

# HOLBROOK E. KOHRT, MD

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## ACADEMIC/PROFESSIONAL QUALIFICATION

- 2007-2011 **Stanford University Medical Center, Divisions of Hematology and Oncology**  
Combined Hematology and Oncology Fellowship, Research Fellow
- 2008-2011 **Stanford University, School of Medicine, Departments of Cancer Biology, Immunology and Epidemiology**  
Ph.D. June 2011. *Advanced Residency Training Scholar*
- 2005-2007 **Stanford University Medical Center, Internal Medicine**  
Internship and Residency, *Clinical Investigator Pathway*
- 2000-2005 **Stanford University, School of Medicine**  
M.D., June 2006. *Baxter Scholar*
- 1996-2000 **Muhlenberg College**  
B.S. Biology/Anthropology, May 2000. *Summa cum laude*, valedictorian.
- 1997 **University of Scranton**  
May-August 1997

## RESEARCH DETAILS

- December 2003 – present **Tumor-draining Lymph Node Analysis.** Stanford University- Peter Lee, M.D. Investigated tumor-immune interactions within primary and secondary echelon lymph nodes of patients with breast cancer and melanoma by immunohistochemistry, flow cytometry, computer modeling and microarray analysis. Funded by Delia and Ronald Baxter Scholarship, Stanford University School of Medicine, Howard Hughes Medical Institute, and Lloyd Foundation.
- June 2004 – present **Bay Area Sentinel Lymph Node Study.** Stanford University- Stefanie Jeffrey, M.D. Facilitated organization and analysis of a patient database of over one thousand breast cancer patients in Northern California incorporating seventeen hospitals and fifty-one physicians. Database analysis performed includes investigating clinicopathologic predictors of false-negative sentinel lymph nodes, sentinel lymph node micrometastasis, and non-sentinel lymph node metastasis. Funded by Howard Hughes Medical Institute and National Institutes of Health.
- October 2003 – June 2004 **Heterogeneity in T Cell Response following Cancer Vaccination.** Stanford University- Peter Lee, M.D. Elucidated novel heterogeneity in CD8 T cell response to tumor among patient samples inoculated with melanoma vaccine. Developed a unique method of modeling differential dynamics of T cell receptor downregulation. Funded by American Society of Hematology and Delia and Ronald Baxter Scholarship.
- May – August 2002 **Child Maltreatment, Mental Illness, and HPA Reactivity.** Mongolia- Directed a research team sponsored by Mongolia-based Agency for the Prevention and Protection of Children from Abuse and Neglect. Evaluated cortisol response, psychiatric epidemiology, and ethnography to model the developmental effects of child abuse on young boys in Mongolia. Funded by Stanford University & Emory University Department of Anthropology.
- September 1998 – May 2000 **Cloning and Characterization of *unc-20*.** Muhlenberg College- Bruce Wightman, Ph.D. Characterized the phenotypic and molecular role of *Unc-20* expression in *C. elegans* with gene cloning analysis by candidate clone recovery, strain mating, and dsRNA interference. Funded by Muhlenberg College and National Science Foundation.
- May – September 1999 **Cross-cultural Stress Syndromes.** Mongolia- Co-director of research team sponsored by the National Medical University of Mongolia. Examined the epidemiology and pathogenesis of *yadargaa*, a culture-bound syndrome in Mongolia by conducting patient,

physician and community assessment. Organized production of an amateur documentary, *The Wrestler's Second*. Funded by Muhlenberg College and Quantum Productions.

August 1997                    **Chaco Canyon Anthropological Review**. Nageezi, New Mexico- William Abruzzi, Ph.D. Performed on-site investigation to determine the factors which resulted in the decline of Chaco as the epicenter of Pueblo, Hopi and Navajo trade in 1200 AD.

January – June 1997            **Nonrandom Mating of *Marabilis jalapa***. Muhlenberg College, Richard Niesenbaum, Ph.D. Designed pollen competition mating pairs to support theory of a 'super-pollen'. Funded by Muhlenberg College and National Science Foundation.

## GRANTS AND FELLOWSHIPS

**PETER P. LEE LABORATORY** (direct participation in grant preparation)

Era of Hope Scholar Award, Department of Defense Breast Cancer Research Program of the Office of the Congressionally Directed Medical Research Programs (2006-2010)

Lloyd Foundation grant recipient (2004-2005)

Lloyd Foundation grant renewal awarded (2005-2006)

## INDIVIDUAL

Advanced Residency Training Scholarship (2008-2011) *research-potential based full-tuition and stipend scholarship*

Delia and Ronald Baxter Scholarship (2000-2005) *merit-based full-tuition and stipend scholarship*

Howard Hughes Medical Institute Research Training Fellowship (2004-2005)

American Society of Hematology Research Fellowship (2003-2004)

Stanford University Traveling Scholarship, Mongolia (2001)

Presidential Scholarship (1996-2000) *merit-based tuition scholarship*

Coca-Cola Scholarship (1996-2000) *national merit-based scholarship*

Alpha Epsilon Delta Alumni Scholarship (2000)

Muhlenberg College Summer Research Grant, Mongolia (1999)

Big 33 State Scholarship (1996-1997)

National Hemophilia Foundation Scholarship (1996-1997)

Pennsylvania Department of Health grant (1996) *\$140,000 grant which funded creation of the Wayne County Family Center* (Eagle Scout Service Project)

## AWARDS

Franklin G. Ebaugh, Jr. Award for Research (2007)

Stanford Annual Award for Outstanding Clinical Teaching by Medicine Housestaff (2007)

American College of Physicians Regional Research Scholar Award (2006)

Franklin G. Ebaugh, Jr. Award for Research (2006)

American College of Physicians Regional Research Scholar Award (2005)

Stanford School of Medicine Alumni Award for Presentation of Research (2004)

President's Award for Academic Excellence (2000)

Phi Beta Kappa (2000)

Omicron Delta Kappa (2000)

Lichtenwalner Memorial Science Award (2000)

Alpha Phi Omega Service Award (1997)

Eagle Scout Honorary Award (1996)

American Red Cross Board of Supervisors District Service Award (1996)

Rotary Service Above Self Award (1996)

Pennsylvania Governor's Award for Exceptional Community Service (1996)

Bausch & Lomb Honorary Science Award (1996)

**PUBLICATIONS**

- Kohrt, H**, Nowels, K, Johnson, D, Holmes, S, and P Lee (2006). “Dendritic and T cell dysregulation in axillary lymph nodes predicts breast cancer recurrence.” Cancer Research, (manuscript in review).
- Kohrt, H**, Rouse, R, Nowels, K, Johnson, D, Siegmund, D, Lee, P, and S Jeffrey, on behalf of the Stanford/Bay Area Breast Surgeon Group (2006). “Predicting non-sentinel lymph node involvement among breast cancer patients with sentinel lymph node metastasis.” Journal of Clinical Oncology, (manuscript in review).
- Kohrt, B, **Kohrt, H**, and D Hurschka (2006). “Salivary cortisol patterns in children with behavioral disorders in Outer Mongolia.” Journal of the American Academy of Child and Adolescent Psychiatry, (manuscript in review).
- Chang, G, Park, A, **Kohrt, H**, Stuge, T, and P Lee (2006). “MHC-Restricted, antigen-specific, immunogenicity against melanocytes in anti-melanoma cytotoxic T lymphocytes.” (manuscript in preparation).
- Ouyang, D, **Kohrt, H**, Garza, D, and G Matheson (2007). “Massive splenic infarct in a collegiate football player with Hb SC Disease.” Clinical Journal of Sports Medicine, (in press).
- Kohrt, H**, Nowels, K, Johnson, D, Holmes, S, and P Lee (2007). “Investigating a failed immune response: Dysregulation of the functional immune response among breast cancer patients.” American College of Physicians, 32.
- Kohrt, H**, Ouyang, D, and E Keeffe (2006). “Systematic review: Lamivudine prophylaxis for chemotherapy-induced reactivation of chronic hepatitis B virus infection.” Alimentary Pharmacology and Therapeutics, 24, 1003-1016.
- Kohrt, H**, Olshen, R, Goodson, W, Rouse, R, Bailey, L, Philben, V, Dirbas, F, Stockdale, F, Carlson, R, and S Jeffrey for the Bay Area SLN Study Group (2006). “Predicting non-sentinel lymph node involvement in breast cancer.” Journal of Clinical Oncology, 24(18S): 10s.
- Kohrt, H**, Li, M, and J Li (2006). A Caughey (Ed.). Blueprints Clinical Cases in Medicine. Baltimore, MD: Lippincott, Williams and Wilkins Publishing.
- Kohrt, H**, Olshen, R, Goodson, W, Rouse, R, Lee, P, Carlson, R, Stockdale, F, and S Jeffrey (2006). “Predicting non-sentinel lymph node involvement in breast cancer patients.” American College of Physicians, 31.
- Kohrt, H**, Nowels, K, Johnson, D, and P Lee (2005). “Profile of immune cells in axillary nodes predicts disease-free survival in breast cancer.” PLoS Medicine, 2(9): e284, 904-919.
- Kohrt, H**, Chen, T, Stuge, T, Webber, J, Holmes, S, and P Lee (2005). “Rapid assessment of recognition efficiency and functional capacity of antigen-specific T cell responses.” Journal of Immunotherapy, 28(4): 297-305.
- Kohrt, H**, Nowels, K, Lee, P, and D Johnson (2005). “Immune profile in tumor-draining lymph nodes predicts disease-free survival in breast cancer.” Annals of Surgical Oncology, 12(2): S17.
- Kohrt, H**, Nowels, K, Johnson, D, and P Lee (2004). “Immune profile of sentinel and non-sentinel lymph nodes among breast cancer patients: evidence of immune dysregulation.” Breast Cancer Research and Treatment, 91(88): S244.

- Kohrt, H**, Chen, T, Stuge, T, Millpeddi, M, and P Lee (2004). "Heterogeneity within antigen-specific T cell responses revealed by differential dynamics of TCR downregulation." Blood, **104**(11): 3851.
- Kohrt, H**, Kohrt, B, Waldman, D, Saltzman, K, and V Carrion. "An ecological-transactional model of significant risk factors for child psychopathology in Outer Mongolia." Journal of Child Psychiatry and Human Development, **35**(2): 163-181.
- Kohrt, H**, Nowels, K, Johnson, D, and P Lee (2004). "Non-sentinel lymph node status among breast cancer patients: predictors and false-negative findings." American Journal of Clinical Pathology, **122**: 644.
- Kohrt, H**, Nowels, K, Johnson, D, and P Lee (2004). "Non-sentinel lymph node status among breast cancer patients: predictors and false-negative findings." Proceedings of the Stanford Medical Student Research Symposium, **21**: 20.
- Kohrt, B, Hurschka, D, **Kohrt, H**, Panebianco, N, and G Tsagaankhuu (2003). "Distribution of distress in post-socialist Mongolia: a cultural epidemiology of *yadargaa*." Social Science and Medicine, **58**(3): 471-485.
- Kohrt, H** (2003). "Reflections on medicine." Stanford Medical Student Clinical Journal, **7**(1): 20-21.
- Kohrt, H** (contributing author, 2003). Caughey, Spizer, Turrle, Palmer, del Castillo (Eds.). Blueprints Notes and Cases: Pathophysiology- Renal, Hematology, and Oncology. Malden, Mass: Blackwell Publishing.
- Kohrt, H**, Kohrt, B, Hurschka, D, and V Carrion (2002). "Cross-cultural examination of child psychopathology in Mongolia." 49<sup>th</sup> Annual Meeting of the American Academy of Child and Adolescent Psychiatry, **18**: 115.
- Kohrt, B, **Kohrt, H**, Hurschka, D, Carrion, V, Waldman, D, and K Saltzman (2002). "Construct validity of DSM diagnosis in Mongolia." 49<sup>th</sup> Annual Meeting of the American Academy of Child and Adolescent Psychiatry, **18**: 115.
- Hruschka, D, Kohrt, B, **Kohrt, H**, and C Worthman (2002). "Salivary cortisol and oppositional defiant disorder in Mongolia." 49<sup>th</sup> Annual Meeting of the American Academy of Child and Adolescent Psychiatry, **18**: 116.
- Cortes, A, Saltzman, K, Weems, C, Regnault, H, **Kohrt, H**, and V Carrion (2002). "Maintenance of elevated cortisol levels in children with history of trauma." 49<sup>th</sup> Annual Meeting of the American Academy of Child and Adolescent Psychiatry, **18**: 108.
- Hruschka, D, Kohrt, B, and **H Kohrt** (2001). "*Yadargaa*: A culturally and biologically bound illness in Mongolia." American Journal of Human Biology, **13**(1): 124.
- Kohrt, B, and **H Kohrt** (2001). "Vulnerability and stress in Mongolia: The adaptive significance of *yadargaa*." American Journal of Physical Anthropology, **114**(S32): 91-92.
- Kohrt, H** (1999). "Molecular cloning strategies of *unc-20*." Proceedings of Society of Developmental Biology, **2**: 12-13.

#### PRESENTATIONS

- Kohrt, H** (invited presentation, 2007). "Investigating a failed immune response: Dysregulation of the functional immune response among breast cancer patients." National American College of Physicians, Annual Meeting 2007.

- Kohrt, H** and D Kao (invited presentation, 2007). “To market and beyond; the ups and downs of pharmaceutical precocity.” Department of Medicine, Grand Rounds, Stanford University Medical Center, 2007.
- Kohrt, H** (presentation, 2006). “Investigating a failed immune response: Dysregulation of the functional immune response among breast cancer patients.” Regional American College of Physicians, Annual Meeting 2006.
- Kohrt, H** (oral presentation, 2006). “Predicting nodal metastasis in breast cancer: successes and pitfalls of statistical models.” 42<sup>nd</sup> Annual Meeting of the American Society of Clinical Oncology.
- Chazaro, B, **Kohrt, H**, Kapelner, A, and P Lee (presentation, 2006). “CD1a dendritic cell populations are immunological predictors of disease-free survival in sentinel node negative breast cancer patients.” New England Science Symposium.
- Kohrt, H** (invited presentation, 2006). “Modeling sentinel lymph node metastasis among breast cancer patients.” National American College of Physicians, Annual Meeting 2006.
- Kohrt, H** (invited presentation, 2005). “The immune response to breast cancer: significance and implications.” Department of Medicine, Grand Rounds, Stanford University Medical Center, 2005.
- Kohrt, H** (presentation, 2005). “Modeling sentinel lymph node metastasis among breast cancer patients.” Regional American College of Physicians, Annual Meeting 2005.
- Kohrt, H** (oral presentation, 2005). “Exploring axillary lymph node immune profile in patients with breast cancer.” Meeting of Howard Hughes Medical Fellows, National Institute of Health.
- Kohrt, H** (oral presentation, 2005). “Immune profile in tumor-draining nodes predicts disease-free survival in breast cancer.” 58<sup>th</sup> Annual Cancer Symposium, Society of Surgical Oncology.
- Kohrt, B, **Kohrt, H**, Hruschka, D, Kunz, R, and C Worthman (presentation, 2005). “Hypocortisolism and disruptive behavior in boys: Findings from high risk populations in Mongolia and Nepal.” Four Dimensions of Childhood; Meeting of the Foundation for Psychocultural Research.
- Kohrt, H** (presentation, 2004). “Predictors of isolated positive sentinel lymph nodes among breast cancer patients.” 4<sup>th</sup> International Sentinel Node Congress.
- Kohrt, H** (presentation, 2004). “Immune profile of sentinel and non-sentinel lymph nodes among breast cancer patients: evidence of immune dysregulation.” 27<sup>th</sup> Annual San Antonio Breast Cancer Symposium.
- Kohrt, H** (presentation, 2004). “Non-sentinel lymph node status among breast cancer patients: predictors and false-negative findings.” Annual Meeting of the American Society for Clinical Pathology.
- Kohrt, H** (presentation, 2004). “Contribution of maltreatment to child psychopathology in an ecological-transactional model.” National Conference on Health Care and Domestic Violence.
- Kohrt, H** (presentation, 2004). “Non-sentinel lymph node status among breast cancer patients: predictors and false-negative findings.” 21<sup>st</sup> Annual Stanford Medical Student Research Symposium.
- Kohrt, H** (presentation, 2002). “Violence and significant risk factors for child psychopathology in Mongolia.” Annual Meeting of the American Academy of Child & Adolescent Psychiatry.
- Tanis, J, **Kohrt, H**, Doto, J, and B Wightman (presentation, 2001). “unc-20 maps to a region that includes two predicted golgi complex proteins.” 13th International C. elegans Meeting.

**Kohrt, H** (presentation, 2000). “Surfing the genome to find a needle in a haystack: the search for *unc-20* in *C. elegans*.” Biology Honors seminar presented in the Muhlenberg College Biology Seminar Series.

**Kohrt, H**, Nguyen, S, and B Wightman (presentation, 2000). “Molecular cloning of the elusive *unc-20*.” 2000 East Coast *C. elegans* Meeting.

**Kohrt, H** (oral presentation, 2000). “Western paradigms of stress related disease.” Muhlenberg College Anthropology Seminar Series.

**Kohrt, H** (oral presentation, 2000). “Innovation in educational programs: Expanding collegiate services.” National Academic Services Conference.

**Kohrt, H** (oral presentation, 1999). “Hemophilia in the age of AIDS.” National Collegiate Honors Council.

**Kohrt, H** (oral presentation, 1999). “*Yadargaa*: A culture bound stress model.” 1<sup>st</sup> Medical University of Ulaanbaatar, Mongolia.

Wightman, B, Carmean, N, Ebert, B, Klampert, K, **Kohrt, H**, Murphy, E, Nguyen, S, Radziewsky, G, and H Wiener (presentation, 1999). “The roles of *fax-1* and *unc-20* in nervous system development.” 12th International *C. elegans* Conference.

**Kohrt, H** (presentation, 1999). “Molecular cloning of *unc-20* in *C. elegans*.” Annual Meeting of Society of Developmental Biology.

#### DOCUMENTARY FILMS

**Kohrt, H**, Kohrt, B, and R Koenig (1999). “The Wrestler’s Second.” Quantum Productions, documentary films.

#### CLINICAL WORK/VOLUNTEER EXPERIENCE

August 2000 – present      **Arbor Free Clinic**- student-organized, free clinic in East Palo Alto. Steering Committee (2001-2002), active clinic volunteer.

August 2000 – June 2005      **PALS**- student-organized “buddy” program linking medical students with chronically-ill children in the Bay Area, co-chair and active member.

January – June 2001      **Green Team Education Program**- public health outreach program to underserved elementary schools in East Palo Alto, class instructor.

1996-2002      **Hole in the Wall Gang Camp**- Paul Newman sponsored for chronically ill children, counselor.  
**Hemophilia Camp**- volunteer counselor and home therapy instructor.  
**American Red Cross**- Board of Directors for Northeastern Pennsylvania, board member.  
**Northeastern Pennsylvania AIDS Council**- developed a youth support group.

**LANGUAGE**      Mongolian (conversational)

**INTERESTS**      travel, hiking, theater