Business Address: Department of Pathology and Laboratory Medicine

Rhode Island Hospital

593 Eddy Street

Providence, RI 02903

Telephone Number: 401-606-4691 Fax Number: 401-444-8514

Email Address: smaleki@lifespan.org

sara_maleki@brown.edu

EDUCATION

Medical School Tehran University of Medical Sciences, Tehran, Iran

MD 2/1999 - 10/2006

Internship 4/2005 – 10/2006

POSTGRADUATE TRAINING

Residency Anatomic & Clinical Pathology

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York 1/2010 – 12/2013

Chief Residency Anatomic & Clinical Pathology

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York 7/2012 – 6/2013

Fellowships Surgical Pathology

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York 1/2014 – 6/2014

Cytopathology

The Leopold G. Koss, M.D. Division of Cytology

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York 7/2014 – 6/2015

Oncologic Surgical Pathology

Department of Pathology and Laboratory Medicine

Memorial Sloan Kettering Cancer Center

New York, New York 7/2015 – 6/2016

POSTGRADUATE HONORS AND AWARDS

2011-2012 Clinical Pilot Project Award

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York

2013 Outstanding Achievement in the Teaching of Medical Students

Leo M. Davidoff Society

Albert Einstein College of Medicine

Bronx, New York

PROFESSIONAL LICENSES AND BOARD CERTIFICATIONS

Licensure

2012 Federation of state medical boards

2013 – 2022 State of Connecticut medical license (retired)
2013 - 8/31/2024 New York State medical license: full, unrestricted
2017 - 6/30/2024 State of Rhode Island medical license: full, unrestricted

Board Certification

2006 Iranian Medical Council

2008 Educational Commission for Foreign Medical Graduates 10/24/2013 American Board of Pathology, Anatomic & Clinical

• Recertification: 10/2017, 11/2019, 11/2021, 12/2023

9/23/2015 American Board of Pathology, Cytopathology

ACADEMIC APPOINTMENTS

7/2016 – 1/2018 **Assistant Professor**

Department of Pathology and Laboratory Medicine

Albert Einstein College of Medicine

SARA MALEKI, MD		
	Bronx, New York	
2/2018 – present	Assistant Professor Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University Providence, Rhode Island	
3/2019 – 9/2023	 Assistant Director, Resident Core Curriculum Pathology Residency Program Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University Providence, Rhode Island I have been responsible for designing, improving, and overseeing the pathology residency weekly didactics curriculum. (20 residents per year, ~ 200 lectures per year) 	
8/2022 - 11/2022	(Substitute) Director of Medical Student Clerkships and Observerships (Substitute) Course Director, Applied Pathology (PATH 0611) (Substitute) Course Director, Sub-Internship in pathology (PATH 6155) Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University Providence, Rhode Island	
2/2023 – 9/2023	Co-Director of Medical Student Clerkships and Observerships Course Co-Director, Applied Pathology (PATH 0611) Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University Providence, Rhode Island	
10/2023 – present	Associate Program Director, Anatomic Pathology Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University	

HOSPITAL APPOINTMENTS

7/2016 – 1/2018	Cytopathologist and Surgical Pathologist Department of Pathology and Laboratory Medicine Montefiore Medical Center Albert Einstein College of Medicine Bronx, New York
2/2018 – present	Cytopathologist and Surgical Pathologist

Providence, Rhode Island

Department of Pathology and Laboratory Medicine

Lifespan Academic Medical Center

Providence, Rhode Island

7/2019 – present **Co-Director of Immunohistochemistry Laboratory**

Department of Pathology and Laboratory Medicine

Lifespan Academic Medical Center

Providence, Rhode Island

 Daily supervision, troubleshooting, and quality control of the immunohistochemistry laboratory (performing approximately 200 unique immunohistochemical and in situ hybridization studies, including predictive markers)

 Review of College of American Pathologists proficiency testing

o Validation of new antibodies.

o Validation of new instruments.

OTHER APPOINTMENTS

2011 – 2013 **Residents Forum Delegate**

College of American Pathologists

2014 – present Ad hoc journal reviewer

• Diagnostic Cytopathology

• Lab Medicine

• American Journal of Clinical Pathology

PLOS One

1/2022 – 12/2022 **President**, Rhode Island Society of Pathologists

5/2023 – present Delegate (Rhode Island), House of Delegates

College of American Pathologists (CAP)

VOLUNTEER ACTIVITIES

2017 CAP Foundation See, Test & Treat® Program

Free cancer screening and health education program for medically

underserved populations Montefiore Medical Center

Bronx, New York

2022 – 2023 Pathologist Lead

WomanCare® Program

The Lifespan Cancer Institute's Women's Health Outreach,

Screening, & Education Program

Free cervical and breast cancer screening and health education

program for underserved populations

Providence, Rhode Island

2023 – present

Diversity, Equity, and Inclusion Committee

Pathology Residency Program

Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University

Providence, Rhode Island

MEMBERSHIPS IN SOCIETIES

Rhode Island Society of Pathologists

■ President 1/2022 – 12/2022

College of American Pathologists

CAP Inspection Team Member 9/2017

United States and Canadian Academy of Pathology

American Society for Clinical Pathology

American Society of Cytopathology

Iranian Pathologists Association of North America

PUBLICATIONS

Google Scholar Profile (as of 11/2023)	All
Citations	305
h-index	7
i10-index	7

Original Publications in Peer-Reviewed Journals

1. <u>Maleki S</u>, Schlecht NF, Keller C, Diaz J, Moss J, Prystowsky MB, Macian F, Brandwein-Gensler M. Lymphocytic Host Response to Oral Squamous Cell Carcinoma: An Adaptive T-Cell Response at the Tumor Interface. Head and Neck Pathology. 2011 Jun,5(2):117-22. 2011.

- 2. <u>Maleki S</u>, Dorokhova O, Sunkara J, Schlesinger K, Suhrland M, Oktay M. Estrogen, Progesterone and HER-2 Receptor Immunostaining in Cytology: The Effect of Varied Fixation on Human Breast Cancer Cells. Diagn Cytopathol. 2013 Oct,41(10):864-70. 2013.
- 3. Hebert T, <u>Maleki S</u>, Arnold J, Vasovic L, Steinberg JJ, Prystowsky MB. A Team-Based Approach to Autopsy Education: Integrating Anatomic and Clinical Pathology at the Rotation Level. Arch Pathol Lab Med. 2014 Mar,138(3):322-7. 2014.
- 4. Fremont R, Calderon D, <u>Maleki S</u>, Khodakhah K. Abnormal high-frequency burst firing of cerebellar neurons in Rapid-Onset Dystonia-Parkinsonism. J Neurosci. 2014 Aug 27,34(35):11723-32. 2014.
- 5. Pignatelli J, Goswami S, Jones J, Rohan T, Pieri E, Chen X, Adler E, <u>Maleki S</u>, Bresnick A, Gertler F, Condeelis J, Oktay M. Invasive Breast Carcinoma Cells from Patients Exhibit MenaINV- and Macrophage-Dependent Transendothelial Migration. Sci Signal. 2014 Nov 25,7(353). 2014.
- 6. <u>Maleki S</u>, Cajigas A, Moss J, Ramesh KH, Khader S. Fine Needle Aspiration Biopsy of Prostate Synovial Sarcoma: A Case Report and Review of the Literature. Diagn Cytopathol. 2017 Feb,45(2):168-172. Epub 2016 Oct 24. Review. 2017
- 7. <u>Maleki S</u>, Khader S, Gersten A, et al. Differentiating Noninvasive Follicular Thyroid Neoplasm with Papillary-like Nuclear Features (NIFTP) from Classic Papillary Thyroid Carcinoma: Analysis of Cytomorphologic Descriptions Using a Novel Machine-Learning Approach. J Pathol Inform. 2019; 10:29. 2019.
- 8. Pongsuvareeyakul T, <u>Maleki S</u>, DeNardo BD, Dizon DS, Phornphutkul C, Singh K. Sporadic uterine Lymphangioleiomyomatosis (LAM): Report of a unique case arising in the lower uterine segment with short review. Gynecol Oncol Rep. 2021.
- 9. Baykara Y, Xiao Y, Yang D, Yakirevich E, <u>Maleki S</u>, Garcia-Moliner M, Wang LJ, Huang CK, Lu S. Utility of secretagogin as a marker for the diagnosis of lung neuroendocrine carcinoma. Virchows Arch. 2022.
- 10. Baykara Y, Lu S, Yang D, Wang Y, Yakirevich E, Hacking SM, Pisharodi L, <u>Maleki S</u>. Utility of Wnt family member 9b (Wnt9b) immunohistochemistry in the cytologic diagnosis of metastatic breast carcinoma. Virchows Arch. 2023.

Abstracts

- 1. <u>Maleki S</u>, Macian F, Schlecht N, Diaz J, Moss J, Brandwein-Gensler M, and Prystowsky MB. Lymphocytic Host Response An Adaptive T Cell Response at Tumor Interface & Relationship with HPV. Poster Session, United States and Canadian Academy of Pathology Annual Meeting, Washington, DC. 2010.
- 2. Fremont RT; Calderon DP; <u>Maleki S</u>; Khodakhah K. Examining the Role of Continuous Abnormal Cerebellar Output in a Model of Rapid Onset Dystonia Parkinsonism. Poster session. Society for Neuroscience Annual Meeting, Washington, DC. 2011.

- 3. Dorokhova O; <u>Maleki S</u>; van der Helm D; Schlesinger K; Suhrland M; Oktay M. ER, PR, HER-2/neu Immunostaining in Cytology: Effect of Varied Fixation on Human Breast Cancer Cell Lines. Poster Session, United States and Canadian Academy of Pathology Annual Meeting, Vancouver, Canada. 2012.
- 4. Fremont RT; Calderon DP; <u>Maleki S</u>; Khodakhah K. Cerebellar-induced basal ganglia Burst firing in a rodent model of dystonia. Poster session, Society for Neuroscience Annual Meeting, New Orleans, LA. 2012.
- 5. Oktay M; Goswami S; Roh M; <u>Maleki S</u>; Rohan T; Gertler F; Jones JG; Condeelis JS. MenaINV expression is associated with discohesion, intravasation and possibly metastasis in human invasive ductal carcinoma of the breast. Poster session. American Association for Cancer Research Annual Meeting, Washington, DC. 2013.
- 6. Yang Y; Shum H; Haigentz M; Mariuma E.; Suhrland M; <u>Maleki S</u>; Acevedo N; Welch M. Anti-Ri antibody associated paraneoplastic brainstem and cerebellar dysfunction as the presenting sign of small cell lung carcinoma. Poster session. American Academy of Neurology 67th Annual Meeting, Washington, DC. 2015.
- 7. <u>Maleki S</u>; Cajigas A; Moss J; Ramesh KH; Khader S. Fine-Needle Aspiration Biopsy of Prostate Synovial Sarcoma: A Case Report and Review of the Literature. Poster session, College of American Pathologists Annual Meeting, Nashville, TN. 2015.
- 8. Mehlman Y; Mantilla J; Maleki S; Hakima L; Khader S. A Retrospective Review of Signet Ring" Features in Cytopathology Specimens with Clinical and Histopathologic Correlation, Montefiore Medical Center (2000-2015). Poster session. European Congress of Cytology Annual Meeting, Liverpool, UK. 2016.
- 9. Racine Brzostek S; Hakima L; Khader S; <u>Maleki S</u>. Cytomorphology of Gastric-Type Adenocarcinoma of Uterine Cervix in Sure-Path Liquid-Based Pap Test. Poster session. College of American Pathologists Annual Meeting, National Harbor, MD. 2017.
- 10. Lajara S; Khairy Z, Khader S, <u>Maleki S</u>, Hakima L. Accuracy of Fine Needle Aspiration Cytology in the Diagnosis of Pleomorphic Adenoma in Salivary Glands: An Institutional Study. Poster session. College of American Pathologists Annual Meeting, National Harbor, MD. 2017.
- 11. <u>Maleki S</u>, Khader S, Gersten A, et al. Differentiating Noninvasive Follicular Thyroid Neoplasm with Papillary-like Nuclear Features (NIFTP) from Classic Papillary Thyroid Carcinoma: Analysis of Cytomorphologic Descriptions Using a Novel Machine-Learning Approach. Platform presentation. United States and Canadian Academy of Pathology 2018 Annual Meeting, Vancouver, Canada. 2018.
- 12. Segura S, Ramos Rivera G, Khader S, <u>Maleki S</u>. Extramedullary Hematopoiesis Presenting as Unilateral Pleural Effusion: A Case Report and Review of Literature. Platform presentation. European Congress of Cytology Annual Meeting, Amman, Jordan. 2018.

- 13. Shahid R, <u>Maleki S</u>, Chen S. A Challenging Parotid Neoplasm. Platform presentation. Rhode Island Society of Pathologists Meeting, Providence, RI. 2019.
- 14. Canepa M, <u>Maleki S</u>, Yakirevich Y. Application of NF2 Immunohistochemistry for the Diagnosis of Mesothelioma. Poster session. United States and Canadian Academy of Pathology Annual Meeting. Virtual. 2021.
- 15. Baykara Y, Xiao Y, Yang D, Yakirevich E, Garcia-Moliner M, <u>Maleki S</u>, Wang L, Huang C, Lu S. Utility of Secretagogin as a Novel Marker for the Diagnosis of Lung Neuroendocrine Carcinoma. Platform presentation. Experimental Biology. Philadelphia, PA. 2022.
- 16. Poursina O, Khayyat A, <u>Maleki S</u>, Amin A. Artificial Intelligence Assists in the Diagnosis of Indeterminate Thyroid Cytology. Accepted for poster session. United States and Canadian Academy of Pathology Annual Meeting. Baltimore. 2024.

INVITED PRESENTATIONS - NATIONAL

1. American Society for Clinical Laboratory Science (ASCLS) Diagnostic Seminar: Cases That Teach, Providence, Rhode Island. 2018.

INVITED PRESENTATIONS - LOCAL/REGIONAL

- 1. Cytopathology and Surgical Pathology Interesting Cases. Duke University. Durham, North Carolina. 2014
- 2. Targeting EZH2 in ARID1A-mutated cancers. Memorial Sloan Kettering Cancer Center. New York, New York, 2015.
- 3. Role of Human Papillomavirus Infection in Bladder Carcinoma. Memorial Sloan Kettering Cancer Center. New York, New York. 2016.
- 4. Differentiating Noninvasive Follicular Thyroid Neoplasm with Papillary-like Nuclear Features (NIFTP) from Classic Papillary Thyroid Carcinoma: Analysis of Cytomorphologic Descriptions Using a Novel Machine-Learning Approach. Warren Alpert Medical School of Brown University. Providence, Rhode Island. 2017.

HOSPITAL TUMOR BOARDS AND INTERDISCIPLINARY CONFERENCES

2010 – Present Rhode Island Hospital

- Endocrine Tumor Board (2018 present)
- Thoracic Multidisciplinary Clinic (2018 present)
- Sarcoma Tumor Board (2019 present)

- Breast Multidisciplinary Clinic (2019 present)
- ENT tumor board (2020 present)

Montefiore Medical Center

Pediatric Endocrine Tumor Board (July 2017)

Memorial Sloan Kettering Cancer Center

- Bone & Soft Tissue Tumor Board (April 2016)
- Thoracic Tumor Board (October 2015)

Montefiore Medical Center

- Head & Neck Tumor Board (cytology) (July 2014 June
- Head & Neck Tumor Board (surgical pathology) (June 2011, October 2012, March 2014, June 2014)
- Breast Tumor Board (April 2010, July 2010, December 2010, April 2014)
- Gynecology Tumor Board (May 2010, January 2012, August 2012, January 2014)
- Pulmonary Tumor Board (January 2010, November 2011, February 2014)
- Bone & Soft Tissue Tumor Board (May 2014)
- Pulmonary Clinical Pathologic Correlation Conference (December 2010, December 2011, December 2012)
- Hematology Morbidity & Mortality Conference Infective endocarditis with septic thromboemboli to the right lung causing disseminated intravascular coagulopathy, multi-organ failure and shock (May 2010)
- Neonatology Morbidity & Mortality Conference Methicillin-sensitive Staphylococcus Aureus sepsis in the setting of Extreme prematurity (August 2010)

QUALITY ASSURANCE PROJECTS

2014-2015 Validation study of HistoGel method for cell block preparation

> The Leopold G. Koss, M.D. Division of Cytology Montefiore Medical Center Bronx, New York

HOSPITAL COMMITTEES

2017 - 2018**Anatomical Pathology Labor Management Committee**

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Bronx, New York

2019 YourVoice Ambassador

Rhode Island Hospital Providence, Rhode Island

PATHOLOGY RESIDENT/FELLOW TEACHING

2012 – 2013 Pathology Chief Resident

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York

 Instructed and supervised junior residents and medical students on various rotations, including surgical pathology, autopsy, and blood bank.

2012 – 2013 Member, Residency Advisory Committee

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York

2012 – 2013 Member, Resident Curriculum Review Committee

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York

1/2014 – 6/2014 Lecturer, Surgical Pathology Fellow

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York

- Unknown Slide Conferences
- (20 pathology residents, ~ 3 hours/6 months)

7/2014 – 6/2015 **Cytopathology Fellow**

Department of Pathology and Laboratory Medicine

Montefiore Medical Center

Albert Einstein College of Medicine

Bronx, New York

 Trained pathology residents in fine needle aspiration biopsy techniques and basic cytopathology

2016-2018 Attending Physician, Pathology Residency Program

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	STREET WITELESS, WID
	Attending, Cytopathology Fellowship Program
	Department of Pathology and Laboratory Medicine
	Montefiore Medical Center
	Albert Einstein College of Medicine
	Bronx, New York
	• (20 pathology residents and 2 cytopathology fellows per
	year) • (~ 250 hours/year of direct one-on-one teaching)
2016 - 2018	Lecturer, Cytopathology Fellowship Core Curriculum
	The Leopold G. Koss, M.D. Division of Cytology
	Department of Pathology and Laboratory Medicine
	Montefiore Medical Center
	Albert Einstein College of Medicine
	Bronx, New York
	Slide Conferences for Fellows
	• (2 cytopathology fellows per year, ~ 1 hour/week)
2017	Lecturer, Resident Core Curriculum
	Department of Pathology and Laboratory Medicine
	Montefiore Medical Center
	Albert Einstein College of Medicine
	Bronx, New York
	 Monthly Unknown Slide Conferences
	• (20 pathology residents per year, ~ 9 hours/year)
	(20 pathology residents per year, 7 hours, year)
2017 – 2018	Member, Cytopathology Fellowship Evaluation Committee
	The Leopold G. Koss, M.D. Division of Cytology
	Department of Pathology and Laboratory Medicine
	Montefiore Medical Center
	Albert Einstein College of Medicine
	Bronx, New York
2018 - present	Attending Physician, Pathology Residency Program
2010 present	Warren Alpert Medical School of Brown University
	• (16 pathology residents per year)
	• (~ 250 hours/year of direct one-on-one teaching)
2018 - present	Lecturer, Resident Core Curriculum
	Pathology Residency Program
	Department of Pathology and Laboratory Medicine
	W Al M I I CI I CD II '

• (16 pathology residents per year, ~ 4 hours/year)

Providence, Rhode Island

Warren Alpert Medical School of Brown University

• Didactics and Unknown Slides Conferences

3/2019 - 9/2023 Assistant Director, Resident Core Curriculum

Pathology Residency Program
Department of Pathology and Laboratory Medicine
Warren Alpert Medical School of Brown University
Providence, Rhode Island

- I have been responsible for designing, improving, and overseeing the pathology residency weekly didactics curriculum.
- (20 residents per year, ~ 200 lectures per year, ~30 hours/year)

10/2023 – present

Associate Program Director, Anatomic Pathology

Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University Providence, Rhode Island

• (20 residents per year, ~30 hours/year)

CYTOTECHNOLOGIST TEACHING

2018 - present

Attending Physician, Cytopathology

Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University

Providence, Rhode Island

- Slide Conferences, Journal Clubs, and College of American Pathologists Educational Activities
- (~ 5 cytotechnologists, ~ 2 hours/year)

ENDOCRINOLOGY FELLOW TEACHING

2018 - present

Lecturer, Fellowship in Endocrinology, Diabetes, and Metabolism

Warren Alpert Medical School of Brown University Providence, Rhode Island

- Thyroid Carcinoma- A Primer
- (4 fellows per year, 1 hour per year)

MEDICAL SCHOOL SMALL GROUP TEACHING

2010 – 2013 Lecturer, Pathology small group sessions

Albert Einstein College of Medicine

Bronx, New York

• (12 medical students per year, ~ 2.5 hours/year)

2019 Lecturer, BIOL3663 IMS-III Pulmonary Pathology small

group sessions

Warren Alpert Medical School of Brown University

Providence, Rhode Island
• (12 medical students per year, ~1 hour)

2020 - present Lecturer, BIOL3643 IMS-I: Histology small group sessions

Warren Alpert Medical School of Brown University

Providence, Rhode Island

• (12 medical students per year, ~ 6 hours/year)

2021 – present Lecturer, BIOL3645 IMS-I: General Pathology small group

sessions

Warren Alpert Medical School of Brown University

Providence, Rhode Island

• (12 medical students per year, ~ 1 hour/year)

MEDICAL STUDENT TEACHING

2018 – present Attending Pathologist, Applied Pathology (PATH 0611)

Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University

Providence, Rhode Island

 (~ 6 medical students and observers per year, ~ 6 hours/year)

8/2022 - 11/2022

(Substitute) Director of Medical Student Clerkships and

Observerships

(Substitute) Course Director, Applied Pathology (PATH 0611) (Substitute) Course Director, Sub-Internship in pathology

(PATH 6155)

Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University

Providence, Rhode Island

• (~ 10 medical students per year, ~ 10 hours/year)

2/2023 – 9/2023 Co-Director of Medical Student Clerkships and Observerships

Course Co-Director, Applied Pathology (PATH 0611)

Department of Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University

• (~ 10 hours/year)

MENTORSHIP

Select trainees with co-authorship in publications:

- Gloria Ramos Rivera, cytopathology fellow, now at Hospital UPR- Dr. Federico Trilla
- **Jose Mantilla**, pathology resident, now at the University of Washington
- Rafiq Shahid, pathology resident, now at George Washington University
- Sabrina Racine Brzostek, pathology resident, now at Weill Cornell Medicine
- **Seema Khutti**, cytopathology fellow, now at Zucker School of Medicine at Hofstra/Northwell
- Sheila Segura, cytopathology fellow, now at Indiana University
- Shweta Gera, cytopathology fellow, now at Montefiore Medical Center
- Sigfred Lajara, pathology resident, now at the University of Pittsburgh Medical Center
- Yigit Baykara, pathology resident
- Yonatan Mehlman, undergraduate student, now at Columbia University College of Physicians & Surgeons

Pathology resident mentorship:

2021 - present

Rozeen Badeel, MD PGY2