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**CURRICULUM VITAE**  
**Marc Dante Coltrera, M.D.**

Personal Data

Born: Brooklyn, N.Y., December 2, 1955

Married: Anne Louise Buchinski  
Two children

Predoctoral Education

Brown University Providence, Rhode Island	ScB.	1973-1977
Yale University New Haven, Connecticut	M.D.	1977-1981

Postdoctoral Education

Internship/Residency:

General Surgery St. Vincent's Hospital and Medical Center New York, New York		1981-1983
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Residency:

Otolaryngology - Head and Neck Surgery Massachusetts Eye and Ear Infirmary, Harvard University Boston, Massachusetts		1983-1986
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Post-residency:

Head and Neck Surgical Oncology Otolaryngology - Head and Neck Surgery Two year research and clinical fellowship University of Washington Seattle, Washington		1986-1988
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Cell Physiology/Molecular Biology Course Competitive entrance, NIH sponsored Thomas Pollard, Director Marine Biological Laboratory Woods Hole, Massachusetts		1990
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### Faculty Appointments

Acting Assistant Professor, Otolaryngology-Head and Neck Surgery University of Washington, School of Medicine, Seattle, WA	1988-1989
Assistant Professor, Otolaryngology-Head and Neck Surgery University of Washington, School of Medicine, Seattle, WA	1989-1993
Associate Professor, Otolaryngology-Head and Neck Surgery University of Washington, School of Medicine, Seattle, WA	1993-1999
Professor, Otolaryngology-Head and Neck Surgery University of Washington, School of Medicine, Seattle, WA	1999-Present
Vice Chairman, Otolaryngology-Head and Neck Surgery University of Washington, School of Medicine, Seattle, WA	2001-2008
Acting Chief, Otolaryngology-Head and Neck Surgery Division Veterans Administration Medical Center Puget Sound, Seattle, WA	2007-2012
Chief, Otolaryngology-Head and Neck Surgery Division Veterans Administration Medical Center Puget Sound, Seattle, WA	2012-Present

### Hospital Positions

#### Attending surgeon:

University of Washington Medical Center, Seattle, WA	1986-present
Children's Hospital and Medical Center, Seattle, WA	1986-present
Harborview Medical Center, Seattle, WA	1986-present
Veteran's Administration Medical Center, Seattle, WA	1986-present
Pacific Medical Center, Seattle, WA	1986-1988
Providence Medical Center, Seattle, WA	1990-present
Swedish Medical Center, Seattle, WA	1996-present

### Honors and Awards

Sophomore Chemistry Prize (Brown)	1975
Sigma Xi Honor Society (Brown)	1977
Graduation Honors in Chemistry (Brown)	1977
Magna Cum Laude (Brown)	1977
Massachusetts General Hospital Research Traineeship	1978
Louis G. Welt Research Award (Yale)	1981
Highest Graduation Honors (Yale)	1981
Trachy Research Teaching Award (UW)	1991
Driftwood Clinical Teaching Award (UW)	1993
Presidential Citation (AHNS)	2001
Distinguished Service Award (AHNS)	2004
Presidential Citation (AHNS)	2006
Driftwood Clinical Teaching Award (UW)	2009
Outstanding Achievement Award (FARF)	2011

Grants

American Cancer Society Fellowship Grant Direct Costs: \$6,000	1986-1987
American Cancer Society Clinical Fellowship Grant Direct Costs: \$10,000	1987-1988
Head and Neck Carcinoma Cell Kinetics Principal Investigator Direct Costs: \$320,000 NINCCDS - Clinical Investigator Development Award	1988-1993
TNF- $\alpha$ Expression and Tumor -associated Cachexia Principal Investigator Direct Costs: \$50,000 Clinical Nutrition Research Unit	1992-1994
Arthur Campbell Medical Student Summer Fellowship For Lisa Powell, medical student: \$1,400 American Cancer Society	1993
Cytoskeletal Hybridoma: Cell Cycle Control in Sarcomas and Melanomas Co-Investigator (25% effort) Direct Costs: \$410,000 NCI - R01	1993-1996
Arthur Campbell Medical Student Summer Fellowship For Justin Ries, medical student: \$1,400 American Cancer Society	1995
Epstein Barr Virus Latent Membrane Genes For Greg Farwell, resident Direct Costs: \$5,000 Head and Neck Society	1997
Arthur Campbell Medical Student Summer Fellowship For Jessica Stanton, medical student: \$1,700 American Cancer Society	1999
Mouse Organ of Corti Cell Cycle For Jennifer Heydt, resident Direct Costs: \$20,000 Deafness Research Foundation	2000
Database Kernel Development Grant Principal Investigator Direct Costs: \$350,000 University of Washington UIF	2000-2002
Behavioral Studies Contract Principal Investigator Direct Costs: \$25,000 University of Washington	2003-2005
Communications Disorders Contract Principal Investigator Direct Costs: \$65,000 CHMC	2005-2008

Pediatric Urology Contract Principal Investigator Direct Costs: \$34,000 CHMC	2007-2009
Vascular Anomalies Contract Principal Investigator Direct Costs: \$20,000 CHMC	2008-2010

Board Certification/Subspecialty Certification

American Board of Otolaryngology	1986
Joint Training Council for Advanced Training in Head and Neck Oncology	1988

Licensure

California	1986
Massachusetts	1983
New York	1982
Washington	1986

Organizations

American Academy of Otolaryngology - Head and Neck Surgery  
American Association for the Advancement of Science  
American Association for Cancer Research  
American College of Surgeons  
American Medical Association  
American Society for Cell Biology  
American Society for Head and Neck Surgery  
Association for Research in Otolaryngology  
King County Medical Society  
Northwest Academy for Otolaryngology  
Sigma Xi  
Seattle Surgical Society

Editorial Responsibilities

Head and Neck Surgery review board	1990-present
Reviewer: <i>Am J Pathol, Applied Immuno, Arch Oto Head Neck Surg, Cancer, Cancer Res, Int J Cancer, J Histochem Cytochem, Lab Invest, Laryngoscope, Otolaryngology-Head Neck Surg</i>	

Special National Responsibilities

Radiation Therapy Oncology Group (RTOG) Head and Neck Surgical Subcommittee, member	1992-1997
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American Society for Head and Neck Surgery Research Committee, member	1993-1995
American Society for Head and Neck Surgery Research Committee, consultant	1995-2000
American Society for Head and Neck Surgery Fellowship and Scholarship Committee, chair	1995-2000
American Society for Head and Neck Surgery Program Committee, member	1997-present
NIH, Otolaryngology Cooperative Group Grant Protocol Development Group, member	1997-present
Association for Research in Otolaryngology Program Committee, member	1998-2003
American Head and Neck Society Education Committee, member	1998-present
American Head and Neck Society Website Committee, member	1998-present
NIH/NIDCD Communication Disorders Review Committee, Special Reviewer	1998-present
American Board of Otolaryngology Examiner	1999-2006
American College of Surgeons Oncology Group Head and Neck Cancer Group, Vice-Chairman	1999-2002
American Society for Head and Neck Surgery Informatics, member	2000-present
American Society for Head and Neck Surgery Database Committee, member	2000-present
American Head and Neck Society Council member	2002-present
American College of Surgeons Faculty Career Development Award Committee, member	2002-present
Association for Research in Otolaryngology Physician Research Training Committee, member	2003-present
Sixth International Conference on Head and Neck Cancer Proffered Papers Chairman	2001-2004
Fanconi Anemia Research Foundation Scientific Advisory Board, member	2004-present
American Head and Neck Society Program Coordinator	2005
Research Workshop on the Biology, Prevention	2006

and Treatment of Head and Neck Cancer Program Coordinator, Spring Meeting	
Fanconi Anemia Research Foundation Abstract submission and review coordinator	2006-present
American Head and Neck Society Database Committee, Chair	2007-2010
Seventh International Conference on Head and Neck Cancer Abstract submission and review coordinator	2007-2008

### Special Local Responsibilities

Resident Applicant Selection Committee, member (UW)	1988-present
Surgical Service Committee, member (SVAH)	1989-present
Otolaryngology Department Research Committee, member (UW)	1989-present
Invasive Procedures Subcommittee, member (UW)	1991-1997
Quality Improvement Committee, member (SVAH)	1991-1994
Co-director Head and Neck Surgical Oncology Fellowship (UW)	1991-2002
Otolaryngology Resident Coordinator (UW)	1991-2001
Director of Research in Head and Neck Surgery (UW)	1992-2001
American Cancer Society Institutional Grant Committee, member (UW)	1993-2003
Computerized Database Development (GUI development for Mac, Windows)	1994-present
Oncology Search Committee, member (UW)	1993-1994
Preoperative Task Force, chair (SVAH)	1994-1995
Virginia Merrill Bloedel Hearing Research Center, member (UW)	1994-present
Tumor Registry Planning Group, member (UW)	1994-1997
Microvascular Search Committee, chair (UW)	1995
SVAMC Otolaryngology Search Committee, member (UW)	1996
Electronic Medical Record Committee (UW)	1997-present
Harborview Otolaryngology Search Committee, member (UW)	1998
UWMC Facial Plastics Search Committee, member (UW)	1998
UWP IT and Business Applications Committee, member (UW)	2004
Dean's Leadership Group, member (UW)	2004 – 2011
Research Infrastructure Support Committee, member (UW)	2005-present
Health Care Cost Effectiveness Committee, member (UW)	2005-present
Otolaryngology Chair Search Committee, member (UW)	2006-2007
University of Washington Physicians Board of Trustees, member (UW)	2008-2011
University of Washington Physicians Executive Committee, member (UW)	2008-2011
VA Puget Sound Otolaryngology Search Committee, chair (UW)	2008
University of Washington Physicians Finance and Audit Committee, member (UW)	2011-2013
VA Puget Sound Operational Improvement Committee, member (SVAH)	2011-present
VA Puget Sound Operational Improvement Committee, chair (SVAH)	2011-2012
VA National System Redesign, member (SVAH)	2012-present

### Publications

1. Begleiter H, Coltrera MD: Evoked potential changes during ethanol withdrawal in rats. Am J Drug Alcohol Abuse 2(2):263-268, 1975
2. Coltrera MD, Rosenblatt M: D-amino acid substitution parathyroid hormone - Effects on bioactivity of substitution at the carboxy- and amino-terminal regions. Citation Calcified Tissue Intl 28(2):212-213 1979
3. Coltrera MD, Rosenblatt M, Potts JT: Analogues of parathyroid hormone containing D-amino acids: evaluation of biological activity and stability. Biochemistry 19:4380-4385, 1980

4. Rosenblatt M, Coltrera MD, Shepard G, Gray DA, Parsons J, Potts JT: Sulfur-free parathyroid analogues containing D-amino acids: Biological properties in vitro and in vivo. Biochemistry 20(25):7246-7250, 1981
5. Coltrera MD, Potts JT, Rosenblatt M: Identification of a renal receptor for parathyroid hormone by photoaffinity radiolabeling using synthetic analogue. J Biol Chem 256(20):10555-10559, 1981
6. Coltrera MD, Googe PB, Harrist TJ, Hyams VJ, Schiller AL, Goodman ML: Chondrosarcoma of the temporal bone: Diagnosis and treatment of thirteen cases and review of literature. Cancer 58(12):2689-2696, 1986
7. Garcia RL, Coltrera MD, Gown AM: Analysis of proliferative grade using anti-PCNA/Cyclin Monoclonal Antibodies in fixed, embedded tissues. Comparison with flow cytometric analysis. Am J Pathol 134(4):733-739, 1989
8. Cummings CW, Eisele DW, Coltrera MD: Lower trapezius myocutaneous island flap. Arch Otolaryngol Head Neck Surg 115(10):1181-1185, 1989
9. Rosowski JJ, Davis PJ, Merchant SN, Donahue KM, Coltrera MD: Cadaver middle ears as models for living ears: comparisons of middle ear input immittance. Ann Otol Rhinol Laryngol 99(5):403-412, 1990
10. Coltrera MD, Gown AM: PCNA/Cyclin expression and BrdU uptake define different subpopulations in different cell lines. J Histochem Cytochem 39(1):23-30, 1991
11. Yeh E, Driscoll R, Coltrera M, Olins A, Bloom K: A dynamin-like protein encoded by the yeast sporulation gene *SPO15* Nature 349(6311):713-715, 1991
12. Flint PW, Downs DH, Coltrera MD: Laryngeal synkinesis following reinnervation in the rat; a neuroanatomic and physiologic study using retrograde fluorescent tracers and electromyography. Ann Otol Rhinol Laryngol.100(10):797-806, 1991
13. Porter PL, Gown AM, Kramp SG, Coltrera MD: Widespread p53 overexpression in human malignant tumors. An immunohistochemical study using methacarn-fixed, embedded tissue. Am J Pathol 140(1):145-153, 1992
14. Coltrera MD, Zarbo RJ, Sakr WA, Gown AM: Markers for dysplasia of the upper aerodigestive tract: suprabasal expression of PCNA, p53 and CK19 in alcohol-fixed, embedded tissues. Am J Pathol 141(4):817-825, 1992
15. Girod DA, Bigler SA, Coltrera MD: Reidel's thyroiditis: report of a lethal case and review of the literature. Otolaryngol Head Neck Surg 107(4):591-595, 1992
16. Watling DL, Gown AM, Coltrera MD: Overexpression of p53 in head and neck cancer. Head Neck 14:437-444, 1992
17. Blanton RA, Coltrera MD, Gown AM, Halbert CL, McDougall JK. Expression of the HPV16 E7 gene generates proliferation in stratified squamous cell cultures which is independent of endogenous p53 levels. Cell Growth Differ 3:791-802, 1992
18. Coltrera MD. The use of cell proliferation markers in tissue sections as indicators of prognosis. Proc Third Intl Head Neck Oncology 1099:379-384, 1993
19. Katsuda S, Coltrera MD, Ross R, Gown AM: Human atherosclerosis IV. Immunocytochemical analysis of cell activation and proliferation in early human lesions. Am J Pathol 142:1787-1793, 1993

20. Coltrera MD, Skelly M, Gown AM: Anti-PCNA antibody PC10 yields unreliable proliferation indices in routinely processed, deparaffinized, formalin-fixed tissue. Appl Immunohistochem, 1:193-200, 1993
21. Tsue TT, Watling DL, Weisleder P, Coltrera MD, Rubel EW: Identification of hair cell progenitors and intermitotic migration of their nuclei in the normal and regenerating avian inner ear. J Neuroscience, 14:140-152, 1994
22. Wang J, Coltrera MD, Gown AM: Cell Proliferation in human soft tissue tumors correlates with platelet derived growth factor B chain expression: an immunohistochemical and in situ hybridization study. Cancer Res, 54: 560-564, 1994
23. Palanca-Wessels MCA, Gown AM, Wang E, Coltrera MD: Immunocytochemical detection of statin, a nuclear protein of G<sub>0</sub> phase, in deparaffinized, methacarn-fixed human breast cancer tissues: Correlation with expression of PCNA and markers of clinical outcome. Appl Immunohistochem, 2:248-253, 1994
24. Huang W Y-F, Coltrera MD, Schubert M, Morton T, Truelove E: Histopathologic evaluation of proliferating cell nuclear antigen (PC10) in oral epithelial hyperplasias and premalignant lesions. Oral Surg Oral Med Oral Pathol, 78:748-754, 1994
25. Gelsleichter LC, Wang E, Zarbo RJ, Gown AM, Coltrera MD: p53 and mdm-2 expression in malignant melanoma. Modern Path, 8:530-535, 1995
26. Bhavé SA, Stone JS, Rubel EW, Coltrera MD: Cell cycle progression in gentamicin-damaged avian cochleae. J Neuroscience, 15:4618-4628, 1995
27. Coltrera MD, Wang J, Porter PL, Gown AM: Expression of PDGF-B and the PDGF receptor  $\beta$  subunit in human breast tissue and breast carcinomas. Cancer Res, 55:2703-2708, 1995
28. Wang J, Coltrera MD, Gown AM: Abnormalities of the p53 and p110RB tumor suppressor gene expression in human soft tissue tumors: correlations with cell proliferation and grade. Modern Path, 8:837-842, 1995
29. Haycox CL, Odland PB, Coltrera MD, Raugi GJ: Indications and complications of medicinal leech therapy. J Am Acad Dermatology, 33:1053-1055, 1995
30. Skelly M, Coltrera MD, Gown AM. Immunohistochemical analysis of p110<sup>RB</sup> expression in human cells and tissues: a reappraisal and critical review of the literature. Appl Immunohistochem 4:16-24, 1996
31. Coltrera MD. Salivary gland tumorigenesis: the myoepithelial cell's role. Proc Fourth Intl Head Neck Oncology 1099:719-725, 1996
32. Gown AM, Jiang JJ, Matles H, Skelly M, Goodpaster TA, Cass L, Reshatof M, Spaulding D, Coltrera MD: Localization of histone (H3) mRNA by in situ hybridization: validation of S phase specificity by comparison with bromodeoxyuridine (BrdU) uptake in animal tissues and human cell lines. J Histochem Cytochem, 44:221-226, 1996
33. Lehr H-A, Hansen KD, Coltrera MD, Russ JC, Gown AM: Photoshop-based image analysis for the semi-automated assessment of Ki-67-defined proliferative activity in the routine diagnosis of breast cancer. Appl Immunohistochem, 4:117-127, 1996
34. Deleyiannis FWB, Weymuller EA, Coltrera MD: Quality of life of disease-free survivors of advanced (stage III or IV) oropharyngeal cancer. Head Neck, 19:466-73, 1997

35. Derkay CS, Malis DJ, Zalzal G, Wiatrak BJ, Kashima HK, Coltrera, MD: A staging system for assessing severity of disease and response to therapy in recurrent respiratory papillomatosis. Laryngoscope, 108:935-7, 1998
36. Goff BA, Reis JA, Els LP, Coltrera MD, Gown AM: Immunophenotype of ovarian cancer as a predictor of clinical outcome: evaluation at primary surgery and second look procedure. Gyn Oncology, 70:378-385, 1998
37. Bhave SA, Oesterle E, Coltrera MD: Macrophages and microglia in regenerating auditory epithelium. J Comp Neurology, 398:241-56, 1998
38. Coltrera MD: Primary T-cell lymphoma of the thyroid. Head Neck, 21:160-3, 1999
39. Coltrera MD, Mathison SM, Goodpaster TA, Gown AM: Abnormal expression of the cystic fibrosis transmembrane regulator (CFTR) in chronic sinusitis in cystic fibrosis and non-cystic fibrosis patients. Ann Otol Rhinol Laryngol, 108:576-81, 1999
40. Dray TG, Coltrera MD, Pinczower EF: Thyroid cartilage fracture repair in rabbits: comparing healing with wire and miniplate fixation. Laryngoscope, 109:118-122, 1999
41. Deleyiannis FWB, Weymuller EA, Coltrera MD, Futran N: Quality of life after laryngectomy: are functional disabilities important? Head Neck, 21:319-24, 1999
42. Farwell DG, McDougall JK, Coltrera MD: Expression of Epstein-Barr virus latent membrane proteins lead to changes in keratinocyte cell adhesion. Ann Otol Rhinol Laryngol, 108:851-859, 1999
43. Weymuller EA, Yueh B, Deleyiannis FWB, Kuntz AL, Alsarraf R, Coltrera MD: Quality of life in head and neck cancer. Laryngoscope, 110:4-7, 2000
44. Weymuller EA, Yueh B, Deleyiannis FWB, Kuntz AL, Alsarraf R, Coltrera MD: Quality of life in head and neck cancer : lessons learned from 549 prospectively evaluated patients. Arch Otolaryngol Head Neck Surg, 126:329-35, 2000
45. Farwell DG, Shera KA, Koop JI, Bonnet GA, Matthews CP, Reuther GW, Coltrera MD, McDougall JK, Klingelhutz AJ: Genetic and epigenetic changes in human epithelial cells immortalized by telomerase. Am J Pathol, 156:1537-47, 2000
46. Oesterle E, Bhave SA, Coltrera MD: Basic fibroblast growth factor inhibits cell proliferation in cultured avian inner ear sensory epithelia. J Comp Neurology, 424:307-26, 2000
47. Weymuller EA, Yueh B, Deleyiannis FWB, Kuntz AL, Alsarraf R, Coltrera MD: Quality of life in head and neck cancer: part 3. Laryngoscope, 110:4-7, 2000
48. Weymuller EA, Alsarraf R, Yueh B, Deleyiannis FWB, Coltrera MD: Analysis of the performance of the University of Washington quality of life instrument and its modification. Arch Otolaryngol Head Neck Surg, 127:489-493, 2001
49. Gleich LL, Gluckman JL, Nemunaitis J, Suen JY, Hanna E, Wolf GT, Coltrera MD, Villaret DB, Wagman L, Castro D, Gapany M, Carroll W, Gillespie D, Selk LM: Clinical experience with HLA-B7 plasmid DNA/lipid complex in advanced squamous cell carcinoma of the head and neck. Arch Otolaryngol Head Neck Surg, 127:775-779, 2001
50. Linardopoulou E, Mefford HC, Nguyen O, Friedman C, van Den Engh G, Farwell DG, Coltrera MD, Trask BJ. Transcriptional activity of multiple copies of a subtelomerically located olfactory receptor gene that is polymorphic in number and location. Hum Mol Genet 10:2373-2383, 2001.
51. Coltrera, MD: Designing clinical databases. Otolaryngol Clin N Am 35:1245-1262, 2002.

52. Larramore G E, Coltrera, MD: Organ preservation strategies in the treatment of laryngeal cancer. Current Options Oncol 4:15-25, 2003.
53. Schwartz DL, Rajendran J, Yueh B, Coltrera, MD, Anzai Y, Krohn K, Eary J: Staging of head and neck squamous cell cancer with extended-field FDG-PET. Archives Otolaryngol Head Neck Surg, 129:1173-78, 2003
54. Heydt JL, Cunningham LL, Rubel EW, Coltrera MD: Round window gentamicin application: an inner ear hair cell damage protocol for the mouse. Hear Res 192:65-74, 2004
55. Schwartz DL, Rajendran J, Yueh B, Coltrera, MD, LeBlanc M, Eary J, Krohn K: FDG-PET Prediction of Head and Neck Squamous Cell Cancer Outcomes. Arch Otolaryngol Head Neck Surg 130:1361-7, 2004
56. Schwartz DL, Ford E, Rajendran J, Yueh B, Coltrera, MD, Virgin J, Anzai Y, Haynor D, Lewellyn B, Mattes D, Meyer J, Phillips M, LeBlanc M, Kinahan P, Krohn K, Eary J, Laramore G: FDG-PET/CT imaging for preradiotherapy staging of head-and-neck squamous cell carcinoma. Int J Radiat Oncol Biol Phys 61:129-36, 2005
57. Coltrera MD: Evaluation and imaging of a thyroid nodule. Surg Oncol Clin N Am 17:37-56, 2008.
58. Perkins JA, Coltrera MD: Relational database development and use in vascular anomaly assessment and treatment. Arch Oto Head Neck 134: 62-66, 2008..
59. Huang BP, Rajendran JG,, Wanner MF, Byrd DR, Coltrera MD, Mann GN, Mankoff DA: The utility of triple phase 99TC MIBI imaging in detecting parathyroid adenoma. J Nuc Med Biol in press.
60. Coltrera MD: The Physics of Ultrasound in a Nutshell. Otolaryngol Clin N Am, 43:1149-59, 2010.
61. Coltrera MD: Thyroid Cancer: Current Diagnosis, Management, and Prognostication. Otolaryngol Clin N Am, in press, 2014.

#### Computer Software Packages (as sole developer)

1. Coltrera MD: Head and neck tumor database. Development and implementation of a multi-platform (Macintosh and Windows), multi-user head and neck tumor database incorporating data elements agreed upon at the Head and Neck Cancer Strategic Planning Conference for Staging and Stratification in Multi-institutional Trials sponsored by NCI and NIDCD, PI: Ernest A. Weymuller. Software was released for beta testing to 47 centers around the United States and abroad in April, 1997. Last update to 450 members of the American Head and Neck Society (national and international) in 33 countries around the world, May 2005.
2. Coltrera MD: Audiology database. Development and implementation of a multi-platform (Macintosh and Windows), multi-user database for audiometric studies. The database uses a specially developed point-and-click interface for capturing and graphing audiometric data Software was released for beta testing at the University of Washington in February, 1998 and the Veterans Administration Medical Center in June 2001. Latest update June 2006.

3. Coltrera MD: Otobase database kernel. Development of a multi-platform (Macintosh and Windows) database kernel to support multi-center national trials. The database kernel incorporates all of the elements necessary to maintain confidentiality in multi-user systems, can operate in stand-alone or client-server environments and can interface with other systems via ODBC/XML/SOAP communications. Complete datasets or subsets of data can be shared for the purposes of a consortium trial. The database kernel garnered competitive grant support of \$350,000 for continued development in February, 2000 (UIF; see grant support).
4. Coltrera MD: Recurrent respiratory papilloma database. Development and implementation of a multi-platform (Macintosh and Windows) database for use in a multi-center national trial incorporating data elements agreed upon by the Multi-Disciplinary Task Force on Recurrent Respiratory Papillomas sponsored by ASPO and ABEA, PI: Craig S. Derkay. Software was released for beta testing in the United States in May, 2001, last update 2005.
5. Coltrera MD: Sarcoma database. Development and implementation of a multi-platform (Macintosh and Windows), multi-user database for sarcoma and orthopedic studies. The database uses a specially developed point-and-click navigational interface for collecting data accommodating multiple detail levels. Software was released for beta testing at the University of Washington in June, 2001. Client-server versions accepted for use in 4 major medical centers in the United States.
6. Coltrera MD: Otobase database kernel - HIPAA compliance and a unique method for data sharing. This release represented a substantial rewrite and upgrade of the original Otobase database kernel to meet all HIPAA compliance issues. In addition the release included a unique method for data sharing which allows for administration of a clinical trial from a central location while individual participants still retain control of their data. Complete datasets or subsets of data can be shared for the purposes of a consortium trial. Patent applied for 2005.
7. Coltrera MD: Melanoma database. Development and implementation of a multi-platform (Macintosh and Windows), multi-user database for melanoma studies. The database uses a specially developed point-and-click navigational interface for collecting data at multiple detail levels. Software was released for beta testing at the University of Washington in July, 2002, latest version 2004
8. Coltrera MD: Behavioral studies in the Seattle Public Schools. Development and implementation of a multi-user database for studying behavioral problems in the public schools. The database uses a specially developed web-based interface which uploads and downloads data to Palm Pilot-type data collectors in the field. Software was released at the University of Washington in August, 2002, latest version 2005
9. Coltrera MD: Esophageal dysfunction database. Development and implementation of a multi-site multi-user database for studying esophageal and gastric dysfunction, surgical and medical interventions and outcomes. Released for beta testing at the University of Washington July 2003, latest version 2005
10. Coltrera MD: New Zealand National Head and Neck Cancer Registry. Development and implementation of a multi-site multi-user database for following treatment and outcomes of all head and neck cancer patients treated in New Zealand. Codified into law and released for general testing in August, 2004. Latest version 2006
11. Coltrera MD: Communication Disorders database. Development and implementation of a multi-platform (Macintosh and Windows), multi-user database for communication disorders used for the coordination of multi-specialty studies in pediatric populations. Software released for beta test in November, 2005.
12. Coltrera MD: Pediatric urology database. Development and implementation of a multi-platform (Macintosh and Windows), multi-user database for pediatric urology studies used for the coordination of national studies. Development of urodynamic interface, work with industry representatives such as Laborie. Software released in 2006.

13. Coltrera MD: Vascular malformation database. Development and implementation of a multi-platform (Macintosh and Windows), multi-user database for vascular malformation studies used for the coordination of national studies. Development of malformation analysis package and grading system. Software released in 2007.
14. Coltrera MD: Cochlear Implant Research database. Development and implementation of a multi-platform (Macintosh and Windows), multi-user database for cochlear implant waveform analysis. Software released for beta test in February, 2010.
15. Coltrera MD: Canadian Head and Neck Tumor database. Development and implementation of a multi-platform (Macintosh and Windows), multi-user database for study of inter-province treatment variation and cost effectiveness. Software released for beta test in March, 2011.

### Abstracts

1. Garcia R, Coltrera MD, Gown AM: Monoclonal antibodies to PCNA/Cyclin can be used to obtain cell kinetic information in fixed, embedded tissues. Lab Invest 60:32A, 1989
2. Coltrera MD, Gown AM: PCNA/cyclin expression and BrdU uptake define different subpopulations of cells in different cell lines. J Cell Biol 109(4):241A, 1989
3. Yeh E, Driscoll R, Coltrera M, Olins A, Bloom K: SPO15, an essential gene for meiosis in the yeast, is homologous to the microtubule binding protein, dynamin. J Cell Biol 111(5):291A, 1990
4. Coltrera MD, Zarbo RJ, Sakr WA, Gown AM: Suprabasal expression of PCNA/Cyclin, and not cytokeratin 19, is a marker of premalignancy in the oral cavity. United States and Canadian Academy of Pathology. Lab Invest 64(1):63A, 1991
5. Blanton RA, Coltrera MD, Gown AM, Halbert CL, McDougall JK: Complex alterations to cell cycle regulation mediated by HPV16 oncoproteins in organotypic culture. J Cell Biol 113(5):157A, 1991
6. Porter PL, Gown AM, Ellis GK, Coltrera MD: p53 is overexpressed in a wide range of malignant, but not benign, human tumors: an immunocytochemical study. Lab Invest 66(1):108A, 1992
7. Bacchi MM, Wang J, Bacchi CE, Coltrera MD, Gown AM: Characterization of TXM4, a new pan-hematolymphoid monoclonal antibody for paraffin sections: immunocytochemical and biochemical studies. Lab Invest 66(1):75A, 1992
8. Tsue TT, Watling DL, Coltrera MD, Rubel EW: Distribution of the proliferating cell nuclear antigen (PCNA) in cells of the avian vestibular epithelium. Assoc Res Oto 15:107, 1992
9. Wang J, Coltrera MD, Skelly MM, Gown AM: Cell proliferation in soft tissue sarcomas: analysis of platelet-derived growth factor B chain expression at the protein and mRNA level, and association with p53 overexpression. Lab Invest 68(1):11A, 1993
10. Palanca-Wessels MCA, Coltrera MD, Skelly MM, Gown AM: Immunocytochemical detection of statin, a nuclear protein of G<sub>0</sub> phase, in deparaffinized, methacarn-fixed human breast cancer tissues. Lab Invest 68(1):18A, 1993
11. Coltrera MD, Skelly MM, Gown AM: Discordance between PCNA indices of human tumors using two different anti-PCNA antibodies in formalin and methacarn-fixed, deparaffinized tissues. Lab Invest 68(1):136A, 1993
12. Tsue TT, Coltrera MD, Rubel EW: Proliferative activity in the normal and regenerating avian vestibular system: an autoradiographic pulse-fix study. Assoc Res Oto 16:29, 1993

13. Mathison SM, Coltrera MD: Expression of Statin, a 57 kD protein associated with cell cycle phase G<sub>0</sub>, in tumors and normal tissues of the head and neck. Assoc Res Oto 16:148, 1993
14. Mathison SM, Gown AM, Coltrera MD: NCAM expression in esthesioneuroblastoma and nasal cavity tissues. Otolaryngol Head Neck Surg 109(2):237, 1993
15. Zee SY, Coltrera MD, Gown AM: Immunocytochemical detection of mdm-2, a p53-binding protein, in a subset of human breast carcinomas. Lab Invest 70(1):25a, 1994
16. Rogerson L, Alpers CE, Lindner V, Coltrera MD, Gown AM: Expression of bFGF in metastatic melanoma. Lab Invest 70(1):40A, 1994
17. Bhave SA, Rubel EW, Coltrera MD: Expression of PCNA and Statin in regenerating chick cochlea. Assoc Res Oto 17:131A, 1994
18. Wang J, Coltrera MD, Gown AM: Loss of p110 expression in tissue sections of human soft tissue sarcomas correlates with tumor grade and cell proliferation index. Proc Amer Assoc Cancer Res 35:238, 1994
19. Coltrera MD, Gown AM: TNFa expression in tumors of the head and neck. Assoc Res Oto 18:52, 1995
20. Cell Proliferation assessment in tissue sections by histone (H3) mRNA in situ hybridization: comparison with Ki-67 antigen expression and flow cytometrically determined S phase fraction. Lab Invest 72(1):20A, 1995
21. Localization of histone (H3) mRNA by in situ hybridization: comparison with bromodeoxyuridine uptake in animal tissues and human cell lines. Lab Invest 72(1):139A, 1995
22. Bhave SA, Oesterle EC, Coltrera MD: Macrophages and microglia in regenerating sensory epithelia. Assoc Res Oto 19:199, 1996
23. Oesterle EC, Bhave SA, Coltrera MD: bFGF inhibits cell proliferation in cultured inner-ear sensory epithelia. Assoc Res Oto 19:198, 1996
23. Winberg G, McDougall JK, Coltrera MD: Expression of Epstein-Barr Virus membrane proteins LMP1, LMP2A and LMP2B in human keratinocytes. Assoc Res Oto 19:52, 1996
24. Hernandez R, Coltrera MD, King M-C, Laird C, Gown AM: Monoclonal antibodies (Mabs) to the C-terminal portion of the BRCA-1 protein show loss of protein in sporadic ovarian cancer. Cancer Res 37:593, 1996
25. Coltrera MD, MacDonald GH, Rubel EW: Histone 3 in situ hybridization in streptomycin damaged whole mount utricles. Assoc Res Oto 20:52, 1997
26. Coltrera MD, Gown AM: Abnormal expression of the cystic fibrosis transmembrane regulator (CFTR) in chronic sinusitis. Assoc Res Oto 21:166, 1998
27. Gleich LL, Gluckman JL, Hanna E, Suen JY, Villaret DB, Coltrera MD, Wolf GT, Gapany M, Castro DJ, Gillespie D: Alloantigen gene therapy for squamous cell carcinoma of the head and neck. Cancer Invest 16 (Suppl. 2); 1998

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#### Book Chapters

1. Coltrera MD, Cummings CW: Retromolar Carcinoma. In Surgery of the Oral Cavity, Chapter 20, Byron J. Bailey (ed). St. Louis, Year Book Medical Publishers, Inc., 1988
2. Coltrera MD: The Biology of Malignancy. In Otolaryngology - Head and Neck Surgery, Supplement 2, Charles W. Cummings (ed). St. Louis, C.V. Mosby Publishing Co., 1990
3. Coltrera MD: Nutrition in Head and Neck Cancer. In Complications in Head and Neck Surgery, Chapter 2, David W. Eisele (ed). Philadelphia, B.D. Decker, 1993
4. Coltrera MD: Advances in Head and Neck Pathology. In Renewal of Certification Study Guide in Otolaryngology-Head and Neck Surgery, Jack Gluckman (ed). American Academy of Otolaryngology-Head and Neck Surgery, American Board of Otolaryngology. Dubuque, Kendall/Hunt, 1998
5. Coltrera MD: Thyroid Function Tests. In Diagnostic Tests in Otolaryngology-Head and Neck Surgery, Douglas E. Mattox (ed). New York, Igaku-Shoin, 1998
6. Coltrera MD: Carcinoma of the Larynx. Current Concepts in Head and Neck Cancer, Jeffrey Spiro, Bruce H. Campbell (eds). New York, American Cancer Society, 2000
7. Laramore G, Coltrera MD: Tumors of the Head and Neck. In Clinical Oncology: A Multidisciplinary Approach for Physicians and Students, Philip Rubin (ed). Philadelphia, W.B. Saunders, 2001
8. Coltrera MD: Avoiding complications in microvascular surgery. In Head and Neck Reconstruction with Microvascular Application, Brian B. Berkey, Neal D. Futran (eds). New York, Thieme, 2003
9. Laramore G, Coltrera MD: Organ preservation strategies in the treatment of laryngeal cancer. In Current Treatment Options in Oncology, Tobin Sharp (ed). Philadelphia, W.B. Saunders, 2005
10. Coltrera MD: Nutrition in Head and Neck Cancer. In Complications in Head and Neck Surgery, Chapter 2, David W. Eisele (ed). Philadelphia, B.D. Decker, 2007
11. Coltrera MD: Essential Physics of Ultrasound In Head and Neck Ultrasound, Lisa Orloff (ed). San Diego, Plural Publishing, 2008

#### Patents (medical-related)

1. Coltrera MD: Coordinating, auditing, and controlling multi-site data collection without sharing sensitive data. Patent App# 10/849,681. :Filed 05/19/2004, granted 09/26/2008

#### Book reviews, Editorials, Audio/Visual

1. Coltrera MD: Anti-proliferating cell nuclear antigen (PCNA) immunocytochemistry in soft-tissue sarcomas of the head and neck. Audio Digest Oto 24:8, 1991
2. Coltrera MD: The basic science of oncology (IF Tannock, RP Hill, eds.)- book review. Head Neck, 15:277-78, 1993

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#### Meeting Presentations

1. D-amino acid parathyroid hormone; effects of substitution at the carboxy- and amino-terminal regions. American Society Bone and Mineral Research, June, 1979
2. Identification of a renal receptor for parathyroid hormone by photoaffinity radioligand labeling. Endocrine Society, June, 1981
3. Normality of the input immittance of middle ears from human cadavers. Association for Research in Otolaryngology, St. Petersburg, February, 1988
4. Lower trapezius myocutaneous island flap. Second International Conference on Head and Neck Cancer, August, 1988
5. Monoclonal antibodies to PCNA/Cyclin can be used to obtain cell kinetic information in fixed embedded tissues. International Academy of Pathology. San Francisco, March, 1989
6. Failure of physiologic parameters as predictors of acute upper airway obstruction. American Broncho-Esophagological Association. San Francisco, April, 1989
7. Cadaver middle ears as models for living ears. American Otological Society. San Francisco, April, 1989
8. Head and neck tumor cell kinetics can be studied in fixed, embedded tissue using monoclonal antibodies to PCNA/cyclin. American Society for Head and Neck Surgery. San Francisco, April, 1989
9. PCNA/cyclin expression and BrdU uptake define different subpopulations of cells in different cell lines. American Society for Cell Biology. Houston, November, 1989
10. Clinical application of anti-PCNA immunocytochemistry in soft tissue sarcomas of the head and neck. American Society for Head and Neck Surgery. Palm Beach, April 1990
11. Comparison of two putative markers of premalignant change in the oral cavity. Third International Head and Neck Oncology Research Conference. Las Vegas, September 1990
12. SPO15, an essential gene for meiosis in the yeast, is homologous to the microtubule binding protein, dynamin. American Society for Cell Biology. San Diego, December 1990
13. Suprabasal expression of PCNA/Cyclin, and not cytokeratin 19, is a marker of premalignancy in the oral cavity. United States and Canadian Academy of Pathology. Chicago, March 1991
14. Laryngeal synkinesis following reinnervation in the rat; a neuroanatomic and physiologic study using retrograde fluorescent tracers and electromyography. American Laryngological Association. Kona, May 1991
15. Complex alterations to cell cycle regulation mediated by HPV16 oncoproteins in organotypic culture. American Society for Cell Biology. Boston, December 1991
16. Overexpression of p53 in head and neck cancer. Association for Research in Otolaryngology. St. Petersburg, February 1992
17. Distribution of the proliferating cell nuclear antigen (PCNA) in cells of the avian vestibular epithelium. Association for Research in Otolaryngology. St. Petersburg, February 1992
18. p53 is overexpressed in a wide range of malignant, but not benign, human tumors: an immunocytochemical study. United States and Canadian Academy of Pathology. Atlanta, March 1992

19. Characterization of TXM4, a new pan-hematolymphoid monoclonal antibody for paraffin sections: immunocytochemical and biochemical studies. United States and Canadian Academy of Pathology. Atlanta, March 1992
20. Proliferation markers in head and neck cancer: recurrence and survival. Third International Conference on Head and Neck Cancer. San Francisco, July 1992
21. Proliferative activity in the normal and regenerating avian vestibular system: an autoradiographic pulse-fix study. Association for Research in Otolaryngology. St. Petersburg, February 1993
22. Expression of Statin, a 57 kD protein associated with cell cycle phase G<sub>0</sub>, in tumors and normal tissues of the head and neck. Association for Research in Otolaryngology. St. Petersburg, February 1993
23. Statin, a nuclear protein associated with G<sub>0</sub> phase, as a marker of clinical outcome in human breast cancer. Western Student Medical Research Forum. Santa Barbara, February 1993
24. Discordance between PCNA indices of human tumors using two different anti-PCNA antibodies in formalin and methacarn-fixed, deparaffinized tissues. United States and Canadian Academy of Pathology. New Orleans, March 1993
25. Immunocytochemical detection of statin, a nuclear protein of G<sub>0</sub> phase, in deparaffinized, methacarn-fixed human breast cancer tissues. United States and Canadian Academy of Pathology. New Orleans, March 1993
26. Cell proliferation in soft tissue sarcomas: analysis of platelet-derived growth factor B chain expression at the protein and mRNA level, and association with p53 overexpression. United States and Canadian Academy of Pathology. New Orleans, March 1993
27. NCAM expression in esthesioneuroblastoma and nasal cavity tissues. American Academy of Otolaryngology-Head and Neck Surgery. Minneapolis, October 1993
28. Expression of PCNA and Statin in regenerating chick cochlea. Association for Research in Otolaryngology. St. Petersburg, February 1994
29. Expression of bFGF in metastatic melanoma. United States and Canadian Academy of Pathology. San Francisco, March 1994
30. p53 and mdm-2 expression in malignant melanoma. Western Student Medical Research Forum. Santa Barbara, February 1994
31. Immunocytochemical detection of mdm-2, a p53-binding protein, in a subset of human breast carcinomas. United States and Canadian Academy of Pathology. San Francisco, March 1994
32. Loss of p110 expression in tissue sections of human soft tissue sarcomas correlates with tumor grade and cell proliferation index. American Association for Cancer Research, San Francisco, April 1994
33. Tumor necrosis factor alpha in head and neck tumors. Association for Research in Otolaryngology. St. Petersburg, February 1995
34. Cell Proliferation assessment in tissue sections by histone (H3) mRNA in situ hybridization: comparison with Ki-67 antigen expression and flow cytometrically determined S phase fraction. United States and Canadian Academy of Pathology. Toronto, March 1995
35. Localization of histone (H3) mRNA by in situ hybridization: comparison with bromodeoxyuridine uptake in animal tissues and human cell lines. United States and Canadian Academy of Pathology. Toronto, March 1995

36. Expression of Epstein-Barr Virus membrane proteins LMP1, LMP2A and LMP2B in human keratinocytes. Association for Research in Otolaryngology. St. Petersburg, February 1996
37. Macrophages and microglia in regenerating inner ear sensory epithelia. Association for Research in Otolaryngology. St. Petersburg, February 1996
38. bFGF inhibits cell proliferation in cultured inner-ear sensory epithelia. Association for Research in Otolaryngology. St. Petersburg, February 1996
39. Photoshop-based image analysis for the semi-automated assessment of Ki-67-defined proliferative activity in the routine diagnosis of breast cancer. United States and Canadian Academy of Pathology. Washington, D.C., April 1996
40. Monoclonal antibodies (Mabs) to the C-terminal portion of the BRCA-1 protein show loss of protein in sporadic ovarian cancer. American Association for Cancer Research. Washington, D.C., April 1996
41. Epstein Barr virus (EBV) latent membrane protein gene-induced changes in keratinocyte cell adhesion and proliferation: a model for nasopharyngeal carcinoma. Fourth International Conference on Head and Neck Cancer. Toronto, July 1996
42. Salivary gland tumors: biological considerations. Fourth International Conference on Head and Neck Cancer. Toronto, July 1996
43. Clinical considerations in hypopharyngeal cancer. Fourth International Conference on Head and Neck Cancer. Toronto, July 1996
44. Apoptosis in normal and malignant tissues of the head and neck. Fourth International Conference on Head and Neck Cancer. Toronto, July 1996
45. Histone 3 in situ hybridization in streptomycin damaged whole mount utricles. Association for Research in Otolaryngology. St. Petersburg, February 1997
46. Head and neck cancer staging systems. Pacific Coast Oto-Ophthalmological Society. San Diego, June 1997
47. A staging system for assessing severity of disease and response to therapy in recurrent respiratory papillomatosis. Triologic Society, southern section. Orlando, January 1998
48. Abnormal expression of the cystic fibrosis transmembrane regulator (CFTR) in chronic sinusitis. Association for Research in Otolaryngology. St. Petersburg, February 1998
49. Histology: a prognostic indicator for SCC of the mouth. American Association for Dental Research. Minneapolis, March 1998
50. Microvascular free flap reconstruction of facial trauma. Trauma Care 1998. Seattle, March 1998
51. Neutron beam radiation therapy for salivary gland neoplasms. Pacific Coast Oto-Ophthalmological Society. Kauai, June 1998
52. Telomerase expression in aerodigestive tract keratinocytes is insufficient for suppression of senescence. Fifth Research Workshop on the Biology and Treatment of Head and Neck Cancer. Washington, August 1998
53. Alloantigen gene therapy for squamous cell carcinoma of the head and neck. Chemotherapy Foundation Symposium XVI. New York, November 1998

54. Epstein Barr virus latent membrane protein expression affects proliferation/apoptotic pathways in keratinocytes and demonstrates tissue specificity. Association for Research in Otolaryngology. St. Petersburg, February 1999
55. Hair cell damage resulting from application of a single dose of gentamicin to the round window of the mouse cochlea. Association for Research in Otolaryngology. St. Petersburg, February 1999
56. Hair cell regeneration in the inner ear: what's wrong with us. Hearing science for practicing otologists. Beijing, May 1999
57. SCC/BCC of the skin: The role for neck dissection. Pacific Coast Oto-Ophthalmological Society. Victoria, June 1998
58. Expression of EPC-1, a quiescent-state cell cycle marker, in mouse cochlea and vestibular sensory epithelia. Association for Research in Otolaryngology. St. Petersburg, February 2000
59. A database for multi-center international head and neck cancer trials. Fifth International Head and Neck Cancer Conference. San Francisco, August 2000
60. Hypopharyngeal cancer. Fifth International Head and Neck Cancer Conference. San Francisco, August 2000
61. Quantitative immunohistochemistry with antibodies to phosphorylated histone 3: a novel method to identify mitotic cells in tissue sections. 23rd Annual San Antonio Breast Cancer Symposium. San Antonio, December 2000
62. Multi-site databases for pediatric urology studies (keynote for Pediatric Urology Section). American Academy of Pediatrics. New Orleans, September 2003
63. American Academy of Otolaryngology Ultrasound Course. New York, September 2004
64. Otobase implementation meeting for national head and neck cancer network in Turkey (two day course). Ankara, February 2005
65. American Academy of Otolaryngology Ultrasound Course. Los Angeles, September 2005
66. Otobase implementation meeting for national head and neck cancer network in New Zealand (two day course). Auckland, February 2006

---Meeting presentations no longer listed. Available on request---

#### Postgraduate Research Students

David L. Watling, MD	1991-92
Winston Y-F Huang, DDS	1991-92
Susan M. Mathison, MD	1992-93
Greg Farwell, MD	1995-96
Jennifer Heydt, MD	1998-99
Henry Ou, MD	1999-2000