

BIOGRAPHICAL SKETCH

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NAME: Charles R Thomas, Jr.

eRA COMMONS USER NAME (credential, e.g., agency login): THOMASCH

POSITION TITLE: Professor and Chair

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Dartmouth College, Hanover, New Hampshire	B.A.	1979	Biology/Education
University of Illinois, Chicago, Illinois	M.D.	1985	Medicine
Baylor College of Medicine, Houston, Texas	Intern	1986	Internal Medicine
Baylor College of Medicine, Houston, Texas	Residency	1988	Internal Medicine
Rush Medical College, Chicago, Illinois	Fellowship	1991	Medical Oncology
University of Washington, Seattle, Washington	Fellowship	1994	Radiobiology
University of Washington, Seattle, Washington	Residency	1997	Radiation Oncology

A. Personal Statement

I am a full-time academic clinician & serve as the department chair of the radiation oncology program at a NCI Designated Cancer Center, the Knight Cancer Institute of the Oregon Health & Science University. My special focus is on radiation oncology, lung Cancer, pancreatic cancer, esophageal cancer, and colorectal cancer. My clinical & translational research involves studying the interactions between novel systemic therapeutics and ionizing radiation. We are focused on the development of a SMART (Serial Multiscale ARchitecture & Theranostic) trial platform. Additional clinical research interests include the design and execution of protocols for translational research-based national cooperative group combined modality therapeutic clinical trials involving GI & thoracic cancers. I am working to develop strategies to address barriers to participation in cancer clinical trials amongst minority and ethnic populations in the U.S.

My health services research interests involve the development of pipeline strategies to increase the pipeline of highly-qualified investigators from under-represented minority groups into radiologic sciences and cancer medicine. I also have interest in patient-provider communication; burnout assessment & management in academic leaders; and the interaction of mentoring and academic productivity.

I'm active in sustained mentorship and actively promoting the careers of promising physician-scientists. I lead our Dept's efforts in mentorship & sponsorship: <http://www.ohsu.edu/xd/education/schools/school-of-medicine/departments/clinical-departments/radiation-medicine/about/training-mentoring.cfm>

I have participated in the 2016 & 2017 (chair) ASCO Grants Workshops & have served as a faculty at the Vail (2009-2012) and Zeist (Flims) Methods in Clinical Cancer Research Workshops (2012-2017)

I have or currently serve on multiple study sections for emerging investigators, including the ASCO Foundation Grants Selection Committee (2nd term), RSNA Research & Education Foundation Radiation Oncology Study Section (past-chair), ASTRO Research Evaluation Committee (vice-chair), and ASTRO Comparative

Effectiveness Grant Selection Committee. I was an inaugural member of the ROI (Radiation Oncology Institute) Research Committee and recently completed a stint on the ROI board. Hence, I understand the commitment that these organizations are making in the careers of young investigators.

The training of the next generation of academic radiation medicine physicians is now our primary training responsibility. Since my arrival in late 2005, we have redefined the residency program and the type of residents who will be matriculating into our program. We have had multiple Holman Pathway residents, who were academically productive: Samuel J. Wang, MD, PhD (Young Investigator Award (YIA) recipient), Marka Crittenden, MD, PhD (ACS Grant recipient), Dr. Kristina Young, MD, PhD (2015 ASCO YIA recipient; 2016 Sidney Kimmel Foundation Scholar), Sophia Bornstein, MD, PhD (Cornell Weill rad onc faculty), Joshua Walker, MD, PhD (2017 RSNA Research Resident/Fellow, ASCO YIA, & ASTRO Resident Seed grant recipient), and Garth Tormoen, MD, PhD. Residents who have not pursued the Holman Pathway also partake in exemplary research projects such as that done by Dr. Nima Nabavizadeh, MD (2016 ASCO YIA and 2016 RSNA Research Seed Grant). Pound-for-pound, peer-reviewed grant success of our comparatively small training program speaks for itself.

B. Positions and Honors

Positions

2005	Professor & Chairman, Department of Radiation Medicine, Oregon Health & Science University, Portland, OR
2005	Physician-in-Chief, Radiation Oncology Services, OHSU HealthCare
2005	Member, Clinical Executive Group, OHSU Knight Cancer Institute
2005	Member, Graduate Faculty, School of Medicine, OHSU
2006	Courtesy (Adjunct) Member, Department of Nuclear Engineering & Radiation Health Physics, Oregon State University, Corvallis, OR

Honors

2004	American Association for Cancer Research Special Minority Scholar Award
2007	Fellow, American Society of Clinical Oncology (FASCO)
2007	Alpha Omega Alpha

C. Contributions to Science

I have published over 240 peer-reviewed articles. My contributions involve:

- 1) I have published several articles in lung cancer treatment, including clinical trials, patient cares, and preclinical research.
 - a. McGinnis GJ, Friedman D, Young KH, Torres ER, **Thomas CR Jr**, Gough MJ, Raber J. Neuroinflammatory and cognitive consequences of combined radiation and immunotherapy in a novel preclinical model, *Oncotarget* 8(6):9155-9173, 2017
 - b. Zindler JD, **Thomas CR Jr**, Hahn SM, Hoffmann AL, Troost EG, Lambin P. Increasing the Therapeutic Ratio of Stereotactic Ablative Radiotherapy by Individualized Isotoxic Dose Prescription. *J Natl Cancer Inst.* 108(2), 2015
 - c. Wozniak AJ, Moon J, **Thomas CR Jr**, Kelly K, Mack PC, Gaspar LE, Raben D, Fitzgerald TJ, Pandya KJ, Gandara DR. A Pilot Trial of Cisplatin/Etoposide/Radiotherapy Followed by Consolidation Docetaxel and the Combination of Bevacizumab (NSC-704865) in Patients with Inoperable Locally Advanced Stage III Non-Small-Cell Lung Cancer: SWOG S0533. *Clin Lung Cancer* 16(5):340-7, 2015
 - d. Tieu BH, Sanborn RE, **Thomas CR Jr**. Neoadjuvant therapy for resectable non-small cell lung cancer with mediastinal lymph node involvement. *Thorac Surg Clin.* 18(4):403-15, 2008
- 2) I've edited & authored multiple publications on colorectal cancer along with recent publications (selected, since 2013 only) with the YIA applicant.
 - a. Kim E, Kim JS, Choi M, **Thomas CR Jr.**: Conditional survival in anal carcinoma using the national population-based Surveillance of Epidemiology and End Results Database (1988-2012). *Dis Colon Rectum* 59(4):291-298, 2016

- b. Mitin T, Enestvedt CK, **Thomas CR Jr.**: Management of oligometastatic rectal cancer: is liver first? J Gastrointest Oncol 6(2):201-207, 2015
 - c. Barnett A, Cedar A, Siddiqui F, Herzig D, Fowlkes E, **Thomas CR Jr.**: Colorectal cancer emergencies. J Gastrointest Cancer 44(2):132-142, 2013
 - d. Herman JM, **Thomas CR Jr.**: RTOG-0529: Intensity-modulated radiation therapy and anal cancer: a step in the right direction? Int J Radiat Oncol Biol Phys 86(1):8-10, 2013
- 3) Design and execution of prospective clinical trials involving thoracic & GI cancers in a multi-institutional setting. I have served as PI or Co-PI of multiple national trials. I also teach in the AACR Vail and Flims Methods in Clinical Trials Courses (2009-2015).
 - a. ACOSOG Radiation Oncology Comm chair
 - b. SWOG Radiation Oncology Comm, former Vice-Chair
 - c. GI Steering Comm, Rectal-Anal Task Force
 - d. Cooperative group trials & publication links (GI only)
 - a. Intergroup-0130/**SWOG-9303**/CALGB-9294/NCCTG-Mayo 91-46-52/RTOG 92-03/NCIC C.08 Phase III Study of Radiation Therapy, Levamisole, and 5-Fluorouracil vs 5-Fluorouracil and Levamisole in Selected Patients with Completely Resected Colon Cancer (SWOG Study Co-Chair), manuscript published J Clin Oncol
 - b. Intergroup/**SWOG R9811**/CALGB-89808/NCCTG-Mayo R9811/RTOG 98-11/ACOSOG Phase III Randomized Study of 5-Fluorouracil, Mitomycin-C, and Radiotherapy versus 5-Fluorouracil, Cisplatin, and Radiotherapy in Carcinoma of the Anal Canal (SWOG Study Chair), manuscript published J Clin Oncol, JAMA, & Int J Radiat Oncol Biol Phys.
 - c. **SWOG-0304** A Phase II Feasibility Translational Research Trial of Induction Chemotherapy followed by Concomitant Chemoradiation followed by Surgical Resection in Patients with Clinical T4 Rectal Cancer (Study Co-Chair), closed
 - d. **NSABP FR-PA-001** A Phase II Study to Determine the Safety and Efficacy of Panitumumab (ABX-EFG) in Combination with Chemoradiotherapy for Locally Advanced Rectal Cancer (Study Chair), closed May 2007
- 4) Barrier assessment, mentorship, and & sponsorship activities for under-represented minority pipeline in academic medicine. I have sponsored multiple URM investigators to present research seminars at OHSU over the past decade, and I have co-authored multiple publications on the diversity and pipeline issue in medicine.
 - a. Deville C, Hwang WT, Burgos R, Chapman CH, Both S, **Thomas CR Jr.**: Diversity in graduate medical education in the United States by race, ethnicity, and sex, 2012, JAMA Intern Med, 2015
 - b. Chapman CH, Hwang W-T, Both S, **Thomas CR Jr.**, Deville C: The current status of diversity in diagnostic radiology: a missed, available pipeline. Radiology 270(1):232-240, 2014
 - c. Deville C, Chapman CH, Burgos R, Hwang WT, Both S, **Thomas CR Jr.**: Diversity by race, ethnicity, and sex, of the United States medical oncology physician workforce over the past quarter century, J Oncol Pract, 2014
 - d. Chapman CH, Hwang WT, Both S, **Thomas CR Jr.**, Deville C: Current status of diversity by race, Hispanic ethnicity, and sex in diagnostic radiology. Radiology 270(1):232-240, 2014

Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/pubmed/?term=thomas+cr+jr>

D. Additional Information: Research Support and/or Scholastic Performance

Supporting Agency: New York University School of Medicine Bristol-Myers Squibb

Funding Number: NCT03278626 **PIs:** Charles R. Thomas, Jr., M.D

Grant Title: Phase I/II Open Label Multi-Center Study of Immune Checkpoint Therapy with Nivolumab for Patients with Locally Advanced Esophageal Squamous Cell Carcinoma (S16-00971)

Time Commitment to Project: 0.12 Calendar

Total Funding Period: June 27, 2017- present

Direct Dollars: n/a

Agency Contact: Kirsten Russell, MD, Kirsten.Russell@nyumc.org, 212-263-6485

Goal: In this multi-institution phase I/II trial, the investigators have chosen paclitaxel and carboplatin using a schedule and doses identical to those used in the CROSS trial.

Specific Aim: Aim: Measure of Unacceptable Toxicity (UT) measured by Recurrent grade 3 hematologic toxicity [Time Frame: 64 Days]; Measure of Unacceptable Toxicity (UT) measured by Recurrent grade 4 hematologic toxicity [Time Frame: 64 Days]

Role: Study Team Member

Supporting Agency: Medical Research Foundation of Oregon

Funding Number: 1012651

PIs: Charles Thomas, MD, Christie Binder, M.D., Ph.D.

Grant Title: Pilot Study for the Identification of Candidate Urinary Biomarkers for Hepatocellular Carcinoma

Time Commitment to Project: 0.25 Calendar

Total Funding Period: December 1, 2017 – November 30, 2018 **Direct Award Amount:** \$20,000

Agency Contact: n/a

Goal: Develop urinary biomarkers that will detect Hepatocellular carcinoma (HCC) by investigating the predictive powers of these published HCC tissue biomarkers for the presence of HCC.

Specific Aims: 1: Targeted HCC protein biomarker search. 2: Novel HCC protein biomarker discovery.

Role: PI/Mentor

Supporting Agency: OHSU Foundation

Funding Number: n/a

PIs: Alexander R. Guimaraes, MD, PhD, Timur Mitin, MD, PhD

Grant Title: Novel imaging of lymph nodes in patients with locally advanced esophageal cancer using ferumoxytol enhanced MRI

Time Commitment to Project: 0.12 Calendar

Total Funding Period: July 1, 2015 – December 31, 2018 **Direct Award Amount:** \$15,000

Agency Contact: n/a

Goal: Provide proof of concept in esophageal cancer and serve as a vehicle for more substantial awards by gathering preliminary data aimed at correlating imaging to pathological findings at the time of esophagectomy.

Specific Aims: Aim 1. To determine feasibility of administering ferumoxytol and obtaining ferumoxytol enhanced MR images in patients with resectable locally advanced esophageal cancer before starting neoadjuvant chemoradiation therapy and again before esophagectomy; Aim 2. To determine whether USPIO-MRI outperforms and/or adds to the PET/CT as a lymph node imaging modality in patients with locally advanced esophageal cancer.

Role: Study Team Member

Supporting Agency: Radiological Society of North America

Funding Number: RSD1625

PIs: Timur Mitin, Danile Herzig, Shushan Rana, Vassiliki Tsikitis

Grant Title: Response to Neoadjuvant Therapy in Rectal Adenocarcinoma

Time Commitment to Project: 0.12 Calendar

Total Funding Period: July 1, 2016 – June 30, 2019 **Direct Award Amount:** \$38,220

Agency Contact: Scott A. Walter, swalter@rsna.org, 630-571-7816

Goal: Test the hypothesis that systemic immune therapy can remodel the immune biology of rectal cancer and improve the efficacy of chemoradiotherapy.

Specific Aims: 1. To determine feasibility of administering ferumoxytol and obtaining ferumoxytol enhanced MR images in patients with resectable locally advanced rectal cancer with enlarged or suspicious lateral pelvic lymph nodes before starting neoadjuvant chemoradiation therapy and again before total mesorectal excision. 2. To determine whether USPIO-MRI is superior to contrast enhanced MRI and/or PET-CT in lymph node delineation in patients with locally advanced rectal cancer.

Role: Study Team Member

Supporting Agency: OHSU Knight Cancer CEDAR

Funding Number: 2018-01-Knight-CEDAR-Seed-001

PIs: Charles Thomas, MD, Christie Binder, M.D., Ph.D.

Grant Title: Pilot Study for the Identification of Candidate Urinary Biomarkers for Hepatocellular Carcinoma

Time Commitment to Project: 0.12 Calendar

Total Funding Period: March 1, 2018 – August 31, 2019 **Direct Award Amount:** \$58,805

Agency Contact: n/a

Goal: Identify candidate biomarkers for inexpensive, universally available screening of at-risk populations for early stage hepatocellular carcinoma using urine extracellular vesicle miRNA and protein. Utilize a focused miRNA microarray and unbiased mass spectrometry to identify candidates.

Specific Aims: 1: Complete sample preparation and complete screening experiments. 1: Review experimental data and identify potential candidates from protein data. 3. Validate candidates.

Role: PI/Mentor

Supporting Agency: Icahn School of Medicine Mount Sinai

Funding Number: 1R01CA203193-01 **PIs:** Juan Wisnivesky, Christopher Slatore

Grant Title: Comparative Effectiveness of Limited Resection vs. Stereotactic Body Radiation Therapy for Early Stage Lung Cancer

Time Commitment to Project: 0.25 Calendar

Total Funding Period: March 1, 2016 – February 28, 2021 **Subaward Amount:** \$146,918

Goal: Compare the effectiveness of limited resection vs. stereotactic body radiotherapy (SBRT) for the treatment of stage IA non-small cell lung cancer (NSCLC).

Specific Aims: 1. compare overall (primary outcome), lung cancer-specific and disease-free (secondary outcomes) survival of patients with stage I NSCLC ≥ 5 cm in size treated with limited resection vs. SBRT; 2. evaluate rates of severe AEs among patients with stage I NSCLC ≥ 5 cm in size treated with limited resection vs. SBRT; 3. assess differences in lung function and QOL among patients with stage I NSCLC treated with limited resection vs. SBRT.

Role: Study Team Member