

COLLEGE OF MEDICINE CURRCULUM VITAE

John H. Lee, MD
August 9, 2007

I. EDUCATIONAL AND PROFESSIONAL HISTORY

A. List of Institutions Attended

Education

1986-1990 B.S. (Honors) Stanford University, Stanford, CA
1990-1995 M.D. University of Minnesota - School of Medicine Minneapolis, MN

Honors, Awards, Recognitions, Outstanding Achievements

1989 American Heart Association Fellowship Recipient, Stanford University, Stanford, CA
1993 Howard Hughes Medical Fellowship Recipient, University of Minnesota School of Medicine, Minneapolis, MN
2006 Scientific Committee and Moderator for HPV related head and neck cancer at the International Papillomavirus Conference
2007 Fanconi Anemia Research Fund Award, American Head and Neck Society

B. Professional and Academic Positions Held

1995-2002 Resident/ Fellow University of Iowa Hospitals and Clinics –
Department of Otolaryngology Iowa City, IA
2002-present Assistant Professor, Department of Otolaryngology Iowa City, IA
2002-present Chief of VAMC Otolaryngology Services, Iowa City, IA

C. Certification and Licensure

American Board of Otolaryngology Certification, Spring 2003
Federal DEA No. BL4884981
Iowa State Controlled Substance No. 1237521
Iowa Medical License, since 1996 No. 31332

II. Clinical Activities

A. Inpatient

Operating Room, Department of Otolaryngology-Head and Neck Surgery, University of Iowa, Iowa City, Iowa – Approximately 8-10 hours per week

VAMC, Otolaryngology Department, Iowa City, Iowa – ½ clinic day ½ OR day

Inpatient Care, Department of Otolaryngology-Head and Neck Surgery, University of Iowa, Iowa City, Iowa – Care of Ward Patients and Inpatient Consults, approximately 10 hours per week

B. Outpatient

Outpatient Care, Department of Otolaryngology - Head and Neck Surgery, University of Iowa, Iowa City, Iowa (Approximately 10 hours per week)

C. Administrative

Chief of VAMC Otolaryngology Services, Veterans' Administration Medical Center, Iowa City, Iowa (Full time)

D. Research

Director of HPV Research Lab – Department of Otolaryngology, University of Iowa, Iowa City, Iowa (35 hours per week)

III. TEACHING AT THE UNIVERSITY OF IOWA

A. Teaching assignments on semester-by-semester basis

2002	Foundations of Clinical Practice I, Spring semester
2003	Foundations of Clinical Practice II, Fall semester
2002, Spring	Medical student interviews
2002	Basic Science Course lecturer on, "Non-neoplastic Salivary gland disease" and "HPV Manifestations in ENT"
2002-2007	Personal and professional development, Fall semester
2003, Fall	Medical student interviews

B. Graduate Students Supervised

Thesis Advisory Committee

Jonathan Bock, M.D.
Dr. Lam-ubol, M.D.
Guinevere Strand

Rhinology Fellows

2002	Christopher L. Brown, M.D.
2003	Siew Shuen Chao, M.D.

Research Fellows

2001-2003	SuMin Yi, M.D.
2002-present	Chad Spanos, M.D.
2004	Siew Shuen Chao, M.D.
2005-present	George Harris MD

Otolaryngology Resident and Fellow Research Projects Supervised

2004	Mark El-Deiry, M.D.
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2007 Eugene Chang, M.D.

Medical Student Research Projects Supervised

2005 Ryan Dempewolf, Medical Student

2005-present Andrew Hoover, Medical Student (HHMI recipient)

IV. SCHOLARSHIP

A. Publications

Journal articles

Fasbender A, **Lee JH**, Walters RW, Moninger TO, Zabner J, Welsh MJ. Incorporation of adenovirus in calcium phosphate precipitates enhances gene transfer to airway epithelia in vitro and in vivo. *J Clin Invest* 1998 Jul 1;102(1):184-93.

Chillon M*, **Lee JH***, Fasbender A, Welsh MJ. Adenovirus complexed with polyethylene glycol and cationic lipid is shielded from neutralizing antibodies in vitro. *Gene Ther* 1998 Jul;5(7):995-1002. (*Equal contribution acknowledged)

Lee JH, Zabner J, Welsh MJ. Delivery of an adenovirus vector in a calcium phosphate coprecipitate enhances the therapeutic index of gene transfer to airway epithelia. *Hum Gene Ther* 1999 Mar 1;10(4):603-13.

Lee JH, Welsh MJ. Enhancement of calcium phosphate-mediated transfection by inclusion of adenovirus in coprecipitates. *Gene Ther* 1999 Apr; 6(4):676-82.

Lee JH, Baker TJ, Mahal LK, Zabner J, Bertozzi CR, Wiemer DF, Welsh MJ. Engineering novel cell surface receptors for virus-mediated gene transfer. *J Biol Chem* 1999 Jul 30; 274 (31):21878-84.

Yi SP*, **Lee JH***, Graham S, Zabner J, Welsh MJ. Adenovirus CaPi Coprecipitates Enhance Squamous Cell Carcinoma Gene Transfer *Laryngoscope* 2001 July vol. 111(7): 1290-6 (*equal contribution acknowledged)

Lee JH, Barich F, Karnell LH, Robinson RA, Zhen WK, Gantz BJ, Hoffman HT. NCDB report on Malignant Paraganglioma of the Head and Neck. *Cancer* 2002 Feb 1;94(3):730-7.

Smith EM, Ritchie JM, Summersgill KF, Klussmann JP, **Lee JH**, Wang DH, Haugen TH, Turek LP. Age, Sexual Behavior and Human Papillomavirus

Infection in Oral Cavity and Oropharyngeal Cancers. *Int J of Cancer* 2004 108:766-772.

Lee JH, Yi SP, Anderson ME, Berger KL, Welsh MJ, Klingelutz AJ, Ozbun MA. Propagation of Infectious Human Papillomavirus Type 16 Using a Novel Adenovirus and Cre/LoxP Mechanism. *PNAS* 2004 101(7):2094-2099.

Wemer R, Hoffman H, **Lee JH**, Robinson R. A Case of Progressive Dysplasia with Intralesional Cidofovir Administration for RRP. *Annals of Otolaryngology, Rhinology & Laryngology*. 2005 Nov;114(11):836-839.

Spanos WC, El-Deiry M, **Lee JH**. Cidofovir Incorporation into Human Keratinocytes with Episomal HPV 16 Results in Non-selective Cytotoxicity. *Annals of Otolaryngology, Rhinology & Laryngology*. 2005 114(11):840-846.

Kulkarni S, Lee A, and **Lee JH**. Sixth and tenth nerve palsy secondary to Pseudomonas infection of the skull base. *Am J Ophthalmol*. 2005 May;139(5):918-920.

Lee JH, Smith RJ. Recurrent Respiratory Papillomatosis: Pathogenesis to Treatment. *Current Opinion in Otolaryngology*. 2005 Dec;13(6):354-359.

James MA, **Lee JH**, Klingelutz AJ. Human Papillomavirus Type 16 E6 Activates NF- κ B, Induces cIAP-2 Expression, and Protects Against Apoptosis in a PDZ Binding Motif-Dependent Manner. *Journal of Virology*. 2006 March: 80(11).

James MA, **Lee JH**. HPV16-E6 associated hTERT promoter acetylation is E6AP dependent, increased in later passage cells, and enhanced by loss of p300. *International Journal of Cancer*. 2006 March.

Berger KL, Barriga F, Lace MF, Turek LP, Domann FE, **Lee JH**, Klingelutz AJ. Cervical keratinocytes containing stably replicating extrachromosomal HPV-16 are refractory to transformation by oncogenic H-Ras. *Virology*. 2006 Aug. 291(2):L175-80

Spanos WC, El-Deiry M, **Lee JH**. "Cidofovir Incorporation into Human Keratinocytes with Episomal HPV 16 Results in Nonselective Cytotoxicity." *Annals of Otolaryngology, Rhinology and Laryngology*. 2005 114(11):840-846.

Spanos WC, Geiger J, Anderson ME, Harris GF, Bossler A, Smith RB, Klingelutz A, **Lee JH**. "Deletion of the PDZ motif of HPV16 E6 prevents immortalization and anchorage independent growth in human tonsil epithelial cells." *Head and Neck Journal*. 2007 January, accepted and pending publication

Lee JH, "HPV16 E6 alone immortalizes, induces AIG, and synergizes with H-Ras to result in carcinogenic growth of MTEC's. The E6 PDZ motif is required for anchorage independent growth in vivo growth." *Archives of Otolaryngology* 2006 January, accepted and pending publication

Harris GF, Anderson ME, **Lee JH**. "Proteasome inhibition reverses E6-mediated

p53 degradation and decreases proliferation in tonsil epithelial cells.” Revised pending revisions, *Archives of Otolaryngology* 2007 February, accepted and pending publication

Smith EM, Wang D, Kim Y, Rubenstein LM, **Lee JH**, Haugen TH, Turek LP. “p16 (INK4a) Expression, human papillomavirus, and survival in head and neck cancer.” *Oral Oncology* 2007 March 12, published on Epub ahead of print.

Book Chapters

Graham SM, **Lee JH**. “Gene Therapy,” in *Scott-Brown’s Otorhinolaryngology: Head and Neck Surgery 7th Ed.*, M.J. Gleeson, Editor. 2007, Hodder Arnold: London. P. (004)1-11.

B. Areas of research interest

- 1986-1990 Student Scientist at Stanford University with Professor Marvin Karasek. My research focused on factors controlling endothelial angiogenesis.
- 1990 **Lee JH**. Factors Influencing Microvessel Angiogenesis. (Senior Honors Thesis)
- 1991-1993 Howard Hughes Medical Fellow and Research Assistant at the University of Minnesota with Professor Richard Linck. Using molecular and cell biology techniques, I identified and cloned a presumptive microtubule associated protein called Tektin in a unicellular protozoa, *chlamydomonas*.
- 1993-95 Research Assistant at the University of Minnesota with Professor Robert Nelson and Professor Stanley Erlandson. Completed a novel study examining four intracellular adhesion molecules on endothelial cells by high resolution scanning electron microscopy.
- 1996-2002 Otolaryngology Research Fellow in the Michael Welsh Lab at the University of Iowa. Research focused on overcoming obstacles of viral and plasmid mediated gene transfer.
- 2002-Present Independent Investigator focused on the mechanism of HPV related tonsil epithelial cell transformations

C. Other Special Presentations

Presentations by Invitation

Lee JH. “Developing an In Vitro Model of HPV-16 Infection”. Presented at Grand Rounds- University of Hawaii, Hawaii, 2003.

Lee JH. “Diagnosis and Treatment of Sinusitis”. Presented to the Department of Medicine, University of Iowa, Iowa City, IA, 2004.

Lee JH. “Diagnosis and Treatment of Sinusitis”. Presented to the Department of Family Practice, University of Iowa, Iowa City, IA, 2004.

Lee JH. “Creating an In Vitro and In Vivo Model of HPV 16 Infection”. Presented to the Department of Microbiology, University of Iowa, Iowa City, IA, 2005.

Lee JH. “Creating an In Vitro and In Vivo Model of HPV 16 Infection”. Presented to the Department of Physiology, University of Iowa, Iowa City, IA, 2005.

Lee JH. “Diagnosis and Treatment of Rhinosinusitis”. Presented to the Department of Allergy/Immunology, University of Iowa, Iowa City, IA, 2005.

Lee JH. “HPV Related Head and Neck Cancer – From Men to Mice and Back Again”. Presented at Stanford University, Stanford, CA, 2007.

International Presentations

Lee JH. “High Titer HPV-16 Delivery to Human Epithelia”. Presented at the HPV Clinical Workshop, 20th International Papillomavirus Conference, Paris, France, 2002.

Lee JH. “Establishment of Episomal HPV-16 in Human Tonsil Oropharyngeal Epithelial Cells”. Presented at the 21st International Conference Papillomavirus, Mexico City, Mexico, 2004

Lee JH. “HPV16 E6 binds and degrades PTP-BI resulting in invasive growth.” 22nd International Papillomavirus Conference, Prague Czech Republic, 2006

National Presentations

Lee JH. “HPV-16 using novel Adenoviral Delivery Method”. Presented at the Molecular Biology of DNA Tumor Viruses Conference, Madison, WI, 2002.

Lee JH. “ HPV Infection of Oropharyngeal Epithelia”. Presented at the Midwest Head and Neck Oncology Meeting, Minneapolis, MN, 2003.

Lee JH. “Delivery of HPV-16 to Tonsillar Epithelia”. Presented at AAO-HNSF Annual Meeting, Orlando, FL, 2003.

Lee JH. “Establishment of Episomal HPV-16 in Human Tonsil Oropharyngeal Epithelial Cells”. Presented at the Molecular Biology of DNA Tumor Viruses Conference, University of Wisconsin, Madison, WI, 2004.

Lee JH. “Cidofovir Incorporation into Human Keratinocytes with Episomal HPV 16 Results in Non-selective Cytotoxicity”. Presented at the ARS-AAO-HNS Annual Meeting, New York, NY, 2004.

Lee JH, Spanos WC. “HPV Induces Radiation Resistance in Oropharyngeal Cells” Presented at the Middle Section Meeting, Triological Society, Chicago, IL, 2004.

Local Presentations

Lee JH. "Diagnosis and Treatment of Oropharyngeal Cancer". Presented at the Head and Neck Cancer & Reconstructive Surgery Course, University of Iowa, Iowa City, IA, 2004

Lee JH. "Turbinates Surgery". And Instructor. Presented at Functional Endoscopic Sinus Course, University of Iowa, Iowa City, IA, 2004.

Lee JH. "Reconstructive Surgery-Regional Flaps". Presented at the Basic Science Course, University of Iowa, Iowa City, IA, 2004.

Lee JH. "Manifestations of HIV Disease". Presented at the Basic Science Course, University of Iowa, Iowa City, IA, 2004.

Lee JH. "Benign Salivary Disease". Presented at the Basic Science Course, University of Iowa, Iowa City, IA, 2004.

Lee JH. "Causes and Treatment of Chronic Sinusitis". Presented at the Basic Science Course, University of Iowa, Iowa City, IA, 2004.

Lee JH. "Oncogenic Mechanism of E6". Presented at Grand Rounds for the Gynecology/Oncology Service, University of Iowa, Iowa City, IA, 2007

D. Grants received

6/2002-8/2002 Parker B. Francis Research Fellowship. Funding was terminated because the K08 award started.

Ongoing Research Support:

HPV in Differentiated Human Airway Epithelia in Vitro
NIH K08

08/15/02-07/31/07

P.I. John H. Lee, MD

NIH K08 funded project HPV infection of airway epithelia. The project focuses on delivery of the HPV viral genome to airway epithelium by using a novel delivery mechanism involving Cre/Cox and adenoviruses

Therapeutic Potential of HPV-16 E6 and E7 Inhibition
Veteran's Administration Medical Center Merit Grant

P.I. John H. Lee, MD

Accepted for funding starting 02/05

Genetic Patterns and Survival in Head and Neck Cancer
NIH

09/01/04-08/31/09

P.I. Elaine M. Smith, PhD

Co-Investigator 10% effort

ACS Research Scholar Grant

Immune cell requirements for curing HPV related HNSCC
Awarded 5/1/2007

Mechanisms of HPV16 E6 in Tonsillar Cancer Growth in Vivo
NIH R01 resubmitted 5/1/2007
P.I. John H. Lee, MD
Awarded 5/29/07

V. SERVICE

- 1988 Summer project in rural Yucatan teaching vacation Bible schools in Spanish.
- 1990 Summer project in Capetown, South Africa constructing and staffing day care centers in Black townships.
- 1990-92 Organized and Participated in a Christian Medical/Dental Society program which provided inner-city youth free camp physicals for over 300 children.
- 1993-95 Volunteer at St. Mary's Community Health Clinic in South Minneapolis, Participated in Doctor's Ought to Care Program: received award of "Most Valuable Presenter."
- 2000 Resident finalist for Humanitarian Award Sponsored by third year medical students.
- 2002-Present Animal Care Committee, Veteran's Affairs Medical Center, Iowa City, IA
- 2004-Present Advisory Committee Central Microscopy Department
- 2004-Present Elected elder in Reformed Church of America