L. Black; Regulation of Blood-Brain/ Tumor Barrier Permeability in Rat by NO-sensitive Kca channels. Society for Neuroscience, November 2000 **Abstract/ Poster**
16. **Vicky N. Yamamoto,** Raymond Schleef**;** The Investigation of Production and Packaging of type-1 Plasminogen Activator Inhibitor (PAI-1) in Megakaryocytic cell lines. Summer Conference for College Undergraduate Research (SCCUR), California State Polytechnic University, Pomona, California, September 1998.
Abstract/ Oral Presentation

Patents: 1. Targeting CBP/b-catenin signaling enhances chemo-radiation sensitivity in cancers (patent pending) . Investigators: Vicky Yamamoto, Uttam Sinha and Michael Kahn.

Academic Activities:

- **Member**, **Southern California Head and Neck Cancer (SoCal HNC) consortium.** 2015-present.
- **Co-Director, National Space Biomedical Research Institute (NSBRI)- SBMT-Young Investigator Award,** Society for Brain Mapping and Therapeutics (SBMT). 2014-2015
- **Program Committee**, stem cell session, 2015 World Congress of Brain Mapping and Therapeutics, and **Co-Chair** of a cancer stem cell session. Society for Brain Mapping and Therapeutics (SBMT). 2014-2015.
- **Grant Reviewer**, cancer study section, Southern California Clinical and Translational Science Institute (SC-CTSI), 2013-present
- **Co-Chair of the Industry Committee and Scientific Program Committee**, Society for Brain Mapping and Therapeutics (SBMT, www.worldbrainmapping.org), 2012-2014.
- Member of the **Executive Board of Directors**, Society for Brain Mapping and Therapeutics (SBMT), 2012-present.
- **Member of the Board of Brain Mapping Foundation**, Society for Brain Mapping and Therapeutics, 2011-present.
- **Scientific Program Committee**, Society for Brain Mapping and Therapeutics, 2008-2013
- **Executive Secretary** for the Board of Directors, Society for Brain Mapping and Therapeutics (Formerly known as International Brain Mapping and Intra-operative Surgical Planning Society (IBMISPS)), 2007-2011

Mentorship:

- Rohit Khanna, undergraduate student. Dec 2010- May 2013
- Karin Wu, medical student, summer 2012 - spring 2013

- Isaac Schmale, medical student, Dean's Special Research Scholar. July 2012-June 2013
- Michael Bauschard, medical student. August 2013-present
- David Thylur, medical student, Dean's Special Research Scholar. July 2014-present
- Garren Low, medical student, January 2015-present

Editorial Roles:

- **Associate Editor**, *NeuroImage*, 2009-2011
- **Ad Hoc Reviewer**, *NeuroImage*, 2007-present
- **Ad Hoc Reviewer**, *Cancer Letters*, 2014-present

Scientific Meetings Attended:

- Deep Brain Connectomics-1st Satellite symposium of SBMT, Clermont-Ferrand Convention Center, France. September 28-29, 2012
- 8th International Conference on Head and Neck Cancer. Toronto, Ontario, Canada. July 2012. 5th Annual QOL International Symposium. Niigata City, Japan. February 2012
- North American Skull Base Society Annual Meeting. Las Vegas, NV. February 2012
- AACR-NCI-EORTC International Conference: Molecular Targets and Cancer Therapeutics, San Francisco, CA. November 2011
- IBMISPS International Brain Mapping and Intra-operative Surgical Planning Society, UCSF Mission Bay Convention center, San Francisco, CA, June 2011
- ISSCR Annual Meeting, San Francisco, CA, June 2010
- IBMISPS International Brain Mapping and Intra-operative Surgical Planning Society, Uniformed Services University Health Science, Bethesda, MD, May 2010
- International Brain Mapping and Intra-operative Surgical Planning Society (IBMISPS), Harvard Medical School Convention Center, Boston, MA, August 2009
- CIRM Grantee Meeting, San Francisco, CA, October 2008
- International Brain Mapping and Intra-operative Surgical Planning Society, CNSI Conference Hall at UCLA, Los Angeles, CA, August 2008
- International Brain Mapping and Intra-operative Surgical Planning Society, Washington Plaza Hotel, Washington DC, Sept 2007
- Wnt Signaling Meeting, San Diego, California. June 2007
- Society for Neuroscience, San Diego, California. November 2001
- The *Candida* Conference, Charleston, South Carolina. March 1999
- American Society for Microbiology General Meeting, Atlanta, Georgia. May 1998

Membership:

International Society for Stem Cell Research (ISSCR), 2010 - present.
American Chemical Society, 2005 - present.
Society for Brain Mapping and Therapeutics (SBMT, formerly known as International Brain Mapping and Intra-operative Surgical Planning(IBMISPS)), 2003 - present.
American Society for Microbiology, 1998 to 2011.

Delta Epsilon Sigma National Scholastic Honor Society, National Organization, 1999.
Kappa Gamma Pi, The National Catholic College Graduate Honor Society, National Organization, 1999 to present.

Other Technical Skills:

- Computer skills (FORTRAN and SPSS)
- Computer Graphics (Adobe Photoshop, Adobe Illustrator, and Quark Xpress)
- Foreign language (write, read, and speak Japanese/ daily conversation in Spanish.

Research Support:

A) On-going support:

1) Industry Award: PRISM Pharma Co., Ltd.
Role: Co-PI (PI: Uttam Sinha)
Project title: Molecular mechanisms of enhanced radiation sensitivity in head and neck squamous cell carcinoma by Wnt-signaling inhibition.
Goal: To elucidate molecular mechanism of Wnt-inhibitor mediated enhanced radiation sensitivity in radiation resistant head and neck squamous cell carcinomas.
Direct Cost: $20,000
2015-current

2) American Medical Association Seed Grant: American Medical Association
Role: Co-PI (PI: Uttam Sinha. Awardee: David Thylur)
Project Title: Cancer stem cell modulation using Wnt pathway inhibition in head and neck squamous cell carcinoma.
Goal: To investigate how Wnt-signaling is involved in cancer stem cell (CSC) and to evaluate how antagonizing Wnt-signaling pathway can modulate population and characteristics of CSC in head and neck cancer.
Direct Cost: $5,000
2015-current

3) Industry Award: Eisai Pharma
Role: Co-PI (PI: Uttam Sinha)
Project title: Antagonizing CBP/beta-catenin signaling enhanced radiation sensitivity in head and neck squamous cell carcinoma.
Goal: To develop targeted therapy utilizing small molecule Wnt inhibitors to enhance radiation sensitivity in radiation resistant head and neck squamous cell carcinoma. The final goal of the project is to bring the treatment to a phase I/II clinical trial.
Direct Cost: $80,500
2012-current

4) Watt Family Foundation:
Role: co-investigator (PI: Uttam Sinha)

Project Title: Improving survival and quality of life in head and neck cancer patients by reducing dose of radiation.
Goal: Drug development for targeting cancer stem cell in head and neck squamous cell Cancer (HNSCC). More specifically to investigate PI3K and β-catenin/CBP pathway in cancer stem cell and to study a variety of genes including survivin, cyclin-D, and SPK to increase sensitivity of HNSCC to ionizing radiation.
Direct Cost: $1,000,000 Endowment
2011 – In Perpetuity

B) Past support:

1) Ming-Hsieh Institute Award: Ming Hsieh Institute (MHI) for Research on Engineering and Medicine for Cancer, University of Southern California.
Role: Co-investigator/ graduate research fellow
(PI: Richard W. Roberts, Co-PI: Uttam Sinha)
Project Title: Developing SUPR Peptide Diagnostics and Therapeutics for Oral Cavity Carcinomas
Goal: To develop new molecular agents (SUPR Peptides) that will assist in diagnosis and treatment of head and neck cancers, particularly squamous cell carcinoma of the of the oral cavity (OSCC) and tongue (TSCC).
Direct Cost: $150,000
2013-2015

2) Pre-Doctoral Fellowship. The Edwin Everest Foundation.
Amount: $100,000.
2010-2012

3) Pre-doctoral Fellowship. California Institute for Regenerative Medicine (CIRM)
Amount: $70,000.
2007-2009