## **Curriculum Vitae**

**NAME:** Lonny J. Ashworth

**EMAIL:** lashwor@boisestate.edu

## **CREDENTIALS:**

Registered by the National Board for Respiratory Care, Registry #4595

## **EDUCATION:**

- Masters of Education, 1980, College of Idaho, Caldwell, ID
- Bachelor of Science, Psychology, 1977, Boise State University, Boise, ID
- Associate of Science, Respiratory Therapy, 1976, Boise State University, Boise, ID

## PROFESSIONAL EXPERIENCE:

- Chair, Department of Respiratory Care, Boise State University, July, 2003 June 2012
- Professor, Respiratory Therapy, Boise State University, July, 2000 present
- Chair, Department of Respiratory Therapy, Boise State University, July, 1996 June, 2001
- Associate Professor, Respiratory Therapy, Boise State University, July, 1983 June, 2000
- Assistant Professor, Respiratory Therapy, Boise State University, July, 1980 June, 1983
- Instructor, Respiratory Therapy, Boise State University, July, 1977 June, 1980
- Chairman, Respiratory Therapy, Boise State University, March, 1980 July, 1983
- Director of Clinical Education, Respiratory Therapy, Boise State University, May, 1979 March, 1980
- Staff Therapist, Respiratory Therapy, Adult Intensive Care, St. Luke's Regional Medical Center, Boise, ID, May, 1976 - November, 1978
- Staff Technician, Respiratory Therapy, St. Luke's Regional Medical Center, Boise, ID, November, 1975 -May, 1976
- Staff Technician, Respiratory Therapy, Boise Anesthesia, Boise, ID, August, 1974 October, 1975
- Staff Technician, Respiratory Therapy, Bannock Memorial Regional Medical Center, Pocatello, ID, August, 1973 - August, 1974

## PROFESSIONAL ORGANIZATIONS:

- American Association for Respiratory Care
- Idaho Society for Respiratory Care
- John Butler Lung Foundation, Board Member
- Japan Respiratory Care Network

## **HONORS**

- Boise State University Foundation Scholar Award for Teaching, 2016
- Koga Medal, American Association for Respiratory Care, International Council for Respiratory Care, 2015
- Fellow, American Association for Respiratory Care, 2012
- Honored Faculty, Selected by Top Ten Scholar, 2011
- Provost's Excellence in Advising Award, College of Health Sciences, 2008
- Excellence in Faculty Research Award, College of Health Sciences, 2004
- Excellence in Faculty Service Award, College of Health Sciences, 2001

# WORKSHOPS AND SEMINARS PRESENTED: 2017

- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, Japan, February 2017
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, Japan, February 2017
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Osaka University Hospital, Osaka, Japan, February 2017
- Mechanical Ventilation of the Adult Patient, Two, half-day workshops presented to basic co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2017
- Mechanical Ventilation of the Adult Patient, Two, two-day workshops presented to advanced nurses at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2017
- Mechanical Ventilation of the Adult Patient, Half-day workshop presented to cardiologists at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2017
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to intensivists at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2017
- Mechanical Ventilation of the Adult Patient, Four, half-day workshops presented to general internal medicine physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2017
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan Kamakura General Hospital, Fujisawa, Japan, January 2017
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Nippon Kokan Hospital, Kawasaki, Japan, January 2017
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical staff at the International Exchange Visit Programme for Respiratory Care Professionals, Kishiwada Tokusyukai Hospital, Osaka, Japan, January 2017
- Mechanical Ventilation of the Adult Patient, Four-day workshop presented to students in the Nurse Directed Care Program at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, January 2017
- Patient-Ventilator Synchrony presented to Fundamentals of Critical Care Support (FCCS) physicians and comedical personnel at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, January 2017

- Basic Use of Pressure Control Ventilation. 26<sup>th</sup> Annual Meeting of the Japan Society for Respiratory Care and Rehabilitation, Yokohama, Japan, October 2016
- Patient/Ventilator Synchrony from Basic to Advanced. 26<sup>th</sup> Annual Meeting of the Japan Society for Respiratory Care and Rehabilitation, Yokohama, Japan, October 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical personnel at the International Exchange Visit Programme for Respiratory Care Professionals, Yokohama Municipal Citizens Hospital, Yokohama, Japan, June 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at

- the International Exchange Visit Programme for Respiratory Care Professionals, Kurashiki Central Hospital, Okayama, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, KKR Takamatsu Hospital, Takamatsu, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, Four, one-day workshops presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to advanced nurses at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, Five, half-day workshops presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan Respiratory Seminar, Fujisawa, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Teine Keijinkai Hospital, Sapporo, July 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Nippon Medical University Musashikosugi Hospital, Kawasaki, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical staff at the International Exchange Visit Programme for Respiratory Care Professionals, Kishiwada Tokusyukai Hospital, Osaka, Japan, July 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical staff at the International Exchange Visit Programme for Respiratory Care Professionals, Mie University, Mie, Japan, August 2016
- Mechanical Ventilation of the Adult Patient, Four-day workshop presented to students in the Nurse Directed Care Program at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, January 2016
- Proportional Assist Ventilation presented to Fundamentals of Critical Care Support (FCCS) physicians and co-medical personnel at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, January 2016
- Mechanical Ventilation of the Adult Patient, Four-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2016
- Mechanical Ventilation of the Adult Patient, Two, two-day workshops presented to advanced nurses at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2016
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical staff at the International Exchange Visit Programme for Respiratory Care Professionals, Kishiwada Tokusyukai Hospital, Osaka, Japan, January 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan General Hospital, Fujisawa, Japan, January 2016

- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, Japan, February 2016
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, Japan, February 2016

- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, June 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, June 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kurashiki Central Hospital, Okayama, Japan, June 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, KKR Takamatsu Hospital, Takamatsu, Japan, June 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Shimane University Hospital, Izumo, Japan, July 2015
- Mechanical Ventilation of the Adult Patient, Four-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2015
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, July 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, July 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Nippon Medical University Musashikosugi Hospital, Kawasaki, Japan, July 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Teine Keijinkai Hospital, Sapporo, July 2015
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan Respiratory Seminar, Fujisawa, Japan, July 2015
- Simulation Planning Workshop, One-day workshop presented to physicians and co-medical personnel at Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, January 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, January 2015

- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, January 2015
- Mechanical Ventilation of the Adult Patient, Three-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2015
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Sakaide City Hospital, Sakaide, Japan, January 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kobe City Medical Center, Kobe City, Japan, January 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan General Hospital, Ofuna, Japan, January 2015

- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Nippon Koukan Hospital, Kawasaki, Japan, June 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, KKR Takamatsu Hospital, Takamatsu, Japan, June 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Teine Keijinkai Hospital, Sapporo, July 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, July 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, July 2014
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, July 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, July 2014
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan Respiratory Seminar, Fujisawa, Japan, July 2014
- Mechanical Ventilation of the Adult Patient, Four-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2014
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan,

- July 2014
- Mechanical Ventilation of the Adult Patient, Two, one-day workshops presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Nippon Medical University Musashikosugi Hospital, Kawasaki, Japan, July 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Osaka University Hospital, Osaka, Japan, July 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Osaka University Hospital, Osaka, Japan, July 2014
- Mechanical Ventilation of the Adult Patient, One-day workshops presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, January 2015
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to critical care nurses at the International Exchange Visit Programme for Respiratory Care Professionals, Japanese Nursing Association, Tokyo, Japan, July 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, February 2014
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to Intensive Care Nurses at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, February 2014
- Mechanical Ventilation of the Adult Patient, Three-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, February 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan Kamakura General Hospital, Kamakura, Japan, February 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical personnel at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan Kamakura General Hospital, Kamakura, Japan, February 2014
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical personnel at the International Exchange Visit Programme for Respiratory Care Professionals, Kobe City Medical Center, Kobe City, Japan, February 2014

- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Hiroshima University Medical Center, Japan, July 2013
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Nippon Medical University Musashikosugi Hospital, Kawasaki, Japan, July 2013
- Mechanical Ventilation of the Adult Patient, Four-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2013
- Mechanical Ventilation of the Adult Patient, Three-day workshop presented to Intensive Care Nurses at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2013
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at

- the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, July 2013
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, KKR Takamatsu Hospital, Takamatsu, Japan, July 2013
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, July 2013
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, July 2013
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan Kamakura Hospital, Fujisawa, Japan, July 2013
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kobe City Medical Center, Kobe City, Japan, July 2013
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Nippon Koukan Hospital, Kawasaki, Japan, July 2013

- Use of Protocols, Lunch Time Lecture presented to co-medical at Japan Respiratory Care Network Annual Educational Seminar, Tokyo, Japan, July 2012
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2012
- Mechanical Ventilation of the Adult Patient, One-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Shonan Kamakura Hospital, Kamakura, Japan, July 2012
- Mechanical Ventilation of the Adult Patient, Three-day workshop presented to physicians at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2012
- Mechanical Ventilation of the Adult Patient, Three-day workshop presented to Intensive Care Nurses at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2012
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, July 2012
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Nippon Koukan Hospital, Kawasaki, Japan, July 2012
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Takamatsu KKR Hospital, Takamatsu, Japan, July 2012
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo Bay Urayasu Ichikawa Medical Center, Urayasu, Japan, July 2012
- Use of Protocols, Lunch Time Lecture presented to co-medical at Japan Respiratory Care Network Annual Educational Seminar, Tokyo, Japan, July 2012
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, Feb 2012
- Mechanical Ventilation of the Adult Patient, Three-day workshop presented at the International Exchange

- Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, Feb 2012
- Mechanical Ventilation of the Adult Patient, Three, one-day workshops presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Japan, Feb 2012
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, Feb 2012
- Mechanical Ventilation of the Adult Patient, One-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Saiseikei Hospital, Yokohama, Japan, Feb 2012
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Nippon Koukan Hospital, Kawasaki, Japan, Feb 2012

- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2011
- Mechanical Ventilation: Advanced Concepts, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2011
- Mechanical Ventilation of the Adult Patient, Three-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2011
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2011
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, July 2011
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Saiseikei Hospital, Yokohama, Japan, July 2011
- Mechanical Ventilation of the Adult Patient, One-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Nippon Koukan Hospital, Kawasaki, Japan, July 2011
- Mechanical Ventilation of the Adult Patient, One-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, JARC, Japan, July 2011
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians and co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, Feb 2011
- Mechanical Ventilation of the Adult Patient, Three-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, Feb 2011
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, Feb 2011
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Saiseikei Hospital, Yokohama, Japan, Feb 2011
- Mechanical Ventilation of the ARDS Patient, Three-hour workshop presented at the Japan Society for Intensive Care Medicine, Yokohama, Japan, February 2011

- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to co-medical at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2010
- Mechanical Ventilation: Advanced Concepts, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2010
- Mechanical Ventilation of the Adult Patient, Four-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2010
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2010
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, July 2010
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Saiseikei Hospital, Yokohama, Japan, July 2010
- Mechanical Ventilation of the Adult Patient, Three-day workshop presented at the International Exchange

- Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, Feb 2010
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, Feb 2010
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Hayama Heart Center, Zushi, Japan, Feb 2010

- Mechanical Ventilation of the Adult Patient, Three-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2009
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, St. Luke's International Hospital, Tokyo, July 2009
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2009
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, February 2009
- Four-hour workshop on Adult Mechanical Ventilation, presented at Hayama Heart Center, Zushi, Japan, February 2009

## 2008

- Preceptor Training Workshop for Respiratory Therapists, Chang Gung Memorial Hospital, Kaohsiung, Taiwan, July 2008
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2008
- Mechanical Ventilation of the Adult Patient, Eight-hour workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2008
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2008
- The Role of the Respiratory Care Professional, Kyoto University, Kyoto, Japan, July 2008
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, February 2008
- Four-hour workshop on Adult Mechanical Ventilation, presented at Kameda Medical Center, Kamogawa, Japan, February 2008
- Four-hour workshop on Adult Mechanical Ventilation, presented at Shonan Kamakura Hospital, Kamakura, Japan, February 2008

- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange
  Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, July 2007
- Advanced Practitioner Workshop, One-day workshop presented at Kameda Medical Center, Kamogawa, Japan, July 2007
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2007
- Advanced Practitioner Workshop, One-day workshop presented at Shonan Kamakura Hospital, Kamakura, Japan, July 2007
- Four-hour workshop on Adult Mechanical Ventilation, presented at Shonan Kamakura Hospital, Kamakura, Japan, July, 2007
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kameda Medical Center, Kamogawa, Japan, February, 2007
- Role of Respiratory Care Practitioners, Lecture presented at Kameda Medical Center, Japan, February 2007
- Ventilator-Induced Lung Injury, Lecture presented at Kameda Medical Center, Japan, February 2007

 Mechanical Ventilation of the Adult Patient, Two, four-hour workshops presented to physicians at Shonan Kamakura Hospital, Kamakura, Japan, February 2007

#### 2006

- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2006
- Mechanical Ventilation of the Adult Patient, Four-hour workshop presented to physicians at Shonan Kamakura Hospital, Kamakura, Japan, July 2006
- Mechanical Ventilation of the Adult Patient, Two-day workshop presented to physicians at Kameda Medical Center, Kamogawa, Japan, July 2006
- Evidence-based Medicine: Weaning Patients from Mechanical Ventilation, Tokyo, Japan, July 2006

## 2005

- Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2005
- Evidence-Based Respiratory Care: Advanced Practitioner Workshop, Tokyo, Japan, July 2005
- Role of Respiratory Therapists in the United States, Kamogawa, Japan, July 2005

## 2004

 Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2004

## 2003

 Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2003

## 2002

 Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, August 2002

## 2001

 Mechanical Ventilation of the Adult Patient, Two-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kamakura, Japan, July 2001

## 2000

• Use of Graphic Analysis during Mechanical Ventilation, Two, three-hour workshops presented at the International Exchange Visit Programme for Respiratory Care Professionals, Nagoya, Japan, August 2000

#### 1999

 Mechanical Ventilation of the Adult Patient, Five-day workshop presented at the International Exchange Visit Programme for Respiratory Care Professionals, Tokyo, Japan, July 1999

## 1998

- Mechanical Ventilation of the Adult Patient, Two, 5-day workshops presented at the International Exchange Visit Programme for Respiratory Care Professionals, Kurume City, Japan, July 1998
- Advanced Concepts in Mechanical Ventilation, PanPacific Forum on Respiratory Care, Fukuoka, Japan, February 1998

- Modes of Mechanical Ventilation during Rehabilitation, Koga Hospital, Kurume City, Japan, Sept 1996
- Mechanical Ventilation of the Adult Patient, Two-day seminar in Kurume City, Japan, September 1996

- Advanced Cardiac Life Support, Two-day seminar in Kurume City, Japan, October 1995
- Mechanical Ventilation of the Adult Patient, Three-day seminar in Kurume City, Japan, April 1995

## **PUBLICATIONS:**

## **Articles:**

- Wing TJ, Haan L, Ashworth LJ, Anderson J. Limiting Volume with Modern Ventilators. *Therapeutic Advances in Respiratory Disease*. 2015
- Asai N, Ohkuni Y, Ashworth LJ, Kaneko N. Implementation of Do Not Attempt Resuscitate Orders in a Japanese Nursing Home. American Journal of Hospice and Palliative Medicine. 2014;31(1):27-32.
- Charan NB, Wolf J, Henrichs M, Williams JM, Sullivan R, Ashworth LJ. Are Inhaled Drugs Delivered to the Bronchial Smooth Muscle Through the Bronchial Circulation? Arch Physiol Biochem. 2003 Oct;111(4):331-3.
- Sandmeyer NP, Ashworth LJ. Cardiopulmonary Implications of Neuromuscular Blockade. Crit Care Nurs Q. 1995 Aug;18(2):25-40.
- Ashworth LJ. **Pressure Support Ventilation**. *Crit Care Nurse*. 1990 Jul-Aug;10(7):20-7.
- Ashworth LJ. Survey of Respiratory Care Faculty Salaries. AARC Times, 1989 December.

# **Case Report:**

 Anderson JA, Ashworth LJ, Crystal L. Ventilator Graphic Interpretation. The Journal for Respiratory Care Practitioners. 2001 December/January.

## **Overview:**

• Overview of Ventilator Withdrawal from "Intensivist". Intensivist. 2012;4(4):948-850.

# **Book Chapter:**

 Advances in Affective and Pleasurable Design. "Self Inflating Mask Interface for Non-Invasive Positive Pressure Ventilation". Co-authored with Lutana Haan and Uwe Reischl. ISBN 9781439871188.

# **Poster Presentations at International Congress:**

#### 2016

• The Effect of Increasing Amplitude and Percent Support on Tidal Volume and Peak Pressure during Proportional Assist Ventilation". Co-authored with Ashlyn Krupa, VeAnn McFadden. American Association for Respiratory Care International Congress, October 2016.

## 2015

• "Patient-Ventilator Asynchrony during Exercise using Assisted Modes of Ventilation and CPAP with Pressure Support Ventilation". Co-authored with Camille Stover, Ashley Blair, Hatsuyo Ebisu. American Association for Respiratory Care International Congress, November 2015.

- "Evaluation of Molecular Sieve Oxygen Concentrators and varying Flow Rates". Co-authored with Grace Hofmann, Kelsey Braden and Leo Ivy. American Association for Respiratory Care International Congress, December 2014.
- "Evaluation of Learning Styles for Patients with COPD". Co-authored with Jennifer Gilbert, Miah Nystrom and Megan LoPiccolo. American Association for Respiratory Care International Congress, December 2014.
- "Manual versus Mechanical Percussion". Brianne Larango, Shawn Case, Kyler Wilson and Lirlande Frederick. American Association for Respiratory Care International Congress, December 2014.

- "Measured Expiratory Resistance of the Blue and Green Acapella Devices as Setting is Increased from 1 − 5; Amplitude 20, 30, 40". Co-authored with Scott M. Hawkins, Amanda V. Wroblewski. American Association for Respiratory Care International Congress, November 2013.
- "Effect of Increasing Patient Effort Simulated with an Electronic Test Lung on the Tidal Volume during a Spontaneous Breathing Trial with Automatic Tube Compensation". Co-authored with Lonny Niejadlik, Kortnee Fleming. American Association for Respiratory Care International Congress, November 2013.
- "Effect of Increasing Amplitude using an Electronic Lung Simulator on Tidal Volume and Peak Inspiratory Pressure during Adaptive Pressure Control". Co-authored with Troy Lempesis, Douglas Stubbs Jr. American Association for Respiratory Care International Congress, November 2013.
- "Performance Comparison of Oxygen Delivery Devices in Patients with Varying Inspiratory Demands". Coauthored with Gwendolyn A. Hinten, Melynda Lewis, Jared B. Eardley, T.J. Wing. American Association for Respiratory Care International Congress, November 2013.
- "Comparison of Predicted Anatomic Deadspace and Measured Deadspace during Mechanical Ventilation using the Drager Evita Infinity V500®". Co-authored with Junko Takada, Hatsuyo Ebisu, Akio Kinoshita. American Association for Respiratory Care International Congress, November 2013.

• "Self Inflating Mask Interface for Non-Invasive Positive Pressure Ventilation". Co-authored with Lutana Haan and Uwe Reischl. 4th International Conference on Applied Human Factors and Ergonomics, July 2012.

## 2011

- "Evaluation of Peak Inspiratory Pressure and Inhaled Tidal Volume during PC-PSV with Variable Pressure Support on the Drager V500". Co-authored with Ross Armstrong, David Strong, Ridwan Awad. American Association for Respiratory Care International Congress, November 2011.
- "Evaluating the Set Release Percentage of AutoRelease during APRV on the Drager V500". Co-authored with Ross Armstrong, David Strong, Ridwan Awad. American Association for Respiratory Care International Congress, November 2011.

## 2010

- Comparing Breathing Intolerance Index Pre- and Post-Diaphragmatic Muscle Fatigue in Healthy Adults."
  Co-authored with Junko Morikawa, Dawn Marie Axness, Dione Harrod, Chontel Ross. American Association for Respiratory Care International Congress, December 2010.
- "Evaluation of Patient-Ventilator Synchrony in the Respironics ST/D, Vision and V60 when Ventilating a Mannequin Interfaced with an Electronic Breathing Simulator." Co-authored with Britney Griffith, Dana Svancara. American Association for Respiratory Care International Congress, December 2010.
- "Effect of Tube Compensation on Tidal Volume during a Simulated Spontaneous Breathing Trial." Coauthored with Britney Griffith, Jesse Ferguson. American Association for Respiratory Care International Congress, December 2010.
- "Comparison of Peak-Expiratory Flow Rate and End-Expiratory Pressure during Airway Pressure Release Ventilation with the Drager XL, Viasys Avea, PB 840 and Servo-i." Co-authored with Ross Armstrong, David Strong. American Association for Respiratory Care International Congress, December 2010.
- "Survey of Existing Conditions of the Respiratory Care Team in Japan: An Analysis of the Impact Factors."
  Miki Nakanishi, Tetsuo Miyagawa. American Association for Respiratory Care International Congress,
  December 2010.

#### 2008

"Accuracy of Delivered Tidal Volume using Adaptive Support Ventilation on the Hamilton G5 when Ventilating an Electronic Test Lung Simulating COPD and ARDS." Co-authored with Hiroyuki Noguchi. American Association for Respiratory Care International Congress, December 2008.

- "Comparison of Peak Inspiratory Pressures Using Adult vs Pediatric Circuits during Pressure-Targeted, Assist-Control with the LTV 1000: Is it Acceptable to Stock only One Circuit?" Co-authored with Phillip Elle and Eric Peart. American Association for Respiratory Care International Congress, December 2006.
- "Comparison of Tidal Volume Using Adult vs Pediatric Circuits during Volume-Targeted, Assist-Control with the LTV 1000: Is it Reasonable to Stock only One Circuit?" Co-authored with Eric Peart and Phillip Elle. American Association for Respiratory Care International Congress, December 2006.
- "Comparing Resistance across the Expiratory Limb of the Limb-O Circuit vs a Heated-Wire Circuit." Coauthored with Ross Armstrong and Nikolas Sirs. American Association for Respiratory Care International Congress, December 2006.
- "Effect of Altitude on Peak Inspiratory Pressure and Tidal Volume during Pressure-Targeted A/C using the LTV 1000 and HT 50." Co-authored with Denise Y. Chase and Susan Marmentini. American Association for Respiratory Care International Congress, December 2006.
- "Effect of Altitude on Tidal Volume and Peak Inspiratory Pressure during Volume-Targeted A/C using the LTV 1000 and HT 50." Co-authored with Susan Marmentini and Denise Y. Chase. American Association for Respiratory Care International Congress, December 2006.
- "Comparing Slow-flow P-V Loops using the Viasys Avea, Drager XL and Hamilton Galileo." Co-authored with Lacey Matteson and Rebecca Brollier. American Association for Respiratory Care International Congress, December 2006.

- "Evaluation of 6 and 12-foot circuit lengths on delivered volume and peak pressure during CPAP/PSV on the LTV 1000." Co-authored with Dan Neifert and Matthew Seitz. American Association for Respiratory Care International Congress, December 2005.
- "Evaluation of 6 and 12-foot circuit lengths on delivered volume and pressure during Pressure A/C on the LTV 1000." Co-authored with Dan Neifert and Matthew Seitz. American Association for Respiratory Care International Congress, December 2005.
- "Evaluation of 6 and 12-foot circuit lengths on delivered volume and pressure during Volume A/C on the LTV 1000" Co-authored with Matthew Seitz and Dan Neifert. American Association for Respiratory Care International Congress, December 2005.
- "Exhalation valve resistance of modern ventilators while ventilating an electronic lung simulator." Coauthored with Thomas J. Wing and Candy Perry. American Association for Respiratory Care International Congress, December 2005.
- "Evaluation of the changes in tidal volume during Pressure-targeted assist/control as time constants vary when flow-cycle is activated on the LTV 1000." Co-authored with Coby Steele and Candy Perry. American Association for Respiratory Care International Congress, December 2005.
- "Evaluation of peak inspiratory pressure during pressure-targeted assist/control on the Pulmonetics LTV 1000 and Newport HT 50." Co-authored with Ty Barnett, Alyssa Rowe and Coby Steele. American Association for Respiratory Care International Congress, December 2005.
- "Evaluation of Positive End-Expiratory Pressure during volume-targeted assist/control ventilation." Coauthored with Ty Barnett, Alyssa Rowe and Coby Steele. American Association for Respiratory Care International Congress, December 2005.
- "Evaluation of delivered volume during volume-targeted assist/control on the Pulmonetics LTV 1000 and Newport HT 50." Co-authored with Ty Barnett, Alyssa Rowe and Coby Steele. American Association for Respiratory Care International Congress, December 2005.
- "Evaluation of peak pressure during CPAP 5 cm H<sub>2</sub>O and pressure support 10 cm H<sub>2</sub>O on the LTV 1000 and the HT 50." Co-authored with Alyssa Rowe and Ty Barnett. American Association for Respiratory Care International Congress, December 2005.
- "The effect of flowrate from an in-line nebulizer on delivered volume and pressure while using the LTV 1000 ventilating an electronic lung simulator." Co-authored with Candy Perry and Coby Steele. American Association for Respiratory Care International Congress, December 2005.

- "Exhalation Valve Resistance of Modern Ventilators". Co-authored with Thomas J. Wing. American Association for Respiratory Care International Congress, December 2004.
- "Automatic Tube Compensation during Expiration: What Effect does it have on Peak Expiratory Flowrate?" Co-authored with Ross Armstrong and Nikolas Sirs. American Association for Respiratory Care International Congress, December 2004.
- "Is Exhalation Valve-Induced Auto-PEEP a Concern with Modern Day Ventilators?" Co-authored with Russell G. Peterson, Essam Al-Jamhan and Jeffery K. Goldman. American Association for Respiratory Care International Congress, December 2004.
- "Response of the Ventilator Subsequent to Patient Disconnection during Dual-Mode Ventilation". Coauthored with Essam Al-Jamhan and David Southwick. American Association for Respiratory Care International Congress, December 2004.
- "Ventilatory Response during Dual-Mode Ventilation after Removal of a Fiberoptic Bronchoscope". Coauthored with Nikolas Sirs and Ross Armstrong. American Association for Respiratory Care International Congress, December 2004.
- "Ventilator Calculated Values of Compliance: Are They Accurate?" Co-authored with Jeffrey K. Goldman and Russell G. Peterson. American Association for Respiratory Care International Congress, December 2004.
- "Ventilator Calculated Values of Resistance: Are They Accurate?" Co-authored with Jeffrey K. Goldman and Russell G. Peterson. American Association for Respiratory Care International Congress, December 2004.
- "Infusion of Cold Saline Directly into the Bronchial Artery Produces Bronchoconstriction in Sheep". Coauthored with Nirmal B. Charan. American Thoracic Society International Conference, May 2004.
- "Automatic Tube Compensation: Does It Really Matter?" Co-authored with Thomas J. Wing, Russell G. Peterson and Jeffrey K. Goldman. American Thoracic Society International Conference, May 2004.

# **Medical Educational Computer Software Developed:**

- Arterial Blood Gas Interpretation/Oxygen Transport
- Trauma Simulation
- Myocardial Infarction Simulation
- Mitral Valve Replacement Simulation
- Neuromuscular Weakness Simulation
- Gastrointestinal Bleeding Simulation
- Drug Overdose Simulation
- Dyspnea Simulation
- Pressure Support Ventilation Simulation
- Mechanical Ventilation Tutorial
- Developed eight more computer programs (Therapist-Driven Protocols) for Mosby Year Book, Inc

## **RESEARCH GRANTS:**

- Ashworth LJ, Sabick M, Kuhlman S. Mass Casualty Ventilator. Faculty Mini-Research Grant, College of Health Sciences-Office of External Funding, Boise State University. FY 2012
- Haan L, Ashworth LJ. Evaluation of the Prevalence of Obstructive Sleep Apnea in the College Age Football Players. Faculty Research Grant, College of Health Sciences-Office of External Funding, Boise State University. FY 2009
- Stephenson D, Ashworth LJ, Long D, Keintz B. Evaluation of Upper Respiratory Deposition of Nanoparticles in a Controlled Laboratory Setting. Faculty Research Grant, College of Health Sciences-Office of External Funding, Boise State University. FY 2009
- Ashworth LJ. Evaluate Automatic Tube Compensation. Faculty Research Grant, Boise State University. July 2003

# **RESEARCH INTEREST:**

- Mass casualty ventilators
- Pressure control ventilation
- Modes of ventilation during exercise
- Transpulmonary pressure
- Cough strength and extubation
- Work of breathing during mechanical ventilation
- Airway Pressure Release Ventilation
- Dual-mode ventilation
- Exhalation valve resistance of mechanical ventilators
- Automatic tube compensation
- Transport ventilators
- Pressure support ventilation