# CURRICULUM VITAE

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# **PROFESSIONAL EXPERIENCE:**

2006-Current Chair, Psychology Department Brigham Young University Provo, Utah

2008-Current	Professor Psychology Department and Neuroscience Center Brigham Young University Provo, Utah
2005-2006	Director – Neuroscience Center Brigham Young University Provo, Utah
2005-2008	Associate Professor Psychology Department and Neuroscience Center Brigham Young University Provo, Utah
1999-2005	Assistant Professor Psychology Department and Neuroscience Center Brigham Young University Provo, Utah
2007-Current	Senior Research Associate Department of Critical Care Medicine Pulmonary and Critical Care Division Intermountain Medical Center Murray, Utah
1997-Current	Senior Research Associate Critical Care Medicine Pulmonary and Critical Care Division LDS Hospital Salt Lake City, Utah
2007 – Current	Faculty Affiliate The Women's Research Institute Brigham Young University Provo, Utah
1999-Current	Adjunct Associate Professor Department of Psychology University of Utah Salt Lake City, Utah
1996-1999	Adjunct Assistant Professor Department of Psychology Brigham Young University Provo, Utah
1994-1997	Post Doctoral Fellow Department of Hyperbaric Medicine

LDS Hospital Salt Lake City, Utah

- 1988-1994 Teaching Fellow and Graduate Instructor, University of Utah.
- 1987-1994 Neurology Learning and Behavior Center in conjunction with LDS Hospital, Hyperbaric Unit, Coordinator of the Psychometric team.
- 1989-1990 Coordinator and Registered Nurse in Head Trauma Clinic. Neurology Learning and Behavior Center in conjunction with Olympus View Hospital.
- 1987-1994 Psychometric Technician. Neurology Learning and Behavior Center and Neuropsychological Consultation Services.
- 1985-1990 LDS Hospital, Maternal Newborn Unit, Inservice Education Coordinator.
- 1985-1990 LDS. Hospital, Maternal Newborn Unit, Diabetic Consultant.
- 1979-1995 Registered Nurse Obstetrics, Gynecology, Antepartum, and Newborn Unit.
- 1977-1983 Prenatal Instructor at Holy Cross Hospital.
- 1975-1979 Registered Nurse, Holy Cross Hospital.
- 1974-1975 Student Nurse Aide, LDS. Hospital.
- 1974-1974 Student Nurse Aide, Utah Valley Medical Center.
- 1971-1973 Secretary and Administrative Assistant, Individualized Instruction and Learning.

### **SCHOLARSHIP:**

# **Peer Reviewed Journal Articles**

- 1) Goodrich-Hunsaker NJ, **Hopkins RO**. (under review). Symptom validity testing, Word Memory Test performance, hippocampal damage and declarative memory impairments. *Neuropsychology*,
- 2) Goodrich-Hunsaker NJ, Gilbert PE, **Hopkins RO**. (under review). The role of the human hippocampus in odor-place associative memory. *Neurobiology of Learning and Memory*,
- 3) Jackson JC, **Hopkins RO**, Miller RR, Gordon SM, Wheeler AP, Thomason JWW, Ely EW. (under review). Acute respiratory distress syndrome and cognitive decline: A case study. *Journal of the International Neuropsychology Society*,
- 4) **Hopkins RO**, Suchyta MR, Snow GL, Jephson A, Weaver LK, Orme JF, Jr., Morris AH. (under review). Glucose and cognitive outcome in acute respiratory distress syndrome survivors.

- 5) McCourt AB, **Hopkins RO**, Cleavinger HB, Parkinson RB, Victoroff J, Bigler ED. (under review). White matter hyperintensities following traumatic brain Injury and their relationship to depression, anxiety and cognitive function.
- 6) **Hopkins RO**, Jackson JC, Wallace CJ. (under review). Neuropsychological outcome in respiratory failure patients: A pilot study.
- 7) Suchyta MR, **Hopkins RO**, Jephson A. (under review). Brain imaging findings associated with neurologic changes during critical illness.
- 8) Suchyta MR, Beck CJ, Key CW, Jephson A, **Hopkins RO.** (in press). Substance dependence and psychiatric disorders are related to outcomes in a mixed ICU population. *Intensive Care Medicine*,
- 9) Shohamy D, Myers CE, Hopkins RO, DeLuca J, Wolansky L, Sage J, and Gluck MA. (in press). Distinct medial temporal lobe and basal ganglia contributions to probabilistic learning and reversal. *Journal of Cognitive Neuroscience*
- 10) **Hopkins RO**, Miller RR, III. (in press). Neurocognitive and Psychiatric Sequelae among Survivors of ARDS. *Clinical Pulmonary Medicine*,
- 11) Myers CE, **Hopkins RO**, Deluca J, Moore NB, Wolansky LJ, Sumner JM, Gluck, MA. (in press). Learning and Generalization Deficits Differ in Patients with Memory Impairments due to Anterior Communicating Artery Aneurysm Rupture or Hypoxic Brain Injury. *Neuropsychology*,
- 12) **Hopkins RO.** (2008). Neurobehavioral Grand Rounds introduction: Does near drowning in ice water prevent anoxic induced brain injury? *Journal of the International Neuropsychological Society*, 14(4), 656-659.
- 13) Shrager Y, Levy DA, **Hopkins RO**, Squire LR. (2008). Working memory and the organization of brain systems. *Journal of Neuroscience*, 28(18), 4818-4822.
- 14) Chambers CA, **Hopkins RO**, Weaver LK, Key CW. (2008). Cognitive and affective outcomes of more severe compared to less severe carbon monoxide poisoning. *Brain Injury*, 22(5), 387-395.
- 15) Meeter M, Radics G, Myers CE, Gluck MA, **Hopkins RO**. (2008). Probabilistic categorization: How do normal participants and amnesic patients do it? *Neuroscience and Biobehavioral Reviews*, 32(2), 237-248.
- 16) Thomsen GE, Snow GL, Rodriguez L, Hopkins RO. (2008). Respiratory failure patients increase ambulation after transfer to an ICU where early activity is a priority. *Critical Care Medicine*, 36(4). 1119-1124.
- 17) Herridge MS, Batt J, **Hopkins RO**. (2008) The Pathophysiology of Long-term Neuromuscular and Cognitive Outcomes Following Critical Illness. *Critical Care Clinics*, 24(1), 179-199.
- 18) Bayley PJ, Wixted JT, **Hopkins RO**, Squire LR. (2008). Yes/no recognition, forced-choice recognition, and the human hippocampus. *Journal of Cognitive Neuroscience*,23(3), 505-512.
- 19) Allen MD, Bigler ED, Larsen J, Goodrich-Hunsaker NJ, **Hopkins RO**. (2007). Functional neuroimaging evidence for high cognitive effort on the Word Memory Test in the absence of external incentives. *Brain Injury*, 21(13), 1425-1428.

- 20) **Hopkins RO**. (2007). Does Critical Illness and ICU Treatment Contribute to Neurocognitive and Functional Morbidity in Pediatric Patients? *Jornal de Pediatria* (Rio J),83(6), 488-490.
- 21) **Hopkins RO**, Weaver LK, Valentine KJ, Mower C, Churchill S, Carlquist J. (2007). Apolipoprotein genotype and outcome with and without hyperbaric oxygen in acute carbon monoxide poisoning. *American Journal of Respiratory and Critical Care Medicine*, 176(10), 1001-1006.
- 22) Suchyta MR, **Hopkins RO**. (2007). Neurologic sequelae in critical illness: Evaluation and outcomes. *Current Respiratory Medicine Reviews*, 3(4), 309-319.
- 23) **Hopkins RO**, Ely EW, Jackson JC. (2007). The role of future longitudinal studies in ICU survivors: Understanding determinants and pathophysiology of brain dysfunction. *Current Opinion in Critical Care*, 13(5), 497-502.
- 24) Weaver LK, Valentine KJ, **Hopkins RO**. (2007). Risk factors for cognitive sequelae following acute carbon monoxide poisoning: Role of hyperbaric oxygen therapy. *American Journal of Respiratory and Critical Care Medicine*, 176(5):491-497.
- 25) Hopkins RO. (2007). Sepsis, Oxidative Stress and Brain Injury. *Critical Care Medicine*, 36(9), 2233-2234.
- 26) Larson MJ, Weaver LK, **Hopkins RO**. (2007). Cognitive sequelae in acute respiratory distress syndrome patients with and without recall of the intensive care unit. *Journal of the International Neuropsychological Society*, 13(14), 595-605.
- 27) Jackson JC, Hart RP, Gordon SM, **Hopkins RO**, Girard T, Ely EW. (2007). Post-traumatic stress disorder and post-traumatic stress symptoms following critical illness in medical ICU patients: Assessing the magnitude of the problem. *Critical Care*, Feb 22;11(1):R27, 118.
- 28) Shrager Y, Bayley PJ, Bontempi B, **Hopkins RO**, Squire LR. (2007). Spatial memory and the human hippocampus. *Proceedings of the National Academy of Science*, 104, 2961-2966.
- 29) Hopkins RO, Spuhler VJ, Thomsen GE. (2007). Transforming ICU Culture to Facilitate Early Mobility. *Critical Care Clinics*, 23, 81-96.
- Bailey P, Thomsen GE, Spuhler VJ, Blair R, Jewkes J, Bezdjian L, Veale K, Rodriquez L, Hopkins RO. (2007). Early activity is feasible and safe in respiratory failure patients. *Critical Care Medicine*, 35(1), 139-145.
- 31) Bayley PJ, **Hopkins RO**, Squire LR. (2006). Fate of old memories following medial temporal lobe damage. *Journal of Neuroscience*, 26(51), 13311-13317.
- 32) **Hopkins RO**, Herridge MS. (2006). Quality of life, emotional abnormalities and cognitive dysfunction in survivors of ALI/ARDS. *Clinics in Chest Medicine*, 27(4), 679-689.
- 33) Smith CN, **Hopkins RO**, Squire LR. (2006). Experience-dependent eye movements, awareness, and hippocampus-dependent memory. *Journal of Neuroscience*, 26(44), 11304-11312.
- 34) Gold JJ, Hopkins RO, Squire LR. (2006). The hippocampus supports both single-item and associative recognition memory, *Learning and Memory*, 13(5), 644-649.

- 35) **Hopkins RO**, Jackson JC. (2006). Long term neurocognitive function after critical illness. *Chest*, 130, 896-878.
- 36) Thomas F, **Hopkins RO**, Handrahan DL, Walker J, Carpenter J. (2006). Sleep and cognitive performance following 12-hour evening vs. 18-hour shifts in flight nurses. *Air Medical Journal*, 25(5), 216-225.
- 37) Hopkins RO, Woon FLM. (2006). Neuroimaging, Cognitive, and Neurobehavioral Outcomes Following Carbon Monoxide Poisoning. *Behavioral and Cognitive Neuroscience Reviews*, 5(3), 141-155.
- 38) **Hopkins RO**, Jackson JC. (2006). Assessing the effects of critical illness on the brain: Are delirium and long-term cognitive impairments related? *Current Opinion in Critical Care*, 5; 388-394.
- 39) Pulsipher DT, **Hopkins RO**, Weaver, LK. (2006). Basal ganglia volumes following carbon monoxide poisoning: A prospective longitudinal study. *Undersea and Hyperbaric Medicine*, 33(4), 245-256.
- 40) Christie JD, Biester RC, Taichman DB, Shull WH, Hansen-Flaschen J, Shea, J, Hopkins RO. (2006). Formation and validation of a telephone battery to assess cognitive function in ARDS survivors. *Journal of Critical Care*, 21(2), 125-132.
- 41) Gold JJ, Smith CN, Bayley PJ, Schrager Y, Brewer JB, Stark CEL, **Hopkins RO**, Squire LR. (2006). Item memory, source memory, and the medial temporal lobe: concordant findings from fMRI and memory-impaired patients. *Proceedings of the National Academy of Science*, 103(24), 9351-9356.
- 42) **Hopkins RO**, Beck CJ, Burnett DL, Weaver LK, Victoroff J, Bigler ED. (2006). Prevalence of white matter hyperintensities in a young healthy normal population. *Journal of Neuroimaging*, 16(3); 243-251.
- 43) White JG, **Hopkins RO**, Glissmeyer EW, Kitterman N, Elliott, CG. (2006). Cognitive, emotional, and quality of life outcomes in pulmonary arterial hypertension patients. *Respiratory Research*, March 31, 7(1):55.
- 44) Meeter M, Myers CE, Shohamy D, Hopkins RO, Gluck MA. (2006). Strategies in probabilistic categorization: Results from a new way of analyzing performance. *Learning and Memory*, 13(2), 230-239.
- 45) **Hopkins RO**, Fearing MA, Weaver LK, Foley JF. (2006). Basal ganglia lesions following carbon monoxide poisoning. *Brain Injury*, 20(3), 273-281.
- 46) Hopkins RO, Gale SD, Weaver LK. (2006). Brain atrophy and cognitive impairment in survivors of acute respiratory distress syndrome. *Brain Injury*, 20(3), 263-271.
- 47) Shrager Y, Gold JJ, **Hopkins RO**, Squire LR. (2006). Intact visual perception in memory-impaired patients with medial temporal lobe lesions. *Journal of Neuroscience*, 26, 2235-2240.
- 48) Kesner RP, **Hopkins RO**. (2006). Mneumonic functions of the hippocampus: A comparison between animals and humans. *Biological Psychology*, 73(1), 3-18.

- 49) Wais PE, Wixted JT, **Hopkins RO**, Squire LR. (2006). The hippocampus supports both the recollection and the familiarity components of recognition memory. *Neuron*, 49(3), 459-466.
- 50) Myers CE, DeLuca J, **Hopkins RO**, Gluck MA. (2006). Conditional discrimination and reversal in amnesia subsequent to hypoxic brain injury or anterior communicating artery aneurysm rupture. *Neuropsychologia*, 44(1), 130-139.
- 51) Hopkins RO, Brett S. (2005). Chronic neurocognitive effects of critical illness. *Current Opinion in Critical Care*, 11, 369-375.
- 52) Jasper BW, Hopkins RO, Van Duker H, Weaver LK. (2005). Depression and anxiety following carbon monoxide poisoning: A prospective longitudinal study. *Cognitive and Behavioral Neurology*, 18(2), 127-134.
- 53) Hall MW, **Hopkins RO**, Long JW, Mohammad SF, Solen KA. (2005). Hypothermia-induced platelet aggregation and cognitive decline in coronary artery bypass surgery: A pilot study. *Perfusion*, 20, 157-167.
- 54) Bayley PJ, Gold JJ, Hopkins RO, Squire LR. (2005). The neuroanatomy of remote memory. *Neuron*, 46(5), 799-810.
- 55) Taichman DB, Christie JD, Plotkin R, Mortensen J, White J, Kaplan S, Hansen-Flaschen J, Palevsky H, Elliott CG, Hopkins RO. (2005). Validation of a Brief Telephone Battery for Neurocognitive Assessment of Patients with Pulmonary Arterial Hypertension. *Respiratory Research*, April 25, 6(1):39.
- 56) Conroy MA, **Hopkins RO**, Squire LR. (2005). On the contribution of perceptual fluency and priming to recognition memory. *Cognitive, Affective, and Behavioral Neuroscience,* 5(1), 1-13.
- 57) Strasser HC, Lilyestrom J, Ashby ER, Honeycutt NA, Schretlen D, Pulver AE, Hopkins RO, DePaulo JR, Potash JB, Schweitzer B, Yates KO, Kurian E, Barta P, Pearlson GD. (2005). Hippocampal and ventricular volumes in psychotic and nonpsychotic bipolars compared with schizophrenic patients and community control subjects: A pilot study. *Biological Psychiatry*, 57, 633-639.
- 58) Hopkins RO, Tate DF, Bigler ED. (2005). Anoxic versus traumatic brain injury: amount of tissue loss not etiology alters cognitive and emotional function. *Neuropsychology*, 19(2), 233-242.
- 59) **Hopkins RO**, Weaver LK, Collingridge D, Parkinson RB, Chan KJ, Orme JF. (2005). Two year neurocognitive, emotional, and quality of life outcomes in survivors of acute respiratory distress syndrome. *American Journal of Respiratory and Critical Care Medicine*, 171, 340-347.
- 60) Levy DA, **Hopkins RO**, Squire LR. (2004). Impaired odor recognition memory in patients with hippocampal lesions. *Learning and Memory*, 11, 794-796.
- 61) Weaver LK, Hopkins RO, Chan KJ, Thomas FO, Churchill SK, Elliott CG, Morris AH. (2004). Special Report: Carbon Monoxide Research Group, LDS Hospital, Utah in reply to Scheinkestel et al., and Emerson: the role of hyperbaric oxygen in carbon monoxide poisoning. *Emergency Medicine Australasia*, 16(5-6), 394-399.
- 62) Jackson JC, Gordon SM, Ely EW, Burger C, **Hopkins RO**. (2004). Research Issues in the Evaluation of Cognitive Impairment in ICU Survivors. *Intensive Care Medicine*, Nov; 30(11), 2009-2016.

- 63) Gordon SM, Jackson JC, Ely EW, Burger C, Hopkins RO. (2004). Clinical Identification of Cognitive Impairment in ICU Survivors: Insights for Intensivists. *Intensive Care Medicine*, Nov; 30(11), 1997-2008.
- 64) Hopkins RO, Haaland KY. (2004). Neuropsychological and Neuropathological Effects of Anoxic or Ischemic Induced Brain Injury. *Journal of the International Neuropsychological Society*, 10(7), 957-961.
- 65) **Hopkins RO**, Weaver, LK, Chan KJ, Orme JF. (2004). Quality of Life, Emotional, and Cognitive Function Following Acute Respiratory Distress Syndrome. *Journal of the International Neuropsychological Society*, 10(7), 1005-1017.
- 66) Bergeson AG, Lundin R, Parkinson RB, Tate DF, Victoroff J, **Hopkins RO**, Bigler, ED. (2004). Clinical rating of cortical atrophy and cognitive correlates following traumatic brain injury. *The Clinical Neuropsychologist*, 18,509-520.
- 67) **Hopkins RO**, Waldram K, Kesner RP. (2004). Sequences assessed by declarative and procedural tests of memory in amnesic patients with hippocampal damage. *Neuropsychologia*, 42(14), 1877-1886.
- 68) Jackson JC, Gordon SM, Hart RP, **Hopkins RO**, Ely EW. (2004). The association between delirium and subsequent cognitive decline: A review of the empirical literature. *Neuropsychology Review*, 14(2), 87-98.
- 69) Hopkins RO, Myers EC, Shohamy D, Grossman S, Gluck M. (2004). Impaired probabilistic category learning in hypoxic subjects with hippocampal damage. *Neuropsychologia*, 42(4), 524-535.
- 70) Gale SD, Hopkins RO. (2004). Effects of hypoxia on the brain: Neuroimaging and neuropsychological findings following carbon monoxide poisoning and obstructive sleep apnea. *Journal of the International Neuropsychological Society*, 10, 60-71.
- 71) Levy DA, Manns JR, Hopkins RO, Broadbent NJ, Gold JJ, Squire LR. (2003). Impaired visual and odor recognition memory span in patients with hippocampal lesions. *Learning and Memory*, 10, 531-536. (see Erratum regarding the author list, *Learning and Memory*, 2004, 11, 123).
- 72) Bayley PJ, **Hopkins RO**, Squire LR. (2003). Successful recollection of remote autobiographical memories by amnesic patients with medial temporal lobe lesions. *Neuron*, 38, 135-144.
- 73) Manns JR, **Hopkins RO**, Squire LR. (2003). Semantic memory and the human hippocampus. *Neuron*, 38, 127-133.
- 74) Angus DC, Carlet J, on behalf of the 2002 Brussels Roundtable Participants. (2003). Surviving Intensive Care – A report from the 2002 Brussels Roundtable. *Intensive Care Medicine*, 167(5), 695-701.
- 75) Orme JF, Jr., Romney JS, Hopkins RO, Pope D, Chan KJ, Thomsen G, Crapo RO, Weaver LK. (2003). Pulmonary function and health related quality of life in survivors of ARDS. *American Journal of Respiratory and Critical Care Medicine*, 167, 690-694.
- 76) Manns JR, Hopkins RO, Reed JM, Kitchener EG, Squire LR. (2003). Recognition memory and the human hippocampus. *Neuron*, 37(1), 171-180.

- 77) Yount R, Raschke KA, Biru M, Tate DF, Miller, MJ, Abildskov T, Gandhi P, Ryser D, Hopkins RO, Bigler ED. (2002). Traumatic brain injury and atrophy of the posterior cingulate gyrus. *The Journal of Neuropsychiatry and Clinical Neurosciences*, 14, 416-423.
- 78) Weaver LK, Hopkins RO, Chan KJ, Churchill S, Clemmer TP, Elliott CG, Orme JF, Jr., Thomas, F.O., Morris, A.H. (2002). Hyperbaric oxygen for acute carbon monoxide poisoning. *New England Journal of Medicine*, 347(14), 1057-1067.
- 79) Parkinson RB, Hopkins RO, Cleavinger HO, Weaver LK, Victoroff J, Bigler ED. (2002). White matter hyperintensities and neuropsychological outcome following carbon monoxide poisoning. *Neurology*, 58, 1525-1532.
- Porter SS, Hopkins RO, Weaver LK, Bigler ED, Blatter DD. (2002).Corpus callosum atrophy and neuropsychological outcome following carbon monoxide poisoning. *Archives of Clinical Neuropsychology*, 17, 195-204.
- 81) Hopkins RO, Weaver LK. (2001). Acute psychosis associated with diving. Undersea and Hyperbaric *Medicine*, 28(3), 145-148.
- 82) Carrillo RC, Gabrieli JDE, Hopkins RO, McGlinchy-Berroth R, Kesner RP, Disterhoft JF. (2001). Spared discrimination and impaired reversal eyeblink conditioning in patients with temporal lobe amnesia. *Behavioral Neuroscience*, 115(6), 1171-1179.
- 83) Hurley RA, **Hopkins RO**, Bigler ED, Taber KH. (2001). Applications of functional imaging to carbon monoxide poisoning. *Journal of Neuropsychiatry and Clinical Neurosciences*, 13(2), 157-160.
- 84) Kesler SR, Hopkins RO, Weaver LK, Bigler ED, Blatter DD, Edge-Booth, H. (2001). Verbal memory deficits associated with fornix atrophy in carbon monoxide poisoning. *Journal of the International Neuropsychological Society*, 7, 640-646.
- 85) Kesner RP, **Hopkins RO**. (2001). Short-term memory for duration and distance in humans: Role of the hippocampus. *Neuropsychology*, 15(1), 58-68.
- 86) Myers CE, **Hopkins RO**, Kesner RP, Monti L, Gluck MA. (2000). Conditional spatial discrimination in humans with hypoxic brain injury. *Psychobiology*, 28(3), 275-282.
- 87) Weaver LK, Howe S, **Hopkins RO**, Chan KJ. (2000). Carboxyhemoglobin half-life in carbon monoxide-poisoned patients treated with 100% oxygen at atmospheric pressure. *Chest*, 117, 801-808.
- 88) Gale SD, Hopkins RO, Weaver LK, Bigler ED, Booth EJ, Blatter DD. (1999). MRI, quantitative MRI, SPECT, and neuropsychological findings following carbon monoxide poisoning. *Brain Injury*, 13(4), 229-243.
- 89) Reynolds CR, Hopkins RO, Bigler ED. (1999). Continuing decline of memory skills with significant recovery of intellectual function following severe carbon monoxide exposure: Clinical, psychometric and neuroimaging findings. *Archives of Clinical Neuropsychology*, 14(2), 235-249.
- 90) Hopkins RO, Weaver LK, Pope D, Orme JF, Jr., Bigler ED, Larson-Lohr V. (1999). Neuropsychological sequelae and impaired health status in survivors of severe acute respiratory distress syndrome. *American Journal of Respiratory and Critical Care Medicine*, 160(1), 50-56.

- 91) Hopkins RO, Larson-Lohr V, Weaver LK, Bigler ED. (1998). Neuropsychological impairments following hanta virus pulmonary syndrome. *Journal of the International Neuropsychological Society*, 4, 190-196.
- 92) **Hopkins RO**, Abildskov TJ, Bigler ED, Blatter DD, Weaver LK. (1997). Three dimensional image reconstruction of neuroanatomical structures: Methods for isolation of the cortex, ventricular system, hippocampus and fornix. *Neuropsychology Review*, 7(2), 87-104.
- 93) Bigler ED, Blatter DD, Anderson CV, Johnson SC, Gale SD, Hopkins RO, Burnett B. (1997). Hippocampal volume in normal aging (16 to 65 years) and traumatic brain injury. *American Journal of Neuroradiology*, 18, 11-23.
- 94) Bigler ED, Johnson SC, Anderson CV, Blatter DD, Gale SD, Russo AA, Ryser DK, Macnamara SE, Bailey BJ, **Hopkins RO**, Abildskov TJ. (1996). Traumatic brain injury and memory: The role of hippocampal atrophy. *Neuropsychology*, 10 (3), 333-342.
- 95) Weaver LK, **Hopkins RO**, Larson-Lohr V. (1996). Functional and neuropsychological recovery in severe carbon monoxide poisoning. *Annals of Emergency Medicine*, 27 (6), 736-740.
- 96) **Hopkins RO**, Kesner RP, Goldstein M. (1995). Memory for novel and familiar spatial and linguistic temporal distance information in hypoxic subjects. *Journal of the International Neuropsychology Society*, 1 (5), 454-468.
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- 98) Hopkins RO, Kesner RP, Goldstein M. (1995). Item and order recognition memory in subjects with hypoxic brain injury. *Brain and Cognition*, 27, 180-201.
- 99) Kesner RP, **Hopkins RO**, Fineman B. (1994). Item and order dissociation in humans with prefrontal cortex damage. *Neuropsychologia*, 334(8), 881-891.

# **EDITED BOOK CHAPTERS:**

- 1) **Hopkins RO**. (in press). Respiratory Disorders: Effects on Neurocognitive and Brain Function. Carol L. Armstrong, Editor. *Handbook of Medical Neuropsychology: Applications of Cognitive Neuroscience*, Springer,
- Hopkins RO, Jackson JC. (in press September 2008). Behavioral Disturbances in the Intensive Care Unit. Gabrielli A, Layon J, and Yu M., Editors. 4<sup>th</sup> Edition, *Civetta, Taylor and Kirby's Critical Care*, Lippincott Williams & Wilkins,
- Hopkins RO, Bigler ED. (2008). Hypoxic and Anoxic Conditions of the CNS. In: J. E. Morgan and J. H. Ricker (Eds.), *Textbook of Clinical Neuropsychology*, Swets & Zeitlinger, Taylor and Francis Group, New York, 521-535.

- Hopkins RO. (2007). Neurocognitive and Affective Sequelae of Carbon Monoxide Poisoning. David G. Penney, Editor, *Carbon Monoxide Poisoning*, CRC Press, Taylor and Francis Group, Boca Raton, 477-494.
- 5) Herridge MS, **Hopkins RO**. (2005). Long-term Outcomes of Critical Illness. In J. B. Hall, G. A. Schmidt, and L. D. H. Wood (Eds.), *3<sup>rd</sup> Edition, Principles of Critical Care*. McGraw-Hill, 217-227.
- 6) Slife BD, Hopkins RO. (2004). Alternative assumptions for Neuroscience: Formulating a True Monism. In B.D. Slife, J. S. Reber, and F. C. Richardson (Eds.), *Critical Thinking about Psychology: Hidden Assumptions and Plausible Alternatives*, Washington D.C., American Psychological Association Books, 121-147.
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- Hopkins RO. (2002). Quality of life following acute respiratory distress syndrome. In S. G. Pandalai (Ed.), *Recent Research Developments in Respiratory and Critical Care Medicine*, Kerala (India): Research Signpost, Vol. 2, 19-27.
- 9) Hopkins RO. (2002). Neurocognitive Impairments in Survivors of Acute Respiratory Distress Syndrome. In: J. L. Vincent (Ed.). 2002 Yearbook of Intensive Care and Emergency Medicine. New York: Springer-Verlang, 765-773
- Hopkins RO. (2001). Brain imaging, neurocognitive sequelae and health related quality of life following acute respiratory distress syndrome. In S. G. Pandalai (Ed.), *Recent Research Developments in Respiratory and Critical Care Medicine*, Kerala (India): Research Signpost, Vol. 1, 209-222.
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- 12) Kesner RP, **Hopkins RO**, Chiba AA. (1992). Learning and memory in humans with an emphasis on the role of the hippocampus. In N. Butters and L.R. Squire (Eds.), *Neuropsychology of Memory* (Volume 2, pp. 106-121). New York: Guilford Press.

# **PUBLISHED ABSTRACTS:**

- Goodrich-Hunsaker NJ, Hopkins RO, Bigler ED. (submitted). Cognitive neuroscience of a declarative verbal memory symptom validity test. *International Neuropsychological Society 37<sup>th</sup> Annual Meeting Program and Abstracts*, February 11-14, 2009 Atlanta, Georgia, pp. xx.
- 2) Goodrich-Hunsaker NJ, **Hopkins RO**. (accepted). Spatial deficits in a virtual radial arm maze in amnesic patients with hippocampal damage, *Society for Neuroscience*,
- 3) Weaver LK, **Hopkins RO**, Churchill S, Deru K. (2008). Neurological outcomes 6 years after acute carbon monoxide poisoning. *Undersea and Hyperbaric Medicine Annual Scientific Meeting Program and Abstracts,* Salt Lake City, Utah, June 26-28, 2008, pp. 41.

- 4) **Hopkins RO**, Weaver LK. (2008). Cognitive outcomes 6 years after acute carbon monoxide poisoning. *Undersea and Hyperbaric Medicine Annual Scientific Meeting Program and Abstracts*, Salt Lake City, Utah, June 26-28, 2008, pp. 40.
- 5) Jewkes J, Blair R, Bailey P, Thompson GE, Spuhler VJ, Bezdjian L, Veale K, Rodriquez L, Hopkins RO. (2008). Early activity is feasible and safe in patients with respiratory failure. *Combined Section Meeting of the American Physical Therapy Association, Acute Care Perspective*, Spring 2008, February, 6-10, 2008, Nashville, Tennessee, pp. 20.
- 6) Bigler ED, Allen MD, Clement PF, Larsen J, Goodrich-Hunsaker NJ, Hopkins RO. (2008). Functional and structural neuroimaging correlates of symptom validity test performance. *International Neuropsychological Society 36<sup>th</sup> Annual Meeting Program and Abstracts*, February 6-9, 2008 Waikoloa, Hawaii, pp. 138.
- 7) Allen MD, Bigler ED, Larsen J, Goodrich-Hunsaker NJ, Hopkins RO. (2007). Functional magnetic resonance imaging (fMRI) evidence for high cognitive effort on the Word Memory Test in the absence of external incentives. *International Neuropsychological Society 36<sup>th</sup> Annual Meeting Program and Abstracts*, February 6-9, 2008 Waikoloa, Hawaii, pp. 122.
- 8) Allen MD, Bigler ED, Larsen J, Goodrich-Hunsaker NJ, **Hopkins RO**. (2007). Functional magnetic resonance imaging (fMRI) evidence for high cognitive effort on the Word Memory Test in the absence of external incentives. *Developmental Neurorehabilitation*, 10(4), 296-297.
- 9) Goodrich-Hunsaker NJ, Gilbert PE, **Hopkins RO**. (2007). The role of the human hippocampus in odor-place memory. 203.12, *Society for Neuroscience*, November 2-7, San Diego, California.
- Shrager Y, Levy DA, Hopkins RO, Squire LR. (2007). Intact working memory in patients with medial temporal lobe lesions: finding an independent criterion for defining working memory. 526.15, *Society for Neuroscience*, November 2-7, San Diego, California.
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- 137) **Hopkins RO**, Gale SD, Johnson SC, Bigler ED, Blatter DD, Weaver LK. (1995). A case study in review: Severe anoxia without concomitant brain atrophy and neuropsychological impairments. *Journal of the International Neuropsychological Society*, 1(2), 124.
- 138) **Hopkins RO**, Kesner RP. (1994). Short term memory for duration in hypoxic subjects. *Abstracts, Society for Neuroscience*, 19, 1075.
- 139) Hopkins RO, Weaver LK, Kesner RP. (1995). Hippocampal size by quantitative MRI corresponds with persistent memory impairments in carbon monoxide poisoned subjects. *Brain and Cognition*, 24, 215.
- 140) Hopkins RO, Weaver LK. (1994). Long-term outcome in subjects with carbon monoxide poisoning. *Abstracts, Undersea and Hyperbaric Medical Society,* (Supplement) 21, 17.
- 141) Hopkins RO, Weaver LK, Howe S, Kesner RP. (1994). In search of an anatomical model of carbon monoxide poisoning. *Abstracts, Undersea and Hyperbaric Society,* (Supplement) 21, 14.
- 142) Howe S, Larson-Lohr V, Weaver LK, **Hopkins RO.** (1994). Development of a comprehensive database for carbon monoxide patients. *Abstracts, Undersea and Hyperbaric Society,* (Supplement) 21, 14-15.
- 143) Hopkins RO, Kesner RP. (1993). Memory for temporal and spatial distance information for new information and the prior knowledge in hypoxic subjects. *Abstracts, Society for Neuroscience*, 18, 1284.

- 144) **Hopkins RO**, Weaver LK, Kesner RP. (1993). Long term memory impairments and hippocampal magnetic resonance imaging in carbon monoxide poisoned subjects. *Abstracts, Undersea and Hyperbaric Society*, 20, 15.
- 145) Hopkins RO, Kesner RP. (1992). Memory for spatial locations and sentences in data-based and knowledge-based memory systems in hypoxic subjects. *Abstracts, Society for Neuroscience*, 18, 746.
- 146) **Hopkins RO**, Kesner RP. (1992). Memory for temporal and spatial distance information for cities in both data-based (New Brunswick) and knowledge-based (United States) memory systems in hypoxic subjects. *Fifth Conference on the Neurobiology of Learning and Memory*, Irvine 1992.
- 147) Howe S, Ershler L, Weaver LK, **Hopkins RO.** (1992). Construction and operation of a small computerized research hyperbaric chamber. *Abstracts, Undersea and Hyperbaric Society Meeting*. 19, 47-48.
- 148) **Hopkins RO**, Howe S, Ershler L, Walker J, Weaver LK, Kesner RP. (1992). Hippocampal Neuronal cellular death due to carbon monoxide poisoning in rats. *Abstracts, Undersea and Hyperbaric Society Meeting*, 19, 88.
- 149) Hopkins RO, Kesner RP. (1991). Data-based and knowledge-based memory for temporal distances in hypoxic brain injured subjects. *Abstracts, Society for Neuroscience*. 17, 133.
- 150) Barger SD, Weaver LK, **Hopkins RO.** (1991). Assessment of cognitive functioning in carbon monoxide poisoned persons. *Abstracts, Undersea and Hyperbaric Society.* (Supplement) 18, 33.
- 151) **Hopkins RO**, Kesner RP. (1990). Data based (episodic) memory for motor responses in hypoxic patients. *Abstracts, Society for Neuroscience*. 16, 286.
- 152) **Hopkins RO**, Weaver LK. (1991). Does late repetitive hyperbaric oxygen improve delayed sequelae associated with carbon monoxide poisoning? *Abstracts, Undersea and Hyperbaric Society Meeting*. (Supplement) 18, 34.

# **OTHER PUBLICATIONS:**

- 1) Hopkins RO, Jackson JC. (2006). Acute respiratory distress syndrome acquired brain injury: An under-recognized and debilitating condition. *Touch Briefings, U.S. Respiratory Diseases,* Issue II, December 2006, 55-56.
- 2) Hopkins RO, Weaver LK, Chan KJ, Orme JF, Jr. (2005). Invited reply to letter to the editor Two Year Cognitive, Emotional, and Quality of Life Outcomes in Acute Respiratory Distress Syndrome, *American Journal of Respiratory and Critical Care Medicine*, 172, 786-787.
- 3) Ely EW, Jackson JC, Gordon SM, **Hopkins RO**. (2005). Invited Reply to Letter to the Editor: Critical Illness Brain Syndrome (CIBS) an underestimated entity? *Critical Care Medicine*, 33(6), 1464-1465.
- 4) Weaver LK, **Hopkins RO**, Finelli PF, Dimario FJ. (2005). Hemorrhagic infarction in white matter following acute carbon monoxide poisoning. Letter to the Editor. *Neurology*, 64(6), 1101.

- 5) Weaver LK, Morris AH, **Hopkins RO**, Chan KJ, Churchill S, Elliott CG, Thomas F. (2003). Response to review of "Hyperbaric oxygen for acute carbon monoxide poisoning" by Wilkinson, Termblett, and Major, Letter to the Editor. *Journal of the Intensive Care Society*, 4, 95-96.
- 6) Weaver LK, **Hopkins RO**, Morris AH. (2002). Hyperbaric oxygen for acute carbon monoxide poisoning, Authors Reply Letters to the Editor, *New England Journal of Medicine*, 348(6), 557-560.
- 7) Weaver LK, Howe S, **Hopkins RO**, Chan KJ. (2001). Half-life of blood carboxyhemoglobin. Letter to the Editor, *Chest*, 119(2), 661-663.
- 8) Weaver LK, **Hopkins RO**, Elliott CG. (1999). Carbon Monoxide Review, Letter to the Editor, *New England Journal of Medicine*, 340(6), 1290. Discussion 1292.
- 9) Weaver LK, **Hopkins RO**, Larson-Lohr V. (1996). Neuropsychologic and functional recovery from severe carbon monoxide poisoning without hyperbaric oxygen therapy. *Annals of Emergency Medicine*, 27(6), 736-740.
- 10) Weaver LK, **Hopkins RO**, Larson-Lohr V. (1995). Hyperbaric oxygen and carbon monoxide poisoning. Letter to the Editor, *Annals of Emergency Medicine*, 26(3), 390-2.
- 11) **Hopkins RO**, Weaver LK. (1995). Carbon monoxide controversies: Neuropsychologic testing, mechanisms of toxicity and hyperbaric oxygen. Letter to the Editor, *Annals of Emergency Medicine*, 25(2), 272-3.
- 12) Weaver LK, **Hopkins RO**, Larson-Lohr V. (1995). Treatment of carbon monoxide poisoning: Critical review of human outcome studies comparing normobaric oxygen with hyperbaric oxygen. Letter to the Editor, *Annals of Emergency Medicine*, 25(2), 271-272.

### **GRANTS AND CONTRACTS:**

### **GRANTS UNDER REVIEW**

Years: 08/01/07 - 07/31/12 Title of Project: Dynamic Signal Processing Analyses of Neural Plasticity Role in Project: Collaborator, Johns Hopkins University Site (Craig Stark PI) PI: Emery Brown, Massachusetts General Hospital Funding Agency: NIH Amount Requested: \$2,385,809

Years: 4/1/2008 - 3/21/2012
Title of Project: Dissociating basal forebrain vs. Medial temporal amnesia: The role of context. (Competitive Renewal)
Role in Project: Principal Investigator for Brigham Young University Site
Funding Agency: NIH - National Institute of Mental Health
Amount Requested: \$337,835 for Brigham Young University Site

## **FUNDED GRANTS**

Years: 12/01/07-11/30/11
Title of Project: Patient outcomes 6 and 12 months after ALTA and EDEN OMEGA ARDS Network trials
Role in Project: Principal Investigator
Funding Agency: NIH - National Heart Lung Blood Institute
Amount Requested: \$1,613,933.00

Years: 8/1/2007 - 8/31/2009

Title of Project: Prediction of Cognitive Sequelae and Ecological Validity in Critically III Adult Patients
Role in Project: Principal Investigator
Funding Agency: The Deseret Foundation
Amount of Award: \$30,003.00

Years: 09/01/2007 – 08/31/2009 Title of Project: Outcome following CO poisoning in children Role in Project: Co-Investigator Funding Agency: Deseret Foundation Amount of Award: \$39,941.62

Years: 5/01/2007 - 4/30/2011 Title of Project: ARDS Long Term Outcome (LTO) Project Role in Project: Principal Investigator Funding Agency: NHLBI and the ARDS Network Amount of Award: \$720,622.00

Years: 4/1/2007 - 3/31/2009
Title of Project: Randomized Trial of 1 vs. 3 Hyperbaric Oxygen Treatments for Acute Carbon Monoxide Poisoning.
Role in Project: Co-Investigator
Funding Agency: The Deseret Foundation
Amount of Award: \$39,987.00

Years: 08/01/06 - 06/30/11
Title of Project: Bringing to light the Risk Factors and Incidence of Neuropsychological Dysfunction in ICU Survivors (The BRAIN-ICU Study)
Role in Project: Consultant
Principal Investigator: E. Wesley Ely, Vanderbilt University
Funding Agency: NIH –National Institute of Aging
Amount of Award: \$2,467,325 (total direct)

Years: 07/01/06 - 06/30/08 Title of Project: Pattern Separation, Pattern Completion and Encoding Dynamics in the MTL Role in Project: Consultant Principal Investigator: Craig Stark, Johns Hopkins University Funding Agency: NSF Amount of Award: \$150,000 (total direct)

Years: 5/1/06 - 4/30/10 Title of Project: Memory Systems of the Mammalian Brain (Competitive Renewal) Role in Project: Consultant Principal Investigator: Larry R. Squire, University of California San Diego Funding Agency: NIH Amount of Award: \$2,297,595

Years: 2005-2005 Title of Project: Effects of impaired memory on tests of neuropsychological malingering. Role in Project: Principal Investigator Funding Agency: College of Family, Home and Social Science, Brigham Young University Amount of Award: \$4740.00

Years: 6/1/2004-11/30/2007 Title of Project: Prolonged outcomes of nitric oxide for ventilated premature babies. Role in Project: Principal Investigator for the Brigham Young University Site Funding Agency: National Institute of Health Amount of Award: \$61,200.00.

Years: 2004-2004

Title of Project: Relationships between cingulate gyrus volume and neuropsychological outcome following carbon monoxide poisoning.Role in Project: Principal Investigator

Funding Agency: College of Family, Home and Social Science, Brigham Young University Amount of Award: \$4416.00

Years: 12/1/2003 - 12/31/2007 Title of Project: Hyperbaric oxygen therapy in chronic stable brain injury. Role in Project: Consultant Funding Agency: Deseret Foundation Amount of Award: \$39,961.00

Years: 2003-2004 Title of Project: Pilot Study: The Effect of a Spiritual Intervention on Outcomes. Role in Project: Co-Investigator Funding Agency: Deseret Foundation Amount of Award: \$39,222.00

Years: 1/1/2003 – 12/31/2005 Title of Project: Memory Impairment in Medial Temporal vs. Basal Forebrain Amnesia Role in Project: Principal Investigator for the Brigham Young University site, Funding Agency: National Science Foundation Amount of Award: \$122,000.00

Years: 2003-2003 Title of Project: Measurement of Sleep Patterns in Infants with Positional Plagiocephaly Role in Project: Principal Investigator Funding Agency: College of Family, Home and Social Science, Brigham Young University Amount of Award: \$4620.00

Years: 2002-2004 Title of Project: Interdisciplinary Collaborative Consortium on the Cognitive Neuroscience of Category Learning Role in Project: Co-Investigator Funding Agency: J.S. McDonnell Foundation Amount of Award: \$310,000.00

Years: 2002-2002 Title of Project: Undergraduate Research Experience in Neuroscience, Mentoring Grant Role in Project: Co-Investigator Funding Agency: Brigham Young University Office of Undergraduate Research Amount of Award: \$31,500.00 (\$3,100.00 per faculty member)

Years: 2001-2002 Title of Project: ApoE and cognitive outcome in ARDS and CO poisoning. Role in Project: Co-Investigator Funding Agency: Deseret Foundation Amount of Award: \$38,800.00

Years: 2001-2002 Title of Project: Brain MRI and neuropsychological outcome in ARDS patients Role in Project: Co-Principal Investigator Funding Agency: Deseret Foundation Amount of Award: \$39,990.80

Years: 2001-2002 Title of Project: White matter hyperintensities following carbon monoxide poisoning Role in Project: Principal Investigator Funding Agency: College of Family, Home and Social Science, Brigham Young University Amount of Award: \$5,000.00

Years: 2001-2001 Title of Project: Undergraduate Research Experience in Neuroscience. Role in Project: Co-Investigator Funding Agency: Brigham Young University Office of Undergraduate Research Amount of Award: \$34,650.00 (\$3,500.00 per faculty member)

Years: 2000-2001 Title of Project: Cognitive Functioning in Flight Nurses Working 12 versus 18 Hour Shifts Role in Project: Co-Principal Investigator Funding Agency: Life Flight, LDS Hospital Amount of Award: \$7,000.00

Years: 2000-2001 Title of Project: Hypothermia-induced neurological damage during surgery. Role in Project: Principal Investigator Funding Agency: Deseret Foundation Amount of Award: \$38,654.00

Years: 1999-2000 Title of Project: Psychological Outcome Following Long-term Mechanical Ventilation Role in Project: Principal Investigator Funding Agency: College of Family, Home and Social Sciences, Brigham Young University Amount of Award: \$3,500.00 Years: 1999-2000 Title of Project: Two Year Outcome in ARDS Survivors. Role in Project: Principal Investigator Funding Agency: Deseret Foundation Amount of Award: \$27,286.00

Years: 1998-1999 Title of Project: The effect of a respiratory failure care process model Role in Project: Co-Investigator Funding Agency: Deseret Foundation Amount of Award: \$34,950.00

Years: 1996-1998
Title of Project: Two year quality of life and neuropsychological outcome following Adult Respiratory Distress Syndrome
Role in Project: Co-Principal Investigator
Funding Agency: Deseret Foundation
Amount of Award: \$29,826.00

Years: 1995-1997 Title of Project: Acute carbon monoxide poisoning hyperbaric oxygen versus normobaric oxygen. Role in Project: Co-Investigator Funding Agency: Deseret Foundation Amount of Award: \$36,574.00

Years: 1995-1996 Title of Project: Long-term cognitive and functional outcome in Adult Respiratory Distress Survivors Role in Project: Co-Principal Investigator Funding Agency: Deseret Foundation Amount of Award: \$14,946.00

Years: 1995-1998 Title of Project: Establishing normative neuropsychological data for the carbon monoxide trial Role in Project: Principal Investigator Funding Agency: Deseret Foundation Amount of Award: \$25,539.00

Years: 1994-1995 Title of Project: Long-term outcome in patients with acute carbons monoxide poisoning Role in Project: Co-Investigator Funding Agency: Deseret Foundation Amount of Award: \$29,327.00)

Years: 1992-1994 Title of Project: Acute carbon monoxide poisoning: Hyperbaric oxygen vs. Normobaric oxygen Role in Project: Co-Investigator Funding Agency: Deseret Foundation Amount of Award: \$33,991.00

Years: 1991-1993

Title of Project: An animal model of delayed neurologic sequelae from carbon monoxide poisoning and possible therapeutic approaches
Role in Project: Co-Investigator
Funding Agency: Deseret Foundation
Amount of Award: \$18,495.00

## **INVITED LECTURES, PAPERS, AND CONFERENCE PRESENTATIONS:**

- 1) Just Mentor, *College of Family, Home, and Social Science, Mary Lou Fulton Mentored Student Research Conference,* Brigham Young University, Provo, Utah, April 3, 2008.
- 2) Safety in Moving Our Critically III Patients. *Early ICU Mobility Therapy's Role in the Critically III, Society of Critical Care Medicine,* Honolulu, Hawaii, February 4, 2008.
- 3) Critical Illness Acquired Brain Injury: Long-term Neurocognitive Outcomes. *Research Rounds, Pulmonary and Critical Care Medicine, Intermountain Medical Center, Murray, Utah,* November 20, 2007.
- 4) Safety in Moving Our Critically III Patients. *Early ICU Mobility: Barriers and Benefits. Plenary Presentation. Chest 2007, Chicago, Illinois, October 20-25, 2007.*
- 5) Social Challenges and Success. 2007 Brain Injury Association of Utah Family and Processionals Conference, October 18-19, Davis Conference Center in Layton Utah, October 19, 2007.
- 6) Neurocognition, neuroimaging and beyond. *National Institute on Aging (NIA) Exploratory Workshop: Critical Illness and Critical Care in Older Adults: Translational Approaches.* Bethesda, Maryland, September 17-18, 2007.
- 7) End-organ damage, repair, recovery, and residual function during and after sepsis: Neurocognitive and Mood. International Sepsis Forum 6<sup>th</sup> Annual Summer Colloquium on The Sepsis Aftermath: Repair, Recurrence, Recovery, and Rehabilitation, June 8-9, Annapolis, Maryland, June 9, 2007.
- 8) Neuropsychological Outcomes After ICU: Life After Critical Care. *American Thoracic Society International Conference*, San Francisco, California, May 22, 2007.
- Critical Illness Acquired Brain Injury: Long-term Neurocognitive Outcomes. *Research Rounds, Pulmonary and Critical Care Medicine, Johns Hopkins Medical Center, Baltimore, Maryland,* February 23, 2007.
- 10) Long-term Sequelae in Critical III Patients. Intermountain Healthcare Intensive Medicine Clinical Program Summer Educational Conference "The Power of Collaboration: Sustaining the Pursuit of Excellence While Working Together to Optimize Best Practices For a Better Tomorrow". The Gathering Place at Gardner Historic Village, Salt Lake City, Utah, July 13, 2006.
- 11) Brain Health and Aging. 16<sup>th</sup> Annual Russell B. Clark Gerontology Health Conference, Brigham Young University, Provo, Utah, March 13, 2006.
- 12) Critical Illness Acquired Brain Injury: Neuroimaging and Neurocognitive Outcomes. *Grand Rounds, Department of Pulmonary and Critical Care Medicine, Wake Forest University School of Medicine,* Winston Salem, NC, March 1, 2006.

- 13) Critical Illness Acquired Brain Injury: Neuroimaging and Neurocognitive Outcomes. *Grand Rounds, Department of Critical Care Medicine, University of Pittsburgh Medical Center, Pittsburgh, PA, September, 21, 2005.*
- 14) Why the Brain Matters: Chronic Neurocognitive and Affective Morbidity of Critical Illness. *Research Conference, Department of Critical Care Medicine, University of Pittsburgh Medical Center,* Pittsburgh, PA, September 20, 2005.
- 15) Neuropsychology and Critical Illness: Issues and Advances: Critical Illness and Long-Term Cognitive Impairment. Symposium, *American Psychological Association Annual Scientific Meeting*, August 21, 2005.
- 16) Theory and practice: Managing the brain during mechanical ventilation: Chronic Neurocognitive Effects of Critical Illness. Symposium, *American Thoracic Society Annual Meeting*, May 25, 2005.
- 17) Surviving Intensive Care theory and practice of optimizing ICU care for better long-term recovery: Depression and Cognitive Sequelae Following Critical Illness. Symposium, *American Thoracic Society Annual Meeting*, May 24, 2004.
- 18) Neuropsychological Assessment in Less Common Medical Disorders: Neuropsychological Sequelae following Acute Respiratory Distress Syndrome. Symposium, 32<sup>nd</sup> Annual Meeting of the International Neuropsychological Association, Baltimore, Feb 4-7,2004.
- Acute respiratory distress syndrome and long-term cognitive impairment: A case study. Presented at Adult Grand Rounds, *National Academy of Neuropsychology 23<sup>rd</sup> Annual Conference*, October 17, 2003.
- 20) Developmental Considerations after Brain Injury in Children and Adolescents. Annual Society for Cognitive Rehabilitation International Conference Assessment and Treatment Strategies for Children and Adults after Brain Injury, April 24-25, 2003.
- 21) Neuropsychological and Neuroimaging effects of Carbon Monoxide. 22<sup>nd</sup> National Academy of Neuropsychology Annual Conference. Workshop, October 11, 2002.
- 22) How should we assess neuropsychological sequelae of critical illness? Round Table Conference "Surviving Intensive Care", 22<sup>nd</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 16-18, 2002.
- 23) Neurocognitive Impairments in Survivors of Acute Respiratory Distress Syndrome. 22<sup>nd</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium March 19-22, 2002.
- 24) Carbon Monoxide Poisoning: Neuropsychological and Neuroimaging Outcome. *Fuller Theological Seminary*, Graduate School of Psychology, Pasadena, California, October 23, 2001.
- 25) Neuropsychological Sequelae in ARDS Survivors. "What Happens to Survivors of ARDS". *American Thoracic Society* 97<sup>th</sup> *International Conference*, San Francisco, May 20, 2001.
- 26) The effects of carbon monoxide on the brain. Larry H. Miller Chevrolet, January 31, 2001.

- 27) Hypoxic Brain Injury: Cognitive and Neuroimaging Outcomes. *Brain Injury Association of Utah,* 2000 Family and Professionals Conference, October 20, 2000.
- 28) Roundtable for young adults & families One day at a time. *Brain Injury Association of Utah, 2000 Family and Professionals Conference,* October 19, 2000.
- 29) Women in Science. The Girl Scouts of Utah annual Cadet and Senior Conference, October 6, 2000.
- 30) The Effects of Carbon Monoxide on the Brain. *AMICUS April Education Meeting*. Deseret Foundation, April 14, 2000.
- 31) CO poisoning: Brain imaging and neuropsychological findings. *Department of Psychology*, University of Utah, September, 1999.
- 32) Neuropsychological Performance in Patients with Carbon Monoxide Poisoning and Demographically Matched Normal Control Subjects. *Deseret Foundation Board Meeting*. August, 1999.
- 33) Brain Injury Altitude, Diving, ARDS and CO. Intermountain Thoracic Society, 42nd Annual Midwinter Conference on Chest Disease. February, 1999.
- 34) Cognitive impairments following decompression illness. Annual Pacific Chapter Meeting of the Undersea and Hyperbaric Medical Society. February, 1998.
- 35) Neuropsychological impairments correlate with neural changes as measured by quantitative and 3-Dimensional brain MRI images following carbon monoxide poisoning. *Winter Symposium on Baromedicine*, January, 1996.
- 36) Neuropsychological outcome in recreational divers with decompression illness. *Winter Symposium on Baromedicine*, January, 1996.
- 37) Carbon monoxide's effect on the brain and hazards posed for normal adults. *National SAFE KIDS Campaign Carbon Monoxide Symposium*. Washington D.C., December 7, 1995.
- 38) Cognitive and behavioral outcome following carbon monoxide poisoning. *Educational Symposia on Carbon Monoxide Poisoning*. New York City, September, 1995. Sponsored by First Alert.
- 39) Development of a Protocol and Outcome Measures for an HBO-HIV Clinical Trial. *Undersea and Hyperbaric Medical Society Annual Scientific Meeting*, June 22, 1995.
- 40) Neuropsychological tools for assessing cognitive outcome and fatigue in Human Immune Deficiency Syndrome. *Undersea and Hyperbaric Medical Society Annual Scientific Meeting*, June 1995.
- 41) Research Methods, Bits and Pieces. Pre-course for the Baromedicine Nurses Associations Meeting, *Undersea and Hyperbaric Medical Society Annual Scientific Meeting*, June 1995.

# **SERVICE:**

## **PROFESSIONAL AND HONORARY SOCIETIES:**

American College of Chest Physicians American Psychological Association American Thoracic Society International Neuropsychological Society National Academy of Neuropsychology Society for Critical Care Medicine Society for Neuroscience Undersea and Hyperbaric Medical Society

## **EDITORIAL AND AD HOC REVIEW ACTIVITIES:**

### **EDITORSHIPS**

2005 – Current	Consulting Editor
	Journal of the International Neuropsychological Society

2005 – Current Editorial Board Member Journal of Critical Care

2007 – Current Editorial Board Member The Open Critical Care Medicine Journal

### **AD HOC REVIEW ACTIVITIES**

Ad Hoc Reviewer, American Journal of Respiratory and Critical Care Medicine Ad Hoc Reviewer, Archives of Environmental and Occupational Health Ad Hoc Reviewer, Behavioral Neuroscience Ad Hoc Reviewer, Biological Research for Nursing Ad Hoc Reviewer, Brain Imaging and Behavior Ad Hoc Reviewer, British Journal of Health Psychology Ad Hoc Reviewer, Cortex Ad Hoc Reviewer, Critical Care Medicine Ad Hoc Reviewer, Health Psychology Ad Hoc Reviewer, Hippocampus Ad Hoc Reviewer, Intensive Care Medicine Ad Hoc Reviewer, Indian Journal of Radiology and Imaging Ad Hoc Reviewer. International Journal of Sports Medicine Ad Hoc Reviewer, Journal of Clinical Psychology Ad Hoc Reviewer, Journal of Clinical and Experimental Neuropsychology Ad Hoc Reviewer, Journal of Critical Care Ad Hoc Reviewer, Journal of the International Neuropsychological Society Ad Hoc Reviewer, Journal of Psychosomatic Research Ad Hoc Reviewer, Neuropsychology. Ad Hoc Reviewer, New England Journal of Medicine Ad Hoc Reviewer, Occupational and Environmental Medicine Ad Hoc Reviewer, Journal of Rehabilitation Medicine Ad Hoc Reviewer, Respiratory Medicine (Current Medical Literature; CML) Ad Hoc Reviewer, Southern Medical Journal Ad Hoc Reviewer, The Journal of Neuropsychiatry and Clinical Neurosciences

Ad Hoc Reviewer, Undersea and Hyperbaric Medicine

## **PROFESSIONAL SERVICE:**

2004 - Current Scientific Advisory Committee Division 40, American Psychological Association

2000-2005 Secretary / Treasurer Intermountain Chapter, Society for Neuroscience

# **COMMUNITY SERVICE:**

Staying Sharp: Current Advances in Brain Research. Sponsored by the AARP of Utah, Dana Brain Alliance, National Retired Teachers Association, and The Brain Institute at the University of Utah. May 31, 2008, Moab, Utah.

Staying Sharp: Current Advances in Brain Research. Sponsored by the AARP of Utah, Dana Brain Alliance, National Retired Teachers Association, and The Brain Institute at the University of Utah. November 10, 2007, Richfield, Utah.

AARP Foundation Women's Leadership Circle Womenvision Summit; Staying Sharp: Current Advances in Brain Research. *Sponsored by the AARP, Dana Brain Alliance, and National Retired Teachers Association,* April 14, 2007, Tucson Arizona

Staying Sharp: Current Advances in Brain Research. *Sponsored by the AARP of Utah, Dana Brain Alliance, National Retired Teachers Association, and The Brain Institute at the University of Utah.* March, 10 2007, Vernal, Utah.

A Seminar to Remember: Maintaining and Improving Health of the Brain and Nervous System. *Sponsored by the Ensign Stake and the Brain Institute of the University of Utah.* February 1, 2007, Salt Lake City, Utah.

Staying Sharp: Current Advances in Brain Research. Sponsored by the AARP of Utah, Dana Brain Alliance, National Retired Teachers Association, and The Brain Institute at the University of Utah. November 18, 2006, Price, Utah.

Staying Sharp: Current Advances in Brain Research. Sponsored by the AARP of Utah, Dana Brain Alliance, National Retired Teachers Association, and The Brain Institute at the University of Utah. March 18, 2006, Provo, Utah.

Staying Sharp: Current Advances in Brain Research. Sponsored by the AARP of Utah, Dana Brain Alliance, National Retired Teachers Association, and The Brain Institute at the University of Utah. November 5, 2005, St. George, Utah.

Staying Sharp: Current Advances in Brain Research. *Sponsored by the AARP of Utah, Dana Brain Alliance, National Retired Teachers Association*. September 17, 2005, Salt Lake City, Utah.

1999 - 2004: Board of Medical Consultants for the ARDS Support Center, Inc.

Judge, Central Utah Science and Engineering Fair (Grades 7 to 12). Brigham Young University, April, 4, 2002).

Taking the long view: Researchers need to study ARDS survivors after they leave the ICU. (2002). Article in: Advance for Managers of Respiratory Care, Vol. 1, No. 2, 30-35.

ARDS outcomes: Looking beyond the ICU Doors. (2001). Pulmonary Reviews: Trends in Pulmonary & Critical Care Medicine, 6(8), 11-15.

Hypoxic Brain Injury: Cognitive & Neuroimaging Outcomes. Making Headway, Brain Injury Association of Utah, Issue 1, 2001, 1-2.

Research Suggests that 25% of Population is more Susceptible to serious Brain Damage from Low-Level Carbon Monoxide Exposure. IEQ Strategies, Feb. 2001, Vol. 14, No.2, 9-12.

Expanding Your Horizons, Math / Science Conference. Salt Lake Community College, May 12, 2001. Presented 3 workshops in Neuroscience.

ARDS Survivors Carry Disease Scars. Article in: Advance for Managers of Respiratory Care. March 1999, Volume 8, No. 3, pp. 32-33.

Cognitive and behavioral effects of carbon monoxide poisoning. Television, Radio and Newspaper Press Conference, Salt Lake City, Utah, January 1999.

Long-term effects of carbon monoxide poisoning. Good Day New York, Television News Program, New York City, New York. September, 1995.

September 1988 to September 1989. Utah Perinatal Association Conference Chair.

September 1987 to September 1988. Utah Perinatal Association Conference Co-Chair.

September 1984 to September 1987. Utah Perinatal Association Conference Committee.

#### AWARDS AND SCHOLARSHIPS:

- 2008 Award for Distinguished Contribution to Accessibility, University Accessibility Center, Brigham Young University
- 2006 Best Research Presentation Award, Undersea and Hyperbaric Medical Society Annual Scientific Meeting
- 2004- Young Scholar Award, Brigham Young University

- 1993 Golden Key National Honor Society
- 1992 Magna Cum Laude, Masters Degree, University of Utah.
- 1988 Alpha Chi (Highest Academic Honors at Westminster College)
- 1988 Sigma Theta Tau (International Honor Society of Nursing)
- 1988 Honors member of the Nightengale Society
- 1988 Who's Who Among Students in American Universities and Colleges
- 1988 Summa Cum Laude, Bachelors Degree, Westminster College.