

## BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2.  
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Nagi F. Khouri	POSITION TITLE Associate Professor of Radiology Director, Division of Breast Imaging		
eRA COMMONS USER NAME (credential, e.g., agency login) NKHOURI1			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
American University of Beirut, Lebanon	B.S.	1967	
American University of Beirut, Lebanon	M.D.	1971	Medicine/Radiology

### A. Personal Statement

My expertise as a full-time Radiologist in the Johns Hopkins Avon Foundation Breast Center Program is foremost in clinical breast imaging and diagnosis, including ultrasound-guided breast biopsies. Additionally, I am the Director of Breast Imaging at the Johns Hopkins Hospital. With my extensive clinical experience in breast imaging, I will provide clinical guidance for the design of the ultra-compact fiber-optic endomicroscope for second harmonic generation (SHG) Collagen I (Col1) imaging in Research Component 4 (RC4). In the clinical studies in Aim 3 of RC4, I will insert the endomicroscope into a routine 14- or 11-gauge breast biopsy needle during routine breast biopsies of consented patients, and test the feasibility of performing SHG Col1 imaging to predict lymph node involvement by means of increased Col1 fiber volume and decreased Col1 fiber distance.

### B. Positions and Honors

#### Positions and Employment

1975	Instructor, American University of Beirut
1976-84	Assistant Professor, Department of Radiology, The Johns Hopkins University,
1985-87	Associate Professor, Full-time, Department of Radiology The Johns Hopkins University,
1987-96	Associate Professor, Part-time, Department of Radiology,
987-96	Radiologist in Charge, Diagnostic Breast Center of Cross Keys, Baltimore,
1995-02	Medical Director, Johns Hopkins Imaging at Green Spring Station
1996-Present	Associate Professor, Full-time, Department of Radiology
2002-Present	Director, Division of Breast Imaging, Johns Hopkins
2004-Present	Associate Professor of Oncology

#### Other Experience and Professional Memberships

##### Clinical Certification

9/30/2012	Medical Maryland – Expiration date, License # D 0019570
9/30/2002	Virginia License #0101 044016

##### Boards

1975	American Board of Radiology
------	-----------------------------

##### Institutional Administrative Appointments

1977-83	Residency Selection Committee,
1982-85	Finance Advisory Committee
1978-80	Postgraduate Course Committee
1986-87	Staff Conference Committee
1985-87	Johns Hopkins Continuing Education Advisory Committee
1986	Executive Committee for the Development of The Philip A Tumulty Endowment Fund
1986-87	In charge of fund-raising from Radiology Staff and Alumni, Funds for Hopkins
1986-87	In charge of planning Radiology Department Ambulatory Care Center, Johns Hopkins Hospital
1996-Present	Medical Director American Radiology Services At Green Spring Station
1996-Present	Member Executive Committee Department of Radiology Johns Hopkins University

1996-98 Member Compliance Committee Department of Radiology Johns Hopkins University,  
 1998-00 Vice-Chair Budget, Finance and Planning Committee, Clinical Practice Association, Johns Hopkins University School of Medicine

2000 Gold Chair Strategic Planning Initiative External Relations – CPA, Johns Hopkins University  
 1996-01 Chairman, Medical Directors Committee, Outpatient Centers American Radiology Services  
 1996-Present Chairman Mammography Committee American Radiology Services  
 2000-Present CPA representative on Service Excellence Action Group  
 2001-Present Member, CPA Operation Oversight Committee

**Advisory Committee**

1995-Present Member of the Breast Cancer Advisory Committee for DHMH  
 2009 -Present Member of the Advisory Committee to the Jordan Breast Cancer Program  
 2010-Present Member of the Advisory Committee to the Lebanon Cancer Program

**Honors**

1979 Siegelman SS, Stitik FP, Khouri NF and Zerhouni EA: CT of the Pulmonary Nodule, Presented at the 65<sup>th</sup> Scientific Assembly and Annual Meeting of the RSNA, Magna Cum Laude Award

1983 Zerhouni EA, Martinez C, Siegelman SS, Khouri NF, Stitik FP, and Naidich DP: CT of the Pulmonary Nodule Using a Reference Phantom. Presented at the 69<sup>th</sup> Scientific Assembly and Annual Meeting of the RSNA,. Honorable Mention.

1987 Meziane MA, Hruban RH, Zerhouni, EA, Wheeler PA, Khouri NF, Fishman EK, Hutchings GM, Siegelman SS, High Resolution CT of the Lung Parenchyma with Pathologic Correlation. Presented at the 72<sup>nd</sup> Scientific Assembly and Annual Meeting of the RSNA, 1986. Certificate of Merit Award. Also presented at the 1987 ARRS Meeting in Miami Florida. Gold Medal Award.

**C. Selected Peer-reviewed Publications** (Selected from 42 peer-reviewed publications)

**Most relevant to the current application**

1. Meziane MA, Hruban RH, Zerhouni EA, Wheeler PS, Khouri NF, Fishman EK, Hutchins GM, Siegelman SS. High resolution CT of the lung parenchyma with pathologic correlation. Radiographics. 1988 Jan;8(1):27-54
2. Kuhlman JE, Fishman EK, Kuhajda FP, Meziane MM, Khouri NF, Zerhouni EA, Siegelman SS. Solitary bronchioloalveolar carcinoma: CT criteria. Radiology. 1988 May;167(2):379-82.
3. Jacobs MA, Ouwerkerk R, Wolff AC, Stearns V, Bottomley PA, Barker PB, Argani P, Khouri N, Davidson NE, Bhujwalla ZM, Bluemke DA. Multiparametric and multinuclear magnetic resonance imaging of human breast cancer: current applications. Technol Cancer Res Treat. 2004 Dec;3(6):54.
4. Ouwerkerk R, Jacobs MA, Macura KJ, Wolff AC, Stearns V, Mezban SD, Khouri NF, Bluemke DA, Bottomley PA. Elevated tissue sodium concentration in malignant breast lesions detected with non-invasive 23Na MRI. Breast Cancer Res Treat. 2007 Dec;106(2):151-60. Epub 2007 Jan 27.
5. Jain A, Haisfield-Wolfe ME, Lange J, Ahuja N, Khouri N, Tsangaris T, Zhang Z, Balch C, Jacobs LK. The role of ultrasound-guided fine-needle aspiration of axillary nodes in the staging of breast cancer. Ann Surg Oncol. 2008 Feb;15(2):462-71. PMC Journal - In Process.
6. Subhawong AP, Subhawong TK, Khouri N, Tsangaris T, Nassar H. Incidental minimal atypical lobular hyperplasia on core needle biopsy: correlation with findings on follow-up excision. Am J Surg Pathol. 2010 Jun;34(6):822-8. PMC Journal - In Process.
7. Jacobs MA, Stearns V, Wolff AC, Macura K, Argani P, Khouri N, Tsangaris T, Barker PB, Davidson NE, Bhujwalla ZM, Bluemke DA, Ouwerkerk R. Multiparametric Magnetic Resonance Imaging, Spectroscopy and Multinuclear ((23)Na) Imaging Monitoring of Preoperative Chemotherapy for Locally Advanced Breast Cancer. Acad Radiol. 2010 Sep 20. [Epub ahead of print] PMC Journal - In Process.

**D. Research Support**

**Ongoing Research Support**

2P50CA103175-06A2 (Bhujwalla)

09/22/11 - 07/31/16

NCI JHU ICMIC Program

This center grant funds an *in vivo* Cellular and Molecular Imaging Center at Johns Hopkins. The program consists of four research components, four developmental projects, one career development award and four resources.

**Completed Projects Within Last Three Years**

GE 190-002 (Khouri)

02/01/08-03/31/10

Clinical Study Protocol

A Multicenter Study to test Non-Inferiority of digital Tomosynthesis (DBT) Compared to Full-field Digital Mammography (FFDM) in Detecting Breast Cancer

Part 2. Recruitment Plan for Asymptomatic Women Referred for Diagnostic Mammography

GE 190-003 (Khouri)

06/01/08- 06/31/10

Clinical Study Protocol

A Multicenter Study to test the Non-Inferiority of Digital Breast Tomosynthesis (DBT) compared to Full-Field Digital Mammography (FFDM) in Detecting Breast Cancer

Part 3. Recruitment Plan for Asymptomatic Women Referred for Breast Biopsy

R01CA100184 (Jacobs)

08/01/04-06/30/08

NIH

Multiparametric MRI Characterization of Breast Tissue

The primary goal of this project is to develop a MRI model for breast cancer diagnosis.