

University of California, San Francisco
CURRICULUM VITAE

Name: Britt-Marie E Ljung, MD

Position: Recalled HCOP
Pathology
School of Medicine

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EDUCATION

1969 - 1971	Karolinska Institute Pre-Med School , Stockholm, Sweden	B.S.	Medicine
1971 - 1975	Karolinska Institute Medical School, Stockholm, Sweden	M.D.	Medicine
1975 - 1977	Rotating Internship, Internal Medicine and Surgery,	Intern	Medicine & Psychiatry, and General Practice, Koping Hospital, Koping, Karolinska Hospital, Stockholm, Sweden
1977 - 1978	Oncology, Karolinska Hospital (7 months), Stockholm,	Resident	Medicine, Sweden
1978 - 1980	Karolinska Hospital, Stockholm, Sweden	Resident	Cytology
1980 - 1983	UCLA School of Medicine, Los Angeles, California	Resident	Pathology

LICENSES, CERTIFICATION

1980	ECFMG exam
1980	FLEX
1981	California license to practice medicine
1985	Diplomat, American Board of Pathology, Anatomic Pathology

- 1989 American Board of Pathology (Cytopathology)
- 2009 Certificate of Special Expertise (CSE) in Ultrasound Guided FNA of Thyroid and Breast, issued by College of American Pathologists
- 2014 Five year Certification in Ultrasound-Guided Fine Needle Aspiration issued by College of American Pathologists (CAP).
- 2015 UCSF Bilingual Clinician Certification for Swedish

PRINCIPAL POSITIONS HELD

- 1981 - 1982 Visiting Assistant Professor of Pathology, UCLA School of Medicine, Los Angeles, California
- 1982 - 1983 Assistant Adjunct Professor of Pathology, UCLA School of Medicine, Los Angeles, California
- 1983 - 1989 Assistant Professor in Residence, Department of Pathology, University of California School of Medicine, San Francisco, California (UCSF)
- 1989 - 1995 Associate Professor of Clinical Pathology, UCSF
- 1994 - 1999 Director, Cytology Division
- 1994 - 2012 Director, Cytopathology Fellowship Program
- 1995 - 2014 Professor of Clinical Pathology, UCSF
- 2000 - 2012 Co-Director Cytology Division
- 2012 - 2014 Senior Director of Cytopathology Division and Laboratory
- 2004 - 2014 Vice Chair Department of Pathology, Mt. Zion campus
- 2013 - 2014 Merit, Professor of Clinical Pathology (step 8), UCSF
- 2014 - present Professor Emerita

OTHER POSITIONS HELD CONCURRENTLY

- 1984 - 1986 Consultant in Pathology, Veterans Administration Medical Center, Martinez, California
- 1985 - 1989 Attending Pathologist, Veterans Administration Medical Center, San Francisco, California
- 1997 - 2009 Attending Pathologist, Brown and Toland Medical Group, San Francisco, California

2010 - present Attending Pathologist, Hill Physicians Group,
San Francisco, CA

HONORS AND AWARDS

- 1985 First Prize in Health Sciences
Communications Association Media
Festival, Patient Education Category:
Educational Video for Hospital Network,
"The Nature of Breast Cancer," David
Watts, Producer.
- 1986 Academic Senate Committee on Equal
Opportunity Faculty Development
Affirmative Action Award.
- 1987 1987 Year Book of Cancer, Year Book
Medical Publishers. Article chosen from
40,000 citations for publication (no. 16
under Publications)
- 1994 Award for "Outstanding Lecture," UCSF
School of Medicine Class of 1996
- 1999 Elected to Gerson Lehrman Group's Council
of Healthcare Advisors
- 2000 Award for Best Abstract Presentation by
Senior Faculty Member, UCSF Clinical
Research Program, 2000
- 2001 2001, Nominee "Outstanding Lecture",
"Outstanding Lecture Series," UCSF School
of Medicine Class of 2003
- 2002 Selected Top Doctor in Pathology,
www.guidetotopdoctors.org, Center for
Study Services
- 2003 Bay Area Consumers Checkbook,
(Winter/Spring 2003 - Vol 10, No. 1) Bay
Area Top Doctors - 8 mentions
- 2006 Thanks Star Recognition Program, Patient
Satisfaction, UCSF
- 2007 Best Doctors in America, 2007-2008
- 2008 America's Top Doctors, Castle Connolly
American Registry
- 2008 Guide to America's Top Pathologists

- 2009 America's Top Doctors for Cancer, Castle Connolly American Registry
- 2010 Yolanda Oertel Interventional Cytopathologist of the Year, Papanicolaou Society of Cytopathology
- 2010 College of American Pathologists Excellence in Education Award
- 2011 Woman of the Year Swedish American Chamber of Commerce
- 2011 Star Recognition Program of American Society of Cytopathology Foundation - Mentorship Acknowledgement from Dr. Epstein
- 2011 Listed in U.S. News and World Reports in the "Best Doctors 2011-2012" Feature
- 2012 Dr. Ljung was honored as CAP faculty when they received The American Society for Training and Development (ASTD), the Excellence in Practice (EIP) annual award.
- 2012 San Francisco Super Doctors appearing in publication in May 2012
- 2013 Listed in US News and World Reports Top 1% Physicians
- 2013 San Francisco Super Doctors
- 2013 Castle Connolly - One of America's Top Doctors for Cancer
- 2014 America's Top Doctors For Cancer
- 2015 Lifetime Achievement Award given by Papanicolaou Society of Cytopathology on March 21, 2015
- 2018 Marquis Who's Who in the World, Personal Biography March 3, 2018
- 2015 American Society of Cytopathology Papanicolaou Award
- 2019 The International Academy of Cytology The James W. Reagan Award May 2019

KEYWORDS/AREAS OF INTEREST

Cytology, Pathology, Oncology, Immunohistochemistry, Cancer, Breast, Prostate, Microarrays, Prognosis, Medical Education. Fine Needle Aspiration Cytology, Tissue Banking for research, Research regulation, Informed Consent. Thyroid, Ultrasound.

CLINICAL ACTIVITIES

CLINICAL ACTIVITIES SUMMARY

Vice Chair of Pathology Mt. Zion Campus 2004 -2013
Senior Director of Cytopathology Division and Laboratory 2012 - 2014
Co-Director Division of Cytology 2000 - 2012
Director Division of Cytopathology 1995-2000

I work part time on recall at the Mission Bay Campus and attend 20% time on the cytology service.

I act as the senior back up faculty for technically challenging cases in the fine needle aspiration clinic. I am also available for microscopic interpretation of difficult internal cases. These activities are in addition to my regular service load.

Primary responsibility for FNA procurement training for cytology fellows and contribute to procurment training of pathology resident's cytology rotations.

I spearheaded the acquisition of ultrasound units for the FNA clinic, installed in late 2008. I was responsible for training and certifying all Cytopathology faculty and fellows in using the ultrasound for imaging FNA targets and to use ultrasound as a guide for FNA procedures. As part of the introduction of the ultrasound capabilities in our clinic I worked with Dr Ruth Goldstein, chief of ultrasound imaging in radiology, and the credentials committee to revise the pathology credentialing form and to put training and proctoring criteria in place.

Medical Director of Cytology laboratories 2012 -2014.

PROFESSIONAL ACTIVITIES

MEMBERSHIPS

1983 - present International Academy of Cytology
1984 - present Society for Analytical Cytology
1985 - present American Medical Association
1987 - present American Society of Cytology

1990 - 2014 San Francisco Medical Society
1992 - present California Society of Pathologists
1996 - present Papanicolaou Society of Cytopathology
2000 - present College of American Pathologists
2000 - present California Medical Association
2002 - present American Society for Clinical Pathology
2003 - present United States and Canadian Academy of Pathology

SERVICE TO PROFESSIONAL ORGANIZATIONS

2013 - 2014	American Society of Cytopathology	Public Affairs and Advocacy Committee
2013 - 2015	Papanicolaou Society of Cytopathology, the post is for 2 years.	Treasurer
2012 - 2018	Papanicolaou Society of Cytopathology	Constitutional Bylaws Committee
2010 - 2014	Papanicolaou Society of Cytopathology	Pancreatic Biliary Guidelines Committee
2009 - 2018	Papanicolaou Society of Cytopathology	Chair, Standards of Practice Guidelines Committee
2009 - 2014	College of American Pathologists - Course Ultrasound Guided Fine Needle Aspiration. Teaching a series of Advanced Practical Pathology Program courses.	Founding faculty author of ongoing MP3 Course

SERVICE TO PROFESSIONAL PUBLICATIONS

- Acta Cytologica, Editorial Board, Fine Needle Aspiration Section
- Cancer Cytopathology, Editorial Board
- Gastroenterology, Peer review
- Cytometry, Book review & Peer review
- Cancer Research, Peer review
- Journal of Urology, Peer review
- The Breast Journal ad hoc review
- Cytopathology Journal, Advisory Editorial Board
- CRC Press/Times Mirror Books, ad hoc review

- Diagnostic Cytopathology, Editorial Board
- Western Journal of Medicine, ad hoc review
- Cancer, ad hoc review
- Journal of the NCI , ad hoc review
- Modern Pathology, ad hoc review
- Analytical and Quantitative Cytology and Histology, ad hoc review
- American Journal of Neuro Radiology, ad hoc review
- Thyroid, ad hoc review
- Journal of the American Society of Cytopathology (JASC), Inaugural Editorial Board.
- PLOS - ad hoc review

INVITED PRESENTATIONS - INTERNATIONAL

- 1983 Fine Needle Aspiration of Breast, lecture, microscopy workshop and aspiration technique workshop. International Symposium on the Aspiration Biopsy. Annenberg Center for Health Sciences. Rancho Mirage. January, 1983.
- 1984 Fine Needle Aspiration Cytology of Prostate. Fourth Annual Symposium on Fine Needle Aspiration. Stockholm, Sweden. August 15, 1984.
- 1986 Fine Needle Aspiration in Breast and Prostate. Lecture, Asociacion Medica Argentina, Sociedad Argentina de Patologia, Buenos Aires, Argentina. April 30, 1986.
- 1993 Fine Needle Aspiration Biopsy for Diagnosis and follow-up of prostate cancer. Consensus Conference, WHO Collaborating Centre for Urological Tumours, "Diagnosis and Prognostic Parameters in Localized Prostate Cancer," Stockholm, Sweden. May 12-13, 1993.
- 2001 Ductal Lavage Cytology. 14th International Congress of Cytology, Amsterdam, Netherlands. May 27-31, 2001.
- 2003 Advanced Aspiration Cytology Symposium, Karolinska Hospital--Stockholm, Sweden, 2003
- 2004 Scientific Symposiums International, Surgical Pathology of Breast and Thoracic and non-gynecologic cytology. 5 lectures. Hawaii, October 25-28, 2004
- 2006 Pathology of DCIS, Japan Comprehensive Cancer Network, Breast International Symposium on Noninvasive Ductal Carcinoma (DCIS) exploring the possibility and the limit of treatment, October 14-15, 2006.

- 2007 Visiting Professor, Stockholm, Sweden. September 24-29, 2007
- 2007 Breast Health Global Initiative Global Summit on International Breast Health - Implementation of Diagnostic Tests. Budapest, Hungary. October 1-4, 2007
- 2008 Visiting Professor, Stockholm, Sweden, August 12-14, 2008
- 2009 Breast Health Global Initiative Conference, Breast Pathology in Low and Middle Income Settings, Ghana January 10- 19 2009
- 2010 Faculty, Cytopathology Training: Fine Needle Aspiration Training, Hope exchange Ghana Health Project, Specialty Training Course, Accra, Ghana August 23-27, 2010
- 2012 Chinese Society of Cytopathology, 10th Annual Meeting, Correct and Successful application of FNA: experience and lessons. Ningbo, Zhejiang Province, China June 15-18, 2012
- 2013 Annual meeting of International Congress of Cytology May 28, 2013 Paris, France. Lecture and Workshop. Invited session: Meet the Expert Session. Topic: FNA Technique □ How to perform good FNAC samples.
- 2014 Peruvian Society of Cytolpathology meeting Oct 13 2014 Lima, Peru (2 Lectures): (1) The role of FNA in Breast: Benefits and limitations Compared to Core Biopsies. (2) The Future of Fine Needle Aspiration: Special tests, ROSE and impact on Patient Management.
- 2015 Fourth Sydney Advanced Fine Needle Biopsy Cytology Tutorial, May 4-8, 2015, Sydney, Australia. Lecture and Workshop. Invited session: US Directed Fine Needle Biopsy.
- 2015 Fine Needle Biopsy Cytology Tutorial: Cytomorphology, Ancillary Testing and Molecular Pathology Applications, May 11-13, 2015, Manilla, Philippines. Invited sessions: Use of Ultrasound in Fine Needle Biopsy Cytology and Liver and EUS.
- 2016 US lecture Ultrasound Guided FNA and Imaging Features, Nairobi, Kenya October 2016.
- 2017 FNA in clinical practice, issues, advantages and comparison with alternatives. Presentation Lima, Peru April 3, 2017
- 2017 Endoscopic Ultrasound-guided FNA Cytology of the Pancreas. Presentation Lima, Peru April 3, 2017
- 2017 Fine Needle Aspiration of the Breast: A practical Review. Presentation Lima, Peru April 3, 2017

2017 Chinese Cytopathological Summit Forum, keynote speaker.
Beijing, China October 14-15, 2017

INVITED PRESENTATIONS - NATIONAL

- 1980 Fine Needle Aspiration: A Practical Solution to Clinical Problems. Department of Oncology, Johns Hopkins Hospital, Baltimore. September, 1980.
- 1982 Fine Needle Aspiration of Breast, lecture and workshop. Tutorial on Clinical Cytology. Center for Continuing Education, University of Chicago, Chicago. May, 1982.
- 1982 Fine Needle Aspiration: lectures and workshops on breast, prostate, lymph nodes, salivary glands, and thyroid. Swedish Hospital, Seattle. July, 1982.
- 1983 Fine Needle Aspiration: Biopsy Techniques and Comparison of Staining Techniques; Cytology of Breast Aspirates; Workshop on Breast Aspirates and Wet Workshop on Fine Needle Aspiration Techniques. Tutorial on Clinical Cytology. University of Chicago. August 26-27, 1983.
- 1984 Fine Needle Aspiration: Biopsy Technique; Fine Needle Aspiration: Comparative Study of May-Grunewald-Giemsa, Papanicolaou, and Hematoxylin and Eosin Stain; Interpretation of Fine Needle Aspiration of Breast Lesions; Workshop on Breast Cytology and Fine Needle Aspiration Techniques. Tutorial on Clinical Cytology. University of Chicago. July 13-14, 1984.
- 1984 Diagnostic Techniques for Salivary Gland Disorders. American Academy of Otolaryngology, Head and Neck Surgery. Annual Meeting. Las Vegas. September 19, 1984.
- 1984 Overview of Fine Needle Aspiration Cytology; Fine Needle Aspiration of the Prostate: Technique; Fine Needle Aspiration of the Prostate: Malignant Lesions, with Grading of Adenocarcinoma and Effects of Treatment; Fine Needle Aspiration of the Prostate: Microscopic workshop. New York University Medical Center. New York. October 12-13, 1984.
- 1985 Fine Needle Biopsies in Diagnoses of Prostate Cancer. Lecture. Advancements in Treatment of Prostate Cancer. Lecture. American Cancer Society, Florida Division, and Largo Medical Center Hospital. Largo, FL. September 21, 1985.
- 1985 Fine Needle Aspiration of the Breast and Thyroid Gland. Workshops. New York University Medical Center. New York. October 5-6, 1985.

- 1985 Thin Needle Aspiration of Lesions of the Breast. Research Seminar, Department of Pathology, Albert Einstein College of Medicine. New York. October 8, 1985.
- 1986 Fine Needle Aspiration of Breast Lesions; Fine Needle Aspiration Technique; and Fine Needle Aspiration--Comparative Study of Stains. Lectures and Workshops. Tutorials on Cytology. Chicago, IL. March 21-22, 1986.
- 1986 Fine Needle Aspiration Technique; Fine Needle Aspiration of Benign Breast Lesions; Fine Needle Aspiration of Borderline Lesions of the Breast; Fine Needle Aspiration Technique and Stains for Thyroid Lesions; Follicular Lesions of the Thyroid. Lectures and Workshops. Fine Needle Aspiration of the Breast and Thyroid Gland. New York University Medical Center. New York. June 7-8, 1986.
- 1986 Diagnostic Techniques for Salivary Gland Disorders. Instructional course. American Academy of Otolaryngology-Head and Neck Surgery, Annual Meeting. San Antonio, TX. September 14-18, 1986.
- 1986 Technique, Interpretation, and Accuracy of Thyroid Aspiration. Pathology Grand Rounds, New York University Medical Center. New York, October 19, 1986.
- 1987 Fine Needle Biopsy. American Academy of Oral Pathology, Annual Meeting. Phoenix, AZ. May 19, 1987.
- 1987 3 lectures: Historical Notes; New Techniques in FNA; Fine Needle Aspiration Cytology of the Prostate. 7th Annual Comprehensive Fine Needle Biopsy Course, UCSF and California Society of Pathologists, Maui, HI. August 22-29, 1987.
- 1987 2 Lectures: Comparison of Cytologic and Gleason Grading of Prostate Cancer; Flow Cytometry and Gleason Grading. Cytopathology/Flow Cytometry and Prognostic Indicators of Prostate Cancer. Prostate Cancer Program Workshop, Prouts Neck, Maine. October 16-18, 1987.
- 1987 Fine Needle Aspiration of Thyroid Gland: Technique, Interpretation, and Clinical Relevance. Pathology Grand Rounds, New York University Medical Center, NY. October 19, 1987.
- 1987 Fine Needle Aspiration Biopsy of the Prostate: Methods, Interpretation, and Diagnostic Accuracy. Clinical and Pathology Update, Department of Pathology, Massachusetts General Hospital, Boston, MA. October 20, 1987.

- 1987 Fine Needle Aspiration of the Thyroid. Lecture, St. Luke's/Roosevelt Hospital Center, Columbia University, New York. October 21, 1987.
- 1987 Lecture and Workshops on Breast FNA. Comprehensive Seminar on Fine Needle Aspiration. NYU Medical Center, New York. October 22-24, 1987.
- 1988 Comparative Advantages of the May-Gruenwald-Giemsa Versus Papanicolaou Technique, lecture; Breast Aspirates and Wet Workshop on Fine Needle Aspiration Techniques, workshop. 31st Annual Tutorial on Clinical Cytology. Chicago, IL. March 5-12, 1988
- 1988 Fine Needle Aspiration of Borderline Lesions of the Breast. American Society of Cytology, Cytoteleconference. April 26, 1988.
- 1988 2 Lectures: Fine Needle Aspiration Biopsy: Historical Notes; Fine Needle Aspiration Cytology of the Prostate. 8th Annual Comprehensive Fine Needle Biopsy Course, UCSF and California Society of Pathologists, Maui, HA. August 13-20, 1988.
- 1989 2 Lectures: Techniques of FNA; FNA of Breasts; Workshop: FNA of Breast. Comprehensive Seminar on Fine Needle Aspiration for Pathologists and Cytologists, NYU Medical Center, New York, NY. June 7-10, 1989.
- 1989 2 Lectures: FNA Historical Notes; Fine Needle Aspiration Cytology of the Prostate. 9th Annual Comprehensive Fine Needle Biopsy Course, UCSF and California Society of Pathologists, Kauai, HI. August 5-12, 1989.
- 1989 2 Lectures: Fine Needle Aspiration Techniques; Fine Needle Aspiration of Breast; 2 Workshops. 33rd Tutorial on Clinical Cytology, Chicago, IL. August 22-29, 1989.
- 1989 3 Lectures: FNA Biopsy: Techniques and Standards; FNA of Breast; FNA of Prostate; 1 Workshop: Prostate and Thyroid. Cytology Review Course, Atlanta, GA. November 11-14, 1989.
- 1990 2 Lectures: Fine Needle Aspiration Techniques; Fine Needle Aspiration of Breast; 2 Workshops. 34th Tutorial on Clinical Cytology, Chicago, IL. March 22-24, 1990.
- 1990 Lecture: Fine Needle Aspiration of the Breast: Morphological Diagnosis and New Approaches to Research. Michigan Cancer Foundation, Detroit, MI. April 26, 1990.

- 1990 Lectures: Prostate FNA: Introduction and Advanced Topics. 10th Annual Comprehensive Fine Needle Biopsy Course, UCSF and California Society of Pathologists, Hamilton, Bermuda, August 5-11, 1990.
- 1990 Lecture: Fine Needle Aspiration of the Eye and Orbit. Cytoteleconference, Annenberg Center for Health Sciences, Eisenhower Medical Ctr, Rancho Mirage, CA. September 25, 1990.
- 1991 Lecture: Fine Needle Aspiration Techniques and Comparison of Staining Methods. 35th Tutorial on Clinical Cytology, International Academy of Cytology, Universal City, CA. January 24, 1991.
- 1991 2 Lectures: Fine Needle Aspiration Biopsy: Historical Notes; Fine Needle Aspiration Cytology of the Prostate, 11th Annual Comprehensive Fine Needle Biopsy Course, UCSF and California Society of Pathologists, Aspen, CO, August 17-24, 1991.
- 1991 Lecture: Fine Needle Aspiration Biopsy in the Diagnosis of Mammographically Detected Breast Lesions, American Society of Cytology, Annual Meeting, Los Angeles, CA, November 6, 1991.
- 1992 Workshops and Lectures: Introduction to Needle Aspiration Cytopathology; Fine Needle Aspiration Cytopathology of the Salivary Glands; Microscopy session: Salivary Gland Aspirates; Fine Needle Aspiration Cytopathology of the Breast; Microscopy session: Breast Aspirates and Wet Workshop on Fine Needle Aspiration Techniques, 37th Tutorial on Clinical Cytology, Chicago, IL, February 29 - March 7, 1992.
- 1992 Lecture: Selected Diagnostic Problems in Breast FNA, 22nd Annual Symposium, Greater New York Association of Cytotechnologists, New York, April 25, 1992.
- 1992 Lecture: Fine Needle Aspiration Sampling and Smearing Techniques, Dept. of Pathology Grand Rounds, NYU Medical Center, New York, April 27, 1992.
- 1992 2 Lectures: Historical Notes, Biopsy Technique, Slide Preparation, and General Information; Fine Needle Aspiration Cytology of the Prostate, 12th Annual Comprehensive Fine Needle Biopsy Course, Mauna Loa, Hawaii, August 9-15, 1992.

- 1993 Lecture: FNA Techniques in Diagnosis and Characterization, International Conference Series on Nutrition and Health Promotion, "Breast Cancer Research: Current Issues--Future Directions," Atlanta, GA. April 25-28, 1993.
- 1994 3 Lectures: Introduction to Fine Needle Aspiration Cytology; FNA Cytopathology of Salivary Glands; FNA Cytopathology of Breast. 4 Microscopy sessions, 39 th Tutorial on Clinical Cytology, International Academy of Cytology, Chicago, IL. Feb 26-March 5, 1994.
- 1994 Faculty, 15th Annual Comprehensive Fine Needle Biopsy Course, Hawaii, August 13-20, 1994.
- 1994 Workshop: Fine Needle Aspiration Technique. 42nd Annual Scientific Meeting, American Society of Cytology, Chicago, IL. Nov 1-6, 1994.
- 1995 Faculty, 40 th Tutorial on Clinical Cytology, University City, CA, Feb 25-Mar 4, 1995.
- 1995 Faculty, 16 th Annual, Comprehensive Fine Needle Biopsy Course, San Francisco, CA, Aug 12-19, 1995.
- 1995 Visiting Professor & Lecture: "Fine Needle Aspiration in Managed Care: How to Make it Work," Dept. Pathology, University of Iowa College of Medicine, Iowa City, IA, Oct. 5-6, 1995.
- 1996 Faculty, Cytopathology Dinner Seminar, ASCP National Meeting, Chicago, IL, Apr 7, 1996.
- 1996 Faculty, 17th Annual, Comprehensive Fine Needle Biopsy Course, Big Island of Hawaii, Aug 10-17, 1996.
- 1996 Panelist, ASC Diagnostic Seminar, "Quality and Adequacy of Fine Needle Aspiration Specimens," 44th Annual Scientific Meeting, American Society of Cytopathology, Denver, CO, Nov 5, 1996.
- 1997 John K. Frost Lectureship, 38th Annual Postgraduate Institute for Pathologists in Clinical Pathology, Johns Hopkins University, Baltimore, MD, Mar-Apr, 1997.
- 1997 Lecture: "Fine Needle Aspirations of Breast," Grand Rounds, Dept. Pathology, Johns Hopkins Medical School, Baltimore, MD, Apr 24, 1997.
- 1997 Faculty, 18th Annual, Comprehensive Fine Needle Biopsy Course, Big Island of Hawaii, Aug 9-16, 1997.

- 1997 Conference: National Cancer Institute Conference: The Uniform Approach to Breast Fine-Needle Aspiration Biopsy: Invited lecturer; Chair: Subcommittee on Fine Needle Aspiration Technique; Co-Chair, Training and Credentialing Subcommittee, Washington, DC, Sept 9-10, 1997
- 1997 Workshop: FNAB technique, 45th Annual Scientific meeting, ASC, Boston, Nov 4-8, 1997
- 1998 2 Lectures and 1 Workshop: FNA of Breast Lesions (lecture and workshop), FNA of Liver and Pancreas, Maine Society of Cytology, 25th Anniversary Educational Seminar, May 1-2, 1998.
- 1998 Faculty, 43rd Tutorial on Clinical Cytology, Chicago, IL, Mar 19-21, 1998
- 1998 Faculty, Cytological Society, Maine, May 1-2, 1998
- 1998 Faculty, 19th Annual, Comprehensive Fine Needle Biopsy Course, Big Island of Hawaii, Aug 8-16, 1998
- 1998 Workshop: FNAB technique, 46th Annual Scientific Meeting, ASC, Nashville, Nov 3-8, 1998
- 1998 Moderator, Panel: State of the Art 1998: Fine Needle Aspiration Diagnosis of the Breast, 46th Annual Scientific meeting, ASC, Nashville, Nov 6, 1998
- 1999 Faculty, 44th Tutorial on Clinical Cytology, University City, CA, Feb 12-19, 1999
- 1999 Faculty, 20th Annual, Comprehensive Fine Needle Biopsy Course, San Francisco, CA, Aug 9-14, 1999.
- 1999 Lecture, National Meeting of the American Osteopathic Association, How to Dramatically Improve the Diagnostic Accuracy of FNA, San Francisco, CA, Oct 24-28, 1999.
- 2000 Faculty, 45th Tutorial on Clinical Cytology, Chicago, IL, Mar 11-18, 2000.
- 2000 Faculty, ASCP/CAP Annual Meeting, San Diego, CA Oct 14-19, 2000.
- 2001 Panelist, Current Issues in Cytology: Interfacing Molecular Epidemiology and Diagnostic Cytology of the Breast, ASC 49th Annual Scientific Meeting, Kansas City, MO Nov 6-10, 2001.
- 2001 Faculty, AstraZeneca Oncology MIS Breast Cancer Preceptorship, UCSF, San Francisco, CA Nov 13-14, 2001.

- 2002 Faculty, Current Controversies in the Pathological Management of Breast Disease, "FNA Biopsy: How does it fit in Current Breast Care?"; Baylor College of Medicine, Houston, TX, April 27, 2002.
- 2002 Faculty, ASCP Course: Non-Gynecologic Cytopathology, "Breast Cytopathology"; Las Vegas, NV, Jun 13, 2002.
- 2002 Lecture and Panelist, Cytopathology Symposium: "Controversies in Early Detection of Breast Carcinoma"; ASCP/CAP Annual Meeting, Washington, D.C., October 13, 2002.
- 2003 Lecture: USCAP: 10th Anniversary Scientific Symposium: Ductal Lavage: Morphology and Update on a Clinical study in High Risk Patients; Washington DC March 22, 2003
- 2003 Lecture, USCAP 10th Anniversary Scientific Symposium: Ductal Lavage: Morphology and Update on a Clinical study in High Risk Patients; Washington DC, March 22, 2003.
- 2006 Invited Expert Participation - NCCN HER2 Testing in Breast Cancer Task Force Meeting. Chicago, IL February 6-7, 2006.
- 2007 Invited Expert Participant - NCI, NIH, DHHS Symposium "Ductal Carcinoma in Situ: Strategies for Integrating Tumor Biology and Population Sciences. San Francisco, CA February 1-2, 2007
- 2007 Lecture, Accuracy and Usefulness of FNA versus Core Biopsy in Breast Diagnosis. United States Canadian Association of Pathologists, Cytology companion meeting. Invited panelist/speaker San Diego March 24, 2007.
- 2007 Invited Expert Participant - NCCN Breast Cancer Guidelines Panel, NCCN, Lansdowne, Virginia June 24-26, 2007
- 2007 NCI Thyroid Fine Needle Aspiration State of the Science Conference. Chair of Committee on Training and Credentialing, Bethesda, MD October 22-23, 2007.
- 2008 Lecture, NCCN Breast Cancer Guidelines Panel, Park City Utah. Neoadjuvant therapy. "If FNA of clinically positive node performed, and is negative, is further axillary staging necessary? (BINV-11) June 22-24, 2008.
- 2009 Tutorial, Thyroid video microscopy 57th Annual Scientific Meeting American Society of Cytology, November 15, 2009.
- 2009 Lectures, NCCN Annual Meeting, Chicago, IL June 28-30, 2009 presented on DCIS CAP standardized reporting and HER-2 marker assay.

- 2009 Lecture, 57th Annual meeting American Society of Cytology, Making the case for cytologist performed ultrasound guided FNA. Nov 2009
- 2009 Video Microscopy Tutorial, Annual meeting American Society of Cytology, Thyroid Video Microscopy Tutorial. November 15, 2009
- 2009 Lectures and workshops: CAP Ultrasound Certification course in Ultrasound Guided Fine Needle Aspiration Biopsy, CAP Annual Meeting, Washington DC October 9-10, 2009
- 2009 Panel and Tutorial, American Society of Cytology, Thyroid Limiting Indeterminate and Suspicious Diagnosis, Denver, Colorado November 15th, 2009
- 2009 Lecture, Grand Rounds, Massachusetts General Hospital, Ultrasound Guided FNA by Pathologists, December 10, 2009
- 2010 Lecture, Breast Global Health Summit, Chicago June 9-11, 2010
- 2010 Faculty, College of American Pathologists Ultrasound Guided Fine Needle Aspiration Certificate Program, June 25-26, 2010 Chicago
- 2010 Faculty, College of American Pathologists' Ultrasound Guided Fine Needle Aspiration Certificate Program, October 15-16, 2010 Atlanta
- 2010 Panelist, American Society for Clinical Pathology, Annual Meeting, Stump the STARS in Cytopathology panelist, October 30th, 2010 San Francisco
- 2011 Workshop, College of American Pathologists, Ultra Sound FNA Course, Chicago June 24-26.
- 2011 Workshop, American Society of Cytopathology Annual Meeting 2011, October 4, 2011 Baltimore, Maryland
- 2011 Presentation, USCAP Annual Meeting, Papanicolaou Society of Cytopathology International Relations Committee, Cytology in Ghana, Feb 26, 2011
- 2012 The Ultrasound-Guided Fine-Needle Aspiration Advanced Practical Pathology Program (USFNA AP3) College of American Pathologists in San Francisco, CA on March 10-11, 2012.
- 2012 American Society of Cytopathology Annual meeting in Las Vegas Nov 2012. Video microscopy session titled: □Thyroid FNA; Minimizing use of Indeterminate/Suspicious and Atypia of undetermined significance

- 2012 American Society of Cytopathology Annual meeting in Las Vegas Nov 2012. Workshop, half day, □Ultrasound guided FNA and specimen preparation techniques□
- 2013 College of American Pathologists MP3, Advanced practical pathology program, Ultrasound guided FNA for pathologists. Englewood Hospital, Englewood New Jersey. Served as faculty Sept 29-30 2012 and May 11-12 2013.
- 2017 Presentation, USCAP educational center representing International Academy of Cytology: 15 session interactive cytology case presentation, Palm Springs, CA on Jan 28, 2017.
- 2018 Lecture and Panelist, Plenary Session --Fine-Needle Aspiration Biopsy: Small Package-Expanding Information. College of American Pathologists in Chicago, Ill. October 24, 2018
- 2018 Presentation, ASC's 66th Annual Scientific Meeting: Breast FNAB Interpretation with Focus on Challenging Cases and the Use of Cell Block Material for ER, PR and HER2neu Testing, Washington, DC on November 12, 2018.
- 2020 Graduated responsibility & Teaching FNA performance. ASC Virtual Strategies in Cytopathology Education; ASC 68th Annual meeting. Nov, 2020.
- 2020 Fine Needle Aspiration Biopsy of Lymphoma: Optimizing Small Volume Biopsies For Morphology And Advanced Ancillary Studies. ASC Virtual Strategies in Cytopathology Education; ASC 68th Annual meeting. Nov, 2020.

INVITED PRESENTATIONS - REGIONAL AND OTHER INVITED PRESENTATIONS

- 1981 Fine Needle Aspiration of Breast, Thyroid, and Prostate. Santa Monica Hospital, Santa Monica. March, 1981.
- 1981 Fine Needle Aspiration of Breast, lecture and workshop. Cytodiagnosis of Medical Practice (workshop). UCLA Extension, UCLA Center for Health Sciences, Los Angeles. February, April, 1981.
- 1981 The Thyroid Nodule: Presentation of fine needle aspiration of the thyroid gland (interdepartmental conference). Current Concepts in Surgical Pathology. UCLA Center for Health Sciences, Los Angeles. April, 1981.
- 1982 Fine Needle Aspiration of Breast, lecture and workshop. Tutorial on Clinical Cytology. Sheraton-Universal Hotel, North Hollywood. January, 1982.

- 1982 Current Evaluation of Fine Needle Aspiration Biopsy of Breast and Other Lesions. 19th Annual Seminar on Controversial Areas in Surgery. Hilton Riviera Hotel, Palm Springs. March, 1982.
- 1982 Fine Needle Aspiration of Breast, lecture. Los Angeles Pathology Society, Los Angeles. September, 1982.
- 1982 Fine Needle Aspiration of Head and Neck Lesions, lecture. Los Angeles Society of Otolaryngology, Los Angeles. November, 1982.
- 1982 Fine Needle Aspiration of Breast, lecture, microscopy workshop, and aspiration technique workshop. California Society of Pathologists, San Francisco. December, 1982.
- 1983 The Changing Management of the Head and Neck Tumor Patient: Fine Needle Aspiration, lecture. Annual Scientific Assembly California Medical Association. Los Angeles. March, 1983.
- 1983 Aspiration Cytology of Head and Neck Lesions. Eye, Ear, Nose, and Throat: Current Concepts and Treatment for the Primary Care Physician. UCLA Extension. Los Angeles. March 26, 1983.
- 1983 Biopsy Techniques. Twelfth Annual Leo G. Rigler Radiology Symposium. Ultrasound in Medicine - Current Advances. UCLA Extension. Los Angeles. May 22, 1983.
- 1983 Fine Needle Aspiration of the Prostate: Technique, complications, and interpretation. Cancer Conference. Daniel Freeman Memorial Hospital. Los Angeles. June 15, 1983.
- 1983 Fine Needle Aspiration. National Society for Histochemistry Symposium/ Convention. Anaheim. September 28, 1983.
- 1983 Diagnostic Techniques for Salivary Gland Disorders. American Academy of Otolaryngology, Head and Neck Surgery, Annual Meeting. Anaheim. October 25, 1983.
- 1984 Fine Needle Aspiration Technique and Interpretation of Breast Lesions. 12th Annual Clinical Conference AMI-Community Hospital of Santa Cruz. February 1, 1984.
- 1984 Series of 4 lectures on fine needle aspiration of different body sites. Veterans Administration Hospital, Department of Pathology. Spring, 1984.
- 1984 Fine Needle Aspiration of Prostate. Bay Area Seminars in Cytopathology. San Francisco. May 10, 1984.

- 1984 Fine Needle Aspiration: Lecture and Workshops. Office proceedings for general practitioners. UCSF Extended Medical Education. San Francisco. September 20-21, 1984.
- 1984 Values and Limitations of Fine Needle Aspiration of Breast. Society for the Study of Breast Disease. San Francisco. November 3, 1984.
- 1984 Fine Needle Aspiration Biopsy in Organs Other Than the Breast. Extended Programs in Medical Education Clinical Conference. Community Hospital of Santa Cruz. November 28, 1984.
- 1985 Fine Needle Aspiration of Breast. Lecture and workshop, Tutorial on Clinical Cytology. Los Angeles. January 25, 1985.
- 1985 Fine Needle Aspiration Biopsy Technique. Workshop, Tutorial on Clinical Cytology. Los Angeles. January 25, 1985.
- 1985 Fine Needle Aspiration: Comparative Study of May-Grunewald-Giemsa, Papanicolau and Hematoxylin and Eosin Stain. Lecture, Tutorial on Cytology. Los Angeles. January 24, 1985.
- 1985 Selected Interesting Cases of Fine Needle Aspiration Cytology. Bay Area Seminars in Cytopathology. February 14, 1985.
- 1985 The Use of Fine Needle Aspiration Cytology as a Diagnostic Tool in Gynecologic Oncology. Lecture. 5th Annual Current Approaches to Radiation Oncology, Biology and Physics. UCSF. San Francisco. March 14, 1985.
- 1985 Fine Needle Aspiration of Prostate Nodules: Technique, Interpretation, and Advantages Over Needle Biopsy. Lecture. Current Issues in Anatomic Pathology. UCSF. San Francisco. May 23, 1985.
- 1985 The Benefits and Limitations of Fine Needle Biopsy of Breast, Thyroid and Salivary Gland. Lecture. 40th Annual Seminar: Medicine 85. Samuel Merritt Hospital. Oakland, CA. September 25, 1985.
- 1985 Fine Needle Aspiration Biopsy of Head and Neck Lesions. Head and Neck Radiology: Advanced Techniques in Diagnostic Imaging. Lecture. Department of Radiology, UCSF. San Francisco. October 19, 1985.
- 1986 Fine Needle Aspiration of Breast Lesions. Oakland Naval Hospital. November 12, 1985

- 1986 Fine Needle Aspiration of the Thyroid. Bay Area Seminars in Cytopathology. Extended Programs in Medical Education. San Francisco. March 13, 1986
- 1986 Fine Needle Aspiration for Diagnosis of Head and Neck Lesions. Lecture, Department of Otolaryngology, UCSF, San Francisco. March 31, 1986.
- 1986 Fine Needle Aspiration Biopsy in the Diagnosis of Salivary Gland Tumors. Lecture. Current Issues in Anatomic Pathology. San Francisco. May 22-23, 1986.
- 1986 Fine Needle Aspiration Cytology. Lecture. Advances in Internal Medicine. San Francisco. May 23 and June 27, 1986.
- 1986 Fine Needle Aspiration Cytology of the Prostate. Sixth Annual Symposium on Fine Needle Aspiration. Extended Programs in Medical Education, San Francisco. August 10-16, 1986.
- 1987 Comparative Advantages of the May-Gruenewald-Giemsa vs. Papanicolaou Technique. Lecture and Workshop. 30th Tutorial on Clinical Cytology. Universal City, CA. January 24-31, 1987.
- 1987 Fine Needle Aspiration, Selected Cases. Bay Area Seminars in Cytopathology. Extended Programs in Medical Education, San Francisco, CA. March 12, 1987.
- 1987 Aspiration Cytology of the Prostate Gland. Workshop. American Society of Cytology, Annual Meeting. San Francisco, CA. March 27, 1987.
- 1987 Fine Needle Aspiration of Borderline Lesions of Breast. Current Issues in Anatomic Pathology, Annual Meeting. San Francisco, CA. May 21-22, 1987.
- 1987 Fine Needle Aspiration of Borderline Breast Lesions. Current Concepts in Surgical Pathology. Stanford University Medical Center. June 19, 1987.
- 1987 FNA for Diagnosis of Breast and Prostate Cancer. Current Concepts of Common Carcinomas--Breast, Colon, and Prostate. Primary Care Update. UCSF School of Medicine. San Francisco, CA. October 29-30, 1987.
- 1987 FNA of Breast, Thyroid, and Prostate. Lecture, St. Francis Memorial Hospital, San Francisco, CA. November, 1987.
- 1988 Fine Needle Aspiration of Prostate. Lecture, Oak Knoll Naval Hospital, Oakland, CA. March 22, 1988.
- 1988 Fine Needle Aspiration of Malignant Tumors in the Breast Other than Primary Epithelial Types. Bay Area Seminars in Cytology. San Francisco, CA. April 14, 1988.

- 1988 Fine Needle Aspiration of Selected Soft Tissue Lesions. Lecture, Current Issues in Anatomic Pathology: 1988. San Francisco, CA. May 26, 1988.
- 1988 Lecture: Fine Needle Aspiration of Breast Lesions, Bay Area Tumor Institute, Oakland, CA. September 29, 1988.
- 1988 Faculty, Annual Advanced Seminar in Urologic Surgery "Urologic Oncology," Department of Urology, UCSF, San Francisco, CA. September 30-October 1, 1988.
- 1988 Lecture: Fine Needle Biopsy in Ocular Oncology. Advances and Controversies in the Management of Ocular and Periocular Malignancies, Department of Ophthalmology, UCSF; San Francisco, CA. December 8-9, 1988.
- 1989 Workshop, Fine Needle Aspiration of Borderline Breast Lesions, American Society of Cytology. San Francisco, CA March 4, 1989.
- 1989 The Use of Fine Needle Aspiration Biopsy in Head and Neck Cancer. Ninth Annual Current Approaches to Radiation Oncology, Biology, and Physics. UCSF. San Francisco, CA. March 8-10, 1989.
- 1989 FNA of the Head and Neck. Bay Area Seminars in Cytopathology, UCSF, San Francisco, CA. April 13, 1989.
- 1989 FNA of Breast, Naval Hospital, Oakland, CA. May 16, 1989.
- 1989 FNA of Prostate, Current Issues in Anatomic Pathology, UCSF, San Francisco, CA. May 25, 1989.
- 1989 Tutorial on Fine Needle Aspiration, Postgraduate training for pathologists: Breast, prostate, lymph nodes, liver and pancreas. UCSF, San Francisco, CA. May 27, 1989.
- 1989 Lecture and Workshop on Breast FNA, VA Hospital, San Diego, CA. June 24, 1989.
- 1990 Fine Needle Aspiration Tutorials, Squaw Valley, CA. March 12-17, 1990
- 1990 Lecture and Workshop, California Association of Cytotechnologists, 26th Annual Workshop Seminar, San Francisco, CA. May 31-June 3, 1990.
- 1990 Lecture to Radiation Therapy Technologist Students: Pathology at UCSF. UCSF, September 11, 1990.
- 1990 Lecture: The Role of FNA in the Evaluation of Neck Masses. UCSF Otolaryngology Update, San Francisco, CA. November 9, 1990.

- 1991 Lecture: FNA of the Eye and Orbit, Naval Hospital, Oakland, CA. January 8, 1991.
- 1991 Case Presentations: Bay Area Seminars in Cytopathology, UCSF, February 14, 1991.
- 1991 Seventh Annual Current Issues in Anatomic Pathology, UCSF, May 23-24, 1991.
- 1991 Lectures on Breast, Liver, Salivary Gland FNA, and Aspiration/Smearing Techniques, Basic Fine Needle Aspiration Tutorial, XVI, UCSF, May 25, 1991
- 1991 Lecture: Fine Needle Aspiration: Importance of Biopsy Technique Accuracy, UCSF Dept. Oral & Maxillofacial Surgery, Grand Rounds, October 22, 1991.
- 1992 Lecture: Cytology of Liver, Spleen, and Pancreas; and Panel Discussion, UCSF Dept of Radiology seminar: Abdominal Imaging in the 90's: Liver, Pancreas, & GI Tract, San Francisco, CA, January 15-17, 1992.
- 1992 Lecture: Stereotactic FNA of Nonpalpable, Mammographically-Detected Lesions in Breast, UCSF Surgery Grand Rounds, January 22, 1992.
- 1992 Lecture: Fine Needle Aspiration of Breast, Thyroid, and Liver: Accuracy, Technical Problems, and Expectations, Hospital Grand Rounds, California Pacific Medical Center, San Francisco, CA, February 4, 1992.
- 1992 Lecture: Predicting Outcome in Breast Carcinoma - Cell Proliferation, Update in Diagnostic Pathology Conference, Division of Surgical Pathology, UCSF, May 11, 1992.
- 1992 2 Lectures: Recent UCSF Experience with Stereotactic Breast Localization Procedures; Cytopathologic Diagnosis of Breast Cancer, San Francisco Radiological Society, Spring Meeting, May 27, 1992.
- 1994 Lecture: Quality Control for Fine Needle Aspiration of Breast Lesions, Postgraduate Course in General Surgery, UCSF, April 21-23, 1994.
- 1994 Lecture: Role of FNA in the Evaluation of Breast Masses, Dept. Ob/Gyn, UCSF, April 26, 1994.
- 1994 Lecture: Cancer Pathology, 2nd Meeting of the Society of Magnetic Resonance, San Francisco. August 6-12, 1994
- 1994 Lecture: FNA of Breast Lesions, Breast Cancer Symposium, UCSF, Sept. 26, 1994.

- 1995 Lecture: FNA Cytology: Problem Areas and Pitfalls, Los Gatos Community Hospital, Los Gatos, CA Jan 19, 1995.
- 1995 Lecture: Pearls and Pitfalls of Fine Needle Aspiration, Grand Rounds, Dept. Otolaryngology, UCSF, Mar 20, 1995.
- 1995 Lecture: Fine Needle Aspiration--Thin Needle, Fat Savings, Peninsula Hospital, Burlingame, CA, Mar 21, 1995.
- 1995 Lecture: Fine Needle Aspiration in Managed Care: How to Make it Work, Primary Care Grand Rounds, Dept. Medicine, UCSF, Apr 6, 1995.
- 1995 Panel Discussant: Quality Improvement in Breast Cancer Care, Grand Rounds, Dept. Surgery, UCSF, Mar 24, 1995.
- 1995 Lecture: Fine Needle Aspiration Biopsy, Kaiser Permanente Medical Center, Santa Clara, CA Nov 1, 1995.
- 1996 Lecture: FNA Cytology of the Pancreas, Grand Rounds, Dept. of Pathology, UCSF, Jan 10, 1996.
- 1996 Lecture: FNA Biopsy Technique: Impact of Training and Experience on Success, Bay Area Seminars in Cytopathology, UCSF, Feb 18, 1996.
- 1996 Workshop: FNA and Managed Care, 32nd Annual Workshop/Seminar Program, California Association of Cytotechnologists, Millbrae, CA, June 7-9, 1996.
- 1996 Lecture: Pathology of Cancers, Radiologic Oncology Technology course, City College of San Francisco, Sept. 3, 1996.
- 1996 Lecture: Fine Needle Aspiration and Pathologic Diagnosis of the Breast Mass, Annual Review Course, Primary Care for the Practicing Gynecologist, UCSF, Oct 25, 1996.
- 1996 Lecture: Pancreas FNA, CPMC, Oct 28, 1996.
- 1997 Lecture: Fine Needle Aspiration of the Breast, Annual Review Course, Primary Care for the Practicing Gynecologist, UCSF, Oct 17, 1997.
- 1998 Lecture: Abdominal Fine Needle Aspiration, Bay Area Seminars in Cytopathology, UCSF, Apr 9, 1998.
- 1998 Lecture: The Impact of Operator Training and Caseload on the Efficacy of Fine Needle Aspiration Biopsy of the Breast, Northern California Chapter of the American College of Surgeons, San Francisco, CA, May 16, 1998
- 1998 Lecture: Sensitivity and Specificity of Intraoral Fine Needle Biopsy, Grand Rounds, Dept. Oral and Maxillofacial Surgery, UCSF, Dec 15, 1998.

- 1999 Lecture: Annual Course, Fine Needle Aspiration Cytology of the Breast, California College of Podiatry, San Francisco, CA, Feb 23, 1999.
- 1999 Lecture: FNA of Liver and Pancreas, Grand Rounds, Dept. of Pathology, Sept 21, 1999.
- 2000 Lecture: Annual Course, Fine Needle Aspiration Cytology of the Breast, California College of Podiatry, San Francisco, CA, Mar 1, 2000.
- 2000 Lecture: Current Issues in Breast Disease, joint lecture with Z. Werb, Departments of Pathology and Laboratory Medicine Grand Rounds, UCSF, May 9, 2000.
- 2000 Faculty, Conducting Successful Clinical Trials, UCSF Office of Research Affairs, September 15, 2000.
- 2001 Lecture: Ductal Lavage Cytology Findings and Histologic Follow-up in Selected Cases. UCSF Comprehensive Cancer Center, Breast Oncology Program Annual Retreat Training Day, San Francisco, CA, Feb 8, 2001.
- 2001 Lecture: Training day for San Francisco Advocacy Core, Breast cancer early diagnosis, May 2, 2001.
- 2001 Faculty, Improving FNA Technique and Smear Preparation, UCSF Cytology Workshop, May 23, 2001.
- 2001 Faculty, Komen Foundation Breast Fellowship, UCSF, 2001-2002.
- 2002 Lecture: Early Breast Cancer: Histologic and Genetic Correlation, Grand Rounds joint lecture with F. Waldman, Dept. of Pathology, Jan 22, 2002.
- 2002 Lecture: The Houston Society of Clinical Pathologists. Current Controversies in the Pathological Management of Breast Disease: Fine Needle Aspiration Biopsy: How Does it fit in Current Breast Care? Saturday, April 27, 2002, Houston, Texas.
- 2002 Lecture: Salick Health Care Inc., Building a Tissue Resource: Importance for Clinical Trials Collecting Biological Materials: Consent and Infrastructure, the New Technology of Tissue Evaluation. Berkeley, CA. September 20-21, 2002.
- 2002 Lecture: UCSF Department of Pathology Resident
- 2002 Conference, "FNA of Deep Lesions"; San Francisco, CA, Apr 10, 2002.

- 2003 Lecture: Joint lecture with Vicky Felstein (Radiology);
Ultrasound Guidance of Procedures, San Francisco, CA
March 19, 2003. Crowne Plaza Hotel.
- 2005 4 Lectures: How to maximize the diagnostic power of very
small specimens, Pros and Cons of Thin-Prep technology for
Non-GYN specimens, Review of interesting and challenging
cytopathology cases in multiheaded scope settings, Fine-
Needle Aspiration biopsy technique, University of Hawaii at
Manoa, April 2005.
- 2006 Lecture: Prognostic Factors, National Comprehensive Cancer
Network Clinical Practice Guidelines in Oncology Symposium
Breast Cancer, Palo Alto, CA May 19, 2006.
- 2006 Lecture: UCSF ENT , Grand Rounds November 27, 2006
- 2006 Lecture: UCSF Head and Neck Endocrine Surgery, San
Francisco, CA October 27-28, 2006
- 2007 Lecture: UCSF Thyroid FNA October 10, 2007
- 2008 Lecture: UCSF 2007 Cancer: Bench to Bedside, San
Francisco, CA March 2008
- 2008 Invited Talk: American College of Surgeons Thyroid and
Parathyroid Ultrasound Skills Oriented Course, Head and
Endocrine Surgery, Thyroid FNA and Cytopathology October
24-25, 2008
- 2008 Lecture: UCSF 2008 Practical Diagnostic Update in
Gynecologic and Breast Pathology, August 29-30, 2008 San
Francisco.
- 2008 Lecture: UCSF Radiology sponsored Breast Disease
Symposium, The role of cytology and histology in the work up
of new breast lesions at UCSF, October 11, 2008
- 2008 Lecture: UCSF Department of Otolaryngology, Head and
Neck Surgery. Technical Tidbits and Terminology in Thyroid
FNA: Report from October 2007 NCI Conference on the State
of the Science. November 17, 2008
- 2009 Lecture: UCSF Department of Radiology. Image guided Fine
Needle Aspiration. July 13, 2009
- 2009 Lecture: UCSF Radiology. The Role of Cytology in Breast
Cancer, September 11, 2009
- 2009 Medical Student Lecture: UCSF Mechanisms, Methods and
Malignancies, Small Group Teams Pathology March 2009
- 2009 Microscope Tutorials, UCSF - Stanford Cytology Seminar:
Thyroid FNA, May 27, 2009

- 2010 Lecture: UCSF Breast Oncology Program Breast Cancer: From Basics to Beyond, April 19, 2010
- 2010 Lecture: UCSF Breast Oncology Program Breast Cancer: From Basics to Beyond, October 4, 2010
- 2010 Lecture: UCSF Pathology Liver Unknown Slide Session. September 28, 2010
- 2010 Joint Breast Cancer Research Symposium between Karolinska Institute and UCSF, co-designed, planned and organized, October 28, 2010
- 2010 Lecture on Breast FNA - Breast Imaging Fellows, Radiology UCSF December 16, 2010
- 2010 Lecture on Image guided FNA for fellows and residents, Radiology UCSF, July 12, 2010
- 2010 M3 Block, Pathology Small Group, UCSF March 2010
- 2011 Workshop: FNA Smear Part 2. Dept of Radiology, UCSF April 5, 2011
- 2011 Fellow Lectures: FNA Biopsy with Ultrasound. Radiology. September 7, 2011
- 2011 UCSF Department of Radiology, FNA Practicum, October 19, 2011
- 2011 Current Issues in Anatomic Pathology, Thyroid FNA May 25, 2011
- 2012 Metabolism and Nutrition Block, Lab UCSF May 2012
- 2012 M3 Block, Pathology Small Group UCSF May, 2012
- 2013 Medical Students Lab (Endocrine) April 3, 2013
- 2013 M3 Block: Classification of Neoplasms, Pathology Small Group UCSF November 5, 2013
- 2013 Current Issues in Anatomic Pathology, Cytology Multi-headed Scope Session & Thyroid FNA May 22, 2013
- 2014 Lecture and Workshop: American Society of Cytopathology 2014. Dallas, Texas. Thyroid FNA: Minimizing AUS and Suspicious Categories with a Focus on Challenging Cases (Video microscopy tutorial 1.5 hours). Improving FNA Technique with an Introduction to US Guidance □A Practical Hands-on Workshop (Faculty on : Ultrasound FNA workshop 2 hours).
- 2017 UCSF Anatomic Pathology, Cytology Seminar: Thyroid FNA: Focus on Difficult Cases. May 24, 2017.

2019 Signing out with the Professor , Thyroid FNAB, Challenging and Interesting Cases. ASC meeting 2019 in Salt Lake City. Nov, 2019

CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT ACTIVITIES

2013 CAP Ultrasound FNA Technique - May 11/12, 2013

2012 CAP Nongyn Cytology Program NGC-G 2012; May 5, 2012

2012 CAP Nongyn Cytology Program NGC-B 2012

2012 CAP Non-Gyn Cytopathology Ed NGCA-2012

2012 UCSF Breast Oncology Program Scientific Retreat

2011 ASC - 59th Annual Scientific Meeting

2011 CAP NonGYN Cytopathology Ed NGCB-2011

2011 USCAP Annual Meeting

2011 CAP Non-GYN Cytopathology ED NGCA -2011

2011 UCSF, Breast Oncology Program Scientific Retreat

2011 College of American Pathologists, Non-GYN Cytopathology Participant Proficiency

2010 UCSF, Anatomic Pathology and Lab Medicine, Mechanisms of Disease Conference

2010 College of American Pathologists, Non-Gyn Cytopathology Participant Proficiency

2010 College of American Pathologists, CAP 10

2010 College of American Pathologists, Intro to Breast Imaging Terminology, including the BI-RADS

2010 College of American Pathologists, Non-Gyn Cytopathology Participant Proficiency

2010 College of American Pathologists, Non-Gyn Cytopathology Participant Proficiency

2009 College of American Pathologists, USFNA Certificate Program Workshop

2008 College of American Pathologists, PAPM Proficiency Testing

2008 UCSF, Anatomic Pathology and Lab Medicine, Mechanisms of Disease Conference

2008 American Association of Clinical Endocrinologists ,Ultrasound Course

2007 College of American Pathologists, Mock Proficiency Test PAPME1-A

2007 UCSF, Selective Sentinel Lymphadenectomy and Breast Ultrasound Course

2007 College of American Pathologists, Moc Proficiency Test PAP MPTA

2006 UCSF, Anatomic Pathology and Laboratory Medicine, Mechanisms of Disease Conference Part II

2006 UCSF, Anatomic Pathology and Laboratory Medicine, Mechanisms of Disease Conference

2006 UCSF/Mt. Zion Challenges of Managing Pain

2006 UCSF - Breast Oncology Program Scientific Meeting

2006 College of American Pathologists, Mock Proficiency Test PAPME1-A

2006 College of American Pathologists, Mock Proficiency Test NGC-C

2006 College American Pathologists, Mock Proficiency Test NGC-D

2006 UCSF/Breast Oncology

2006 California Society of Pathologists - Annual Convention

2006 UCSF/Head and Neck Endocrine Surgery

2005 University of Hawaii at Manoa - Conference

2005 South Bay Pathology Society - Tumors of Soft Tissue and Bone

2005 UCSF/Mt. Zion - Challenges of Managing Pain Symposium

2005 College of American Pathologists, Mock Proficiency Test PAM C-D

2005 American Society of Cytopathology, Annual Scientific Meeting

2005 UCSF - Department of Pathology - Mechanisms of Disease Parts I, II

2005 UCSF - School of Medicine - Breast Oncology Program Scientific Meeting

2004 UCSF - School of Medicine - Lymphatic/Breast Ultrasound

2004 CPMC - Surg Path of Breast & Thoracic Tumors, Infections Disease & NonGynecologic Cytology

2004 UCSF - Grand Rounds, ENT

2004 UCSF - Department of Lab Medicine and Pathology Mechanisms of Disease

2004 UCSF - Grand Rounds - Department of Lab Medicine

2004 UCSF -- Mechanisms of Disease Conference (M02043) - School of Medicine

2003 American Society of Cytopathology - 51st Annual Scientific Meeting, Orlando, FL

2003 Midwest Institute for Medical Education - Cytoquest - Thinprep Gyn Cytology

2003 UCSF - Mechanisms of Disease Conference (0000302) - School of Medicine

2003 UCSF - Anatomic Pathology (MAP03001)

2003 UCSF - Diagnostic Radiology RAD03029

- 2003 USCAP - 92nd Annual Meeting
- 2003 South Bay Pathology Society - Problems in Pathology of the Head & Neck
- 2002 UCSF Grand Rounds - Early Breast Neoplasia: Histologic and Genetic Correlations
- 2002 UCSF Grand Rounds - Department of Pathology and Laboratory Medicine - MGR03020
- 2002 The College of American Pathologists - 2002 Interlaboratory Comparison Program in
- 2002 The College of American Pathologists - 2002 Interlaboratory Comparison Program in
- 2002 California Society of Pathologists - 55th Annual California Seminars in Pathology
- 2002 American Society for Clinical Pathology - #3501 Non-Gynecologic Cytopathology
- 2002 Salick Health Care ResearchGroup Annual Meeting Fall 2002, Berkeley
- 2002 USCAP - #3202 Cytopathology Symposium: Controversies in Early Detection of Breast
- 2002 Baylor College of Medicine - Management of Breast disease
- 2001 The College of American Pathologists - Interlaboratory Comparison Program in Cervico-Vaginal
- 2001 Midwest Institute for Medical Education - Cytoquest / Thinprep Gyn Cytology
- 2001 American Society of Cytopathology - 49th Annual Scientific Meeting of the American Society of
- 2001 UCSF Grand Rounds - Department of Pathology, Laboratory Medicine Grand Rounds
- 2001 College of American Pathologists - 2002 Interlaboratory Comparison Program in Cervico-Vaginal
- 2001 South Bay Pathology Society Annual Conference - Current Concepts in Surgical Pathology

GOVERNMENT AND OTHER PROFESSIONAL SERVICE

- 1988 - 1988 Consultant on Special Study Section, NIH. Division of Research Grants, Houston Baker, PH.D., Chair.
- 1989 - 1989 Ad Hoc Grant review, Illinois Cancer Council, Comprehensive Cancer Center for the State of Illinois
- 1991 - 1991 Evaluated proposal from the Pediatric Division of the Cooperative Human Tissue Network (CHTN), and the Gynecologic Oncology Group, NCI, NIH.

- 1992 - 1992 Evaluated proposal: "CHTN Supplement: Ovarian Tumor Repository," CHTN, NCI, NIH
- 1995 - 1995 NIH Study section, "Tissue Procurement"
- 1995 - 1995 Inter-laboratory Comparison Survey, College of American Pathologists
- 1996 - 2018 Papanicolaou Society (2004, Program Development Task Force)
- 1997 - 1997 Panel Member, NIH sponsored consensus conference on Uniform practice of Fine Needle Aspiration of Breast
- 1998 - 1998 Member, CCE Council on Cytopathology, ASCUS Project, Jan, 1998.
- 1998 - 1998 Contributor, 1998 Resident In-Service Exam, ASCP, Jun, 1998.
- 1998 - 1998 Review of project for the Breast Cancer Fund, Aug, 1998.
- 1998 - 1998 Chaired panel: Recent Advances in Cytopathology, American Society of Clinical Pathology
- 1998 - 2005 Member, NCI National Specimen Resources Committee, Bethesda, MD
- 1999 - 1999 Member of ASC Task Force to Review ACGME Fellowship Requirements
- 1999 - 1999 NIH Grant Review Panel, Philadelphia, PA, October 18-20, 1999.
- 1999 - 1999 Chaired panel: Improvement of Training Standards in Cytopathology, American Society of Clinical Pathology Educational Matrix Meeting, Chicago IL, Nov 19-20, 1999.
- 2000 - 2000 Chaired panel: CCE, American Society of Clinical Pathology Educational Matrix Meeting, Oakbrook, IL, Nov 17-18, 2000.
- 2002 - 2014 Member, National Comprehensive Cancer Network (NCCN) Breast Cancer Panel, Annual meetings
- 2002 - 2002 Consultant, ProDuct Health, Inc.
- 2002 - 2002 Consultant, Applied Imaging Corp
- 2003 - 2003 Contributed check sample to ASCP
- 2005 - 2005 Member, NCCN HER2 Testing in Breast Cancer Task Force
- 2006 - 2006 Member, CBCTR (Cooperative Breast Cancer Tissue Resource) Research Evaluation Board NCI
- 2007 - 2007 Chaired Committee for Papanicoulau Society for 2007 award.

- 2007 - 2007 Committee Chair NIH sponsored Conference on State of the Art of Fine Needle Aspiration of Thyroid gland
- 2008 - 2008 HER2 Testing in Breast Cancer: NCCN Task Force Report and Recommendations
- 2008 - 2009 CAP served as expert in developing certification course for Pathologist performed guided FNA.
- 2009 - 2009 GlaxoSmithKline International Ethnic Research Committee, External Steering Committee Review Meeting, Seattle, WA January 9-10.
- 2009 - 2009 California Biorepository Research Network, member representing UCSF Cancer Center Research Tissue Core
- 2009 - 2009 CAP Member Market Research Panel Participant
- 2009 - 2018 Papanicoulou Society of Cytology Chair, Committee on Standards of Practice Guidelines
- 2012 - 2012 Ad Hoc Review for NIH, Program in Innovative and Applied Emerging Technologies and Bio-specimen Science. Oct 2012

UNIVERSITY AND PUBLIC SERVICE

UNIVERSITY SERVICE

UC SYSTEM AND MULTI-CAMPUS SERVICE

- 1990 - 1990 Facilitator, All-University Faculty Conference
- 1992 - 1992 Participant, Conference on the Report of the University Task Force on Faculty Rewards "Pister Report"

UCSF CAMPUSWIDE

- 1984 - 1995 Surgical Case and Hospital Mortality Review Committee; Chair, 1989-94
- 1985 - 1990 Committee on Equal Opportunity; 1986, Vice Chairperson
- 1988 - 1990 Committee on Equal Opportunity, Chairperson; Co-author, Advancement and Promotion at UCSF: A Survival Handbook for Tenure Track and In-residence Faculty.
- 1989 - 1995 Quality Assurance Executive Committee
- 1991 - 1992 Committee on Privilege and Tenure, Academic Senate, UCSF
- 1992 - 1992 Neuropathology Search Committee, Department of Pathology
- 1992 - 1992 Search Committee, Department of Ear, Nose, and Throat Surgery
- 1992 - 1997 ad hoc Peer Review Process

1994 - 1995 Bylaws Committee of the Medical Staff

1994 - 2006 Credentials Committee

1994 - 1995 Quality Assurance Executive Committee

1996 - 1998 President of the Medical Staff

1997 - 1998 Search Committee for two breast surgeons for Mt. Zion Breast Center

1997 - 2014 Chair, Breast Oncology Program, Breast Tissue Utilization Committee

1997 - 1999 Director, Tissue Banking Core serving the UCSF Comprehensive Cancer Center

1998 - 2014 Member, UCSF Comprehensive Cancer Center

1998 - 2019 Member, CCC Tissue Core Oversight Committee

1998 - 1999 Search Committee, Department of Radiation Oncology

1998 - 2000 Chair, Credentials Committee

1998 - 2014 Member, Breast Care Center Site Committee

1999 - 2014 Member, Cancer Center Program Planning Committee

1999 - 2014 Director Comprehensive Cancer Center Tissue Core

1999 - 2000 Search Committee, Carol Franc Buck Breast Care Center/Department of Surgery

2000 - 2014 Member, Cancer Committee

2000 - 2002 Chair, Bylaws Committee, UCSF Medical Staff

2000 - 2002 Member, UCSF Comprehensive Cancer Center Endocrine Oncology Section

2001 - 2009 Member, UCSF Cancer Center Performance Improvement Subcommittee

2001 - 2014 Member, UCSF Comprehensive Cancer Center Cancer Risk Program Steering Committee

2002 - 2007 UCSF HIPPA Research Committee

2002 - 2010 Member, UCSF Committee on Privilege & Tenure Advisory Panel

2003 - 2014 Cancer Center Program Activity Coordinator for Multidisciplinary Cancer Conferences

2003 - 2006 Member, Faculty Welfare Senate Committee

2004 - 2005 Ad hoc Medical Staff Committee

2005 - 2006 Committee on Faculty Life

2004 - 2004 Member, Search Committee Radiology
2005 - 2005 Member, Search Committee Pathology
2005 - 2005 Member, Search Committee Department of Surgery
2006 - 2014 Ad Hoc Member, Medical Staff Tissue Committee
2006 - 2006 Member, Search Committee Breast Surgeon
2006 - 2014 Member, Cancer Committee
2007 - 2007 Search Committee, Department of Radiology
2007 - 2007 Search Committee, Department of Radiation Oncology
2008 - 2008 Member, Medical Staff Tissue Committee
2009 - 2009 Member, Search Committee Women's Imaging at Mt. Zion
2010 - 2011 Member, Search Committee Women's Imaging at Mt. Zion
2012 - 2013 Member, Search Committee Women's Imaging at Mt. Zion

DEPARTMENTAL SERVICE

1991 - 1991 ad hoc Committee on Promotion
1992 - 1992 ad hoc Committee on Promotion
1995 - 1995 Department of Pathology Executive Committee
1996 - 1998 ad hoc Committee on Promotions
2002 - 2002 Chair, ad hoc Search Committees (2), Cytopathology Faculty
2003 - 2003 Resident Teaching Conference, Department of Pathology April 03
2004 - 2004 Chair, ad hoc Search Committee, Cytopathology Faculty
2004 - 2004 Member, Search Committee Director Molecular Path Lab
2009 - 2014 Member, Appointments, Promotions, Merit Committee,
Pathology Department

COMMUNITY AND PUBLIC SERVICE

1983 - present Supervised the work of and taught various aspects of cytology to 31 pathologists in private practice.
1987 - 1987 Interview, Physician's Radio Network.
1987 - 1987 Lecture to Community Group, SWEA [Swedish Women's Education Association] "Breast Disease, Early Diagnosis and Treatment Options," Nov 9, 1987.
1989 - 1989 Lecture on Breast Cancer for Swedish Women's Educational Association, New York and New Jersey Chapters, June 7

- 1991 - 1991 Public Service Interview - An important Tool in Breast Cancer Detection, Science Today, October 23, 2001.
- 1994 - 2015 Public / community Service, Bay Area Breast Discussion Group
- 1994 - 1994 Lecture, "Pathology of Cancers," City College of Radiologic Oncology Technology, Sept 6
- 1994 - 1994 CNN Television, "Larry King Live:" Expert on breast cytopathology, April 22, 1994.
- 1997 - 1997 Bay Area Breast Cancer Study Group, lecture □Breast Disease from a Pathologist□s Perspective, □ March 24, 1997
- 1998 - 1998 Review of project for the Breast Cancer Fund, Aug, 1998.
- 1999 - 1999 Lecture to Community Group, SWEA [Swedish Women's Education Association] "Breast Cancer Diagnosis," April 5, 1999.
- 1999 - 2001 Board of Directors, San Francisco Medical Society, San Francisco, CA
- 1999 - 1999 Consultant, ProDuct Health, Inc.
- 2000 - 2000 Consultant, Applied Imaging Corp
- 2001 - 2001 Contributed to Wall Street Journal article on: The informed Patient: Giving the gift of □Body Tissue□Doctors urge patients to donate surgical by products to science. (December □02)
- 2002 - 2002 Interview for MAMM Magazine, Tissue banking for Research
- 2004 - 2004 Contributed check sample to ASCP
- 2006 - 2006 Lecture on Osteoporosis, SWEA March 2006
- 2008 - 2008 Oncology News International interview resulting in Publication December 2008
- 2008 - present Papanicolaou Society, Board of Directors, Member at Large
- 2009 - 2014 Papanicolaou Society, Chair Standards of Practice Guidelines Committee
- 2009 - 2009 Lecture on Medical School Process in Sweden, SWEA February 2009
- 2013 - 2013 Jury Achievement Awards, Swedish American Chamber of Commerce

TEACHING AND MENTORING

TEACHING SUMMARY

Residents in pathology:

In my current role as Emerita faculty I continue to direct the FNA sampling training for the cytology fellows including bench training in procurement and direct supervision in the clinic weekly. I also assist with the FNA procurement training for rotating pathology residents. I have produced two DVDs on FNA procurement, the most recent one an updated version that includes ultrasound guided FNA, that is used for all trainees at UCSF and also widely nationally and internationally. The videos are posted on line and are free of charge. I arrange for an individualized schedule for each resident based on their level of training and individual needs. I am available for reviewing results of quizzes on specific organ systems. All faculty in cytology have responsibility for a different set of quizzes together covering most of all aspects of diagnostic cytology. I serve as one of multiple cytology faculty pairing with trainees in FNA clinic, I participate in the weekly case based review and journal club conference attended by all cytology trainees.

Once a year I give an "unknown session" on liver cytopathology. Twelve cases are provided for residents to review prior to the session and during the session the features of each case are discussed and reviewed as well as the correct and differential diagnoses.

Fellows cytology:

I was the director of the one year cytology fellowship program through 2012. The program was reviewed by ACGME in Sept 2010 and granted 5 years without any citations. The fellowship directorship was transitioned to Dr. E Khanafshar at the end of 2012.

My role as Emerita faculty includes once a week service in the FNAB clinic, typically with the rotating fellow. I teach procurement and interpretation of the samples collected.

Dermatopathology fellows:

Until my retirement from full time work I participated in the training in cytopathology for the Dermato-pathology fellows. These fellows have a requirement for rotation in pathology including cytology if they come from a dermatology background. These fellows rotate for one month and are incorporated into our rotation system similarly to a pathology resident. I direct this rotation.

All the above categories of fellows and residents are required to review and answer quiz sets on various organ systems. I review these quizzes with trainees on a regular basis and each session takes on average about 2 hours. This is intense one on one teaching focusing on challenging cases and represent an important part of training in our program. It is very well received by the trainees.

POSTDOCTORAL FELLOWS AND RESIDENTS MENTORED

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
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Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2020 - 2021	Mohsen Hosseini	Cytology Fellow		Mentor/Supervision	UCSF
2020 - 2021	Brent Molden	Cytology Fellow		Mentor/Supervision	UCSF
2019 - 2020	Kent Truong	Cytology Fellow		Mentor/Supervision	UCSF
2019 - 2020	Lucy Han	Cytology Fellow		Mentor/Supervision	UCSF
2018 - 2019	Soo-Ryum Yang	Cytology Fellow		Mentor/Supervision	Sloan Kellermen
2018 - 2019	Nancy Greenland	Cytology Fellow		Mentor/Supervision	Private Practice
2017 - 2018	Jeanette Ruiz	Cytology Fellow		Mentor/Supervision	Private Practice
2017 - 2018	Shweta Agarwal	Cytology Fellow		Mentor/Supervision	Private Practice
2016 - 2017	Joshua Menke	Cytology Fellow		Mentor/Supervision	Faculty Stanford
2016 - 2017	Nhu Thuy Can	Cytology Fellow		Mentor/Supervision	Industry
2015 - 2016	Dianna Ng	Cytology Fellow		Mentor/Supervision	Sloan Kellerman
2015 - 2016	Patricia Goldhoff	Cytology Fellow		Mentor/Supervision	Private Practice
2014 - 2015	Tara Saunders	Cytology Fellow		Mentor/Supervision	Faculty UCSF
2014 - 2015	Vijay George	Cytology Fellow		Mentor/Supervision	Private Practice
2013 - 2014	James Lindsey	Cytology Fellow		Mentor/Supervision	Private Practice
2013 - 2014	Sarah Calkins	Cytology Fellow		Mentor/Supervision	Faculty UCSF
2012 - 2013	Sara Barcia	Cytology Fellow		Mentor/Supervision	Private Practice
2012 - 2013	Brandie Firetag	Cytology Fellow		Mentor/Supervision	Private Practice

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2011 - 2012	Khaing Soe Win	Cytology Fellow		Mentor/Supervision	Private Practice
2011 - 2012	Nancy Ciau	Cytology Fellow		Mentor/Supervision	Private Practice
2010 - 2011	Maria Serrano-Correa	Cytology Fellow		Mentor/Supervision	Private Practice
2010 - 2011	Rena Yu	Cytology Fellow		Mentor/Supervision	Private Practice
2009 - 2010	Stephanie McAlhaney	Cytology Fellow		Mentor/ Supervision	Private Practice
2009 - 2010	Poonam Vohra	Cytology Fellow		Mentor/Supervision	UCSF Faculty
2008 - 2009	Manuela Nebuloni	Visiting Professor		Mentor/Supervision	Professor, University of Milan
2008 - 2009	Alyssa Throckmorton	Breast Surgery Fellow		Mentor/ Supervision	Private Practice
2008 - 2009	Maria Serrano-Correa	Clinical Instructor		Mentor/Supervision	Private Practice
2008 - 2009	Veronica Velasco	Cytology Fellow		Mentor/Supervision	Private Practice
2008 - 2009	Joan Bernard	Cytology Fellow		Mentor/Supervision	Private Practice
2008 - 2008	Sara Barcia	Resident		Mentor/Supervision	Private Practice
2007 - 2008	Agnes Radzio	Breast Surgery Fellow		Mentor/Supervision	Kaiser Permanente, San Rafael
2007 - 2008	Rebecca Swain	Cytology Fellow		Mentor/Supervision	Private Practice
2007 - 2008	AnneMieke VanZante	Cytology Fellow		Mentor/Supervision	Professor, UCSF
2006 - 2006	Longwen Chen	Staff Pathologist Cleveland Clinic		Mentor/Supervision	Staff Pathologist Cleveland Clinic

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2006 - 2007	Ian Jaffee	Cytology Fellow		Mentor/Supervision	Staff Pathologist, CPMC
2006 - 2007	Judy Pang	Cytology Fellow		Mentor/Supervision	CPMC Chief of Pathology
2005 - 2006	Kristen Jensen	Cytology Fellow		Mentor/Supervision	Assistant Professor, Stanford
2005 - 2006	Mathew Greenberg	Cytology Fellow		Mentor/Supervision	Quest Diagnostics, Denver
2004 - 2005	Robert Hass	Cytology Fellow		Mentor / Supervision	Private Practice
2004 - 2005	Erik Schwartz	Cytology Fellow		Mentor / Supervision	Assistant Professor, Stanford
2003 - 2004	Phillip Holsten	Cytology Fellow		Mentor/Supervision	Deceased
2003 - 2004	Dawn Darbonne	Cytology Fellow		Mentor/Supervision	Private Practice, Cytopathology
2002 - 2003	Joseph T. Rabban	Cytology Fellow		Mentor / Supervision	Prof. of Clinical Pathology, UCSF
2002 - 2003	Lorelle E. Carley	Cytology Fellow		Mentor / Supervision	Cytologist/Pathologist - Private Practice
2001 - 2002	Carol A. Trujillo	Cytology Fellow		Mentor / Supervision	Cytologist/Pathologist, Private Practice
2001 - 2002	Frederick Baehner	Cytology Fellow		Mentor / Supervision	Prof. of Clin. Pathology, UCSF

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2000 - 2001	James H.Bainton	Cytology Fellow		Mentor / Supervision	Cytologist/Pathologist, SSF Kaiser
1999 - 2000	Brenda Ng	Cytology Fellow		Mentor / Supervision	Partner / Pathologist, Private Practice
1999 - 2000	Lisa Tai	Cytology Fellow		Mentor / Supervision	Private Practice
1999 - 2000	Ronald Balassanian,	Cytology Fellow		Mentor / Supervision	Faculty UCSF

RESEARCH AND CREATIVE ACTIVITIES

RESEARCH AND CREATIVE ACTIVITIES SUMMARY

Meng HM, Ben Y, Zheng Li, Chew K, Ljung BM, Lagios MD, Dairkee S. Breast Cancer susceptibility gene aberrations occur early in sporadic breast tumor and in the acquisition of breast epithelial immortalization. *Genes Chromosomes Cancer*, 2004 Nov; 41(3):214-22.

- Participated in design and planning of study. Collected and performed detailed pathologic review of all cases. Revised the manuscript.
Brogi, E, Miller MJ, Casadio C, Ljung BM, Montgomery Leslie. Paired ductal lavage and fine needle aspiration specimens from patients with breast carcinoma. *Diagnostic Cytopathology* 3:370-5, 12/2005
- As an expert on breast ductal lavage, I was invited to independently review all cases in the study. Major role in revising the manuscript. Participated in study design including set of criteria used.
Ljung BM, Chew K, Moore DH, King EB. Cytology of Ductal Lavage Fluid of the Breast. *Diagnostic Cytopathology*, Vol:(30)3, 2004.
- Initiated and designed study. Principal writer of manuscript and provided all illustrations.
Hwang SE, Devries S, Chew KL, Moore D, Kerlikowske K, Thor A, Ljung BM, Waldman FM. Patterns of Chromosomal Alterations in Breast Ductal Carcinoma In situ. *Clinical Cancer Res*. 10:5160-7, Aug/2004.
- Banked all specimens and provided detailed microscopic review of all cases. Participated in study design and manuscript revisions.
Khan SA, Wiley EL, Rodriguez N, Baird C, Ramakrishnan R, Nayar R, Bryk M, Bethke KB, Staradub VL, Wolfman J, Rademaker A, Ljung BM and Morrow M. Ductal lavage findings in women with known breast cancer undergoing mastectomy. *Journal National Cancer Institute* 96: 1510-7, Oct/2004.
- Participated in study design. As a known expert in breast ductal lavage, provided independent interpretations of all cytologic specimens. Participated in manuscript revisions.

CURRENT RESEARCH INTEREST

I am interested in evaluating the usefulness of small biopsy specimens including FNAB smear and cell blocks for diagnostic, prognostic and theranostic evaluation. I am particularly interested in the impact that high quality specimens have on the diagnostic effectiveness of

these small specimens and the level and type of associated training in procurement needed to achieve such results. Specifically I am interested in the impact on timely patient care and the cost of care that providing a high percent of clinically useful information in the form of definitive actionable diagnostic information have.

We recently published FNAB data on >2000 consecutive thyroid specimens with a minimum of 10 years follow up from the California Cancer registry allowing for calculation of true risk of malignancy rates for all diagnostic categories. In addition we are planning to use the same data set to analyze the frequency of need for costly molecular studies, helpful in sorting out equivocal diagnoses based on FNAB morphology alone. By minimizing these □gray zone□ diagnosis, by having optimal samples, we anticipate that significant savings can be done to patient care. Because thyroid nodules are very common and require large numbers of biopsies, we postulate that training operators in effective procurement, resulting in more definitive diagnosis, minimizing the need for molecular studies, would have a significant impact on cost.

In our experience smear preparations are more effective than Thin layer preparations in providing material conducive to definitive diagnosis on FNAB. In recent years Thin layer has become widely used, in part because of the convenience of not having to learn how to learn/make smear preparations. In fact in some circles there is an impression that smear preparations are out of date and that Thin layer preparations are better and more modern/ up to date. I am planning to address this in an Endocrinology Journal to reach an audience beyond the cytology/pathology community.

A data base containing 3 months of consecutive FNAB samples from all organ sites has been analyzed for adequacy of samples and distribution of diagnosis. Follow up on patients through medical records and population based registry is planned. The focus will be on diagnostic accuracy, usefulness of FNAB procedure, morbidity and impact on cost of care compared to alternative methods of investigation.

RESEARCH AWARDS - PAST

1.

Gift Fund - Hematology Oncology Dr. Ljung was paid 2% effort Collaboration with Dr. Moasser	11/01/2013	2/28/2014
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2.

Susan G Komen for the Cure Research Grant Enhancing Efficacy of Chemotherapy in Triple-negative/Basal-like Breast Cancer by Targeting Macrophages	07/01/2011	06/30/2016
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3. NCI/NIH PO1 CA107584-01 A-1

Core C - Tissue Core Dr. Ljung was paid 5% effort.	2006	2011
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Grant for Thea Tlsty

4.	DAMD17-03-1-0481 Dr. Ljung was paid 5% effort (uncapped on a new DOD Grant for Laura Esserman, MD)	2003-07-01	2003-07-01
5.	PACIFIC MED CTR AG05407 The SOF at UCS CPMC is establishing a subcontract With UCSF Dennis Black as PI (Epidemiology) 2% funding	2003-01-01	2006-07-01
6.	NIH/NCI P30 CA82103 Cancer Center Support Grant, 10% support, P.I., Tissue Core. McCormick, P.I. of CCSG. 556168-29610	1999	07(FY) / yr 5
7.	NCI/NIH P30 CA82103-08 Cancer Center Support Grant - Tissue Core Grant for Dr. McCormick Dr. Ljung was paid 4% effort as Director of Tissue Core	1999	2017
8.	NIH 444939-59725 Program Project in Breast Cancer; P.I. Subproject, 20%	1987	95(FY) yr 7
9.	NIH, RO1 EY07504 Uveal Melanoma Cell Biology; 5% support, P.I. Devron Char.	1988	92(FY)
10.	NIH/NCI 1 P50 CA58207 Bay Area Cancer Translational Research Program; "SPORE in Breast Cancer," 10% support, P.I., Core 2: Human Fresh Tissue Bank	1992	03(FY)

11. US Army MMC DAMD 17-96-6260 A New Vision for Integrated Prognosis, 8.5% support, PI, Breast Core	1996	00(FY)
12. UC BCRP 2 RB-0197 Predictors of Recurrent Breast Tumors in Women with DCIS, 5% effort (no salary since 1998), P.I. K. Kerlikowske.	1996	01(FY)
13. NIH/NCI P30 CA82103 Cancer Center Support Grant, 10% support, P.I., Tissue Core, F. McCormick, P.I. of CCSG.	1999	02(FY)
14. CCRP 00-91135 CCRP 00-91135, Molecular Pathology of Neoplasia, 10% effort (no salary), P.I. T. Tlsty	2000	03 (FY)
15. NIH/NCI 1 P50 CA5820-147 Bay Area Cancer Translational Research Program; "SPORE in Breast Cancer," P.I., Core 2: Human Fresh Tissue Bank. Grant for Dr. Gray \$ 7% support, direct/yr 1	1992	11/30/2012
16. MSRG-06-264-01-CCE American Cancer Society Molecular Markers of Thyroid Cancer 5% effort donated.	2006	2012

PEER REVIEWED PUBLICATIONS

1. (* = Supervising senior author with resident or fellow)
2. Auer G, Nordenskjold B, Wallgren A, Gustavsson S, Silfversward C, Arrhening E, Ljung BM. Nuclear DNA distribution and estrogen receptor content in human mammary carcinoma. *Anal Quant Cytol* 2:4, 1980.
3. Clark OH, Gooding GAW, Ljung BM. Locating a parathyroid adenoma by ultrasonography and aspiration biopsy cytology. *West J Med* 135:154-158, 1981.
4. Nordenskjold B, Skoog L, Wallgren A, Silfversward C, Gustavsson S, Ljung BM, Westerberg H, Gustavsson J-A, Wrangle O. Measurement of DNA synthesis and estrogen receptor in needle aspirates are powerful methods in the management of mammary carcinomas. *Advances in Enzyme Regulation* 19:489-495, 1980.
5. Kaufman JS, Ljung BM, Walther P, Waisman J. Aspiration biopsy of the prostate. *Urology* XIX:587-591, 1982.
6. Van Herle AJ, Rich P, Ljung BM, Ashcraft MW, Solomon DH, Keller EB. The Thyroid Nodule. *Annals of Internal Medicine*. 1982;96:221-232.
7. Jobst SB, Ljung BM, Gilkey F, Rosenthal DL. Cytologic diagnosis of olfactory neuroblastoma: A case report with multiple diagnostic parameters. *Acta Cytol* 27:299-305, 1983.
8. Freedman A, Ehrlic RM, Ljung BM. Prevention of cyclophosphamide cystitis with 2-mercaptoethane sodium sulfonate: A histologic study. *J Urol* 132:580-582, 1984.
9. Ljung BM, Hanafee W. CT scanning and aspiration cytology in the management of parotid lesions. *Revue de Laryngologie* 105:21-24, 1984.
10. Ljung BM, Larsson SG, Hanafee W. Computed tomographyguided aspiration cytologic examination in head and neck lesions. *Arch Otolaryngol* 110:604-607, 1984.
11. *Abemayor E, Ljung BM, Newman A, Dudley J, Bergstrom L, Magidson JG. Teratomas of the head and neck in childhood. *Laryngoscope* 94:1489-1492, 1984.
12. Ljung BM. Fine needle aspiration of the prostate gland. *Sem in Urol* 3:18-26, 1985.
13. Ljung BM, Cherrie R, Kaufman JJ. Fine needle aspiration of the prostate gland: A study of 103 cases with histological follow-up. *J Urol* 135:955-958, 1986.
14. *Cohen MB, Ljung BM, Boles R. Salivary gland tumors: Fine-needle aspiration vs. frozen-section diagnosis. *Arch Otolaryng* 112:867-869, 1986.
15. Bottles K, Miller TR, Cohen MB, Ljung BM. Fine needle aspiration biopsy: Has its time come? *Am J Med* 81:525-531, 1986.
16. *Hales M, Bottles K, Miller T, Donegan E, Ljung BM. Diagnosis of Kaposi's sarcoma by fine-needle aspiration biopsy. *Am J Clin Pathol* 88:20-25, 1987.
17. Cohen MB, Rodgers RPC, Hales MS, Gonzales JM, Ljung BM, Beckstead JH, Bottles K, Miller TR. The influence of training and experience in the interpretation of fine needle aspirates of the breast: Analysis by ROC curves. *Arch Pathol Lab Med* 111:518-520, 1987.
18. Char DH, LeBoit P, Ljung BM, Wara W. Radiation therapy for ocular necrobiotic xanthogranuloma. *Arch Ophthalmol* 105:174-175, 1987.

19. Dairkee SH, Ljung BM, Smith H, Hackett A. Immunolocalization of a human basal epithelium specific keratin in benign and malignant breast disease. *Breast Cancer Res & Treat* 10:11-20, 1987.
20. *Layfield LJ, Mukamel E, Hilborne LH, Hannah JB, Glasgow BJ, Ljung BM, deKernion JB. Cytologic grading of prostatic aspiration biopsy: A comparison with the Gleason grading system. *J Urol* 138:798-800, 1987.
21. *Layfield LJ, Hilborne LH, Ljung BM, Feig S, Ehrlich R. Use of fine needle aspiration cytology for the diagnosis of testicular relapse in patients with acute lymphoblastic leukemia. *J Urol* 139:1020-1022, 1988.
22. Char DH, Ljung B-M, Miller T, Phillips T: Primary intraocular lymphoma (ocular reticulum cell sarcoma) diagnosis and management. *Ophthalmology* 95:625-630, 1988.
23. Ljung BM, Char D, Miller TR, Deschenes J. Intraocular lymphoma: Cytologic diagnosis and the role of immunologic markers. *Acta Cytol* 32:840-847, 1988.
24. Char D, Ljung BM, Deschenes J, Miller TR. Intraocular lymphoma: Immunologic and cytologic analysis. *Brit J Ophthalmol* 72:905-911, 1988.
25. Levin KE, Chew KL, Ljung BM, Mayall BH, Siperstein AE, Clark OH. Deoxyribonuclear acid cytometry helps identify parathyroid carcinomas. *J Clin Endocrinol Metabol*, 67:779-784, 1988.
26. Ljung BM, Mayall B, Lottich C, Boyer C, Sylvester SS, Leight GS, Siegler HF, Smith HS. Variations in tumor-cell viability and DNA ploidy in human breast cancer by different cell dissociation techniques. *Breast Cancer Res & Treat* 13:153-159, 1989.
27. Kindy-Degnan N, Char DH, Swift PS, Kaleta S, Ljung B-M: Bromodeoxyuridine uptake in the assessment of intraocular tumor therapy. *Arch Ophthalmol* 107:746-755, 1989.
28. Fredrick D, Char DH, Ljung B-M, Brinton G: Solitary intraocular lymphoma as an initial presentation of widespread disease. *Arch Ophthalmol* 107:395-397, 1989.
29. *Gonzales J, Ljung B-M, Guerry T, Shoenrock LD: Congenital torticollis: Evaluation by fine needle aspiration biopsy. *The Laryngoscope* 99:651-654, 1989.
30. Char D, Miller T, Ljung B-M, Howes E, Stoloff A: FNA biopsy in uveal melanoma. *Acta Cytol* 33:599-605, 1989.
31. *Cohen MB, Fisher PE, Holly EA, Ljung B-M, Lowhagen T, Bottles K: Fine needle aspiration biopsy diagnosis of mucoepidermoid carcinoma: Statistical analysis. *Acta Cytol* 34:43-49, 1990.
32. *Cohen MB, Ljung B-ME: Fine needle aspiration biopsy of the prostate. *Path Annu* 26:89-108, 1991.
33. Chen L-C, Neubauer A, Kurisu W, Waldman FM, Ljung B-M, Goodson W III, Goldman ES, Moore D, Balazs M, Liu E, Mayall BH, Smith HS: Loss of heterozygosity on the short arm of chromosome 17 is associated with high proliferative capacity and DNA aneuploidy in primary human breast cancer. *Proc Natl Acad Sci USA* 88:3847-3851, 1991.
34. Char DH, Kroll SM, Stoloff A, Kaleta-Michaels S, Crawford JB, Miller TR, Howes EL Jr, Ljung BM: Cytomorphometry of uveal melanoma. Comparison of fine needle aspiration biopsy samples with histologic sections. *Anal Quant Cytol Histol* 13:293-299, 1991.

35. Christov K, Chew KL, Ljung B-M, Waldman FM, Duarte LA, Goodson WH III, Smith HS, Mayall BH: Proliferation of normal breast epithelial cells as shown by in vivo labeling with bromodeoxyuridine. *Am J Pathol* 138:1371-1377, 1991.
36. Smith HS, Chen L-C, Ngo JL, Ljung B-M: Molecular and cellular lesions associated with breast cancer progression. *Breast Cancer Res Treat* 18:551-554, 1991.
37. Waldman FM, Chew K, Ljung B-M, Goodson W, Hom J, Duarte LA, Smith HS, Mayall B: A comparison between bromodeoxyuridine and 3H thymidine labeling in human breast tumors. *Mod Pathol* 4:718-722, 1991.
38. Goodson WH III, Ljung B-M, Waldman F, Mayall B, Chew K, Moore DH II, Smith H, Goldman ES, Benz C: In vivo measurement of breast cancer growth rate. *Arch Surg* 126:1220-1224, 1991.
39. Chen L-C, Kurisu W, Chang JN, Ljung B-M, Goldman ES, Moore D II, Smith HS: Heterogeneity for allelic loss in human breast cancer. *JNCI* 84:506-510, 1992.
40. Liu E, Thor A, He M, Barcos M, Ljung B-M, Benz C: The HER2 (c-erbB-2) oncogene is frequently amplified in in situ carcinomas of the breast. *Oncogene* 7:1027-1032, 1992.
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42. *Mockli G, Ljung B-M, Goldman R: FNA of intramuscular myxoma of the tongue: A case report. *Acta Cytol* 37:226-228, 1993.
43. Goodson WH III, Ljung B-M, Moore DH II, Mayall B, Waldman FM, Chew K, Smith HS: Tumor labeling indices of primary breast cancers and their regional lymph node metastases. *Cancer* 71:3914-3919, 1993.
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45. Smith HS, Lu Y, Deng G, Martinez O, Krams S, Ljung B-M, Thor A, Lagios M: Molecular aspects of early stages of breast cancer progression. *J Cell Biochem* 17G:144-152, 1993.
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55. Horn-Ross PL, Ljung B-M, Morrow M: Environmental factors and the risk of salivary gland cancer. *Epidemiology* 8:414-419, 1997.
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21. Dollinger M, Rosenbaum EH, Tempero M, Mulvihill SJ, Ljung BM and Morita ET. How Cancer is Diagnosed. In *Everyone's Guide to Cancer Therapy*, Dollinger M, Rosenbaum EH, Tempero M, and Mulvihill SJ. (eds) 5th edition, Kansas City, Andrews McMeel, 2006.
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23. Staerckel GA, Ljung BM, Shidham W, Frable WJ, Josai J. edited by Ed Cibas. Undifferentiated (Anaplastic) Carcinoma. In *The Bethesda System for Reporting Thyroid Cytopathology: Definitions, Criteria and Explanatory Notes*. In press, Springer, 2009

OTHER PUBLICATIONS

1. Reviewer for Knowledge Summaries (KS) of Comprehensive Breast Cancer Control by Union for International Cancer Control (UICC), the National Cancer Institute (NCI) Center for Global Health and Breast Health Global Initiative (BHGI). These are communication toolkit for policymakers and clinicians based on framework of the BHGI resource-stratified guidelines. May 2014.

SIGNIFICANT PUBLICATIONS

1. Carlson RW, Moench SJ, Hammond ME, Perez EA, Burstein HJ, Allred DC, Vogel CL, Goldstein LJ, Somlo G, Gradishar WJ, Hudis CA, Jahanzeb M, Stark A, Wolff AC, Press MF, Winder EP, Paik S, Ljung BM; NCCN HER2 Testing In Breast Cancer Task Force. *J Natl Compr Canc Netw* 2006 Jul;4 Suppl 3:S1-22. Review.

I served as senior author on this manuscript that is an extensive review of Her2/neu testing and impact on the management of breast cancer. This manuscript was written as part of the activities of the NCCN (National Comprehensive Cancer Network) breast cancer panel where, at the time, I served as the only pathologist. I contributed review of the literature, personal knowledge of the field and participated in reviewing and revising the manuscript.

2. Ljung, BM. Thyroid Fine-Needle Aspiration: Smears Versus Liquid-based Preparations. *Cancer*: 2008 25;114(3):144-8.

This was a commentary conceived and written by me alone. The topic is highly controversial at this time and the choice of method for preparing specimens has profound impact on the specificity of thyroid FNA diagnosis and important implications for patient care, morbidity and cost.

3. Ljung BM, Langer J, Mazzaferri EL, Oertel YC, Wells SA, Waisman J. Invited Review: Training, Credentialing and Re-Credentialing for the Performance of Thyroid FNA: A Synopsis of the National Cancer Institute Thyroid Fine-Needle Aspiration State of the Science Conference. *Diagnostic Cytopathology* 2008 36(6):400-6./>

This paper was written as part of documentation of the 2007 NCI sponsored State of the Art conference on thyroid FNA. I chaired the committee charged with dealing with Training, Credentialing and Performance of the procurement part of thyroid FNA. I wrote the first draft of the manuscript and all the subsequent drafts and final

4. Hyyan R, Sener SF, Anderson BO, Garrote LM, Hortobagyi GN, Ibarra JA Jr, Ljung BM, Sancho-Garnier H, Stalsberg H; Breast Health Global Initiative Diagnosis Panel. *Cancer*. 2008 Oct 14;113(8Suppl):2257-68./>

I participated in the 2007 international conference in Budapest on Breast Health Global Initiative. I served on the diagnosis panel and wrote parts of the manuscript and provided input and review for other parts. My contributions were focused on the parts pertaining to the use of FNA and core biopsies primarily.

5. Poller D, Ljung BM, Gonda P. Use of streamed internet video for cytology training and education: www.PathLab.org. *Diagn Cytopathol*. 2009 Feb 3 [Epub ahead of print]/>

I conceived, produced, wrote and acted in the original video/DVD that was the basis for this paper. The video/DVD is now available on the internet for free and is used widely in the United states in most training programs teaching FNA technique and in many countries worldwide. A second updated and expanded video including chapters on ultrasound guided FNA was released in 2012 and is available on youtube (https://www.youtube.com/watch?v=mXh9en_nCB).

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55. Ng, D, van Zante, A, Lung, BM. Thyroid Fine Needle Aspiration: The UCSF Experience. Presentation at ASC 2013.
56. Nhu Thuy Can MD1, Kristie L White MD, MAEd1,*, Sarah Calkins MD1, Britt-Marie Ljung MD1, and Elham Khanafshar MD, MS1. Cytology cases of the week: An educational tool that improves trainee exposure to cytology. Platform presentation at USCAP on March 6, 2017
57. Dianna Ng, Morgan Ndaga, Fred Okango, Daniel Ogola, Britt-Marie Ljung Teaching Fine Needle Aspiration Biopsy at a community hospital in rural Kenya. Presentation at UCSF Medical Center; San Francisco, CA; Matibabu Foundation; Ukwala, Kenya. March 21, 2017.
58. Jeanette Ruiz, Joshua R. Menke, Elham Khanafshar, and Britt-Marie Ljung. Novel Fine Needle Aspiration Method for Collecting Abdominal Fat Pad Cell Block for Amyloid Testing. May 1, 2017.

OTHER CREATIVE ACTIVITIES

1. 1985-present: Ongoing production and updating of several thousand histology correlated studysets of instructional cytologic cases, including written description of morphologic features (average of 15 cases/month contributed).
2. 1990: DVD, FNAB Technique - 1 hour long, comprehensive review of FNA sampling and sample preparation. DVD is used extensively throughout the US and internationally
3. 1997: Developed and implemented universal consent for donation of tissue for research. The consent has been endorsed by NCI and adopted in many academic institutions in similar form.
4. 2004: PBL case: Mrs. Moore
5. 2008: DVD technique video has been added on the Papanicolaou Society website <http://www.papsociety.org/index.html>
6. 2009: In response to the new GME requirement for anatomic pathology residents to review at least 1500 cases in the course of training I took on a leadership role in putting extensive tutorial materials together to be housed at VAMC for residents to utilize during their rotation there. These materials include female specific cases in short supply at VAMC

such as Pap-smears, breast FNA and other unusual and interesting cases generated through the busy cytology service at the Mt Zion campus. The materials include slide based material as well as various imaging based resources.

7. 2018: Second 38 min video on FNAB procurement techniques and related subjects including ultrasound guided FNAB. Also posted on USCAP and Panicleau Societies respective Website. https://www.youtube.com/watch?v=mXh9en_nCBU

8. 2020: The PathPod Podcast - Dr. Sara Jiang (@Sara_Jiang) speaks with cytopathologist and legend in the field of Fine-Needle Aspiration biopsy, Dr. Britt-Marie Ljung (@LjungMD). In this segment, Beyond the Scope, we speak to pathologists about their pursuits and interests in and outside of pathology. <https://pathpod.podbean.com/e/beyond-the-scope-britt-marie-ljung-cytopathologist/>