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: H. Richard Alexander, MD

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

POSITION TITLE: Chief Surgical Officer

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 Colorado, Boulder, Colorado	BA	05/1975	Biology
Georgetown University, School of Medicine,	MD	05/1979	Medicine
Washington, DC			
Internship, Walter Reed Military Medical Center,		06/1980	Surgery
Bethesda, MD			
Residency, Walter Reed Military Medical Center,		06/1985	General Surgery
Bethesda, MD			
Fellowship, Memorial Sloan-Kettering Cancer		06/1989	Surgical Oncology
Center, New York, NY			

A. Personal Statement

I am a surgical oncologist, cancer researcher and, surgical educator. My roles as Chief Surgical Officer at Rutgers Cancer Institute of New Jersey and System Director of Surgical Oncology at Robert Wood Johnson Barnabas Health have become the highlight of my career for several reasons. In particular is the opportunity to work with join a world-class organization and collaborate with colleagues in the Gastrointestinal/ Hepatobiliary Oncology Program to further build and expand the portfolio of treatment and clinical research options for patients who may benefit from the surgical treatment of complex, rare, or recurrent cancers. My surgical career started as a medical officer in the US Navy where I served aboard both the USS Mt. Whitney (LCC-20) and the USS Midway (CV-41). After that I completed a fellowship in surgical oncology at the Memorial Sloan-Kettering Cancer Center in New York, I subsequently joined the Surgery Branch of the National Cancer Institute (NCI) where I eventually became a Deputy Director in the Center for Cancer Research. At the NCI and during my subsequent tenure in the department of surgery at the University of Maryland, School of Medicine, I led teams that developed internationally recognized clinical and research programs for patients with advanced primary, recurrent, or metastatic cancer. I have focused my clinical and research efforts to define and expand the application of surgical resection for properly selected patients with recurrent or metastatic gastrointestinal cancers. Specifically, I have a particular interest defining the role of surgical treatment in patients with peritoneal surface metastases from peritoneal mesothelioma, appendiceal cancer, colorectal cancer, and other tumors. Throughout my career my professional and academic successes have been built on a foundation of values that we all share in caring for our patients; compassion, communication, respect, teamwork, and a commitment to providing patients exceptional, thoughtful and timely surgical care in the context of a multidisciplinary treatment plan. To that end, I have always valued the partnerships that I have developed with other physicians who are invested in their patient's cancer treatment.

Ongoing and recently completed projects that I would like to highlight include:

Project: Studies of the anti-tumor mechanisms of the inflammatory cytokines tumor necrosis factor (TNF) and interleukin (IL)-1, Continuous funding: 1997-2006 NCI CCR Intramural funding: \$460,575 (FY 2005)

Project: Characterization of Proteins in the Tumor Microenvironment That Influence tumor Growth and Metastases, Continuous funding: 1997-2006
NCI CCR Intramural funding: \$460.575 (FY 2005)

Cooperative Research and Development Agreement (Delcath Systems Inc., Norwalk, CT) 2001-2007 Annual funding: \$190,000

"Role of IL-1 in Pancreatic Adenocarcinoma Growth and Metastases" Pilot Grant, Experimental Therapeutics Program, UMGCC. Awarded, February 2008. Annual funding: \$25,000 x 2 years

"Research Program in Peritoneal Surface Cancers" Philanthropic support for Section of Surgical Oncology Received 2/2008. Total amount: \$1,250,000.

"Phase III Random Assignment Trial of PHP versus Best Supportive Care for Patients with Metastatic Melanoma to the Liver" Industry Sponsored Trial 4/2008-2012, total contract: \$600,000

"Inhibition of IL-1 as a Novel Target in Peritoneal Mesothelioma" Mesothelioma Applied Research Foundation awarded 12/2008 annual funding: \$50,000 x 2 years

"GCC1586: Randomized Controlled Phase 3 Study to Evaluate the efficacy, Safety, and Pharmacokinetics of melphalan/HDS Treatment in Patients with Hepatic-Dominant Ocular Melanoma" Industry Sponsored Trial (Delcath) opened 9/2016, total approved contract: \$1,062,630 (assuming enrollment of 10 patients)

Citations:

- 1. Sandiford, JA, **Alexander, HR**. Zinc deficiency in Crohn's Disease. <u>J Royal Coll Surg</u> (Edinburgh), 26: 357-359, 1981.
- 2. **Alexander, HR**, Thompson, WR, Ramwell, PW, Fletcher, JR. Urinary thromboxane reflects dose-response tissue injury in humans. Curr Surg, 42:18-20, 1985.
- 3. Thompson, WR, **Alexander**, **HR**, Martin, A., Fletcher, JR, Ghosh, B. Percutaneous subclavian catheterization for prolonged systemic chemo-therapy. <u>J Surg Oncol</u>, 29: 184-186, 1985.
- 4. Chernow, B., **Alexander, HR**, Smallride, RC, Ramwell PW, Fletcher JR. Hormonal responses to graded surgical stress. <u>Arch Int Med</u>, 147: 1273-1278, 1987.

B. Positions, Scientific Appointments, and Honors

Positions and	d Scientific Appointments
2017-Present	Chief Surgical Officer, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
2017-Present	Professor, Department of Surgery, Robert Wood Johnson Medical School, New Brunswick, NJ
2017-Present	Surgeon, Robert Wood Johnson University Hospital, New Brunswick, NJ
2017-Present	Surgeon, Monmouth Medical Center, Monmouth, NJ
2017-Present,	Surgeon, Saint Barnabas Medical Center, Livingston, NJ
2015-2017	Head, Surgical Oncology, Department of Surgery, University of Maryland School of Medicine,
	Baltimore, MD
2014-2017	Surgeon, Department of Surgery, Baltimore VA Hospital, Baltimore, MD
2014-2017	Surgeon, Department of Surgery, Frederick Memorial Hospital, Frederick, MD
2006-2017	Surgeon, Department of Surgery, University of Maryland Medical Center, Baltimore, MD
2006-2017	Professor and Associate Chair for Clinical Research, Department of Surgery, University of
	Maryland School of Medicine, Baltimore, MD
2003-2006	Deputy Director, Center for Cancer Research, National Cancer Institute/NIH, Bethesda, MD
1995-2006	Head, Surgical Metabolism Section, National Cancer Institute/NIH, Bethesda, MD
1989-2006	Surgeon, Surgery Branch, Warren Grant Magnuson Clinical Center, NIH, Bethesda, MD
1989-1995	Surgeon, Surgery Branch, National Cancer Institute, NIH, Bethesda, MD
1991-1991	Staff Surgeon (CMDR), National Naval Medical Center, Bethesda, MD
1986-1987	Staff Surgeon (CMDR), U.S. Naval Hospital, Yokosuka, Japan
1985-1986	Ship's Surgeon (LCDR), USS Midway (CV-41) Seventh Fleet, Yokosuka, Japan
1980-1981	Medical Officer (LT), USS Mount Whitney (LCC-20), Second Fleet, Norfolk, VA

Other Experience and Professional Memberships

American Association of Endocrine Surgeons Association for Academic Surgery American Surgical Association Society of Surgical Oncology Society of University Surgeons American Society of Clinical Oncology American College of Surgeons Mesothelioma Applied Research Foundation

Honors

2014-2016	America's Top Physicians
2013	Student Marshall, School of Medicine Convocation
2011	Coater, White Coat Ceremony
2011	Health Care Hero Award Program
2010, 2017	Top Doctor
2010	Invited Lecturer, Family Day
2010, 2014	Hooder, School of Medicine Convocation
2010	Distinguished Clinical Faculty Teaching Award
2007-2009	Senior Resident Teaching Award
2005	NIH Award of Merit
2002	Distinguished Clinical Teaching Award, NIH

Editorial Boards

Journal of Clinical Oncology (Editorial Board) Annals of Surgical Oncology (Section Editor)

C. Contributions to Science

- I am a member of the Clinical Investigations and Precision Therapeutics (CIPT) Program at the Rutgers
 Cancer Institute of New Jersey. The Overall Goals of the Clinical Investigations and Precision Therapeutics
 (CIPT) Program are to 1) translate outstanding science across the Cancer Center into early phase trials, 2)
 develop novel diagnostic, prevention, and therapeutic strategies; and 3) promote bidirectional translation
 from bench to bedside and back.
 - a. **Alexander, HR**, Turnbull, AD, Rosen, PP. Metastases to the breast from gastrointestinal adenocarcinoma: report of two cases. J Surg Oncol, 42: 264-266, 1989.
 - b. **Alexander HR**, DePippo P, Rao S, Burt ME. Substrate alterations in a rat sarcoma model: Effect of tumor growth and resection. <u>J Surg Res</u>, 48: 471-475, 1990.
 - c. **Alexander, HR**, Candela, FC, Dershaw, DD, Kinne, DW. Needle localized mammographic lesions: Results and evolving treatment strategy. <u>Arch Surg</u>, 125: 1441-1444, 1990.
 - d. **Alexander, HR**, Doherty, GM, Buresh, CM, Venzon, DJ, Norton, JA. A recombinant human receptor antagonist to interleukin-1 improves survival after lethal endotoxemia in mice. <u>J Exp Med</u>, 173: 1029-1032, 1991.
- 2. Dr. Alexander spends much of his time researching Internal medicine, Cancer, Peritoneal surface, Oncology and Pancreaticoduodenectomy. In his research on the topic of Internal medicine, Biliary fistula is strongly related with Gastroenterology. His work on Adenocarcinoma as part of general Cancer research is often related to In-patient, thus linking different fields of science. His Peritoneal surface research includes elements of Appendiceal neoplasms, Intensive care medicine, General surgery and Pathology. To a larger extent, Dr. Alexander studies Surgery with the aim of understanding Pancreaticoduodenectomy. As part of one scientific family, he deals mainly with the area of Surgery, narrowing it down to issues related to the Intraperitoneal chemotherapy, and often surgical oncology.
 - a. Wang J, Yang S, He P, Schetter AJ, Gaedcke J, Ghadimi BM, Ried T, Yfantis HG, Lee DH, Gaida MM, Hanna N, Alexander HR, Hussain SP. Endothelial Nitric Oxide Synthase Traffic Inducer (NOSTRIN) is a Negative Regulator of Disease Aggressiveness in Pancreatic Cancer. Clin Cancer Res. 2016 Dec 15;22(24):5992-6001.
 - b. Wang J, He P, Gaida M, Yang S, Schetter AJ, Gaedcke J, Ghadimi BM, Ried T, Yfantis H, Lee D, Weiss JM, Stauffer J, Hanna N, **Alexander HR**, Hussain SP. Inducible nitric oxide synthase enhances disease aggressiveness in pancreatic cancer. Oncotarget. 2016 Aug 16;7(33):52993-53004.

- c. Yang S, He P, Wang J, Schetter A, Tang W, Funamizu N, Yanaga K, Uwagawa T, Satoskar AR, Gaedcke J, Bernhardt M, Ghadimi BM, Gaida MM, Bergmann F, Werner J, Ried T, Hanna N, **Alexander HR**, Hussain SP. A Novel MIF Signaling Pathway Drives the Malignant Character of Pancreatic Cancer by Targeting NR3C2. Cancer Res. 2016 Jul 1;76(13):3838-50.
- d. Hughes MS, Zager J, Faries M, **Alexander HR**, Royal RE, Wood B, Choi J, McCluskey K, Whitman E, Agarwala S, Siskin G, Nutting C, Toomey MA, Webb C, Beresnev T, Pingpank JF. Results of a Randomized Controlled Multicenter Phase III Trial of Percutaneous Hepatic Perfusion Compared with Best Available Care for Patients with Melanoma Liver Metastases. Ann Surg Oncol. 2016 Apr;23(4):1309-19.
- e. Li YC, Khashab T, Terhune J, Eckert RL, Hanna N, Burke A, **Alexander HR**. Preoperative Thrombocytosis Predicts Shortened Survival in Patients with Malignant Peritoneal Mesothelioma Undergoing Operative Cytoreduction and Hyperthermic Intraperitoneal Chemotherapy. Ann Surg Oncol. 2017 Aug;24(8):2259-2265. Epub 2017 Mar 21