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: Crabtree, Benjamin Franklin

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

POSITION TITLE: Professor of Family Medicine and Community Health

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
Washington College, Maryland	BS	06/1971	Biology
University of South Florida, Tampa	MA	06/1982	Applied Anthropology
University of Connecticut, Storrs CT	PhD	05/1986	Medical Anthropology

A. Personal Statement

Using the skills of an applied medical anthropologist, I have worked in healthcare delivery system redesign and primary care practice organizational change focused on cancer screening and care for patients with a history of cancer using qualitative ethnographic methods and mixed-methods designs over a 30-year program of research. Over the past twenty years, I have been intensely engaged in cancer related research designed to enhance the quality of care in primary care practices. I have gained a deep appreciation on the day-to-day realities clinicians, staff members, and patients face in primary care practices. In addition to this implementation science work, I have expertise in qualitative and participatory methods like those envisioned as an integral part of population science research. I have been PI on two recent NIH R01 grants, and MPI on a current NCI R01 grant, that use ethnographic and mixed-methods to develop, implement, and evaluate primary care practice cancer survivor interventions. In an August 2022 released SAGE Publication book I co-authored with William Miller, we pay special attention to the role of qualitative methods in participatory inquiry and provide detailed examples including a recent project we completed in New Jersey during the COVID-19 pandemic. This new book, Doing Qualitative Research (3rd Edition), greatly expands the previous editions I coedited and which was one of the more widely used texts on qualitative research. I served as the Guest Editor for a *Health Services Research* theme issue on mixed methods research published in 2013 and served as a member of the SQUIRE committee that put together standards for quality improvement and on the OBSSR panel the created the NIH Best Practices for Mixed Methods Research in the Health Sciences. I have over 240 peer reviewed publications, 25 books/book chapters, and have served as principal investigator on over 20 grants including 5 NIH funded R01s and an NCI Senior Investigator (K05) award. I have served as a methods consultant on major research projects for Case Western Reserve University, University of Colorado, HealthPartners, the McColl Institute, University of Cincinnati, Hamamatsu University, Wollongong University, and numerous other national and international institutions.

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

ongoing

1. R18HS028574

Jimenez ME (PI), Role: Co-Investigator

12/01/2021 - 11/30/2026

Ready and Healthy for Kindergarten: A Primary Care Innovation to Promote a 360-degree View of Child Health

2. R01 CA257197 Hudson SV & Crabtree BF (MPI) 07/01/2021 - 06/30/2026

Adapting and implementing evidence-based breast cancer follow-up in primary care

3. R37 CA24254

Tsui J (PI), Role: Subcontract PI

08/20/2020 - 04/30/2024

Accelerating Evidence-based Strategies into Practice for HPV Vaccination in Safety-Net Primary Care Settings

4. R01 HD099125

Jimenez (PI), Role: Co-Investigator

05/15/2020 - 02/28/2025

Addressing Disparities in Language and Social-emotional Skill Acquisition using Multi-Level Strategies in Primary Care

5. UL1 TR003017

Panettieri (PI), Role: Core C. Advisor for Community and Collaboration

03/11/2019 - 02/29/2024

New Jersey Alliance for Clinical and Translational Science (NJ ACTS)

Completed

1. R01 HS023940

Cohen (PI), Role: Subcontract PI/Qualitative Team Leader

05/01/2015 - 04/30/2019

Evaluating System Change to Advance Learning and Take Evidence to Scale (ESCALATES)

2. R01 CA176838

Hudson (PI), Role: Co-Investigator

09/30/2013 - 08/31/2019

Cancer Education for Longer-term Survivors (EXCELS) in Primary Care

3. R01CA176545

Crabtree (PI)

09/01/2014 - 12/31/2018

PCMH Implementation Strategies: Implications for Cancer Survivor Care

4. UL1 TR003017-02S2

Hudson, Panettieri, Barrett, Blaser, Jimenez, Hill (MPI), Role: Co-Investigator 09/01/2020 – 02/28/2023

New Jersey Alliance for Clinical and Translational Science (RADxUP Supplement - NJ HEROES TOO)

Citations

- a. Rubinstein E, Miller WL, Hudson SV, Howard J, O'Malley D, Tsui J, Lee HS, Bator A, Crabtree BF. Cancer Survivorship Care in Advanced Primary Care Practices: A Qualitative Study of Challenges and Opportunities. JAMA Internal Medicine, 2017 Dec 1;177(12):1726-1732. doi: 10.1001/jamainternmed.2017.4747. PMID: 28973067..
- b. **Crabtree BF**, Miller WL. Doing Qualitative Research (3rd Edition). Newbury Park, CA: SAGE Publications, 2023
- c. **Crabtree BF**, Miller WL, Howard J, Rubinstein EB, Tsui J, Hudson SV, O'Malley D, Ferrante JM, Stange KC. Cancer Survivorship Care Roles for Primary Care Physicians. Ann Fam Med 2020; 18 (3): 202-209. PMCID: PMC7213992
- d. **Crabtree BF**, Howard J, Miller WL, Cromp D, Hsu C, Coleman K, Austin B, Flinter M, Tuzzio L, Wagner EH. Leading Innovative Practice: Leadership Attributes in LEAP Practices. The Milbank Quarterly 2020 Jun;98(2):399-445. doi: 10.1111/1468-0009.12456. Epub 2020 May 13. PMCID: PMC7296441.

B. Positions, Scientific Appointments, and Honors

B.1. Positions

2019 – present	Distinguished Professor, Dept Family Medicine and Community Health, Rutgers RWJMS
2007 – 2013	Program co-Leader, Cancer Prevention and Control, Cancer Institute of New Jersey
1999 – 2019	Professor, Dept Family Medicine and Community Health, Rutgers RWJMS

- 1999 2015 Professor and Director, Division of Research, Dept of Family Medicine, Rutgers RWJMS 1997 1999 Professor and Director, Division of Research; Dept of Family Practice, UNMC, Omaha, NE
- 1993 1997 Associate Professor, Dept of Family Practice, UNMC, Omaha, NE
- 1986 1992 Assistant Professor (Joint Appointment); Dept Anthropology, U Connecticut, Storrs, CT
- 1985 1992 Asst Prof & Assoc Dir, Research Division, Dept Family Med, U Connecticut, Farmington, CT

B.2. Other Experience and Professional Memberships

- 2011 2014 NIH Dissemination and Implementation in Health Research study section, member
- 2003 2007 Associate Editor, Annals of Family Medicine
- 1993 1997 Health Services Development Study Section; Agency for Health Care Policy & Research
- 1978 1980 English Teacher, Hiroshima Girls High School, Japan
- 1976 1978 TB Control Worker, U. S. Peace Corps/Korea
- 1974 1975 WHO Smallpox Surveillance Officer, U.S. Peace Corps/Ethiopia

B.3. Honors

- 2016 Norman H. Edelman, MD Clinical Science Mentoring Award. Rutgers RWJ Medical School
- 2014 Curtis G. Hames Research Award for Lifetime Contribution to the Development of Family Medicine Research. Awarded jointly by Society of Teachers of Family Medicine, American Academy of Family Physicians and North American Primary Care Research Group
- 2011 Best Paper Award. Society of Teachers of Family Medicine.
- 2007 Excellence in Research Award. UMDNJ Foundation.

C. Contributions to Science

- 1. Much of my professional career has focused on expanding the research methods used in primary care research to include qualitative research and mixed-methods designs. In the 1980s and into the 1990s primary care research relied primarily on epidemiological designs and was not taking advantage of the added value of qualitative research methods. I published a series of articles and an edited book, *Doing Qualitative Research* (1992 and 1999), that influenced the field to adopt more qualitative methods. Sage Publications released a complexly new edition of *Doing Qualitative Research* in August 2022 that William Miller and I co-authored instead of editing. I was a very early proponent of mixed-methods designs, including co-authoring a 1994 article in the *Journal of General Internal Medicine* that describes the basic mixed-methods designs widely used today. I served as the Guest Editor for a *Health Services Research* theme issue on mixed-methods research published in 2013 and was a member on the 2011 OBSSR panel that created the NIH Best Practices for Mixed Methods Research in the Health Sciences.
 - 1.a. **Crabtree BF**, Miller WL. *Doing Qualitative Research* (3rd Edition). Newbury Park, CA: Sage Publications, 2023.
 - 1.b. Stange KC, Miller WL, **Crabtree BF**, O'Connor PJ, Zyzanski SJ. Multimethod Research: Approaches for Integrating Qualitative and Quantitative Methods. J Gen Int Med, 9(May):278-282, 1994.
 - 1.c. Miller WL, **Crabtree BF**, Harrison MI, Fennell ML. Integrating mixed methods in health services and delivery system research. Health Serv Res, Dec;48(6 Pt2):2125-33, 2013. PMCID: PMC4097838
 - 1.d. Crabtree BF, Miller WL, Gunn J, Hogg W, Scott C, Levesque JF, Harris M, Chase S, Advocat J, Halma L, Russell G. Uncovering the Wisdom Hidden Between the Lines: The Collaborative Reflexive Deliberative Approach. Family Practice 2018 May 23;35(3):266-275. doi: 10.1093/fampra/cmx091. PMCID: PMC5965090.
- 2. Since the mid-2000s, major initiatives to redesign primary care practices have moved to the forefront of health system reform. I have taken a leading role on developing new organizational change models and intervention designs to enhance quality of care in primary care practices, including the Patient-Centered Medical Home (PCMH). I have been the lead investigator or senior co-investigator on large intervention trials funded by NCI, NHLBI, NIDDK, and the Robert Wood Johnson Foundation. This body of work has had a major influence on healthcare organizational interventions in current use.
 - 2.a. Cohen D, McDaniel RR Jr, **Crabtree BF**, Ruhe MC, Weyer SM; Talia A, Miller WL, Goodwin MA, Nutting P, Solberg LI, Zyzanski SJ, Jaen CR, Gilchrist V, Stange KC. A practice change model for quality improvement in primary care practice. J Healthcare Management, 49(3):155-68, 2004. PMID: 15190858.
 - 2.b. Solberg LI, Hroscikoski MC, Sperl-Hillen JM, O'Connor PJ, **Crabtree BF**. Key issues in transforming health care organizations for quality: the case of advanced access. Jt Comm J Qual Saf, 30(1):15-24, 2004. PMID: 14738032.

- 2.c. **Crabtree BF**, Nutting PA, Miller WL, Stange KC, Stewart EE, Jaen CR. Summary of the National Demonstration Project and Recommendations for the Patient Centered Medical Home. Ann Fam Med, 8(suppl 1): S80-S90, 2010. PMCID: PMC2885727.
- 2.d. **Crabtree BF**, Nutting PA, Miller WL, McDaniel RR, Stange KC, Jaen CR, Stewart EE. Primary care practice transformation is hard work: Insights from a 15 year developmental program of research. Medical Care, 49(Dec Suppl): S28-35, 2011. PMCID: PMC3043156.
- 3. In addition to contributing to the interventions for addressing the complexity of primary care practice and mixed-methods designs, I have been a proponent of collaborative team research and team-based clinical care. In 1993 I obtained an AHRQ R03 conference grant to convene experts with diverse research methods and content expertise to explore how collaborations could enhance research and practice. This led directly to an edited book on collaborative research and laid the foundation for practice interventions based on enhancing team communication and relationships. Collaborative teams have now become a major attribute expected in primary care practices and is a necessity in emerging research designs.
 - 3.a. **Crabtree BF**, Miller WL, Addison R, Gilchrist V, Kuzel A., (Eds). Exploring Collaborative Research in Primary Care. Newbury Park, CA: Sage Publications, 1994.
 - 3.b. Jordan ME, Lanham HJ, **Crabtree BF**, Nutting PA, Miller WL, Stange KC, McDaniel RR Jr. The role of conversation in health care interventions: enabling sensemaking and learning. Implementation Science, 4:15, 2009. PMCID: PMC2663543.
 - 3.c. Balasubramanian BA, Chase SM, Nutting PA, Cohen DJ, Ohman-Strickland PA, Crosson JC, Miller WL, Crabtree BF, and ULTRA Study Team. Using learning teams for reflective adaptation (ULTRA) Insights from a team-based change management strategy in primary care. Ann Fam Med, 8(5):425-432, 2010. PMCID: PMC2939418.
 - 3.d. Shaw EK, Howard J, Etz RS, <u>Hudson SV</u>, **Crabtree BF**. How team-based reflection affects quality improvement implementation: a qualitative study. Qual Manag Health Care, 21(2):104-13, 2012. PMCID: PMC3395586.
- 4. Cancer prevention and control in primary care settings has been a major content focus of my research, including for six NIH R01 projects on which I served as PI or the PI on a major sub-contract. These funded projects included descriptive studies funded by NCI and AHRQ which documented current practices and group randomized interventions designed to enhance the delivery of preventive services funded by NCI and NHLBI. I am the MPI on a current NCI R01 that is developing transferrable models for delivering care for long-term cancer survivors. This body of research is making major contributions to enhancing cancer-related quality of care in primary care settings.
 - 4.a. **Crabtree BF**, Miller WL, Tallia AF, Cohen DJ, DiCicco-Bloom B, McIlvain HE, Aita VA, Scott JG, Gregory PB, Stange KC, McDaniel RR Jr. Delivery of Clinical Preventive Services in Family Medicine Offices. Ann Fam Med, 3(5): 430-435, 2005. PMCID: PMC1466921.
 - 4.b. Hudson SV, Hahn KA, Ohman-Strickland P, Cunningham RS, Miller SM, **Crabtree BF**. Breast, Colorectal and Prostate Cancer Screening for Cancer Survivors and Non-Cancer Patients in Community Practices. J Gen Internal Med, 24(Suppl 2): 487-90, 2009. PMCID: PMC2763158.
 - 4.c. **Crabtree BF**, Miller WL, Howard J, Rubinstein EB, Tsui J, Hudson SV, O'Malley D, Ferrante JM, Stange KC. Cancer Survivorship Care Roles for Primary Care Physicians. Ann Fam Med 2020; 18 (3): 202-209. PMCID: PMC7213992.
 - 4.d. Tsui J, Hudson SV, Rubinstein EB, Howard J, Hicks E, Kieber-Emmons A, Bator A, Lee HS, Ferrante JM, Crabtree BF. A mixed-methods analysis of the capacity of the Patient Centered Medical Home to implement care coordination services for cancer survivors. Journal of Translational Behavioral Medicine. 2018 May 23;8(3):319-327. doi: 10.1093/tbm/ibx059.
- 5. Within the United States there are dramatically increasing numbers of citizens with behavioral and mental health concerns. To address this demographic transition, it is important to understand current care processes in primary care practices and identify strategies to enhance quality of behavioral health care in practices designed to meet acute care needs. I have work as a collaborator in behavioral health integration in primary care and have served as a co-author on numerous publications with investigators around the country. Much of this current work revolves around integration of behavioral health in primary care settings including substance use as noted above.

- 5.a. Solberg LI, Crain AL, Maciosek MV, Unutzer J, Ohnsong KA, Beck A, Rubenstein L, Whitebird RR, Rossom RC, Pietruszewski PB, Crabtree BF, Joslyn K, Van de Ven A, Glasgow RE. A stepped-wedge evaluation of an initiative to spread the collaborative care model for depression in primary care. Ann Fam Med, 13(5): 412-20, 2015. PMID: 26371261 PMCID: PMC4569448
- 5.b. Balasubramanian BA, Fernald D, Dickinson M, Davis M, Gunn R, **Crabtree BF**, Miller BF, Cohen DJ. REACH of intervention integrating primary care and behavioral health. J Am Board Fam Med, Sep-Oct;28 Suppl 1: S73-S85, 2015. PMID: 26359475 PMCID: PMC7315784
- 5.c. Cohen DJ, Balasubramanian BA, Davis M, Hall J, Gunn R, Stange KC, Green LA, Miller WL, **Crabtree BF**, England MJ, Clark K, Miller BF. Understanding care integration from the ground up. J Am Board Fam Med, Sep-Oct;28 Suppl 1: S7-S20, 2015. PMID: 26359474 PMCID: PMC7304938
- 5.d. Solberg LI, Crain L, Jaeckels N, Ohnsorg K, Margolis KL, Beck A, Whitebird RR, Rossom R, Crabtree BF, Van de Ven A. The DIAMOND Initiative: Implementing collaborative care for depression in 75 primary care clinics. Implementation Science, Nov 16; 8(1):135, 2013. PMID: 24238225 PMCID: PMC3842646

Complete List of Published Work in MyBibliography:

https://www.ncbi.nlm.nih.gov/myncbi/1RygDrtphXXMyl/bibliography/public/