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: Jessica Sheth Bhutada, MD, MS

eRA COMMONS USER NAME: jbhutada

POSITION TITLE: Assistant Professor of Clinical Pediatrics

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
University of Michigan - Ann Arbor	BS	05/2011	Interdisciplinary Perspectives on Health
University of Kansas School of Medicine	MD	05/2015	
McGaw Medical Center/Ann & Robert H. Lurie Children's Hospital of Chicago	Resident	07/2018	General Pediatrics with Certificate in Advocacy and Population Health
Children's Hospital Los Angeles	Fellow	06/2021	Pediatric Hematology/Oncology
University of Southern California	MS	05/2021	Clinical, Biomedical, and Translational Investigations
Children's Hospital Los Angeles	Fellow	06/2022	AYA Oncology/Survivorship

A. PERSONAL STATEMENT

I am currently an Assistant Professor of Clinical Pediatrics in the Division of Pediatric Hematology/Oncology and Medical Co-Director of the Adolescent and Young Adult Cancer and Blood Disease Service at Children's Hospital Los Angeles (CHLA). Through my general pediatrics training, I obtained a certificate in advocacy and population health which laid the foundation of interest in developing a career in translational research integrating population health sciences with clinical care. My primary area of interest is in studying and addressing survival disparities in cancer patients, particularly in the AYA population. During my pediatric hematology-oncology fellowship, I served as a principal investigator (PI) in collaboration with the Los Angeles Cancer Surveillance Program (LA-CSP) for a SEER-based study assessing sociodemographic factors associated with incidence and survival patterns of metastatic cancer in AYAs compared to older adults. Our findings of marked sociodemographic and age-related disparities in the burden and survival outcomes of AYAs led to my most recent study assessing health disparities in AYAs who present with localized versus metastatic disease. As a result of these analyses, I am studying metastatic gastric cancer in AYAs as it is a highly fatal disease with a rising incidence predominantly affecting AYAs in their 20s and 30s. Compared to older adults, AYAs are more likely to present with metastatic gastric cancer. Minority and low socioeconomic AYAs are at highest risk of presenting with metastatic disease. In contrast to more robust literature describing the etiology of gastric cancer in older adults, there is a paucity of similar literature for early-onset gastric cancer. It is essential to evaluate environmental and structural risk factors for metastatic gastric cancer in AYAs to inform targeted public health initiatives for communities at highest risk of developing this deadly disease. As a Health Equity Scholar at the Center for Health Equity Education & Advocacy led by faculty from Harvard Medical School and Harvard T.H. Chan School of Public Health, I have undertaken intensive leadership training focused on community organization principles to advance health equity. I will apply these skills towards partnering with loco-regional community advocacy organizations to disseminate the findings of this study and develop targeted public health campaigns for communities at highest risk of metastatic gastric cancer in young adults.

In my work with the LA-CSP through collaboration with internationally recognized epidemiologists, including Drs. Dennis Deapen, Amie Hwang and Lihua Liu, I have cultivated a relationship of scientific inquiry and cooperative research advancement. My primary research mentor is David R. Freyer, DO, MS, Professor of Clinical Pediatrics, Medicine, and Population and Public Health Sciences, who is Immediate Past Chair of the Children's Oncology Group AYA Oncology Discipline Committee, co-director of our AYA Cancers Program, Director of the Cancer Survivorship Program at USC Norris, and has a strong track record of related research, funding, and mentorship. My secondary research mentor is Myles Cockburn, PhD, Professor of Population and

Public Health Sciences, who is an international expert in applying geospatial analysis to evaluate cancer health disparities and has a strong track record of research funding, mentorship, and developing public health initiatives in melanoma and gastric cancer. My third research mentor is Chanita Hughes Halbert, PhD, Associate Director of Cancer Equity at USC Norris Comprehensive Cancer Center, who is a nationally recognized leader in minority health research and an expert in identifying sociocultural, psychological, genetic and environmental determinants of cancer health disparities and translating these findings into interventions to improve health equity among racially and ethnically diverse populations. My fourth mentor is Syma Iqbal, MD, a world-renowned GI medical oncologist and translational scientist who has helped contextualize my research findings to impact patient care. I am passionate about this area of research which combines my interests in cancer disparities and AYA oncology and am grateful for the opportunity to submit this application to expand collaborative efforts.

Relevant Citations:

- a. **Sheth Bhutada J**, Hwang A., Liu L, Deapen D, Freyer D. Poor-Prognosis Metastatic Cancers in Adolescents and Young Adults: Incidence Patterns, Trends, and Disparities, *JNCI Cancer Spectrum*, 2021; PMID: 34250441. (*Published with Invited Commentary, PMID: 34250442*).
- b. **Sheth Bhutada J**, Hwang A, Liu L, Tsai, K Deapen D, Freyer D. Survival of Adolescents and Young Adults with Poor-Prognosis Metastatic Cancer: A Population-based Study of Contemporary Patterns and Their Implications. *Cancer Epidemiol Biomarkers Prev*, 2022; PMID: 35086824.
- c. **Sheth Bhutada J,** Hwang A, Liu L, Tsai, K Deapen D, Freyer D. Risk of Presenting with Poorprognosis Metastatic Cancer in Adolescents and Young Adults: A Population-based Study. *Cancers (Basel)*. 2022; PMID: 36230854

B. POSITIONS AND HONORS

Positions and	I Employ	yment
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FUSITIONS AND	<u>Linployment</u>	
2016 - 2018	Representative, Pediatric Residency Diversity Committee, Lurie Children's Hospital	
2016 - 2018	Pediatrics Program Representative, Residents and Fellows Forum, McGaw Medical Center,	
2020 - 2022	Pediatric Hematology/Oncology Fellow Representative, Graduate Medical Education Committee, Children's Hospital Los Angeles	
2020 - 2021	Pediatric Hematology/Oncology Fellow Representative, Diversity Equity and Inclusion Committee, Children's Hospital Los Angeles	
2020 - 2021	Fellow Representative, Chemotherapy Safety Committee, Children's Hospital Los Angeles	
2020 - 2021	Fellow Representative, Pediatric Hematology/Oncology Fellowship Program Evaluation Committee, Children's Hospital Los Angeles	
2020 - 2021	Fellow Representative, Pediatric Hematology/Oncology Fellowship Curriculum Committee, Children's Hospital Los Angeles	
2020 - 2021	Chief Fellow, Pediatric Hematology Oncology Fellowship Program, Children's Hospital Los Angeles	
2021 - 2022	Center for Health Equity Education & Advocacy Health Equity Scholar, Cambridge, MA	
2022 – present	Assistant Professor of Clinical Pediatrics, Keck School of Medicine, University of Southern California	
2022 – present Member, Bone and Soft Tissue Solid Tumor Program, Cancer and Blood Disease Institute.		

2022 – present Member, Bone and Soft Tissue Solid Tumor Program, Cancer and Blood Disease Institute, Children's Hospital Los Angeles

2022 – present Medical Co-Director of the Adolescent and Young Adult Cancer and Blood Disease Service, Children's Hospital Los Angeles

Other Experience and Professional Memberships

2013 - 2015	Region 7 Director, American Medical Women's Association
2014 -	Alpha Omega Alpha
2015 - 2018	Residency Program Delegate, American Academy of Pediatrics
2018 -	American Society of Pediatric Hematology Oncology
2018 -	Children's Oncology Group

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2014	Junior Member Induction, Alpha Omega Alpha
2015	Student Research in Pediatrics, Herbert C. Miller Award, University of Kansas School of Medicine
2015	Glasgow-Rubin Citation for Academic Achievement, American Medical Women's Association
2015	Outstanding Scholastic Achievement, Merck Manual Award, University of Kansas School of Medicine
2015	Highest Academic Performance in Psychiatry Clerkship, Paul C. Laybourne Award, University of Kansas School of Medicine
2023	Morris and Mary Press Humanism Award Nominee

C. Contributions to Science

Honors

1. Cancer Care Delivery and Disparities in Adolescent and Young Adult (AYA) Oncology

Metastatic disease is the strongest predictor of mortality in AYAs. Therefore, to improve survival in AYAs, there must be a comprehensive understanding of the interplay between sociodemographic factors and tumor biology in predicting outcomes of metastatic disease in high-risk populations. To explore this, I have worked with leading epidemiologists at the Los Angeles Cancer Surveillance Program to complete a Surveillance, Epidemiology and End Results Program (SEER) based analysis of incidence and survival patterns involving 17,210 cases of metastatic cancer in AYAs from 2000-2016 to assess the relative impact of sociodemographic factors in AYAs compared to older adults. Our results document significant racial and socioeconomic disparities affecting AYAs with varying patterns across different cancer types. I have been invited to present these results at several local and regional conferences. As a member of the Cancer Care Delivery Research Committee in the Children's Oncology Group, I am studying disparities in resources available to AYAs treated in community settings.

- a. **Sheth Bhutada J.** Poor-prognosis Metastatic Cancers in Adolescents and Young Adults: Incidence and Survival Disparities, USC Center for Young Adult Cancer Survivorship Research, presentation at Bimonthly Center meeting, February 2021.
- b. **Sheth Bhutada J.** Modern Priorities in Adolescent and Young Adult Oncology. Los Angeles Cancer Surveillance Program 30th Annual Educational Symposium, August 2021.
- c. Beauchemin, M, Ji, L, Williams, A, Nightingale, C, Wolfson, J, Salsman, J, Levine, J, Freyer, D, Grimes, A, Sugalski, A, Prasad, P, Pollock, B, Santacroce, S, **Bhutada, J,** Roth, M, Parsons, S. (2023). Comprehensive cancer-related resources for adolescents and young adults (AYAs) treated in the community setting: 2022 Landscape survey results. JCO Oncology Practice. 19. 151-151. 10.1200/OP.2023.19.11_suppl.151.

2. Childhood Cancer Supportive Care and Survivorship Outcomes

As a member of the Children's Oncology Group Sexual Health Task Force, I have facilitated the development of Patient Reported Outcomes (PROs) to evaluate the impact of cancer treatment on sexual function in AYAs. Recognizing the importance of delivering full dose induction chemotherapy to achieve early remission in pediatric acute lymphoblastic leukemia (ALL), I have evaluated our program's approach to managing patients who present with conjugated hyperbilirubinemia at diagnosis who were unable to receive standard planned induction chemotherapy. Additionally, my residency research project focused on understanding neurocognitive mediators of adaptive function in pediatric brain tumor and acute lymphoblastic leukemia patients. My work in this retrospective chart review resulted in the creation of a database of neuropsychological profiles of 250 pediatric cancer survivors treated at a single institution. The results of this study were used to identify neurocognitive measures to predict decreased adaptive function in childhood cancer, with the hopes of guiding outreach efforts with local school districts.

a. Demedis J, Bingen K, Cherven B, Frederick NN, Freyer DR, Levine J, Sheth Bhutada J, Quinn GP, Bober S, DuVall AS. Development of a patient-reported outcomes battery for sexual health in adolescent and young adult cancer clinical trials. J Adolesc Young Adult Oncol. *Accepted* 2023.

- b. **Sheth Bhutada J,** Huh W, Orgel E. Managing Conjugated Hyperbilirubinemia at Presentation of Pediatric Acute Lymphoblastic Leukemia. Poster Presentation at American Society of Pediatric Hematology Oncology conference, 2022. Pittsburgh, PA
- c. **Sheth J**, Powell S, Pillay Smiley N. Neurocognitive Mediators of Adaptive Function in Pediatric Brain Tumor and Acute Lymphoblastic Leukemia Patients. Pediatric Resident Senior Project Presentation, 2018. Chicago, IL

3. Healthcare Access

I also have a strong passion for understanding factors influencing patients and their family's ability to access the healthcare system. In medical school, I led a study surveying parents of pediatric patients to assess if parental healthcare needs were being unmet as a result of their children requiring medical care. The results of this survey were used to refine social work assessments pertaining to parents of pediatric patients in an academic institution with a large, underserved population.

a. **Sheth J**, Cavanaugh C, Kretsinger H. Access to Healthcare Among Parents of Patients Seen at KUMC General Pediatrics Clinic. Population Health in Practice Capstone Project Oral Presentation, 2015. Kansas City, KS

4. Quality Improvement

Throughout my career I have been interested in quality improvement efforts and have most recently served on our division's chemotherapy safety committee. During medical school, I performed a single institutional analysis of factors affecting lumbar puncture and bone marrow procedure quality in oncology patients which was presented as a poster at a national conference.

a. Sheth J, Degar B, Billett A. Lumbar puncture and bone marrow procedure quality: A single institutional exploratory analysis. Poster Presentation at American Society of Pediatric Hematology Oncology conference, 2013. Miami, FL

D. Research Support and/or Scholastic Performance

Current Research Support

Mentored Career Development Award in Clinical Translational Research

KL2TR001854

04/01/23- 03/31/26

Sheth Bhutada (PI)

Title: Determining modifiable risk factors for metastatic gastric cancer in adolescents and young adults

Teen Cancer America – Children's Oncology Group Young Investigator Award

04/01/24- 03/31/26

Sheth Bhutada (PI)

Title: Determining modifiable risk factors for metastatic early-onset gastric cancer

Past Research Support

David Stroud Foundation Sheth Bhutada (PI) 7/4/21-6/30/22

Title: AYA Post-Graduate Oncology Fellowship

This funding is to carry out AYA Oncology Research and Training at Children's Hospital Los Angeles and USC Norris Cancer Hospital. This is currently funding my ongoing study evaluating disparities in metastatic cancer incidence amongst AYAs.

John H. Richardson Endowed Postdoctoral Fellowship, Achievement Rewards for College Scientists Foundation, Inc. (awarded by the USC Norris Comprehensive Cancer Center) Sheth Bhutada (PI) 10/01/20-09/30/21

Title: Towards Eliminating Survival Disparities Among Adolescents and Young Adults with Metastatic Cancer: A Population-Based Analysis of Socio-Demographic and Tumor Characteristics