

CURRICULUM VITAE
Carol M. Bier-Laning, M.D.

PERSONAL DATA

Address:

Office: Department of Otolaryngology
Loyola University Medical Center
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Maywood, IL 60153
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Board Certification: American Board of Otolaryngology -3/26/96 #4810

Medical License: State of Ohio - expires 7/1/05 #71880
State of Illinois - expires 7/31/05 #036-102148

EDUCATION

Milton Senior High School
Milton, Wisconsin
Graduated May, **1979**

University of Wisconsin-Madison
Madison, Wisconsin
B.S.-Medical Technology August, **1983**

University of Colorado Medical School
Denver, Colorado
M.D. May, **1989**

University of Minnesota
Minneapolis, Minnesota
M.S.-Otolaryngology June, **1995**
Thesis Title: Gentamicin Ototoxicity: A Comparison of Distortion
Product Otoacoustic Emissions and Electrophysiologic Measures

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POSTGRADUATE EDUCATION

Department of Surgery
University of Minnesota
Minneapolis, Minnesota
General Surgery Resident **1989-1991**

Department of Otolaryngology
University of Minnesota
Minneapolis, Minnesota
Otolaryngology Resident **1991-1995**

Department of Otolaryngology
Arthur G. James Cancer Hospital and Research Institute
The Ohio State University
Columbus, Ohio
Head and Neck Oncology Fellow **1995-1996**

The Ohio State University
Columbus, Ohio
Postdoctoral Research Fellow **1996-1997**, funded by the National Cancer Institute,
National Research Service Award CA-09338, Division of Cancer Prevention & Control

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WORK HISTORY

Monitoring Technician
Department of Anesthesiology
University Hospital
Madison, WI **8/83-8/84**

Laboratory Technician
Department of Pharmacology
University of Colorado
Denver, CO **10/84-8/85**

Assistant Professor
Department of Otolaryngology-Head and Neck Surgery
The University of Texas Southwestern Medical Center
Dallas, TX **8/97-7/99**

Birth of our 3rd child and full-time parenting
8/99-9/00

Clinical Assistant Professor
Department of Otolaryngology
Loyola University Medical Center
Maywood, IL **10/00-present**

Staff Otolaryngologist
Edward Hines, Jr. VA Hospital
Hines, IL **10/00-present**

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HONORS

Elected Phi Kappa Phi Honor Society,
University of Wisconsin, 1982

Graduated with Distinction,
University of Wisconsin, 1983

Subspecialty Award in Aging
Western Section, American Federation for Clinical Research/
Western Society for Clinical Investigation, 1987

Elected Alpha Omega Alpha Honor Society, Junior Year,
University of Colorado, 1988

Awarded Cecil J. Watson Award for outstanding research achievement
by a resident in clinical medicine,
University of Minnesota, 1995

Selected to receive Postdoctoral Training Fellowship, 1996-7, funded by the
National Research Service Award CA-09338 awarded to The Ohio State
University

MEMBERSHIPS

Alpha Omega Alpha, 1988-present

American Academy of Otolaryngology-Head and Neck Surgery, 1991-present

The Triological Society, Post-Graduate Fellow, 1996-present

American Head and Neck Society, Candidate Member, 1997-present

Chicago Laryngological and Otological Society, 2001-present

American Board of Otolaryngology, 1996-present

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HOSPITAL AFFILIATIONS

Edward Hines, Jr. Veterans Administration Hospital, Hines, IL Attending staff

COMMITTEES

Cancer Committee, Hines VA Hospital, Hines, IL
Education Committee, Department of Otolaryngology, Loyola University Medical Center

COURSES ATTENDED

Pedicled and Free Tissue Transfers for Head and Neck Reconstruction

Course Directors: Hugh Biller, M.D., Mark Urken, M.D.,
Juan Moscoso, M.D.

Department of Otolaryngology
Mount Sinai School of Medicine
New York, New York March, 1995

Beyond Parity: Transforming Academic Medicine Through Women's Leadership

Joint Sponsors: University of Illinois at Chicago, Center for Research on Women
and Gender, National Center of Excellence in Women's Health

Office on Women's Health, Region V and
U.S. Department of Health and Human Services (DHHS)
Chicago, Illinois September, 2002

VA Cooperative Studies Program Randomized Clinical Trials Course

Sponsor: VA Cooperative Studies Program
Chicago, Illinois April, 2003

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RESEARCH

PAST FUNDING AND RESEARCH EXPERIENCE

Rhone-Poulenc Rorer, Collegeville, PA
A Phase II, Multi-Center, Open Label Study to Evaluate Effectiveness and Safety of
AD5CMV-*p53* Administered by Intra-Tumoral Injections in 39 Patients with Recurrent
Squamous Cell Carcinoma of the Head and Neck
C. M. Bier-Laning is PI
March 1998 – July 1999; contractual studies

CURRENT FUNDING AND RESEARCH EXPERIENCE

Medical Research Service, Department of Veterans Affairs, Washington, D.C.
In situ-activated immunotherapy to block post-surgical cancer recurrence
M. Rita I. Young is PI, **C. M. Bier-Laning** is collaborator
April 2002 - March 2006; \$554,500

Introgen Therapeutics, Inc., Houston, TX

A Phase III, Multi-Center, Open-Label, Randomized Study to Compare the Overall
Survival and Safety of Bi-Weekly Intratumoral Administration of INGN 201 Versus
Weekly Methotrexate in 240 Patients with Refractory Squamous Cell Carcinoma of the
Head and Neck (SCCHN) [T301]
C. M. Bier-Laning is PI
July 2003-present; contractual studies

National Institutes of Health, Bethesda, MD; 1 R21 CA111950-01
Induction of the apoptotic program triggers LOH
Andrew T. M. Vaughan is PI, **C. M. Bier-Laning** is coinvestigator
October 2004- September 2006; \$200,000
Submitted, awaiting review

CURRENT PROJECTS

Basic research:

LOH in squamous cell carcinoma after arrest of apoptosis

Clinical projects:

Role of nutritional support in patients treated for head and neck squamous cell carcinoma
Use of PET scanning in evaluation of head and neck squamous cell carcinoma
p53 gene therapy in patients with end stage head and neck squamous cell carcinoma

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INVITED LECTURES

Management of Melanoma of the Head and Neck
Chicago Medical Society Annual Midwest Clinical Conference
Chicago, IL March 2002

POSTERS AND PRESENTATIONS

Bier-Laning CM, Nies AS, Gerber JG, Zahniser NR. Differential regulation of leukocyte beta-adrenergic receptors in the young and the elderly. Paper presented at the Western Section, American Federation for Clinical Research/Western Society for Clinical Investigation; 1987 Feb; Carmel (CA).

Bier-Laning CM, Adams GL. Patterns of recurrence after CO₂ laser excision of intraoral squamous cell carcinoma. Paper presented at the American Society for Head and Neck Surgery 35th Annual Meeting; 1993 Apr; Los Angeles (CA).

Bier-Laning CM, Morizono T, Levine SC. Correlation of distortion product otoacoustic emissions with compound action potentials and auditory brainstem responses in guinea pigs treated with gentamicin. Poster presented at the American Academy of Otolaryngology-Head and Neck Surgery 97th Annual Meeting-Research Forum; 1993 Oct; Minneapolis (MN).

Bier-Laning CM, Hom DB, Gapany M, Manivel JC, Duvall AJ III. Microcystic adnexal carcinoma: Management options based on long-term follow-up. Paper presented at the Middle Section Meeting, The Triological Society; 1995 Jan; Omaha (NB).

Bier-Laning CM, Levine SC, Morizono T. Effects of furosemide on compound action potential and distortion product otoacoustic emissions in guinea pigs. Poster presented at the Association for Research in Otolaryngology Midwinter Meeting; 1995 Feb; St. Petersburg Beach (FL).

Bier-Laning CM, Wiet G, Stredney D, Yagel R, Schmalbrock P, Smith J Jr, Schuller DE. Evaluation of a high performance computing technique for cranial base tumor visualization. Poster presented at the Fourth International Conference on Head and Neck Cancer; 1996 Jul; Toronto, Canada.

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POSTERS AND PRESENTATIONS (cont)

Bier-Laning CM, Tobin E, Nicholson R, Mountain R, Schuller DE, Lang J. Overexpression of cyclin D1 and *c-myc* in squamous cell carcinoma of the head and neck. Paper presented at the Fourth International Conference on Head and Neck Cancer; 1996 Jul; Toronto, Canada.

Bier-Laning CM, Johnson A, Au JL-S. Relationship between p16 and Taxol effects. Paper presented at the Fifth Research Workshop on the Biology, Prevention and Treatment of Head and Neck Cancer; 1998 Aug; McLean (VA).

Bier-Laning CM, VanEcho D, Yver A, Dreiling LK. A phase II multi-center study of AD5CMV-p53 administered intratumorally to patients with recurrent head and neck cancer. Poster presented at the 35th American Society of Clinical Oncology Annual Meeting; 1999 May; Atlanta (GA).

Bier-Laning CM, Kim LT. Characterization of focal adhesion kinase (FAK) in tumor cell lines. Poster presented at the 5th International Conference on Head and Neck Cancer; 2000 July; San Francisco (CA).

Bier-Laning CM, Schroeder ML, Young MRI. Focal adhesion proteins and their role in tumor invasion and metastasis. (Work with Lewis Lung Carcinoma). Poster presented at The Annual Hines, Loyola, North Chicago VA, Chicago Medical School Research Poster Session, Hines VA Hospital; 2002 Apr; Hines (IL).

Bier-Laning CM, Schroeder ML, Young MRI. Cellular invasion differences are associated with differences in FAK and Src in normal keratinocytes versus malignant squamous cells (SCC VII/SF). Paper presented at the Sixth Research Workshop on the Biology, Prevention and Treatment of Head and Neck Cancer; 2002 October; McLean (VA).

Bier-Laning CM, Bien C, Young MRI. Focal adhesion proteins and their role in tumor invasion and metastasis. (Work with SCC VII/SF). Poster presented at The Annual Hines, Loyola, North Chicago VA, Chicago Medical School Research Poster Session, Hines VA Hospital; 2003 Apr; Hines (IL).

Bier-Laning CM, Bien C, Vaughan ATM. Initiation of the apoptotic pathway by radiation triggers damage at 11q23 in FaDu cells. Poster to be presented at the 6th International Conference on Head and Neck Cancer; 2004 Aug; Washington, D.C.

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Bier-Laning CM, Petruzzelli G, Muzaffar K. Treatment of the contralateral neck in T1/T2 squamous cell carcinoma of the oral tongue. Poster to be presented at the 6th International Conference on Head and Neck Cancer; 2004 Aug; Washington, D.C.

Bier-Laning CM, Choudhury A, Foley S, Hintzke C, Wallner S, Slavik L, Lees A. Morbidity of treatment-related malnutrition in head and neck cancer patients. Poster to be presented at the 6th International Conference on Head and Neck Cancer; 2004 Aug; Washington, D.C.

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POSTERS AND PRESENTATIONS (cont)

Zahniser NR, Parker DC, **Bier-Laning CM**, Miller JA, Gerber JG, Nies AS. Effects of aging on antagonist and agonist interactions with beta-adrenergic receptors on human leukocyte membranes. Federation of American Societies for Experimental Biology 70th Annual Meeting; 1986 Apr; St. Louis (MO).

Zahniser NR, **Bier-Laning CM**, Gerber JG, Nies AS. Timolol-induced regulation of leukocyte beta-adrenergic receptors in the young and elderly. Paper presented at the Xth International Congress of Pharmacology; 1987 Aug; Sydney, Australia.

Gapany M, Goswitz J, **Bier-Laning CM**, Adams GL. p53 in early oral squamous cell carcinoma: Immunohistochemical study. Poster presented at the Fourth Research Workshop on the Biology, Prevention, and Treatment of Head and Neck Cancer; 1994 Sep; Arlington (VA).

Tobin E, Weghorst C, Borchers J, Knobloch T, Repasky M, **Bier-Laning CM**, Schuller DE, Lang J. Expression of tumor suppressor genes p16 and RB in squamous cell carcinoma of the head and neck. Paper presented at the Fourth International Conference on Head and Neck Cancer; 1996 Jul; Toronto, Canada.

Karanfilov B, **Bier-Laning CM**, Schuller DE, Siegle RJ, Pellegrini A, Young D, Bellisari G, Miller R. Histologically-determined therapy for early stage oral cancers. Paper presented at the 100th Annual Meeting of the Triological Society; 1997 May; Scottsdale (AZ).

Kim LT, Wu J, **Bier-Laning C**, Turnage RH. Keratinocyte activation is associated with decreased phosphorylation of the EGF receptor. Poster presented at the European Tissue Repair Society/Wound Healing Society Joint Meeting; 1999 Aug; Bordeaux, France.

Kim LT, Wu J, **Bier-Laning C**, Turnage RH. Integrin-dependent signaling is enabled during keratinocyte activation. Paper presented at the Association for Academic Surgery; 1999 Nov; Philadelphia (PA).

Kapadia LA, **Bier-Laning CM**. Benefit of single modality therapy to the primary in advanced stage SCCa of the tonsil. Paper presented at the Southern Section Meeting, The Triological Society; 2000 Jan; St. Petersburg (FL).

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POSTERS AND PRESENTATIONS (cont)

Nemunaitis J, Goodwin WJ, **Bier-Laning C**, Hamm J, Clayman G, Van Echo DA, Banks PLC, Wilson DR, Merritt JA. Intratumoral adenoviral-mediated p53 gene transfer is associated with a survival advantage in recurrent squamous cell cancer of the head and neck (SCCHN) based on a dose response model using phase 2 data. Poster presented at AACR; 2002 Apr; San Francisco (CA).

Lathers DMR, Achille NJ, **Bier-Laning C**, Petruzzelli GJ, Young MRI. Plasma levels of immune modulating cytokines in head and neck squamous cell carcinoma patients. Paper presented at The Sixth Research Workshop on the Biology, Prevention and Treatment of Head and Neck Cancer; 2002 Oct; McLean (VA).

Banich JC, **Bier-Laning CM**, Reyes CV. Sebaceous lymphadenoma identified by FNA. Poster presented at the Middle Section Meeting, The Triological Society; 2003 Jan; Indianapolis (IN).

Lathers DMR, Achille NJ, Petruzzelli G, **Bier-Laning C**, Young MRI. Plasma levels of immune modulating cytokines in head and neck squamous cell carcinoma patients. Poster presented at the American Association of Immunologists; 2003 May; Denver (CO).

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PUBLICATIONS

Cooper DMF, **Bier-Laning CM**, Halford MK, Ahlijanian MK, Zahniser NR. Dopamine, acting through D-2 receptors, inhibits rat striatal adenylate cyclase by a GTP-dependant process. *Mol Pharmacol* 1986;29:113-119.

Zahniser NR, Parker DC, **Bier-Laning CM**, Miller JA, Gerber JG, Nies AS. Comparison between the effects of aging on antagonist and agonist interactions with beta-adrenergic receptors on human mononuclear and polymorphonuclear leukocyte membranes. *J Gerontol* 1988;43:151-157.

Zahniser NR, **Bier-Laning CM**, Gerber JG, Nies AS. Timolol-induced up regulation of polymorphonuclear leukocyte β_2 -adrenergic receptors in the elderly. *Clin Pharmacol Ther* 1989;45:469-75.

Hitzemann R, Dains K, **Bier-Laning CM**, Zahniser NR. On the selection of mice for haloperidol response and non-response. *Psychopharmacol* 1991;103:244-250.

Bier-Laning CM, Adams GL. Patterns of recurrence after CO₂ laser excision of intraoral squamous cell carcinoma. *Arch Otolaryngol Head Neck Surg* 1995; 121 :1239-1244.

Bier-Laning CM, Hom DB, Gapany M, Manivel JC, Duvall AJ III. Microcystic adnexal carcinoma: Management options based on long-term follow-up. *Laryngoscope* 1995;105:1197-1201.

Schuller DE, **Bier-Laning CM**. Resection of lesions of the base of the tongue. *Proceedings of the 4th International Conference on Head and Neck Cancer* 1996;4:873-878.

Schuller DE, Mountain RE, Nicholson RE, **Bier-Laning CM**, Powers B, Repasky M. One stage reconstruction of partial laryngopharyngeal defects. *Laryngoscope* 1997;107:247-253.

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PUBLICATIONS (cont)

Schuller DE, **Bier-Laning CM**. Laryngeal carcinoma nodal metastases and their management. *Otolaryngol Clinics North Am* 1997;30:167-177.

Bier-Laning CM. Surgical Complications. In: Cummings CW, Fredrickson JM, Harker LA, Krause CJ, Richardson MA, Schuller DE, editors. *Otolaryngology Head and Neck Surgery*. 3rd ed. Philadelphia, PA: Mosby; 1997:1811-1820.

Schuller DE, **Bier-Laning CM**, Sharma PK, Siegle RJ, Pellegrini AE, Karanfilov B, Bellisari G, Miller R, Young DC. Tissue conserving surgery for prognosis, treatment, and function preservation. *Laryngoscope* 1998;108:1599-1604.

Danahey DG, Tobin EJ, Schuller DE, **Bier-Laning CM**, Weghorst CM, Lang JC. p16 mutation frequency and clinical correlation in head and neck cancer. *Acta Oto-Laryngologica* 1999;119:285-8.

Kim LT, Wu J, **Bier-Laning CM**, Dollar BT, Turnage RH. Focal adhesion kinase up-regulation and signaling in activated keratinocytes. *J Surg Res* 2000;91:65-69.

Bier-Laning CM. Surgical Complications. In: Cummings CW, Fredrickson JM, Harker LA, Krause CJ, Richardson MA, Schuller DE, editors. *Otolaryngology Head and Neck Surgery*. 4th ed. Philadelphia, PA: Mosby; in press.