

**University of California, San Francisco**  
**CURRICULUM VITAE**

**Name:** Nancy Yerkes Greenland

**Position:** Assistant Professor of Clinical Pathology, Step 4  
Pathology  
School of Medicine

**Address:** 1825 4th Street, L2181  
San Francisco, CA 94107  
Voice: 415-353-4554  
Email: nancy.greenland@ucsf.edu

**EDUCATION**

2010 - 2014	Stanford University, Stanford, CA	M.D. School of Medicine
2005 - 2010	Massachusetts Institute of Technology, Cambridge, MA	Ph.D. Chemistry
2001 - 2005	Columbia University, New York, NY	B.A. Magna cum laude, Chemistry

**LICENSES, CERTIFICATION**

2019	American Board of Pathology Certification, Cytopathology
2018	American Board of Pathology Certification, Anatomic and Clinical Pathology
2016	Medical License, California #A141071

**PRINCIPAL POSITIONS HELD**

11/2019 - present	University of California, San Francisco	Assistant Professor	Anatomic Pathology
11/2019 - 9/2022	San Francisco Veterans Affairs Medical Center	Staff Pathologist	Anatomic Pathology
7/2019 - 11/2019	University of California, San Francisco	Surgical Pathology Fellow	Anatomic Pathology
7/2018 - 6/2019	University of California, San Francisco	Cytopathology Fellow	Anatomic Pathology
7/2014 - 6/2018	University of California, San Francisco	Anatomic and Clinical Pathology Resident	Anatomic and Clinical Pathology

**HONORS AND AWARDS**

2005	Magna cum laude	Columbia University
2005	Departmental Honors in Chemistry	Columbia University
2005	Jean Dreyfuss Boussevain Undergraduate Scholarship for Excellence in Chemistry	Columbia University
2005	Dean's List, all eight semesters	Columbia University

**KEYWORDS/AREAS OF INTEREST**

Cytopathology, Fine needle aspiration biopsy, Genitourinary pathology, Surgical pathology, Molecular pathology.

**CLINICAL ACTIVITIES****CLINICAL ACTIVITIES SUMMARY**

My current clinical mission is to provide diagnostic cytopathology service at the University of California San Francisco (UCSF). At UCSF I sign out cytology specimens obtained at UCSF and specimens submitted from other institutions for patients who will receive care at UCSF. I also perform ultrasound-guided and palpation-guided fine needle aspiration biopsies in the FNA clinic at UCSF. I provide rapid on-site evaluation of CT-guided and ultrasound-guided fine needle aspiration biopsies performed by radiologists. I teach residents and fellows during sign outs. I participate in the consensus conference for the Cytopathology Division and in a daily UCSF/ZSFGH/VA tri-hospital genitourinary consensus conference. Starting in September 2023 I will also sign out genitourinary specimens at UCSF.

From 2019-2022 I was a staff pathologist at the San Francisco Veterans Affairs Health Care System (SFVAHCS). Although my clinical areas of expertise are in cytopathology and genitourinary pathology, my general anatomic pathology sign out included gastrointestinal, pulmonary, and dermatopathology. I reviewed surgical pathology and cytology specimens obtained at the SFVAHCS and specimens submitted from other institutions for patients who would receive care at the SFVAHCS. As a cytopathologist, I also performed rapid on-site evaluation of CT-guided and ultrasound-guided fine needle aspiration biopsies performed by radiologists. I staffed a clinic where we performed fine needle aspiration biopsies on palpable lesions. I served as the pathologist for the weekly SFVAHCS Multidisciplinary Tumor Boards and participated in the monthly SFVAHCS pathology quality improvement conferences. I also provided weekly teaching conferences for the pulmonary fellows.

**CLINICAL SERVICES**

2022 - present	Attending Pathologist, University of California San Francisco	Daily
2019 - 2022	Staff Pathologist, San Francisco Veterans Affairs Health Care System	Daily
2019 - 2022	Attending Pathologist, San Francisco Veterans Affairs Health Care System Multidisciplinary Tumor Board	Weekly

## PROFESSIONAL ACTIVITIES

### MEMBERSHIPS

- 2022 - present Genitourinary Pathology Society, member.
- 2020 - present UCSF Helen Diller Family Comprehensive Cancer Center, associate member in prostate cancer.
- 2020 - present International Society of Urological Pathology (ISUP), member, and current treasurer.
- 2019 - present Papanicolaou Society of Cytopathology, member.
- 2019 - present American Urological Association (AUA), affiliate member.
- 2018 - present American Society of Cytopathology (ASC), member.
- 2015 - present College of American Pathologists (CAP), member.
- 2014 - present United States and Canadian Academy of Pathologists (USCAP), member.

### SERVICE TO PROFESSIONAL ORGANIZATIONS

- 2023 - present International Society of Urological Pathology (ISUP) Treasurer

### INVITED PRESENTATIONS - INTERNATIONAL

- 2023 American Society for Clinical Oncology Genitourinary Cancer Symposium 2023. Best of the Journals: Prostate Cancer - Pathology. San Francisco, CA, February 2023. Invited Presentation
- 2022 International Society of Urological Pathologists. ISUP Presents Series. Prostate cancer commercial tests and cribriform morphology. Virtual Meeting, November 2022. Invited Presentation
- 2022 Nancy Y. Greenland, Yue Peng, Ronald Balassanian, Z. Laura Tabatabai, Tze Wai Tiffany Shing, Poonam Vohra. Utility and Performance of Cell Blocks in Urine Cytology: Experience at Three Teaching Hospitals. Platform Presentation, American Society of Cytopathology, Annual Meeting, Baltimore, Maryland, November 2022. Platform Presentation
- 2021 Nancy Y. Greenland, Anthony Wong, Jeffrey P. Simko, Bradley A. Stohr. Molecular Risk Classifier Score and Biochemical Recurrence Risk Are Associated with Cribriform Pattern Type in Gleason 3+4=7 Prostate Cancer. Platform Presentation, United States and Canadian Academy of Pathology, Annual Meeting, Virtual, March 2021. Platform Presentation

2020	Nancy Y. Greenland, Janet E. Cowan, Emily Chan, Peter R. Carroll, Bradley A. Stohr, Jeffrey P. Simko. Molecular Diagnostic Associated Changes in Prostate Cancer Biopsy NCCN Category are Linked to Histopathologic Features. Platform Presentation, United States and Canadian Academy of Pathology, Annual Meeting, Los Angeles, California, March 2020.	Platform Presentation
2019	Nancy Y. Greenland, Janet E. Cowan, Li Zhang, Peter R. Carroll, Emily Chan, Bradley A. Stohr, Jeffrey P. Simko. Expansile Cribriform Pattern 4 has Worse Pathologic Outcomes at Prostatectomy than Glomerulation Pattern 4 for Men Treated for Prostate Cancer. Platform Presentation, Western Section of the American Urological Association, Annual Meeting, Monterey, California, November 2019.	Platform Presentation
2019	Nancy Y. Greenland, Li Zhang, Janet E. Cowan, Peter R. Carroll, Bradley A. Stohr, Jeffrey P. Simko. Expansile Cribriform Gleason Pattern 4 has Worse Outcomes at Prostatectomy than Glomerulation Gleason Pattern 4. United States and Canadian Academy of Pathology, Annual Meeting, National Harbor, Maryland, March 2019.	Platform Presentation
2016	Nancy Y. Greenland, Ajay Ravindranathan, Morgan Diolaiti, Beth Cimini, Bradley A. Stohr. In Situ Evaluation of Telomerase Expression and Function in Human Cells and Tissues. United States and Canadian Academy of Pathology, Annual Meeting, Seattle, Washington, March 2016.	Platform Presentation

#### **INVITED PRESENTATIONS - REGIONAL AND OTHER INVITED PRESENTATIONS**

2020	Nancy Y. Greenland, Anthony Wong, Jeffrey P. Simko, Bradley A. Stohr. Molecular Risk Classifier Score and Biochemical Recurrence Risk are Associated with Cribriform Pattern Type in Gleason 3+4=7 Prostate Cancer. Platform Presentation, UCSF Prostate Cancer Program Annual Scientific Retreat, UCSF, San Francisco, CA, November 2020.	Platform Presentation
2019	UCSF Department of Anatomic Pathology Grand Rounds, Mechanism of Disease Conference, February 2019: "Treatment-emergent neuroendocrine prostate cancer".	Presenter
2017	UCSF Department of Anatomic Pathology Grand Rounds, Mechanism of Disease Conference, October 2017: "Constrictive Bronchiolitis".	Presenter

2017	UCSF Department of Anatomic Pathology Grand Rounds, Mechanism of Disease Conference, January 2017: "Prader-Willi Syndrome".	Presenter
2016	Zuckerberg San Francisco General, Hematology, December 2016: "Sickle cell disease".	Presenter
2016	UCSF Department of Laboratory Medicine, Hematology, June 2016: "Sickle cell disease".	Presenter
2016	UCSF Department of Anatomic Pathology Grand Rounds, Mechanism of Disease Conference, April 2016: "Correlation of a Genomic Risk Classifier with Histopathologic Patterns in Prostate Cancer".	Presenter
2016	Zuckerberg San Francisco General, Chemistry, April 2016: "Prostate cancer screening and new genomic tests for prostate cancer".	Presenter
2016	UCSF Department of Laboratory Medicine, Immunology, January 2016: "Prostate cancer screening and new genomic tests for prostate cancer".	Presenter
2015	UCSF Department of Laboratory Medicine, Cytogenetics, October 2015: "Dyskeratosis congenita".	Presenter
2015	UCSF Department of Anatomic Pathology Grand Rounds, Mechanism of Disease Conference, October 2015: "Dyskeratosis congenita".	Presenter
2015	Zuckerberg San Francisco General, Microbiology, August 2015: "Measles".	Presenter
2015	San Francisco Veterans Affairs Health Care System, Laboratory Medicine, February 2015: "Sickle cell disease".	Presenter
2014	UCSF Department of Anatomic Pathology Grand Rounds, Mechanism of Disease Conference, April 2014: "Placenta percreta: potential catastrophe".	Presenter

**CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT ACTIVITIES**

2023	United States and Canadian Academy of Pathology Annual Meeting, New Orleans, LA
2023	American Society for Clinical Oncology Genitourinary Cancer Symposium 2023, San Francisco, CA
2022	American Society of Cytopathology Annual Meeting, Baltimore, MD
2022	United States and Canadian Academy of Pathology Annual Meeting, Los Angeles, CA

2021	American Society of Cytopathology Annual Meeting, Henderson, NV
2021	United States and Canadian Academy of Pathology Annual Meeting, Virtual.
2020	United States and Canadian Academy of Pathology Annual Meeting, Los Angeles, CA
2019	Western Section of the American Urological Association, Annual Meeting, Monterey, CA
2018	United States and Canadian Academy of Pathology Annual Meeting, Vancouver, Canada
2019	United States and Canadian Academy of Pathology Annual Meeting, National Harbor, MD
2017	United States and Canadian Academy of Pathology Annual Meeting, San Antonio, TX
2016	United States and Canadian Academy of Pathology Annual Meeting, Seattle, WA

## UNIVERSITY AND PUBLIC SERVICE

### SERVICE ACTIVITIES SUMMARY

At UCSF, I am on the Pathology Department's Lactation Committee. I am also a member of the UCSF Pathology Department Residency Program Director and Vice Chair of Education Selection Committee and am a member of the UCSF Cytopathology Fellowship Clinical Competency Committee. At the SFVAHCS, I served as a pathologist at the weekly Multidisciplinary Tumor Boards and participated in the monthly pathology department quality improvement meetings. I have served as a volunteer alumni undergraduate interviewer for Columbia University and am a volunteer at my children's school for various events.

### DEPARTMENTAL SERVICE

2023 - present	Department of Pathology - Faculty Search Committee for Academic Cytopathologist (JPF04551).	Committee Member
2023 - present	Member of the UCSF Cytopathology Fellowship Clinical Competency Committee.	Committee Member
2023 - present	Member of the UCSF Pathology Department Residency Program Director and Vice Chair of Education Selection Committee.	Committee Member
2020 - present	I am on the UCSF Pathology department's Lactation Committee, the goal of which is to implement policies to help lactating mothers in the Pathology department.	Committee Member
2019 - 2022	I participated in the monthly Quality Improvement meetings for the Pathology Department at the SFVAHCS.	Attending Pathologist

- 2016 - 2017 During my clinical pathology residency, I created a send-out test guide for laboratory medicine residents rotating at the SFVAHCS, including information about the clinical utility and pricing for the various send-out laboratory tests. I also reviewed the list of send-out tests at the SFVAHCS that had been ordered during 2016 and identified potential tests for closer examination due to either unusually high volume and/or cost.
- 2015 - 2015 During my clinical pathology residency, I served as part of a Quality Improvement mock inspection team.

### **SERVICE AT OTHER UNIVERSITIES**

- 2019 - 2022 I served as a volunteer alumni interviewer for Columbia College, Columbia University. I interviewed students who were applying early decision and regular decision to Columbia and wrote summary reports for the Admissions Committee.

### **COMMUNITY AND PUBLIC SERVICE**

- 2018 - 2018 Volunteer at Le Lycee Francais de San Francisco's Athleton, an annual fundraiser. Volunteer
- 2010 - 2013 Interviewed, counseled, and examined patients at Stanford's Arbor Free Clinic, an acute-care clinic providing free medical care for adults who lack health insurance. Volunteer
- 2010 - 2011 During medical school at Stanford, I teamed with two other medical students to increase bicycle safety awareness at the medical school. We successfully arranged for the provision of free helmets and lights to the 2011 entering medical school class. Volunteer
- 2003 - 2004 Volunteer math and science tutor to underprivileged high school students at Columbia University's Double Discovery Center. Volunteer science and math tutor

### **CONTRIBUTIONS TO DIVERSITY**

#### **CONTRIBUTIONS TO DIVERSITY Contributions to Diversity, Equity & Inclusion Guidance**

At UCSF, I am a member of the UCSF Pathology Department's Lactation Committee, the goal of which is to implement policies to help lactating mothers in the Pathology department. As a pathologist at the San Francisco Veterans Affairs Medical Center, I provided patient care to veterans, many of whom are disadvantaged and/or come from underserved areas. I completed UCSF Diversity, Equity, and Inclusion Training in September 2020. During graduate school, I served as a mentor to first-year women graduate students through the MIT Chemistry Department's Women in Chemistry group. I also mentored students of diverse backgrounds during my role as a resident tutor and sophomore advisor at Harvard's Pforzheimer House.

## TEACHING AND MENTORING

### TEACHING SUMMARY

As an undergraduate at Columbia, Ph.D. student in Chemistry at MIT, and medical student at Stanford, I held positions as a teaching assistant and tutor in organic chemistry and genetics. As a pathology resident at UCSF, I taught medical students in small group laboratory sessions. As a cytopathology fellow at UCSF, I taught residents through one-on-one sessions. As a staff pathologist at the SFVAHCS, I taught residents during sign out and held monthly teaching sessions on genitourinary pathology and laboratory management. As an Assistant Professor at UCSF, I have also been a small group facilitator for UCSF medical students in the Life Stages course and the Airways, Blood and Circulation course as part of the Bridges curriculum. I have also developed and given a lecture on cytopathology to graduating UCSF medical students as part of the COBIE (COmpetency-Based Immersion Experience) curriculum. As a cytopathologist at UCSF, I teach residents and fellows during sign out and hold several teaching sessions a year for all the residents during which I review interesting cases. I also manage the cytology rotation for UCSF residents. For the residents rotating on Cytology, I create their schedule, orient them, and teach them how to perform FNA biopsies and proper FNA smearing technique.

### FORMAL TEACHING

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	2022 - 2023	Foundational Sciences in Foundations 2. Session IDS113/ADT Cytology. Gave a lecture on cytopathology to medical students on OB/GYN and pediatrics clerkships.	Lecturer	Medicine	50
	2022 - 2023	Gave a lecture on cytopathology to graduating UCSF medical students as part of the COBIE (COmpetency-Based Immersion Experience) curriculum.	Lecturer	Medicine	3



Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	2022 - 2023	Small group facilitator for UCSF medical students in the Airways, Blood and Circulation course as part of the Bridges Curriculum. Small group facilitator for ischemic heart disease and valvular heart disease sessions.	Small Group Facilitator	Medicine	13
	2022 - 2023	Small group facilitator for UCSF medical students in the Life Stages course as part of the Bridges Curriculum. Small group facilitator for placental pathology, gynecologic pathology, breast pathology, and prostate pathology sessions.	Small Group Facilitator	Medicine	13
	2021 - 2022	Gave a lecture on cytopathology to graduating UCSF medical students as part of the COBIE (COmpetency-Based Immersion Experience) curriculum.	Lecturer	Medicine	4

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	2021 - 2022	Small group facilitator for UCSF medical students in the Life Stages course as part of the Bridges Curriculum. Small group facilitator for placental pathology, gynecologic pathology, breast pathology, and prostate pathology sessions.	Small Group Facilitator	Medicine	13
	2020 - 2021	Developed and gave a lecture on cytopathology to graduating UCSF medical students as part of the COBIE (COmpetency-Based Immersion Experience) curriculum.	Lecturer	Medicine	3
	2020 - 2021	Small group facilitator for UCSF medical students in the Life Stages course as part of the Bridges Curriculum. Small group facilitator for placental pathology, gynecologic pathology, breast pathology, and prostate pathology sessions.	Small Group Facilitator	Medicine	13
	2015 - 2016	Pathology for Medical Students; hematology, cardiac, pulmonary, and renal pathology sessions	Laboratory Instructor		~10 per group

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
X	2010 - 2011	Stanford University, Human Molecular Genetics Course	Teaching Assistant		~15
X	2009 - 2010	Massachusetts Institute of Technology, Organic Chemistry I	Head Teaching Assistant		~120
X	2005 - 2006	Massachusetts Institute of Technology, Organic Chemistry I	Teaching Assistant		~120
X	2004 - 2005	Columbia University, Organic Chemistry Laboratory	Teaching Assistant		~10

### INFORMAL TEACHING

- 2023 - present Manage the cytopathology rotation for UCSF residents. In addition to creating the schedule for the residents, I also orient the residents on their first day of the rotation and teach them how to perform FNA biopsies and proper FNA smearing technique. During their rotation I show them various educational cases.
- 2022 - 2023 Gave three one-hour Zoom teaching session to the UCSF residents on cytopathology. I showed them various interesting cytopathology cases and discussed the important teaching points.
- 2021 - 2022 Created a lecture on cytopathology rapid onsite evaluation tips and how to write cytopathology reports for UCSF pathology residents, which I gave to the residents rotating at the SFVAHCS.
- 2020 - 2022 Created a lecture on laboratory management for UCSF pathology residents, which I gave to the residents rotating at the SFVAHCS.
- 2019 - 2022 Created two slide study sets on kidney pathology and bladder pathology for UCSF pathology residents. I gave teaching sessions to the residents rotating at the SFVAHCS using these two study sets.
- 2019 - 2019 Participated in a teaching session for UCSF medical students on how to perform ultrasound-guided fine needle aspiration biopsies.
- 2018 - 2019 Created cytopathology cases of the week for UCSF pathology residents, taking photographs of cytopathology cases and writing explanations of the cytopathologic findings.
- 2018 - 2019 At ZSFG, informally taught residents cytopathology prior to sign out of cases.
- 2009 - 2010 Resident tutor in chemistry at Pforzheimer House, Harvard University.

**MENTORING SUMMARY**

During my Ph.D. years at MIT, I mentored three first-year women chemistry graduate students from 2006 to 2009 as part of the Women in Chemistry group. I also supervised two undergraduate students in Professor Sarah O'Connor's laboratory. As a resident tutor at Pforzheimer House at Harvard University from 2009-2010, I served as a sophomore advisor to seven students.

I was a research mentor for UCSF pathology resident Cornelia Ding on a prostate cancer pathology project. I am currently a career mentor to UCSF fellow Constance Chen. I am also a research mentor to UCSF cytologist Hyeji Yoon on a cytopathology research project.

**PREDOCTORAL STUDENTS SUPERVISED OR MENTORED**

Dates	Name	Program or School	Mentor Type	Role	Current Position
2023 - 2023	Hyeji Yoon	UCSF Cytologist	Research/Scholarly Mentor	Research Mentor	
2008 - 2008	Katie Thomas	MIT	Research/Scholarly Mentor	Research Supervisor	
2007 - 2008	Jia Xin Wu	MIT	Research/Scholarly Mentor	Research Supervisor	

**POSTDOCTORAL FELLOWS AND RESIDENTS MENTORED**

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2022 - 2023	Constance Chen	UCSF Anatomic Pathology Resident and Fellow	Career Mentor	Career Mentor	Cytopathology fellow at UCSF
2020 - 2021	Cornelia Ding	UCSF Anatomic Pathology Resident	Research/Scholarly Mentor	Research Mentor	Assistant Professor at UCSF

**RESEARCH AND CREATIVE ACTIVITIES****RESEARCH AND CREATIVE ACTIVITIES SUMMARY**

My research is primarily in genitourinary pathology and cytopathology. In genitourinary pathology, my research has been mainly focused on prostate cancer molecular diagnostics. At UCSF, ancillary molecular testing is performed on many prostate cancer cases using various commercial assays such as the OncotypeDx test and the Decipher test. I have been mining these datasets in relation to standard and additional histologic parameters in an attempt to improve upon the prognostic and clinical value of both the molecular and histologic results of prostate cancer patients. My research has shown that much of the improvement in predicting risk of progression at prostatectomy seen with a gene classifier can be explained by features observed on histopathology that are not typically reported, such as type of Gleason pattern 4 and stromal reaction. While at the SFVA, I created a SFVA prostate cancer database in VA

RedCap and also obtained IRB approval for SFVA prostate cancer patients to undergo additional biopsies for research. In cytopathology, my research has mainly been in the area of urine cytology. Various projects in urine cytology have included studying the use of cell blocks and studying rare variants of urothelial carcinoma.

### RESEARCH AWARDS - CURRENT

1. 1 R01 CA279203-01	Co-investigator	4.15 % effort	Flavell (PI)
NIH-NCI		05/01/2023	04/30/2028
Systematic evaluation of toxicity and therapeutic efficacy in CD46 directed radioligand therapy		\$ 411,300 direct/yr	\$ 2,057,073 total
		1	
The major goal of this project is to investigate the toxicity and therapeutic efficacy of CD46 directed radioligand therapy in prostate cancer and in multiple myeloma.			
Pathologist			
2. 5 U01 HL146242-05	Co-investigator	2.00 % effort	Tien/Aouizerat/Price (PI)
NIH-NHLBI		04/01/2019	03/31/2026
SF Bay Area MACS/WIHS Combined Cohort Study		\$ 3,786,093 direct/yr	\$ 27,874,791 total
The major goal of this project is to investigate the progression of HIV in women and men, with special attention to the effect of HIV therapy on medical and behavioral conditions. Participants are evaluated via annual interviews, physical examinations, and specimen collections.			
Site Pathologist, Malignancy Working Group Cancer Adjudication Committee Member			
3. 2021 Movember - PCF Challenge Award	Co-Investigator	1/8 salary when employed at SFVA. % effort	Huang (PI)
Prostate Cancer Foundation		12/30/2020	12/30/2025
MET-PAAM: Elucidating the Molecular Mechanisms of Tumor Progression in Metastatic Prostate Cancer among Men of African Ancestry		\$ 500,000/yr (direct)	direct/yr 1
The major goal of this project is to investigate genomic alterations in prostate cancers from African American patients, which will enable new precision medicine approaches to be developed for African American patients.			
Site Pathologist			

### PEER REVIEWED PUBLICATIONS

1. Meera R. Chappidi, Martin Sjostrom, **Nancy Y. Greenland**, Janet E. Cowan, Avi S. Baskin, Kevin Shee, Jeffry P. Simko, Emily Chan, Bradley A. Stohr, Samuel L. Washington III, Hao G. Nguyen, David A. Quigley, Elai Davicioni, Felix Y. Feng, Peter R. Carroll, Matthew R. Cooperberg. Transcriptomic Heterogeneity of Expansile Cribriform and Other Gleason Pattern 4 Prostate Cancer Subtypes. *European Urology Oncology*, 2023, *Accepted*.
2. **Nancy Y. Greenland**, Nikka Khorsandi, Yue Peng, Ronald Balassanian, Z. Laura Tabatabai, Tze Wai Tiffany Shing, Poonam Vohra. Utility and Performance of Cell Blocks in Urine Cytology: Experience at Three Teaching Hospitals. *Cancer Cytopathology*, 2023, In press. <https://doi.org/10.1002/cncy.22730>. PMID 37291084.

3. Nikka Khorsandi, Chien-Kuang Cornelia Ding, Christopher VandenBussche, Carlo De La Sancha Verduzco, **Nancy Greenland**, Poonam Vohra. Urine Cytology in Patients with Gender Confirmation Surgery and Hormone Therapy: Evaluation of Urine Cytology Performance in an Underserved Patient Population. *Journal of the American Society of Cytopathology*, 2023 Jul-Aug; 12 (4): 267-274. <https://doi.org/10.1016/j.jasc.2023.04.001>. PMID 37150707.
4. **Nancy Y. Greenland**, Yue Peng, Poonam Vohra, Z. Laura Tabatabai. Cytologic Features of Micropapillary Variant Urothelial Carcinoma in Urinary Tract Cytology. *Diagnostic Cytopathology*, 2022 Oct; 50 (10): E280-E284. PMID 35593193.
5. Yue Peng, **Nancy Y. Greenland**, Ursula Lang, Bradley A. Stohr. LZTS2, a Novel and Independent Prognostic Biomarker for Clear Cell Renal Cell Carcinoma. *Pathology - Research and Practice*, 2022 Apr;232:153831. PMID 35287088.
6. **Nancy Y. Greenland**, Fred Deiter, Daniel R. Calabrese, Steven R. Hays, Jasleen Kukreja, Lorriana E. Leard, Nicholas A. Kolaitis, Jeffrey A. Golden, Jonathan P. Singer, John R. Greenland. Inflammation on Bronchoalveolar Lavage Cytology is Associated with Decreased Chronic Lung Allograft Dysfunction-Free Survival. *Clinical Transplantation*, 2022 Mar 5:e14639. PMID 35246990.
7. **Nancy Y. Greenland**, Matthew R. Cooperberg, Anthony C. Wong, Emily Chan, Peter R. Carroll, Jeffrey P. Simko, Bradley A. Stohr. Molecular Risk Classifier Score and Biochemical Recurrence Risk are Associated with Cribriform Pattern Type in Gleason 3+4=7 Prostate Cancer. *Investigative and Clinical Urology*, 2022 Jan; 63(1):27-33. PMID 34983120.
8. **Nancy Y. Greenland**, Chuanyi Li, Stephen Cook, Yue Peng. Diagnosis of anaplastic lymphoma kinase-negative anaplastic large cell lymphoma on pleural fluid cytology. *Diagnostic Cytopathology*, 2021 Aug 18. doi: 10.1002/dc.24855. PMID 34406711.
9. Daniel Dugger, Monica Fung, Steven R. Hays, Jonathan Singer, Mary Ellen Kleinhenz, Lorriana Leard, Jeffrey Golden, Rupal Shah, Joyce Lee, **Nancy Y. Greenland**, Kirk D. Jones, Charles Langelier, John R. Greenland. Chronic Lung Allograft Dysfunction Small Airways Reveal A Lymphocytic Inflammation Gene Signature. *American Journal of Transplantation*, 2021 Jan; 21(1): 362-371. PMID: 32885581.
10. **Nancy Y. Greenland**, Rebecca Wolsky, Teresa M. Darragh, Poonam Vohra. Gastric-type endocervical adenocarcinoma and cervical cytology: Experience at a general hospital and review of the literature. *Cytopathology* 2021 Jan; 32(1): 75-83. PMID: 32851700.
11. **Nancy Y. Greenland**, Janet E. Cowan, Emily Chan, Peter R. Carroll, Bradley A. Stohr, Jeffrey P. Simko. Prostate Biopsy Histopathologic Features Correlate with a Commercial Gene Expression Assay's Reclassification of Patient NCCN Risk Category. *The Prostate* 2020 Dec; 80(16): 1421-1428. PMID 32946625.
12. **Nancy Y. Greenland**, Jessica A. Van Ziffle, Yen-Chun Liu, Zhongxia Qi, Sonam Prakash, Linlin Wang. Genomic Analysis in Myeloid Sarcoma and Comparison with Paired Acute Myeloid Leukemia. *Human Pathology*, 2020 Nov 21; 108: 76-83. PMID 33232718.
13. **Nancy Y. Greenland**, Janet E. Cowan, Li Zhang, Peter R. Carroll, Emily Chan, Bradley A. Stohr, Jeffrey P. Simko. Expansile Cribriform Gleason Pattern 4 has more Histopathologic and Molecular Features of Aggressiveness and Greater Risk of Biochemical Failure compared to Glomerulation Gleason Pattern 4. *The Prostate* 2020 May; 80(8): 653-659. PMID 32220141.

14. **Nancy Y. Greenland**, Li Zhang, Janet E. Cowan, Peter R. Carroll, Bradley A. Stohr, Jeffrey P. Simko. Correlation of a Commercial Genomic Risk Classifier with Histologic Patterns in Prostate Cancer. *The Journal of Urology* 2019 Jul; 202(1): 90-95. PMID 30810466.
15. John R. Greenland, Ping Wang, Joshua J. Brotman, Rahul Ahuja, Tiffany A. Chong, Mary Ellen Kleinhenz, Lorriana E. Leard, Jeffrey A. Golden, Steven R. Hays, Jasleen Kukreja, Jonathan P. Singer, Kirk Jones, Zoltan Lasik, Neil N. Trivedi, **Nancy Y. Greenland**, Paul Blanc. Gene signatures common to allograft rejection are associated with lymphocytic bronchitis. *Clinical Transplantation* 2019 May; 33(5). PMID: 30849195.
16. Cristina L. Abrahams, Xiaofan Li, Millicent Embry, Abigail Yu, Stellanie Krimm, Sarah Krueger, **Nancy Y. Greenland**, Kwun Wah Wen, Christopher Jones, Venita DeAlmeida, Willy A. Solis, Shannon Matheny, Toni Kline, Alice Y. Yam, Ryan Stafford, Arun P. Wiita, Trevor Hallam, Mark Lupher, Arturo Molina. Targeting CD74 in multiple myeloma with the novel, site-specific antibody-drug conjugate STRO-001. *Oncotarget* 2018; 9: 37700-37714. PMID 30701025.
17. Su-Yang Liu, Nancy Joseph, Ajay Ravindranathan, Bradley Stohr, **Nancy Greenland**, Poonam Vohra, Elizabeth Hosfield, Iwei Yeh, Eric Talevich, Courtney Onodera, Jessica Van Ziffle, James P. Grenert, Boris Bastian, Yunn-Yi Chen, and Gregor Krings. Genomic profiling of malignant phyllodes tumors reveals aberrations in FGFR1 and PI-3 kinase/RAS signaling pathways and provides insights into intratumoral heterogeneity. *Modern Pathology* 2016; 29: 1012-1027. PMID: 27255162.
18. Peter Bernhardt\*, **Nancy Yerkes\***, Sarah E. O'Connor. Bypassing stereoselectivity in the early steps of alkaloid biosynthesis. *Organic and Biomolecular Chemistry* 2009; 7: 4166-4168. PMID: 19795053. (\*co-first authors).
19. Hyang-Yeol Lee, **Nancy Yerkes**, Peter Bernhardt, Sarah E. O'Connor. Aza-tryptamine substrates in natural product biosynthesis. *Chemistry and Biology* 2009; 16: 1225-1229. PMID: 20064432.
20. **Nancy Yerkes**, Jia Xin Wu, Elizabeth McCoy, M. Carmen Galan, Shi Chen, Sarah E. O'Connor. Substrate specificity and diastereoselectivity of strictosidine glucosidase, a key enzyme in monoterpene indole alkaloid biosynthesis. *Bioorganic and Medicinal Chemistry Letters* 2008; 18: 3095-3098. PMID: 18061449.
21. Wenjun Zhou, **Nancy Yerkes**, Jason J. Chruma, Lei Lu, Ronald Breslow. Chiral polyamines from reduction of polypeptides: asymmetric pyridoxamine-mediated transaminations. *Bioorganic and Medicinal Chemistry Letters* 2005; 15: 1351-1355. PMID: 15713385.

## SIGNIFICANT PUBLICATIONS

1. **Nancy Y. Greenland**, Li Zhang, Janet Cowan, Peter R. Carroll, Bradley A. Stohr, Jeffrey P. Simko. Correlation of a Commercial Genomic Risk Classifier with Histologic Patterns in Prostate Cancer. *The Journal of Urology* 2019 Jul; 202(1): 90-95. PMID 30810466.

I was the primary author of this publication. In this publication we found that some of the predictive usefulness of a molecular classifier score relates to its correlation with histopathologic features which are apparent but not typically reported on in prostate biopsies.

2. **Nancy Y. Greenland**, Janet E. Cowan, Li Zhang, Peter R. Carroll, Emily Chan, Bradley A. Stohr, Jeffrey P. Simko. Expansile Cribriform Gleason Pattern 4 has more Histopathologic and Molecular Features of Aggressiveness and Greater Risk of Biochemical Failure compared to Glomerulation Gleason Pattern 4. *The Prostate*, 2020 May; 80(8): 653-659. PMID 32220141.

I was the primary author of this publication. In this publication we found that the expansile cribriform type of Gleason pattern 4 is more aggressive than the glomerulation pattern, and that men with this pattern of prostate cancer likely require more aggressive management.

3. **Nancy Y. Greenland**, Janet E. Cowan, Emily Chan, Peter R. Carroll, Bradley A. Stohr, Jeffrey P. Simko. Prostate Biopsy Histopathologic Features Correlate with a Commercial Gene Expression Assay's Reclassification of Patient NCCN Risk Category. *The Prostate*, 2020 Dec; 80(16): 1421-1428. PMID 32946625.

I was the primary author of this publication. In this publication we found that moderate or severe stromal reaction, chronic inflammation, and lack of nuclear polarization in Gleason score 3+3=6 tumors were each associated with an increase in NCCN risk category indicated by a commercial gene expression assay and vice versa. Our results suggest that this commercial gene expression assay captures histologic features associated with aggressiveness that are not routinely assessed in standard histopathologic assessments, and that consideration of such histologic features may improve upon current tumor grading approaches.

## CONFERENCE ABSTRACTS

1. **Nancy Y. Greenland**, Matthew R. Cooperberg, Peter R. Carroll, Janet E. Cowan, Bradley A. Stohr, Jeffrey P. Simko, Emily Chan. Morphologic Patterns Observed in Prostate Biopsy Cases with Discrepant Gleason Score and Molecular Risk Classification. Poster Presentation, United States and Canadian Academy of Pathology, Annual Meeting, New Orleans, Louisiana, March 2023.
2. **Nancy Y. Greenland**, Janet E. Cowan, Peter R. Carroll, Jeffrey P. Simko, Bradley A. Stohr, Emily Chan. Large Cribriform Glands (>0.25 mm diameter) as a Predictor of Adverse Pathology in Men with Gleason score 3+4=7 (Grade Group 2) Prostate Cancer. Poster Presentation, United States and Canadian Academy of Pathology, Annual Meeting, New Orleans, Louisiana, March 2023.
3. Claire M. de la Calle, **Nancy Greenland**, Vittorio Fasulo, Martina Maggi, Emily Chan, Bradley A. Stohr, Jeffrey P. Simko, Katsuto Shinohara, Matthew R. Cooperberg, Peter R. Carroll, Hao G. Nguyen. Associations of Serum-based and Urine-based Molecular Diagnostics with Histologic Subtyping on Prostate Biopsy. Platform Presentation Contributor, American Urological Association Annual Meeting, New Orleans, Louisiana, May 2022.
4. **Nancy Y. Greenland**, Yue Peng, Poonam Vohra, Z. Laura Tabatabai. Cytologic Features of Micropapillary Variant Urothelial Carcinoma in Urinary Tract Cytology. Poster Presentation, American Society of Cytopathology, Annual Meeting, Henderson, Nevada, November 2021.
5. Chien-Kuang Ding, Hannah Lee, Z. Laura Tabatabai, **Nancy Y. Greenland**, Poonam Vohra. Performance of the Paris System for Reporting Urinary Cytology (TPS) in Upper



- Urinary Tract Cytology - An Institutional Experience at a General Hospital. Poster Presentation Contributor, American Society of Cytopathology, Annual Meeting, Henderson, Nevada, November 2021.
6. Chien-Kuang Ding, Emily Chan, Bradley A. Stohr, Jeffrey P. Simko, **Nancy Y. Greenland**. The Clinical Utility of a 17-Genes Molecular Classifier Score in Men with NCCN Intermediate Risk Prostate Cancer. Poster Presentation Contributor and Senior Author, College of American Pathologists, Annual Meeting, September 2021.
  7. Hannah Lee, **Nancy Y. Greenland**, Z. Laura Tabatabai, Chien-Kuang Cornelia Ding, Poonam Vohra. Upper Urinary Tract Cytology Performance Before and After the Implementation of the Paris System for Reporting Urinary Cytology (TPS). Poster Presentation Contributor, United States and Canadian Academy of Pathology, Annual Meeting, Los Angeles, California, March 2021.
  8. Fred Deiter, Jonathan Hoover, **Nancy Greenland**, Zoltan Laszik, Jeffrey Golden, Jonathan Singer, Steven Hays, John Greenland. Inflammation on BAL Cytology is Associated with Infection, Rejection, and Decreased CLAD-Free Survival. Poster Presentation Contributor, International Society for Heart and Lung Transplantation, Annual Meeting, Montreal, Canada, April 2020 - canceled due to Covid19.
  9. **Nancy Y. Greenland**, Frederick Deiter, Jonathan Hoover, Steven Hays, Jasleen Kukreja, Jeffrey Golden, Jonathan Singer, Zoltan Laszik, John R. Greenland. Inflammation on Bronchoalveolar Lavage Cytology is Associated with Decreased Chronic Lung Allograft Dysfunction-Free Survival. Poster Presentation, United States and Canadian Academy of Pathology, Annual Meeting, Los Angeles, California, March 2020.
  10. **Nancy Y. Greenland**, Janet E. Cowan, Emily Chan, Peter R. Carroll, Bradley A. Stohr, Jeffrey P. Simko. Evaluation of Histopathologic Features in Biopsies in which a Molecular Classifier Test Resulted in a Change in NCCN Category. Poster Presentation, UCSF Prostate Cancer Program Annual Scientific Retreat, UCSF, San Francisco, California, November 2019.
  11. Emily Chan, Janet E. Cowan, **Nancy Y. Greenland**, Samuel L. Washington, Kyle B. Zuniga, Bradley A. Stohr, Jeffrey P. Simko, Peter R. Carroll. Expansile Cribriform pattern in Men with Gleason Score 7 Prostatic Adenocarcinoma on Biopsies in an Active Surveillance Cohort is Associated with Adverse Pathology at Radical Prostatectomy. Platform Presentation Contributor, Western Section of the American Urological Association, Annual Meeting, Monterey, California, November 2019.
  12. Kyle B. Zuniga, Samuel L. Washington, Jeffrey P. Simko, **Nancy Y. Greenland**, Bradley A. Stohr, Emily Chan, Janet E. Cowan, Imelda Tenggara, Martina Maggi, June M. Chan, Matthew R. Cooperberg, Peter R. Carroll. Expansile cribriform subtype at biopsy predicts adverse pathology at radical prostatectomy. Poster Presentation Contributor, Western Section of the American Urological Association, Annual Meeting, Monterey, California, November 2019.
  13. John R. Greenland, Ping Wang, Joshua J. Brotman, Rahul Ahuja, Tiffany A. Chong, Mary Ellen Kleinhenz, Lorriana E. Leard, Jeffrey A. Golden, Steven R. Hays, Jonathan P. Singer, Jasleen Kukreja, **Nancy Y. Greenland**, Zoltan Laszik, Paul Blanc. A Metagene Signature for Lymphocytic Bronchitis Following Lung Transplantation. Platform Presentation Contributor, American Transplant Congress, Boston, Massachusetts, June 2019.

14. **Nancy Y. Greenland**, Ping Wang, Tiffany A. Chong, Jonathan Singer, G. Zoltan Laszik, Kirk D. Jones, John Greenland. Solid organ rejection gene signature changes across lung allograft rejection pathologies. Poster Presentation, United States and Canadian Academy of Pathology, Annual Meeting, Fort Washington, Maryland, March 2019.
15. Kyle B. Zuniga, Samuel L. Washington III, Jeffry P. Simko, **Nancy Y. Greenland**, Bradley Stohr, Janet E. Cowan, Imelda Tenggara, June M Chan, Matthew R. Cooperberg, Peter R. Carroll. Cribriform pattern, genomic prostate score, and adverse pathology at radical prostatectomy in a cohort of prostate cancer patients initially on active surveillance. Poster Presentation Contributor, Genitourinary American Society of Clinical Oncology, Annual Meeting, San Francisco, California, February 2019.
16. **Nancy Y. Greenland**, Li Zhang, Peter R. Carroll, Bradley A. Stohr, Jeffry P. Simko. Expansile Cribriform Gleason Pattern 4 has Worse Outcomes at Prostatectomy than Glomerulation Gleason Pattern 4. Poster Presentation, UCSF Prostate Cancer Program Annual Scientific Retreat, UCSF, San Francisco, California, November 2018.
17. **Nancy Y. Greenland**, Jessica Van Ziffle, Sonam Prakash, Linlin Wang. Genomic Analysis in Myeloid Sarcoma and Comparison with Paired Acute Myeloid Leukemia. Poster Presentation, United States and Canadian Academy of Pathology, Annual Meeting, Vancouver, Canada, March 2018.
18. Millicent Embry, Xiaofan Li, Abigail Yu, Cristina Abrahams, **Nancy Greenland**, Kwun Wah Wen, Christopher Jones, Venita DeAlmeida, Stellanie Krimm, Sarah Krueger, Shannon Matheny, Toni Kline, Alice Yam, Ryan Stafford, Arun Wiita, Trevor Hallam, Mark Lupher, Arturo Molina. CD74 in Expressed in Relapsed and Refractory Multiple Myeloma and Can Be Targeted with a Novel Anti-CD74 Antibody Drug Conjugate, STRO-001. Poster Presentation Contributor, American Society of Hematology Annual Meeting and Exposition, Atlanta, Georgia, December 2017.
19. **Nancy Y. Greenland**, Bradley A. Stohr, Jeffry P. Simko. Association of Genomic Prostate Scores (GPS) with Prostatectomy Rates and Pathology at the Time of Prostatectomy. Poster Presentation, United States and Canadian Academy of Pathology, Annual Meeting, San Antonio, Texas, March 2017.
20. **Nancy Y. Greenland**, Li Zhang, Bradley A. Stohr, Jeffry P. Simko. Value of a Genomic Risk Classifier (GPS Score) in Relation to Histopathologic Parameters. Poster Presentation, UCSF Prostate Cancer Program Annual Scientific Retreat, UCSF, San Francisco, California, October 2016.
21. **Nancy Y. Greenland**, Li Zhang, Bradley A. Stohr, Jeffry P. Simko. Correlation of a Commercial Genomic Risk Classifier (GPS Score) with Histopathologic Parameters in Prostate Cancer. Poster Presentation, United States and Canadian Academy of Pathology, Annual Meeting, Seattle, Washington, March 2016.
22. **Nancy Yerkes**, Mindy Tsai, See-Ying Tam, Stephen Galli. Role of mast cell-associated RABGEF-1 in IgE-dependent immune responses in vivo. Poster Presentation, Stanford University School of Medicine Scholarly Concentration Symposium, Stanford, California, May 2012.
23. **Nancy Yerkes**, Wenjun Zhou, Jason J. Chruma, Lei Lu, Ronald Breslow. Peptide-derived oligamine reagents as transaminase mimics. Poster Presentation, American Chemical Society, San Diego, California, March 2005.

**OTHER CREATIVE ACTIVITIES**

1. Clarinetist in the Columbia University Orchestra during college.
2. Clarinet Teacher and Counselor at Greenwood Music Camp, Cummington, Massachusetts during the summers after my freshman and sophomore years of college.