

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Randall, Marcus E.

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

POSITION TITLE: Chair and Professor of Radiation Medicine, University of Kentucky

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
University of North Carolina – Chapel Hill, NC	A. B.	1978	Chemistry
University of North Carolina – Chapel Hill, NC	M.D.	1982	Medicine

A. Personal Statement

I am a Professor of Radiation Medicine with special expertise in treatment of gynecological cancers, and I am chair of the Department of Radiation Medicine at the University of Kentucky. I have a special clinical expertise in brachytherapy, including the use of permanent interstitial implants in the treatment of radio-recurrent disease. I am co-chair of the Uterine Corpus Committee for NRG Oncology, a position I have held since 2005 (when it was previously part of GOG). Prior to this, I chaired the Radiation Oncology Committee within the GOG. Among other studies, I was the Study Chair for GOG #122, which changed the treatment paradigm for locally advanced endometrial cancer and opened new lines of clinical investigation. I also served as Study Chair for GOG #249 and GOG 258, major phase III studies in endometrial cancer that were recently completed. Each study has been presented at a major national oncology meeting and publication of manuscripts are pending. In addition, I served as the radiation oncology editor of Principles and Practice of Gynecologic Oncology, the world's leading multidisciplinary textbook in this disease category, for the 4th through the 6th edition.

1. Matei M, Filiaci V, **Randall M**, Mutch D, Steinhoff M, DiSilvestro P, Moxley K, Kim B, Powell M, O'Malley D, Spirto N, Tewari K, Richards E, Nakayama J, Miller D. A randomized phase III trial of cisplatin and tumor volume directed irradiation followed by carboplatin and paclitaxel vs. carboplatin and paclitaxel for optimally debulked, locally advanced endometrial carcinoma: A Gynecology Oncology Group/NRG Oncology Study. ASCO Proceedings, J Clin Oncol, May 2017.
2. Feddock J, Aryal P, Steber C, Edwards J, Cheek D, **Randall M**. Outpatient template-guided permanent interstitial brachytherapy using 131Cs in gynecologic malignancies: Initial report. Brachytherapy 16 (2017) 393-401.
3. Feddock J, Cheek D, Steber C, Edwards J, Slone S, Luo W, **Randall M**. Re-irradiation using Permanent Interstitial Brachytherapy (PIB): A Potentially Durable Technique for Salvaging Recurrent Pelvic Malignancies. Int J Radiat Oncol Biol Phys 2017 Aug 27. doi: 10.1016/j.ijrobp.2017.08.027.
4. Podzielinski I, **Randall ME**, Breheny PJ, Escobar PF, Cohn DE, Quick AM, Chino JP, Lopez-Acevedo M, Seitz JL, Zook JE, Seamon LG. Primary radiation therapy for medically inoperable patients with clinical stage I and II endometrial carcinoma. Gynecologic Oncology 124:36-41, 2012.

B. Positions and Honors**Positions and Employment**

1986-1994 Instructor, Assistant Professor, Associate Professor of Radiology (Radiation Oncology)
Bowman Gray School of Medicine of Wake Forest University

- 1994-2004 Professor and Chair, Department of Radiation Oncology
Indiana University School of Medicine
- 2004-2006 Professor of Radiation Oncology, Brody School of Medicine of East Carolina University
- 2004-2006 Director, Leo Jenkins Cancer Center
Brody School of Medicine of East Carolina University
- 2006-present Professor and Chair, Markey Foundation Endowed Chair, Department of Radiation
Medicine, University of Kentucky, Lexington, KY
- 2012-present President, Kentucky Medical Services Foundation, Inc.

Other Experience and Professional Memberships

- 1985- Member, American Society for Radiation Oncology (ASTRO)
- 1986- Member, Gynecologic Oncology Group (now NRG Oncology, Inc.)
- 1987-2010 Member, Radiation Oncology Committee, GOG/NRG Oncology, Inc.
- 2002-2005 Chair, Radiation Oncology Committee, GOG/NRG Oncology, Inc.
- 1998-present Member, Uterine Corpus Committee, GOG/NRG Oncology, Inc.
- 2005-present Co-Chair, Uterine Corpus Committee, GOG/NRG Oncology, Inc.
- 1991-1995 Member, Ovarian Committee, GOG/NRG Oncology, Inc.
- 1993-1997 Member, Developmental Therapeutics Committee, GOG/NRG Oncology, Inc.
- 1999-2002 Member, Executive Committee, GOG/NRG Oncology, Inc.
- 2011-2015 Member, Executive Committee, GOG/NRG Oncology, Inc.
- 1999-2002 Member, Human Subjects Research Committee, GOG/NRG Oncology, Inc.
- 2011-2015 Member, Human Subjects Research Committee, GOG/NRG Oncology, Inc.
- 2006-present Member, Protocol Development Committee, GOG/NRG Oncology, Inc.
- 2005-2006 Member, Central Institutional Review Board, National Cancer Institute
- 2006-2013 Member, Gynecologic Cancer Steering Committee, National Cancer Institute
- 2006-2013 Member, Uterine Task Force, National Cancer Institute
- 2001-present Member, American Brachytherapy Society
Editorial Board, Journal of Brachytherapy
- 2004-2010 Member, Radiological Physics Center, Clinical Advisory Board
- 2002-present Editorial Board of multiple journals
- 1993-present Editorial Review Panel for multiple journals

Honors

- 1995 William A. Mitchell Endowed Professorship in Radiation Oncology
Indiana University School of Medicine
- 2003 International President's Award of Lions International "in recognition of distinguished
efforts given willingly to the ideal of One World, One Heart"
- 2003 Fellowship, American College of Radiology
- 2006 Markey Foundation Endowed Chair
- 2010 Fellowship, American Society for Radiation Oncology (ASTRO)

C. Contributions to Science

1. Early work was focused on various aspects of gynecologic oncology, including pathologic subtypes and possible impacts on outcomes. I described the subtype of Papillary Squamous Carcinoma of the cervix and suggested important distinctions in terms of diagnosis and natural history. Other less common histologies were reviewed.
 - a. **Randall ME**, Andersen WA, Mills SE, Kim JC. Papillary squamous cell carcinoma of the uterine cervix-A clinicopathologic study of nine cases, *Int J Gynecol Pathol* 5:1-10, 1986.
 - b. Mills SE, Austin MB, Randall ME. Lymphoepithelioma-like carcinoma of the uterine cervix-A distinctive, undifferentiated carcinoma with inflammatory stroma, *Am J Surg Pathol* 9:883-889, 1985.
 - c. Randall ME, Kim JC, Mills SE, Hahn SS, Constable WC. Uncommon variants of cervical carcinoma treated with radical irradiation-A clinicopathologic study of 66 cases, *Cancer* 57:816-822, 1986.
2. Throughout my career, I have been involved with retrospective analyses of various populations of patients with gynecologic cancers, as well as surveys of practice patterns.

- a. **Randall ME**, Wilder J, Greven K, Raben M. Role of intracavitary cuff boost after adjuvant external irradiation in early endometrial carcinoma, *Int J Radiat Oncol Biol Phys* 19:49-54, 1990.
 - b. Wolfson AH, Tralins KS, Greven KM, Kim RY, Corn BW, Kuettel MR, Phillippart C, Raub WA Jr., **Randall ME**. Adenocarcinoma of the fallopian tube: Results of a multi-institutional retrospective analysis of 72 patients, *Int J Radiat Oncol Biol Phys* 40:71-76, 1998.
 - c. Nelson GN, **Randall ME**, Sutton G, Moore D, Hurteau J, and Look K. FIGO stage IIIC endometrial carcinoma with metastases confined to pelvic lymph nodes: Analysis of treatment outcomes, prognostic variables, and failure patterns following adjuvant radiation therapy, *Gynecol Oncol* 75:211-214, 1999.
 - d. Colombo A, **Randall M**, Mirza MR, Trimble EL. Practice patterns of radiotherapy in cervix cancer among member groups of the Gynecologic Cancer Intergroup (GCIG). *Int J Radiat Oncol Biol Phys* 68(2):485-490, 2007.
3. Throughout my career, I have used interstitial brachytherapy as a salvage treatment for selected patients with recurrent gynecologic cancers who have had previous radiation therapy. My preferred technique has been the use of permanent short half-life isotopes to create a very conformal dose distribution that limits dose to uninvolved tissues. I reported one of the early series using this technique, as well as subsequent series of patients. I was the first person to investigate the use of a relatively new isotope, Cesium-131, in patients with recurrent gynecologic cancers, and I developed the conceptual bases of isotope distribution, dose-response relationships, patient selection, and dosing, including the appropriate dose correction factors to be applied, compared to older isotopes. Outstanding results are now being reported in these patients with recurrent disease, and the technique is now being used to further improve and tailor up front therapy with radiation therapy.
- a. **Randall ME**, Evans L, Greven KG, McCunniff AJ, Doline RM. Interstitial reirradiation for recurrent gynecologic malignancies: results and analysis of prognostic factors, *Gynecol Oncol* 48:23-31, 1993.
 - b. Luo W, Molloy, J, Aryal, P, Feddock J, **Randall M**. Determination of prescription dose for Cs-131 permanent implants using the BED formalism including resensitization correction. *Med Phys* 41, 024101 (2014); doi: 10.1118/1.4860255.
 - c. Wooten CE, **Randall M**, Edwards J, Aryal P, Luo W, Feddock J. Implementation and early clinical results utilizing Cs-131 permanent interstitial implants for gynecologic malignancies. *Gyn Onc* 133 (2014) 268-273.
 - d. Feddock J, **Randall M**, Kudrimoti M, Baldwin L, Shah P, Weiss H, DeSimone C. Impact of post-radiation biopsies on development of fistulae in patients with cervical cancer. *Gyn Onc* 133 (2014) 263-267.
4. I have led prospective studies in various populations of patients with gynecologic cancers and been involved in a number of ancillary studies based on this work. Much of this work has truly been practice-changing, including demonstrating for the first time the role of systemic chemotherapy in locally advanced endometrial cancer (GOG 122). More recently, the results of GOG 249 and GOG 258 have been presented at important national meetings, further establishing and refining appropriate therapies for patients with high risk, early stage as well as locally advanced endometrial cancer populations.
- a. **Randall ME**, Barrett RJ, Spirtos N, Chalas E, Homesley HD, Lentz SL, Hanna M. Chemotherapy, early surgical reassessment, and hyperfractionated abdominal radiotherapy in stage III ovarian cancer: Results of a Gynecologic Oncology Group trial, *Int J Radiat Oncol Biol Phys* 34:139-147, 1996.
 - b. **Randall ME**, Spirtos NM, Dvoretzky P. Whole abdominal radiotherapy versus combination chemotherapy with Doxorubicin and Cisplatin in advanced endometrial carcinoma (Phase III), Gynecology Oncology Group Study No. 122, Monographs, *J Natl Cancer Inst* 19:13-15, 1995.
 - c. **Randall ME**, Brunetto VL, Muss H, Spirtos NM, Mannel RS, Fowler J, Thigpen JT, Benda JA. A randomized phase III trial of whole abdominal irradiation versus combination doxorubicin-cisplatin chemotherapy in advanced endometrial carcinoma: A Gynecologic Oncology Group study. *J Clin Oncol* 24:36-44, 2006.

- d. **Randall M**, Filiace V, McMeekin D, Yashar C, Mannel R, Salani R, DiSilvestro P, Burke J, Rutherford T, Spirtos N, Cho J, Kim J-W, Anderson P, Brewster W, Small W, Aghajanian C, Miller D. A phase III trial of pelvic radiation therapy vs vaginal cuff brachytherapy followed by paclitaxel/carboplatin chemotherapy in patients with high-risk, early stage endometrial cancer: A Gynecology Oncology Group Study. *Int J Radiat Oncol Biol Phys* 99: 1313, 2017.
5. I was involved in the very early work to investigate the role of stereotactic radiosurgery in the management of patients with early stage lung cancers, initially in patients who were not candidates for surgery, but now expanded to include most patients, even those who are surgical candidates. This early work at Indiana University included the first prospective work done in this area and established dose and safety parameters that are very important clinically even today and form the basis of ongoing clinical research work. Part of this work also included detailed medical physics investigation to understand dose distribution in inhomogeneous media.
- Timmerman, R., Papiez, L., McGarry, R., Likes, L., DesRosiers, C., Bank, M., Frost, S., **Randall, M.**, and Williams, M. Extracranial stereotactic radioablation: results of a phase I study in medically inoperable stage I non-small cell lung cancer patients. *Chest*. 124: 1946-1955. 2003.
 - Papiez L, Timmerman R, DesRosiers C, **Randall M**. Extracranial stereotactic radioablation: Physical principles. *Acta Oncologica* 42(8):882-894, 2003.
 - Moskvin V, DesRosiers C, Papiez L, Timmerman R, **Randall ME**, DesRosiers P. Monte Carlo simulation of the Leksell Gamma Knife: I. Source modeling and calculations in homogeneous media. *Phys in Med and Bio* 47:1995-2011, 2002.
 - Difilippo F, Papiez L, Moskvin V, Peplow D, DesRosiers C, Johnson J, Timmerman R, **Randall M**, Lillie R. Doses induced by photoneutron processes in a patient body during radiotherapy treatment simulated with MCNPX. *Med Phys* 30:2849-2854, 2003.

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

Ongoing Research Support

U10CA180868-03 Wolmark/Curran/Mannel (Co-PIs) 4/17/14 – 2/28/19

NIH/NCI

NRG Oncology Network Group Operations Center

Goal: NRG Oncology's primary mission is to improve the lives of adults with cancer by conducting multi-institutional clinical and translational research trials in seven cancer disease sites that will define new standards of care, identify and verify useful biomarkers and biomarker-based clinical decision-making, create better risk stratification models, identify under- and over-treatment scenarios, and create new knowledge leading to greater opportunities for cancer survivorship.

Role: Co-Chair

Completed Research Support

None