

CURRICULUM VITAE FOR ACADEMIC PROMOTION

The Johns Hopkins University School of Medicine



(Signature)

Phuoc T. Tran

5/5/2010

Date

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

2009- Assistant Professor, Radiation Oncology, Johns Hopkins Medicine.

Personal Data

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Education and Training (in chronological order):

DEGREE	INSTITUTION	DATE	FIELD
B.S.	University of California, San Diego (UCSD)	1992-1996	Mol. Biology
Ph.D.	Oregon Health & Science University (OHSU)	1998-2001	Genetics
M.D.	OHSU	1996-2003	Medicine
Postdoc Fellow	OHSU	2002-2003	Genetics
Med. Intern	St. Mary's Medical Center, San Francisco, CA	2003-2004	Int. Medicine
Resident	Stanford University Medical Center	2004-2008	Rad Onc
Chief Resident	Stanford University Medical Center	2007-2008	Rad Onc
Postdoc Fellow	Stanford University Medical Center	2005-2009	Cancer Biology

Professional Experience (in chronological order, earliest first)

Dates	Positions	Institutions
2008-2009	Instructor, Radiation Oncology	Stanford University Medical Center.
2008-2009	Member	Stanford Cancer Center.

RESEARCH ACTIVITIES

Publications: Peer-reviewed Original Science Research

1. Tsutomu Nobori, Kenji Takabayashi, **Phuoc Tran**, Lisa Orvis, Ayse Batova, Alice L. Yu and Dennis A. Carson. Genomic cloning of methylthioadenosine phosphorylase: A purine metabolic-enzyme deficient in multiple different cancers. *Proc. Natl. Acad. Sci. USA* **93** (1996) 6203-6208.
2. Hiroki Hori, **Phuoc Tran**, Carlos J. Carrera, Yasuko Hori, Michael D. Rosenbach, Dennis A. Carson and Tsutomu Nobori. Methylthioadenosine Phosphorylase cDNA Transfection Alters Sensitivity to Depletion of Purine in A549 Lung Cancer Cells. *Cancer Research* **56** (1996) 5653-5658.

3. **Phuoc T. Tran**, Hiroki Hori, Yasuko Hori, Katsuzumi Okumura, Kazuhiro Kagotani, Hiroshi Taguchi, Dennis A. Carson and Tsutomu Nobori. Molecular cloning of the human methylthioadenosine phosphorylase processed pseudogene and localization to 3q28. *Gene* **186** (1997) 263-269.
4. **Phuoc T. Tran** and R. Michael Liskay. Functional Studies on the Candidate ATPase Domains of *Saccharomyces cerevisiae* MutL-alpha. *Mol. Cell. Biol.* **20** (2000) 6390-6398.
5. Jayson Bowers, **Phuoc T. Tran**, R. Michael Liskay, and Eric Alani. Analysis of yeast MSH2-MSH6 suggests that the initiation of mismatch repair can be separated into discrete steps. *J. Mol. Biol.* **302** (2000) 327-338.
6. **Phuoc T. Tran**, Jeffery A. Simon and R. Michael Liskay. Interactions of Exo1p with components of MutL-alpha in *Saccharomyces cerevisiae*. *Proc. Natl. Acad. Sci. USA* **98** (2001) 9760-9765.
7. Jayson Bowers, **Phuoc T. Tran**, Amita Joshi, R. Michael Liskay, and Eric Alani. MSH-MLH complexes formed at a DNA mismatch are disrupted by the PCNA sliding clamp. *J. Mol. Biol.* **306** (2001) 957-968.
8. **Phuoc T. Tran**, Naz Erdeniz, Sandra Dudley and R. Michael Liskay. Characterization of nuclease-dependent functions of Exo1p in *Saccharomyces cerevisiae*. *DNA Repair* **1** (2002) 895-912.
9. Caroline Welz-Voegele, Jana E. Stone, **Phuoc T. Tran**, Hutton M. Kearney, R. Michael Liskay, Thomas D. Petes and Sue Jinks-Robertson. Alleles of the yeast *PMS1* mismatch repair gene that differentially affect recombination- and replication-related processes. *Genetics* **162** (2002) 1131-1145.
10. Sumeet S. Chugh, Olga Senashova, Allison Watts, **Phuoc T. Tran**, Zhengfeng Zhou, Qiuming Gong, Jack L. Titus and Susan J. Hayflick. Postmortem Molecular Screening in Unexplained Sudden Death. *J Am Coll Cardiol.* **43** (2004) 1625-1629.
11. **Phuoc T. Tran**, Naz Erdeniz, Lorraine S. Symington and R. Michael Liskay. EXO1 – a multi-tasking eukaryotic nuclease. *DNA Repair* **3** (2004) 1549-1559.
12. **Phuoc T. Tran**, Zheng Su, Percy Lee, Philip Lavori, Amreen Husain, Nelson Teng & Daniel S. Kapp. Prognostic Factors for Outcomes and Complications for Primary Squamous Cell Carcinoma of the Vagina Treated with Radiation. *Gynecol Oncol.* **105** (2007) 641-649.
13. **Phuoc T. Tran**, Zheng Su, Wendy Hara, Amreen Husain, Nelson Teng & Daniel S. Kapp. Long Term Survivors Using Intraoperative Radiation Therapy for Recurrent Gynecologic Malignancies. *Int J Radiat Oncol Biol Phys.* **69** (2007) 504-511.
14. **Phuoc T. Tran***, Julien Fey*, Naz Erdeniz*, Lionel Gellon, Serge Boiteux and R. Michael Liskay. A mutation in *EXO1* defines separable roles in DNA mismatch repair and post-replication repair. *DNA Repair* **6** (2007) 1572-1583.
* - these authors contributed equally.
15. **Phuoc T. Tran***, Wendy Hara*, Zheng Su, H. Jill Lin, Pavan K. Bendapudi, Jeffrey Norton, Nelson Teng, Christopher R. King & Daniel S. Kapp. Intraoperative Radiation Therapy for Locally Advanced and Recurrent Soft Tissue Sarcomas in Adults. *Int J Radiat Oncol Biol Phys.* **72** (2008) 1146-1153.
* - these authors contributed equally.

16. **Phuoc T. Tran***, Alice C. Fan*, Pavan K. Bendapudi*, Shan Koh, Kim Komatsubara, Joy Chen, George Horng, David I. Bellovin, Sylvie Giuriato, Craig S. Wang, Jeffrey A. Whitsett and Dean W. Felsher. Combined Inactivation of MYC and K-Ras Oncogenes Reverses Tumorigenesis in Lung Adenocarcinomas and Lymphomas. *PLoS ONE* 3 (2008) e2125.
* - these authors contributed equally.
17. **Phuoc T. Tran** and Dean W. Felsher. The current STATE of Biomarkers for Response to Anti-Angiogenic Therapies. *Cancer Biol Ther* 7 (2008) 2004-2006.
18. Wendy Hara, **Phuoc Tran**, Gordon Li, Zheng Su, Putipun Puataweepong, John Adler, Steven Chang, Scott Soltys and Iris C. Gibbs. Cyberknife for brain metastases of malignant melanoma and renal cell carcinoma. *Neurosurgery* 64 (2009) A26-32.
19. Melissa Horoschak, **Phuoc T. Tran***, Pavan Bachireddy, Robert B. West, David Mohler, Christopher Beaulieu, Daniel S. Kapp, and Sarah S. Donaldson. External beam radiation therapy enhances local control in pigmented villonodular synovitis. *Int J Radiat Oncol Biol Phys.* 75 (2009) 183-187.
* - corresponding author.
20. Christopher H. Chapman, John Shen, Edith J. Filion, **Phuoc T. Tran**, Wendy Hara, Alfredo Asuncion, Daniel Marko, Heather Wakelee, Gerald J. Berry, Kevin W. Dimmick, Billy W. Loo, Jr., Jon Green. Marked tumor response and fatal hemoptysis during radiation for lung cancer in an HIV-positive patient taking nelfinavir. *J Thorac Oncol* 4 (2009) 1587-1589.
21. Hu Zhou, Manuel Rodriguez, Fred van den Haak, Geoffrey Nelson, Rahil Jogani, Jiali Xu, Xinzhi Zhu, Yongjiang Xian, **Phuoc T. Tran**, Dean W. Felsher, Paul J. Keall, Edward E. Graves. Development of a MicroCT-Based Image-Guided Conformal Radiotherapy System for Small Animals. *Int J Radiat Oncol Biol* (2009) *In press.*

Inventions, Patents, Copyrights (pending, awarded)

	Date	Title
None.		

Extramural Funding (current, pending, previous)

Ongoing Research Support

PBF Fellowship (23799)	Tran (PI)	6/1/08-5/31/11	2.52 calendar mos
Francis Family Foundation			\$50,000
“Investigations on the Differential Oncogene-dependency of MYC versus <i>K-Ras</i> Murine Primary Lung Tumor Model Systems”			
Aims #1 & #2 goals are to isolate the molecular differences between MYC- and <i>K-Ras</i> -induced lung tumors and then to force MYC-induced lung tumors to exhibit an oncogene-addicted phenotype by targeting these differences. Aim #3 is the generation of a conditional mouse model of <i>Twist1</i> for the study of pulmonary fibrosis and cancer metastasis.			
Role: PI			
ASTRO JFCRTA	Tran (PI)	8/15/09-6/30/11	0.6 calendar mos
American Society for Radiation Oncology (ASTRO)			\$125,000
“Inducible <i>SNAIL</i> transgenic mouse model for radiation induced-pulmonary fibrosis”			
Aim #1 is to generate an inducible hSNAIL-S6A lung mouse model. Aim #2 is to characterize phenotypes of these mice following thoracic radiation using small animal imaging and molecular-			

pathologic examination. Aim #3 is to determine if constant transcription of hSNAI1-S6A is necessary for maintenance of fibrosis.

Role: PI

Completed Research Support

5-T32-HL07781 Bagby (PI) 7/1/98-6/30/01
NIH \$12,000

Oregon Health & Science University Molecular Hematology Research Training Fellow.

Role: Investigator

No overlap

Research Resident (RR0601) Tran (PI) 7/1/06-6/30/07
RSNA \$30,000

“Investigations on the Mechanism of MYC-dependent Inhibition of DNA double strand break repair”

To explore mechanisms of MYC-dependent genomic instability primarily by structure-function studies on MYC with double-strand break repair assays.

Role: PI

No overlap

1046297-100-KAVWO Tran (PI) 7/1/07-6/30/08
SUMC Radiation Oncology Henry S. Kaplan Fund \$45,000

“Investigations on the Mechanism of MYC-dependent Inhibition of DNA double strand break repair”

To explore mechanisms of MYC-dependent genomic instability primarily by structure-function studies on MYC with double-strand break repair assays.

Role: PI

No overlap

Research Fellow (RF0801) Tran (PI) 7/1/08-7/30/09
Radiologic Society of North America \$50,000

“Investigations on the Differential Oncogene-dependency of MYC versus *K-Ras* Murine Primary Lung Tumor Model Systems”

Goals are to isolate differences in oncogenic signal transduction networks between MYC- and *K-Ras*-induced lung tumors and then to force MYC-induced lung tumors to exhibit an oncogene-addicted phenotype by targeting these differences.

Role: PI

PRF-CHRP Pilot Award Tran (PI) 1/1/09-7/31/09
Pediatric Research Fund - Child Health Research Program (PRF-CHRP) \$35,000

“Conditional epithelial-mesenchymal transition (EMT)-dependent murine model for radiation induced-pulmonary fibrosis”

Aim #1 is to generate conditional mTWIST and mSNAI-S6A lung restricted mouse models. Aim #2 is to characterize phenotypes of these mice following thoracic radiation using small animal imaging and ultimately pathologic examination. Aim #3 is to determine if constant transcription of mTWIST and mSNAI-S6A are necessary for fibrosis phenotypes.

Role: PI

Research Program Building / Leadership

Dates, name of research / basic science program, role

Project 1. 6/1/08-present, Investigations on the Differential Oncogene-dependency of MYC versus *K-Ras* Murine Primary Lung Tumor Model Systems: PI Tran

Project 2. 8/15/09-present, Inducible SNAI1 transgenic mouse model for radiation induced-pulmonary fibrosis: PI Tran

Project 3. 8/17/09-present, Twist1 functions required for radiation induced-pulmonary late effects: PI Tran

Project 4. 8/17/09-present, Lung specific Twist mediated EMT in lung premetastatic niche PI Tran

Project 5. 8/17/09-present, Reactivation of oncogene-induced senescence as treatment for lung cancer: PI Tran

Project 6. 8/17/09-present, Defining a Twist1 oncogene molecular subtype for prostate cancer therapy: co-PI Tran/DeMarzo

Project 7. 8/17/09-present, Evaluating the efficacy of ERG targeted therapy in vivo for prostate cancer: PI Tran

Project 8. 4/1/10-present, Testing the "Embryonic Reawakening" hypothesis for benign prostatic hyperplasia: co-PI Schaeffer/Tran

Project 9. 4/1/10-present, Interrogation of non-oncogenic addiction for the effective treatment of lung cancer: co-I Tran

EDUCATIONAL ACTIVITIES

Educational Publications (see notes re: format under Research Publications, above) Peer-reviewed, original, educational publications should be listed first, followed by the remaining categories of publications.

None.

Teaching

1. March 16, 2010, Johns Hopkins School of Medicine Genes to Society medical student course "Introduction to Radiation Oncology", Role: Instructor, JHU SOM.
2. 3/30-5/11/10, Johns Hopkins School of Medicine Cellular and Molecular Medicine Course "Genomic Instability in Human Disease", Role: Instructor, JHU SOM.

Mentoring (pre- and post-doctoral)

1. 8/08-6/09, Leelanand Rachakonda, MD, Present position Radiology resident at Jacobi Medical Center, Stanford Medical Student (8/08-6/09).
2. 12/08- present, Diane Tseng, BA, Present position Stanford Medical Student.
3. 10/09-present, Saravanan Thiyagarajan, DVM, MS, PhD, Present position Postdoctoral Fellow.
4. 2/10-present, Sandhya Thulasi Das, PhD – Present position Postdoctoral Fellow.

Educational Program Building / Leadership

Dates, name of educational program or curriculum, role

None.

Educational Extramural Funding (current, pending, previous)
Grants or contracts obtained to support an educational initiative.

None.

CLINICAL ACTIVITIES

Certification

- Diplomate of the American Board of Radiology - Radiation Oncology: Valid until May 2019.
- California Medical License: A87841 (valid until June 2010).
- Maryland Medical License: D0068806 (valid until September 2011).
- Drug Enforcement Agency #: BT8897045 (valid until December 2012).
- Maryland Controlled Dangerous Substances #: M66985 (valid until February 2011).

Clinical (Service) Responsibilities (dates, specialty, role, time commitment)

GU Radiation Oncology attending, 8/17/2009-present, 25% effort.

Clinical Program Building / Leadership

Dates, name of clinical program, role

None.

Clinical Extramural Funding (current, pending, previous)

Grants or contracts obtained to support a clinical initiative.

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Tran (PI)

4/28/10-3/22/11

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“Multimodality Therapy for Recurrent High Risk Prostate Cancer: A Phase II Study”

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments (date, committees)

None.

Editorial Activities (dates, role)

Ad Hoc Reviewer:

2008-	International J. of Radiation Oncology Biology Physics
2008-	Gynecologic Oncology
2009-	Radiation Oncology
2009-	Cancer Biology & Therapy
2009-	Clinical Cancer Research
2009-	British J. of Urology International

Advisory Committees, Review Groups/Study Sections (date, sponsor, role)

Committees and Professional Activities:

2009-2011 RSNA Scientific Program Committee - Radiation Oncology & Radiobiology Subcommittee

Professional Societies (date, membership, committees, role)

2004	ASTRO (Member ID#35173018)
2004	RSNA (Member ID #00374305)
2004	American College of Radiology (ACR) (Member ID #05043345)
2005	American College of Radiation Oncology (ACRO)
2007	American Society of Clinical Oncology (ASCO) (Member ID #81970)
2007	American Association for Cancer Research (AACR) (Member ID #140253)
2008	American Thoracic Society (ATS) (Member ID #00115427)

Conference Organizer, Session Chair (date, sponsor, role)

None.

Consultantships (date, organization/agency, role)

None.

RECOGNITION

Awards, Honors (date, title, description, sponsor)

- 1995 John Muir College Caledonian Honor Society, UCSD.
- 1995-1996 UC Regents Scholar; the most prestigious UC scholarship.
- 1992-1996 UCSD John Muir College Provost's Honors seven times.
- 1996 Graduated *magna cum laude* from UCSD.
- 1996-2003 OHSU Laurel Merit MD/PhD Scholar.
- 1996-2003 OHSU School of Medicine Scholar six times.
- 1998-2001 OHSU Molecular Hematology Research Training Fellow (NIH grant 5-T32-HL07781).
- 2001 Summer Institute in Geriatrics (American Society of Geriatrics & Boston Uni. School of Medicine).
- 2002 Keystone Abstract Scholarship - *Molecular Mechanisms of DNA Replication & Recombination*.
- 2003 OHSU Dean's Medical Student Research Award recipient.
- 2005 American Society for Radiation Oncology (ASTRO) travel grant for Gordon Res Conf: *Radiation Onc.*
- 2006 Radiological Society of North America (RSNA) Roentgen Resident Research Award.
- 2006 RSNA Research Resident (RR0601).
- 2007 American Radium Society (ARS) Travel Grant.
- 2007 ASCO/AACR Methods in Clinical Cancer Research Workshop Scholarship.
- 2007 Malcolm A. Bagshaw Award.
- 2007 Henry S. Kaplan Research Fellow (SUMC grant 1046297-100-KAVWO).
- 2007 ASTRO 2007 Resident Poster Recognition Award (Top 3 posters of the meeting).
- 2007 Helena Anna Henzl Gabor Science Fund Travel Grant.
- 2008 ASTRO Translational Symposium Travel Grant.
- 2008 RSNA Research Fellow (RF0801).
- 2009 RSNA Research Scholar (RSCH0915); Declined.
- 2008-2011 Parker B. Francis Fellow.
- 2009-2011 ASTRO Junior Faculty Career Research Training Award.

Invited Talks, Panels (date, title, venue, sponsor)

1. Keystone Symposium on *Molecular Mechanisms of DNA Replication and Recombination*: "Repairosomes" workshop (2002). "Studies on the catalytic activities of Exo1p and their involvement during DNA mismatch repair". **Keystone Abstract Scholarship.**
2. Gordon Research Conference: *Radiation Oncology* (2005). "A mutation in *EXO1* defines separable roles in DNA mismatch repair and a MutL-alpha-independent DNA damage tolerance pathway". **ASTRO awardee.**
3. Radiation Research Society (RRS)- ASTRO national meeting Minisymposium: "Mechanisms of DNA Repair" (2005). "A mutation in *EXO1* defines separable roles in DNA mismatch repair and a MMR-independent DNA damage tolerance pathway".
4. Radiation Oncology and Radiobiology: Gyn Onc session of the RSNA national meeting (2005). "Long Term Survivors Using Intraoperative Radiation Therapy for Recurrent Non-Ovarian Gynecologic Malignancies".
5. American Radium Society (ARS) meeting (2007). "Probing Oncogene-dependence with a Novel Murine Lung Tumor Model System". **ARS Travel Grant.**

6. Stanford University Medical Center, Division of Medical Oncology & Hematology Research Retreat (October 10, 2007). "Rationale for Combined Inactivation of MYC and *K-Ras*^{G12D} Oncogenes for Inhibition of Tumor Maintenance".
7. Oregon Health and Science University (OHSU) Radiation Medicine Visiting Scholar (April 16, 2008). "Rationale for Combined Inactivation of MYC and *K-Ras*^{G12D} Oncogenes for Inhibition of Tumor Maintenance".
8. UC San Diego Radiation Oncology CART Seminar series (August 1, 2008). "Mathematical modeling of survival and death signals predicts oncogene addiction".
9. Virginia Commonwealth University, Massey Cancer Center (October 15, 2008). "Conditional mouse models of Kras- & MYC-induced lung tumorigenesis: *Exploring principles of targeted therapy*".
10. UC Los Angeles Radiation Oncology Translational Thursday Seminar series (October 30, 2008). "Conditional mouse models of Kras- & MYC-induced lung tumorigenesis: *Exploring principles of targeted therapy*".
11. Johns Hopkins Radiation Oncology (November 10, 2008). "Conditional mouse models of Kras- & MYC-induced lung tumorigenesis: *Exploring principles of targeted therapy*".
12. Stanford University Medical Center, Health Research and Policy research noon conference (December 5, 2008). "Evaluation of stereotactic body therapy concurrent with nelfinavir for oligometastases".
13. University of Pennsylvania Radiation Oncology (December 10, 2008). "Conditional mouse models of Kras- & MYC-induced lung tumorigenesis: *Exploring principles of targeted therapy*".
14. University of Chicago Radiation & Cellular Oncology (December 15, 2008). "Conditional mouse models of Kras- & MYC-induced lung tumorigenesis: *Exploring principles of targeted therapy*".
15. Stanford University Medical Center, Division of Pediatric Hematology-Oncology research noon conference (January 9, 2009). "Multi-Scale Modeling Predicts when Oncogene Inactivation Will Result in Tumor Regression".
16. Stanford Comprehensive Cancer Center, Molecular Therapeutics Retreat (January 20, 2009). "Multi-Scale Modeling Predicts when Oncogene Inactivation Will Result in Tumor Regression".
17. Stanford Association for Multi-Disciplinary Medicine & Science Chalk Talk (March 17, 2009). "Imaging surrogates as prognostic and predictive biomarkers".
18. Johns Hopkins Chemical Therapeutics Seminar (October 26, 2009). "SBRT for Localized Prostate CA: Radiobiologic Rationale & Cyberknife Results".
19. Johns Hopkins Radiation Oncology Grand Rounds (November 16, 2009). "Chromosomal rearrangements in epithelial tumors: *ETS* fusions reset the dogma".
20. Johns Hopkins Brady Urology Prostate Cancer Research Day (February 6, 2010). "Radiation Oncology Prostate Cancer Update".

21. Johns Hopkins Brady Urology Grand Rounds (February 25, 2010). "SBRT for Localized Prostate CA: Radiobiologic Rationale & Cyberknife Results".
22. Sidney Kimmel Comprehensive Cancer Center (SKCCC) Prostate Education and Support Group seminar series (April 27, 2010). "CyberKnife for Prostate Cancer: Hype, Hope...No, Just Hypofractionation."

OTHER PROFESSIONAL ACCOMPLISHMENTS