

Selected Professional Activities

- 2018-Present Scientific Review & Guidelines Committee, American Academy of Pain Medicine
- 2017-Present Affiliate Faculty, Institute for Data Science and Informatics, University of Missouri
- 2016-Present Co-Director, Center for Precision Medicine, Associate Professor, Department of Medicine, University of Missouri School of Medicine
- 1993-Present Alumni Association in the Department of Anesthesia, Critical Care, and Pain Medicine, Massachusetts General Hospital, Harvard Medical School
- 2001-2008 Special Advisor to the President, University of Texas Health Science Center at Houston
- 2001-2008 Founding Vice President (Associate Vice President 2001-2006, promoted to Vice President 2006) for International Programs, University of Texas Health Science Center at Houston
- 2008 Search Committee for President of the University of Texas Health Science Center at Houston
- 2007-2008 The University of Texas System, Global Initiative Advisory group
- 2006-2007 The University of Texas System, Global Initiative Task Force
- 2005-2008 Executive Council, University of Texas Health Science Center at Houston
- 2001-2008 Texas Medical Center, International Affairs Advisory Council
- 2005-2008 Chair, International Programs Award Review Committee, University of Texas Health Science Center at Houston
- 2004-2008 Multicultural Affairs Committee, University of Texas Health Science Center at Houston
- 1996-2006 Scientific Advisory Committee, University Clinical Research Center, University of Texas Health Science Center at Houston and MD Anderson Cancer Center
- 2003-2006 Board of Directors, American Academy of Pain Medicine
- 2005 Search Committee for President of Houston Community College, Coleman College for Health Sciences
- 2004 Delegate, representing US government, Vietnam Education Foundation
- 2001-2002 Grant Review Study Section, California Cancer Research Program
- 2000, 2002 American Academy of Pain Medicine, Annual Meeting Program Committee
- 2003 Chair, Scientific Session, American Academy of Pain Medicine, Annual Meeting
- 2002-2003 Co-Chair, 7th Multidisciplinary Approach to Palliative Care, Pain, and Symptom Management Conference, University of Texas, M.D., Anderson Cancer Center
- 1998-2002 Chair, Education Committee, American Academy of Pain Medicine
- 1998-2002 Alternate Delegate, Texas Society of Anesthesiologists
- 1996-2001 Director, Senior Clinical Performance Examination (Standardized Patient OSCE Examination), University of Texas, Health Science Center at Houston, Medical School
- 1997-2001 Curriculum Committee, *ex officio*, University of Texas, Health Science Center at Houston, Medical School
- 1997-2002 Steering Committee, Collaboration among Texas medical schools to improve education in Cancer Prevention and Detection. (CATCHUM)
- 1997, 2000 Course Director, "End of Life Care and Pain Management" University of Texas, Health Science Center at Houston, Medical School

- 1997-2003 Course Director, Senior Clinical Rotation “Multidisciplinary Approach to Palliative Care, Pain Management, and Symptom Control” The University of Texas, Health Science Center at Houston, Medical School and The University of Texas, M.D. Anderson Cancer Center
- 1997-1999 Steering Committee, Collaboration among Texas medical schools to improve education in pain management
- 1996-2000 Member of Clinical Epidemiology Core Group, University of Texas, Health Science Center at Houston, Medical School
- 1995-2001 Facilitator, Problem-based learning, University of Texas, Health Science Center at Houston, Medical School
- 1993-1996 American Society of Anesthesiologists, Task Force on Pain Management Clinical Practice Guidelines, Cancer Pain Section
- 1990-1993 Faculty, Attending Physician, Pain Control Center, Massachusetts General Hospital, Harvard Medical School,
- 1989-1993 Faculty, Attending Physician, Department of Anesthesia, Massachusetts General Hospital, Harvard Medical School

Honors and Awards:

- 2011 Medical Honoree, American Heart Association, Heart Ball, Houston, Texas
- 2000 Fleming and Davenport Awards
- 1981 Scholar, Harvard Alumni Association (Taipei)

Selected Publication:

- 1 Chang HM, Berde CB, Holz GG, Steward GF, Kream RM. Sufentanil, morphine, met-enkephalin and k-agonist (U50,488H) inhibit substance P release from primary sensory neurons: a model for presynaptic spinal opioid actions. *Anesthesiology*. 1989; 70:672-677 PMID: 2467589 Cited 60 times
2. DeGasperi R, Thomas LJ, Sugiyama E, Chang HM, Beck PJ, Orlean P, Albright C, Waneck G, Sambrook J, Warren CD, and Yeh ETH. Correction of a defect in mammalian GPI anchor biosynthesis by a transfected yeast gene. *Science (Wash. D.C.)*, 250:988-991, 1990 PMID: 1978413 Cited 59 times
3. Sugiyama E, DeGasperi R, Urakaze M, Chang HM, Thomas LJ, Hyman R, Warren CD, and Yeh ETH. Identification of the defects in GPI anchor biosynthesis in the Thy-1 expression mutants. *Journal of Biological Chemistry*. 266:12119-12122, 1991 PMID: 1829456 Cited 88 times
4. Thomas LJ, DeGasperi R, Sugiyama E, Chang HM, Beck PJ, Orlean P, Urakaze M, Kamitani T, Sambrook J, Warren CD, and Yeh ETH. Functional analysis of T-cell mutants defective in the biosynthesis of glycosylphosphatidylinositol anchor. Relative importance of glycosylphosphatidylinositol anchor vs. N-linked glycosylation in T-cell activation. *Journal of Biological Chemistry* 266:23175-23184, 1991 PMID:1835975 Cited 18 times
5. Mahoney JF, Urakaze M, Hall S, DeGasperi R, Chang HM, Sugiyama E, Warren CD, Nicholson-Weller A, Borowitz M, Rosse WF, Yeh ETH. Defective glycosylphosphatidylinositol anchor synthesis in paroxysmal nocturnal hemoglobinuria (PNH) granulocytes. *Blood*, 79:1400-1403, 1992. PMID: 1372185 Cited 51 times

6. Urakaze M, Kamitani T, DeGasperi R, Sugiyama E, Chang HM, Warren CD, Yeh ETH. Identification of a missing link in glycosylphosphatidylinositol anchor biosynthesis in mammalian cells. *Journal of Biological Chemistry*, 267:6459-6462, 1992. PMID: 1313004 Cited 47 times
7. Yeh ET, Chang HM. Pathophysiology and principles of pain management in rheumatic diseases. *Curr Opin Rheumatol*. 1992 Jun;4(3):332-6. Review. PMID: 1599812. Cited 1 time
8. Thomas LJ, Urakaze M, DeGasperi R, Kamitani T, Sugiyama E, Chang HM, Warren CD, Yeh ETH. Differential expression of glycosylphosphatidylinositol-anchored proteins in a T-cell hybridoma mutant producing limiting amounts of the glycolipid core. Implication for Paroxysmal Nocturnal Hemoglobinuria. *Journal of Clinical Investigation*, 89:1172-1177, 1992. PMID: 1532587 Cited 11 times
9. Kamitani T, Chang HM, Rollins C, Waneck GL, Yeh ETH. Correction of the class H defect in glycosylphosphatidylinositol anchor biosynthesis in Ltk⁻ cells by a human cDNA clone. *Journal of Biological Chemistry*, 268: 20733-20736, 1993 PMID: 8407896 Cited 69 times
10. Ware R, Howard TA, Kamitani T, Chang HM, Yeh ETH, Seldin MF. Chromosomal assignment of genes involved in glycosylphosphatidylinositol anchor biosynthesis: implications for the pathogenesis of paroxysmal nocturnal hemoglobinuria. *Blood*, 83(12): 3753-3757, 1994 PMID: 8204896 Cited 38 times
11. Norris J, Hall S, Ware R, Kamitani T, Chang HM, Yeh ETH, Rosse WF Glycosylphosphatidylinositol anchor synthesis in paroxysmal nocturnal hemoglobinuria: partial or complete defect in an early step. *Blood*, 83(3) 816-821, 1994 PMID: 7507735 Cited 27 times
12. Yeh ET, Kamitani T, Chang HM. Biosynthesis and processing of the glycosylphosphatidylinositol anchor in mammalian cells. *Seminars in Immunology*, 6:73-80, 1994 PMID: 8054538 Cited 15 times
13. Chang HM, Wang L, Zhang XP, Kream RM, Yeh ETH. Modulation of Substance P Release in primary sensory neurons by misoprostol and prostaglandins. *American Journal of Therapeutics*, 3, 276-279, 1996 PMID: 11862261 Cited 3 times
14. Okura T, Gong L, Kamitani T, Wada T, Okura I, Wei CF, Chang HM, Yeh ETH. Protection against Fas/APO-1 and tumor necrosis factor-mediated cell death by a novel protein, Sentrin. *Journal of Immunology. Cutting Edge*, 157:4277-4281, 1996 PMID: 8906799 Cited 272 times
15. Chang HM. Cancer Pain Management. *Medical Clinics of North America*, Vol. 83, No 3:711-736 May 1999 PMID: 10386122 Cited 28 times
16. Chang HM. Educating Medical Students in Pain Medicine and Palliative Care, Editorial, *Pain Medicine*, Vol.3, No.3: 194-195, 2002 PMID: 15099251 Cited 13 times
17. Chang HM Pain and Its Management in Patients with Cancer, *Cancer Investigation*, Vol. 22, No. 5: 799-809, 2004 PMID: 15581060 Cited 4 times
18. Yeh ET, Chang HM Oncocardiology-Past, Present, and Future: A Review, *JAMA Cardiol*. 2016 Dec 1;1(9):1066-1072 PMID: 27541948 Cited 30 times
19. Yeh ET, Chang HM Cancer and Clot: Between a Rock and a Hard Place, *J Am Coll Cardiol* 2017 August 22; 70 (8): 939-941 PMID: 28818203 Cited 4 times
20. Chang HM, Moudgil R, Scarabelli T, Okwuosa T, Yeh ET Cardiovascular Complications of Cancer Therapy: Best Practices in Diagnosis, Prevention, and Management: Part 1, *J Am Coll Cardiol* November 14;70(20):2536-2551, 2017

- PMID: 29145954 Cited 51 times
21. Chang HM, Okwuosa T, Scarabelli T, Moudgil R, Yeh ET Cardiovascular Complications of Cancer Therapy: Best Practices in Diagnosis, Prevention, and Management: Part 2, J Am Coll Cardiol November 14;70 (20):2552-2556, 2017
PMID: 29145955 Cited 39 times
 22. Yang FM, Zuo Y, Zhou W, Xia C, Hahm B, Sullivan M, Cheng J, Chang HM, Yeh ET sNASP Inhibits TLR Signaling to Regulate Immune Response in Sepsis. J Clin Invest. 2018 Jun 1;128(6):2459-2472. doi: 10.1172/JCI95720. Epub 2018 May 7.
PMID: 29733298 Cited 5 time

Practice Guidelines and Position Statement:

1. Ferrante FM, Bedder M, Caplan RA, Chang HM, Connis RT, Harrison P, Jamison RN, Krane EJ, Nedelikovic S, Patt R., Portenoy RK. Practice Guidelines for Cancer Pain Management. Developed by Task Force on Pain Management, Cancer Pain Section. American Society of Anesthesiologists
Anesthesiology, 1996; 84: 1243-57 ISSN: 0003-3022 Cited 101 times
2. Chang HM, Gallagher R, Vailancourt PD, Balter K, Workman EA, McClain B, Ellenberg M, Chiang JS Undergraduate Medical Education in Pain Medicine, End-of-Life Care, and Palliative Care: A position statement from the American Academy of Pain Medicine. Pain Medicine, Vol.1, No 3: 224, September 2000