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: Toppmeyer, Deborah L.

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

POSITION TITLE: Professor of Medicine

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)*	CompletionDate MM/YYYY	FIELD OF STUDY
Ohio Wesleyan University, Delaware, Ohio	BA	05/1981	Chemistry/Psychology
Albany Medical College, Albany, New York	MD	05/1985	Medicine

A. Personal Statement

I am a medical oncologist and serve as the Chief Medical Officer, Division Chief of Medical Oncology and Section Chief of Solid Tumor Oncology for the Rutgers Cancer Institute of New Jersey, a NCI Designated Comprehensive Cancer Center. I am also Director of the Stacy Goldstein Breast Cancer Center where I treat breast cancer patients and oversee a comprehensive, multidisciplinary clinical research program. The program is organized such that there is a specific trial available for patients with different stages and histological subtypes of breast cancer. As a member institution for NRG Oncology, I serve as our site's principal investigator. The NRG Oncology group seeks to improve the lives of cancer patients by conducting practice-changing multi-institutional clinical and translational research. As a member of the ECOG CORE Breast Committee, I participate in enrolling early stage breast cancer patients on high priority cooperative group trials. In the metastatic setting, I have been involved in the design and implementation of translational clinical trials that offer promising new therapies targeted to specific types of breast cancer that simultaneously dovetail with programmatic research initiatives at the Rutgers Cancer Institute of New Jersey. For example, complementing the Cell Death and Survival Signaling Program, I designed a first line metastatic trial combining the mTOR inhibitor, RAD001 with albumin-bound Paclitaxel as well as an investigator initiated clinical trial examining the combination of carboplatin, doxil and bevacizumab in patients with previously untreated triple-negative metastatic breast cancer. I also serve as Director of the Hereditary Oncology Prevention and Evaluation Program. This program provides New Jersey residents with the opportunity for risk assessment and genetic susceptibility testing. My expertise in clinical approaches to the treatment of patients with breast cancer, clinical trial design and implementation, and genetic susceptibility to breast cancer will allow me to provide necessary input as a co-investigator for the proposed project. I work collaboratively with Drs. Crabtree and Hudson as advisors for the Rutgers Cancer Institute of New Jersey's Cancer Survivorship Center of Excellence and am honored to be part of this research team.

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

1R01HG011928-01
PI: Rana, H. Site PI: Toppmeyer, D.
A Stakeholder Informed Randomized Trial of Pretest Video Education vs Standard Genetic Counseling for Cancer Patients: Evaluating the Impact on Patients, Providers and Practices
09/22/2021-06/30/2025

Citations:

1. Albain KS, Gray RJ, Makower DF, Faghih A, Hayes DF, Geyer CE, Dees EC, Goetz MP, Olson JA, Lively T,Badve SS, Saphner TJ, Wagner LI, Whelan TJ, Ellis MJ, Wood WC, Keane MM, Gomez HL, Reddy PS, Goggins TF, Mayer IA, Brufsky AM, **Toppmeyer DL**, Kaklamani VG, Berenberg JL, Abrams J, Sledge GW, Sparano JA. Race, ethnicity and clinical outcomes in hormone receptor-positive, HER2-negative, node- negative breast cancer in the randomized TAILORx trial. J Natl Cancer Inst. 2020 Sep 28:djaa148. doi: 10.1093/jnci/djaa148. Epub ahead of print. PMID: 32986828.

2. Tung N, Arun B, Hacker MR, Hofstatter E, **Toppmeyer DL**, Isakoff SJ, Borges V, Legare RD, Isaacs C, Wolff AC, Marcom PK, Mayer EL, Lange PB, Goss AJ, Jenkins C, Krop IE, Winer EP, Schnitt SJ, Garber JE.TBCRC 031: Randomized Phase II Study of Neoadjuvant Cisplatin Versus Doxorubicin-Cyclophosphamide

   in Germline BRCA Carriers With HER2-Negative Breast Cancer (the INFORM trial). J Clin Oncol. 2020 May10;38(14):1539-1548. doi: 10.1200/JCO.19.03292. Epub 2020 Feb 25. PMID: 32097092.

3. Sparano JA, Gray RJ, Makower DF, Albain KS, Saphner TJ, Badve SS, Wagner LI, Kaklamani VG, Keane MM, Gomez HL, Reddy PS, Goggins TF, Mayer IA, **Toppmeyer DL**, Brufsky AM, Goetz MP, Berenberg JL,Mahalcioiu C, Desbiens C, Hayes DF, Dees EC, Geyer CE Jr, Olson JA Jr, Wood WC, Lively T, Paik S, EllisMJ, Abrams J, Sledge GW Jr. Clinical Outcomes in Early Breast Cancer With a High 21-Gene Recurrence Score of 26 to 100 Assigned to Adjuvant Chemotherapy Plus Endocrine Therapy: A Secondary Analysis of the TAILORx Randomized Clinical Trial. JAMA Oncol. 2020 Mar 1;6(3):367-374. doi: 10.1001/jamaoncol.2019.4794. PMID: 31566680; PMCID: PMC6777230.

B. Positions, Scientific Appointments and

Positions

2016-present	Chief, Division of Medical Oncology, Rutgers-Robert Wood Johnson Medical School, NewBrunswick, New Jersey
2013-present	Professor with Tenure, Rutgers Robert Wood Johnson Medical School, New Brunswick, NewJersey.
2011-present	Chief Medical Officer, Rutgers Cancer Institute of New Jersey, Rutgers Robert Wood JohnsonMedical School, New Brunswick, NJ.
2010-present	Section Chief, Solid Tumor Oncology, Division of Medical Oncology, Rutgers Robert WoodJohnson Medical School, New Brunswick, New Jersey
2004-2013	Associate Professor with Tenure, Rutgers Robert Wood Johnson Medical School, NewBrunswick, New Jersey
2002-2013	Associate Professor of Medicine, Rutgers Robert Wood Johnson Medical School, NewBrunswick, New Jersey
1995-2002	Assistant Professor of Medicine, UMDNJ/Robert Wood Johnson Medical School, NewBrunswick, New Jersey
1994-1995	Instructor in Medicine, Division of Clinical Pharmacology, Dana-Farber Cancer Institute,Boston, MA
1994-1995	Instructor in Medicine, Harvard Medical School, Boston, MA
1992-1994	Summer Fellowship in The Program in Clinical Effectiveness, A Joint Program of Brigham andWomen's Hospital, Harvard Medical School, and Harvard School of Public Health, Boston, MA
1992-1993	Special Fellow in the Breast Evaluation Center, Dana-Farber Cancer Institute
1990-1994	Fellow in Medical Oncology, Dana-Farber Cancer Institute, Boston, MA
1990-1994	Clinical Fellow in Medicine, Harvard Medical School, Boston, MA
1988-1990	Physician Investigator Fellowship Training Program, University of Pittsburgh School ofMedicine
1987-1988	Senior Resident, Internal Medicine, University of Pittsburgh School of Medicine
1986-1987	Junior Resident, Internal Medicine, University of Pittsburgh School of Medicine
1985-1986	Intern in Medicine, University of Pittsburgh School of Medicine, Pittsburgh ` Pennsylvania

**On July 1st, 2013 The University of Medicine and Dentistry of New Jersey (UMDNJ) merged with Rutgers, The State University of New Jersey. Appropriate name changes have been made above for current positions.

Honors

2021-2022	New York Magazine: Top Doctors
2020	America's Top Doctors for Cancer Care– Castle Connolly, American Registry: (10th Anniversary)
2020	America's Top Doctors 20 Years- Castle Connolly Medical LTD
2020	America's Most Honored Doctors - Top 1% of all recognized professionals in America. Castle Connolly, American Registry
2018	Woman of Distinction: Girl Scouts of Central and Southern New Jersey Exceptional Women in Medicine; Castle Connolly Top Doctors
2016 – 2022	Top Doctors New York Metro Area (digital guide):
2017-2022	Inside New Jersey Magazine: Top Doctors for Cancer Care Inside New Jersey Magazines' Top
2017-2022	Doctors for Women's Health
2015-2022	Top Doctors For Cancer – Newsweek Magazine
2014-2016	Best Doctors in America – Top 5% of U.S. doctors - Best Doctors Inside Jersey's Top Doctor's– -Castle Connolly Medical LTD.
2011-2022	America's Top Doctors for Cancer. Castle Connolly, American Registry. Outstanding Leader, Making a Difference for Women Award, National Council for Research on Women.
2011	America's Most Honored Professionals - Top 10% of all recognized professionals in America. Castle Connolly, American Registry.
2011-21	Inside New Jersey Magazines' Top Doctors. Castle Connolly, American Registry.
2010	American Cancer Society Night of Wine and Roses Medical Honoree
2006	The Cancer Institute of New Jersey Award of Hope for Leadership in Patient Care
2005	Spirit of Jane Rodney Award- Susan G. Komen Foundation
1984	Alpha Omega Alpha
1981	Psi Chi - National Honorary Psychology Society
1981	Ralph Signet Award - for excellence in Chemistry Research
1981	Phi Beta Kappa/Magna Cum Laude
1980	Lubrizol Scholar in Chemistry
1979	Chi Gamma Nu - National Honorary Chemistry Society

C. Contribution to Science

1. I oversee the clinical research program within the comprehensive multidisciplinary breast program. This program is organized so there are specific trials available for patients with different stages and histological subtypes of breast cancer. In the neoadjuvant and the metastatic setting, my colleagues and I have been involved in the design and implementation of translational clinical trials that offer promising new therapies targeted to specific types of breast cancer that simultaneously dovetail with programmatic research initiatives at the Cancer Institute integral to the CCSG. For example, as part of the Breast Cancer Research Program, I developed an R01-funded "Phase II trial of sequential epirubicin and navelbine in patients with advanced breast cancer" to test the prediction that p53 status is a major determinant of sensitivity to microtubule poisons. In addition, complementing the Cell Death and Survival Signaling Program, I have designed a first line metastatic trial combining the mTOR inhibitor, RAD001 with Albumin-bound Paclitaxel as well as an investigator initiated clinical trial examining the combination of carboplatin, Doxil and bevacizumab in patients with previously untreated triple-negative metastatic breast cancer. The latter trial laid the groundwork for the current neoadjuvant Doxil/carbo combination trial that interfaces with the precision medicine initiative that is currently the major research focus at Rutgers Cancer Institute of New Jersey.

    a. Mehta MS, Dolfi SC, Bronfenbrener R, Bilal E, Chen C, Moore D, Lin Y, Rahim H, Aisner S, Kersellius RD, Teh J, Chen S, **Toppmeyer D**, Medina DJ, Ganesan S, Vazquez A, Hirshfield KM. Metabotropic glutamate receptor 1 expression and its polymorphic variants associate with breast cancer phenotypes. PLoS One. 2013 Jul 26;8(7):e69851. doi: 10.1371/journal.pone.0069851. Print 2013. PMCID: PMC3724883.
    b. Sharma MR, Mehrotra S, Gray E, Wu K, Barry WT, Hudis C, Winer EP, Lyss AP, **Toppmeyer D**, Moreno-Aspitia A, Lad TE, Velasco M, Overmoyer B, Rugo HS, Ratain MJ, Gobburu JV. Personalized Management of Chemotherapy-Induced Peripheral Neuropathy Based on a Patient Reported Outcome: CALGB 40502 (Alliance). J Clin Pharmacol. 2020 Apr;60(4):444-452. doi: 10.1002/jcph.1559. Epub 2019 Dec 4. PMID: 31802506; PMCID: PMC7064382.
    c. **Toppmeyer D**, Press MF. Testing considerations for phosphatidylinositol-3-kinase catalytic subunit

alpha as an emerging biomarker in advanced breast cancer. Cancer Med. 2020 Jul 22;9(18):6463–72. doi: 10.1002/cam4.3278. Epub ahead of print. PMID: 32697890; PMCID: PMC7520347.

d. Mark Jesus M Magbanua , Laura H Hendrix, Terry Hyslop, William T Barry 3, Eric P Winer, Clifford Hudis, **Toppmeyer D**, Lisa Anne Carey, Ann H Partridge, Jean-Yves Pierga, Tanja Fehm, José Vidal-Martínez, Dimitrios Mavroudis, Jose A Garcia-Saenz, Justin Stebbing, Paola Gazzaniga, Luis Manso, Rita Zamarchi, María Luisa Antelo, Leticia De Mattos-Arruda, Daniele Generali, Carlos Caldas, Elisabetta Munzone, Luc Dirix , Amy L Delson, Harold Burstein, Misbah Qadir, Cynthia Ma, Janet H Scott, François-Clément Bidard, John W Park, Hope S Rugo. "Serial analysis of circulating tumor cells in metastatic breast cancer receiving first-line chemotherapy"J Natl Cancer Inst 2020 Aug 8;djaa113. doi: 0.1093/jnci/djaa113. PMID: 32770247

2. I serve as Director of the Hereditary Oncology Prevention and Evaluation Program (HOPE). This program provides New Jersey residents with the opportunity for risk assessment and genetic susceptibility testing. Because central New Jersey has a large population of Ashkenazi Jews, who have a high prevalence of BRCA1/2 mutations, this program is particularly important as a resource for the community and for genetic and interventional studies including planned neoadjuvant studies with PARP inhibitors in patients with newly diagnosed early stage disease. I have previously collaborated extensively on studies to evaluate the role of genetic variants in risk of development of breast cancer and in risk of recurrence of breast cancer.

   a. Khiabanian H, Hirshfeld KM, Goldfinger M, Bird S, Stein M, Aiser J, **Toppmeyer D,** Wong S, Chan N, Shar K, Gheeya J, Vig H, Hadigol M, Pavlick D, Ansari S, Ali S, Xia B, Rodriguez-Rodriguez L, GanesanS. Inference of germline mutational status and evaluation of loss of heterozygosity in high-depth tumor- only sequencing data. JCO Precision Oncol. 2018;2018. doi: 10.1200/PO.17.00148. Epub 2018 Jan 19. PMCID: PMC6148761.
   b. Karam R, Conner B, LaDuca H, McGoldrick K, Krempely K, Richardson ME, Zimmermann H, Gutierrez S, Reineke P, Hoang L, Allen K, Yussuf A, Farber-Katz S, Rana H, Culver S, Lee J, Nashed S, **Toppmeyer D**, Collins D, Haynes G, Pesaran T, Dolinsky JS, Tippin Davis B, Elliott A, Chao E. "Assessment of Diagnostic Outcomes of RNA Genetic Testing for Hereditary Cancer". JAMA Netw Open. 2019 Oct 2;2(10):e1913900. doi: 10.1001/jamanetworkopen.2019.13900.
   c. Le Compte CG, Lu SE, Ani J, McDougall J, Walters ST, **Toppmeyer D,** Boyce TW, Stroup A, Paddock L, Grumet S, Lin Y, Heidt E, Kinney AY. Understanding cancer genetic risk assessment motivations in a remote tailored risk communication and navigation intervention randomized controlled trial. Health Psychol Behav Med. 2022 Dec 9;10(1):1190-1215. doi: 10.1080/21642850.2022.2150623. eCollection 2022. PMID: 36518606
   d. Kinney AY, Walters ST, Lin Y, Lu SE, Kim A, Ani J, Heidt E, Le Compte CJG, O'Malley D, Stroup A, Paddock LE, Grumet S, Boyce TW, **Toppmeyer D,** McDougall JA. Improving Uptake of Cancer Genetic Risk Assessment in a Remote Tailored Risk Communication and Navigation Intervention: Large Effect Size but Room to Grow. Clin Oncol. 2023 Feb 14:JCO2200751. doi: 10.1200/JCO.22.00751. Online ahead of print.PMID: 36787512

3. An innovative and interactive high school biology and genetics curriculum, BioCONECT, **(Biology and Cancer, ONline Education Connecting Teens)** was developed collaboratively by Rutgers Cancer Institute of New Jersey and the Rutgers School of Public Health with the philanthropic support of the Val Skinner foundation and a local Susan G Komen grant. The goal of BioCONECT is to enhance science literacy, improve cancer awareness and to introduce students to careers in cancer prevention, research and treatment. BioCONECT advances students' problem-solving and decision making skills, and expands their understanding of genetics and biology while exploring relationships between science and technology. Using breast cancer as the context for learning, students learn about risk factors for and molecular events involved in the etiology of cancer. Students receive instruction in cancer genetics, genetic counseling, and cancer treatment and prevention, including clinical trial design. The curriculum increases breast cancer awareness, while addressing cancer-related concerns and emphasizes preventative health behaviors and risk reduction strategies throughout the lifespan. Teacher workshops are used to disseminate the curriculum. To date, 369 teachers representing 171 schools and 117 school districts have been trained enabling a broad dissemination of the curriculum to over18,000 students. To extend the **BioCONECT** student experience, **BOLD** ***(BioCONECT Oncology Leadership Development)*** was developed as a summer camp for high school students. During this week-long interactive camp held at the Rutgers Cancer Institute of New Jersey, students increase their understanding of cancer-related causes, diagnostic tools, treatment options and current research. They also identify risk reduction strategies and learn first-hand about diverse health-related careers. Approximately 200 students have participated to date.

   a. J.K. Campbell, L. Hemminger, H. Vig and **Toppmeyer, D**. "BioCONECT (Biology and Cancer, Online Education Connecting Teens): An innovative and interactive high school curriculum" presented at the

South Carolina Science Council Annual Meeting, Myrtle Beach, SC, 2010 November.

b. J.K. Campbell, L. Liang, H. Vig and **Toppmeyer, D**. “BioCONECT (Biology and Cancer, Online Education Connecting Teens): An innovative and interactive high school curriculum" presented at the National Science Teachers Association Annual Meeting, San Francisco, CA, 2011 March.

Complete List of Published Work in My Bibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/1TUJb0of7gwAo/bibliography/47914806/public/?sort=date&direction= ascending