Research has long been part of the curriculum to become an advanced respiratory therapist at OSU and participating in the Denman Undergraduate Research Forum or Current Concepts in Respiratory Care is expected. All undergraduate students learn fundamentals in statistics, research methods, critical analysis, and presentation through their courses and "Senior Projects." Students participating in the AMP Honors Research Program work independently with a faculty advisor while most students form research teams with faculty and work on projects collaboratively.

Winners at Denman UG Research Forum

2004: Christina Ayotte 2nd
2005: Marjorie Ardito 1st
2008: Christopher Knapp, Inez Rasoul, Christina Wolfinger 1st
2009: Kim Johnson, A.J. Johnson, Katherine Barnes 2nd
2009: Rachel Franz, Sincer Jacob 3rd
2010: Jilliann Hoyt, Dana Khy, Leah Seebon 3rd

RT with distinction Honor Roll

These RTs successfully completed an undergraduate thesis and the Allied Medical Honors Program. They graduated with a Bachelor of Science degree in Allied Medical Professions with distinction.

1980: Gary Ansel
1980: Deryl Gulliford
1981: Colleen Bridges Lewis
1985: Michael Bumbulis
1995: Stephanie Morgan Green
1997: Kelly Becker
1997: Melanie Leininger
1998: Eric Hirt
1998: Megan Hoenberger Nussbaum

2000: Whitney Hastwell
2003: Lori Brucato Alexander
2003: Mia Fousek
2003: Mary Wigger
2004: Christina Ayotte
2004: Natalie Burkiewicz
2004: Meghna Patel
2005: Marjorie Ardito
2011: Jenny Hsieh

Research Links & Resources

- Library Resources for RT Students
- Respiratory Care Journal
- AARC Open Forum Abstracts
- AARC Times
- AARC Education Annual
- Advance for Respiratory Care
- RT - The Journal for RCPs
- Focus on Respiratory Care
- Respiratory Care Research Handbook
- Survey Sample Size
- Sample Size & Power
- Randomize
- Standard Instruments
- Errors in Hypothesis Testing
- Human Subject Regulations Decision Charts
- Office Responsible Research Practices
- IRB Forms
- Research Proposal Guidelines
- Respiratory Care Manuscript Guidelines
Class of 2011 Does CCRC & Denman

“Current ventilator management procedures and practices: An ecological study of Central Ohio Hospitals.” Lee D. Keasal RRT, David M. Weber RRT, Jessica M. Liddil RRT, Kevin M. Niswonger RRT, Marlena N. Tucker RRT. Advisors: Sarah M. Varekojis, PhD, RRT; James M. O’Brien, Jr, MD; Naeem Ali, MD


“The Progression and Impact of Sleep Disordered Breathing in Acutely Decompensated Heart Failure Post-Discharge.” Jenny Hsieh RRT. Advisors: Rami N Khayat MD, Sarah M Varekojis PhD RRT

“Interrater Reliability of a Respiratory Therapy Preceptor Training Program.” Jacob Beach, Lufta Bana RRT, Amanda Gradert RRT, Raimie Lewis RRT, Katie Stark RRT, Carlton Stewart RRT. Advisor: Crystal Dunlevy, EdD, RRT

“Inpatient Tobacco Counseling by Respiratory Therapists.” Leslie Grove RRT, Mary Holden RRT, Courtney Seibert RRT, Holly Karlecke RRT, Phil Mann RRT. Advisor: Georgianna Sergakis, PhD, RRT
Class of 2010 Does CCRC & Denman

**Best @ Current Concepts in Respiratory Care:**
“Evaluation of The Ohio State University Health Coach Training Program.” Derick Asah, RRT, Alodie Lim, RRT, Donica Marks, RRT, Lacey Schissler Lambotte, RRT, Lauren Speakman, RRT. Advisor: Crystal Dunlevy, EdD, RRT

**Third Place Health Sciences Clinical Division @ Denman:**
“A Comparison of the Stability of PO2and PCO2Stored in Plastic Arterial Samplers.” Alyssa Bistak RRT, Melissa Frasure RRT, Jilliann Hoyt RRT, Dana Khy RRT, Leah Seebon RRT. Advisor: Herbert Douce MS, RRT, FAARC

“Interdisciplinary High-fidelity Clinical Simulation: Effects on Teamwork, Communication and Decision Making.” Melissa Klug CRT, Myungsun Lipthratt RRT, Amber Pollard RRT, Tulsi Shah RRT, Quinn Stechschulte RRT. Advisor: Georgianna Sergakis, PhD, RRT

“Describing Initial Mechanical Ventilation Protocols in Academic Medical Centers.” Kristina Barney RRT, Anamaria Booker RRT, Lindsay Himes RRT, Matthew Jurecki RRT, Hanan Rahim CRT. Advisor: Sarah Varekojis PhD, RRT
Second Place Health Sciences Clinical Division at Denman:
“Effects of Blood Pressure and Needle Size on Arterial Sampler Filling Time.” Kim Johnson RRT, A.J. Johnson RRT, Katherine Barnes RRT. Advisor: F. Herbert Douce MS RRT FAARC

Third Place Health Sciences Clinical Division @ Denman:
“Evaluation of a Difficult Airway Response Team.” Rachel Franz RRT, Sincer Jacob CRT. Advisors: Georgianna Sergakis, PhD, RRT, & JoAnne Trees, MBA, RRT

“The Use of Airway Clearance Techniques in the United States.” Amanda Wuske RRT, Matthew Weaver RRT, Nicholas Koski RRT. Advisor: Georgianna Sergakis PhD, RRT

“Current Practices Related to Lung Protective Strategies in Patients with Acute Respiratory Distress Syndrome in Ohio Hospitals.” Megan Anzak RRT, Nagham Houssami RRT. Advisor: Sarah Varekojis PhD RRT


“A Descriptive Study of Pulmonary Rehabilitation of Neuromuscular Disease Patients.” Robert Conley CRT, Kirstin West RRT, Emily Wittler RRT. Advisor: Phil Hoberty, EdD RRT

“Can Maximum Inspiratory Flow Rates Following Eucapnic Voluntary Hyperventilation Identify Vocal Cord Dysfunction?” Margaret Sullivan RRT, Denah Julian RRT, Seth Agyeman-Berko CRT. Advisor: F. Herbert Douce MS, RRT, FAARC
### Denman 2008 100% RT Participation

**Knapp, Rasoul, Wolfinger 1st Place**

- “The Expanding Scope of Practice and Competency Assurance of Respiratory Therapists in Ohio Hospitals” Christopher Knapp, Inez Rasoul, Christina Wolfinger - F. Herbert Douce, advisor

- “The Extent of Rehabilitation Modification to Accommodate patients with Restrictive Lung Disease.” Brittannie Hall, Carrie Netcher and Kim Garfield. Phillip D. Hoberty, EdD, advisor

- “Effectiveness of inhaled nitric oxide at a clinical dosage to prevent nosocomial pneumonia in mechanically ventilated neonates” Elizabeth Atkinson, Allyson Becker, Angel Fok. Sarah L. Varekojis, PhD, advisor

- “Cost Effectiveness of High Frequency Chest Wall Compressions in Neuromuscular Patients With Difficulty Mobilizing Secretions” Carla Drennen, Jamie Gallagher, Brittany Hayes. Sarah L. Varekojis, PhD, advisor

- “An Evaluation of Respiratory Therapy Preceptor Training through an online Preceptor Training Module” Lauren Klocek, Mary Mast, Amanda Miller. Georgianna Sergakis, PhD, advisor

- “Tobacco Use and Dependence: The Role of the Respiratory Therapist” Rachel Brown, NineEva Prentiss, Crystal West. Georgianna Sergakis, PhD, advisor

### RT @ Denman 2007

- “The Effects of Transporting Arterialized Blood Samples in a Pneumatic Tube System on Blood Gas Values” Branden W. Luna, Andrew Weirauch, Rebecca Oppermann

- “The Outcomes of Asthma Education” Ismail Azzam, Sarah O’Connell, Jenny Secrist

- “Prevalence of Asthma as it Persists in a Population” Adam Buxton, David Yang

- “Respiratory Therapists’ Knowledge of the 2005 AHA Cardiopulmonary Resuscitation Guidelines for BLS” Jennifer Kaufhold, Tiffany Moore

- “A Comparison of Two Compression to Ventilation Ratios on Rescuer Performance in BLS” Nicholas Mallas, Rebecca Rosenstein

- “High Frequency Chest Wall Oscillation in a Non-Cystic Fibrosis Population” J. Ryan Hughes, Lindsey Kauh, Lauren Sander

- “Infection Control of Wright Respirometers” Pamela Kuhlman, Riko Ohori, Jo Lynn Phillippi

- “Respiratory Care Journal’s Authorship Change in the Past 18 Years” Jennifer Kaufhold

- “Evaluating RTs & RNs on Their Beliefs, Practices, and Confidence Regarding Smoking Cessation Counseling in Parents of Patients” Lindsay Cooper, Holly Schoenlein
Stephanie Brindza, Brittany Locklear, Kayla Williams: "Level of Health Literacy and Smoking Behaviors in Pre-Allied Med Students." Sarah Varekojis, PhD advisor.

Kristina Davis, Jolynne Kohli: "Baccalaureate Degrees in Respiratory Therapy: Advanced Clinical Skills, Clinical Experience, and Curriculum." F. Herbert Douce advisor

Melissa Figueroa, Erin Hensley, Gavin Wong: "The Relationship Between The Use Of Clinical Patient Care Protocols And Department Characteristics On Job Satisfaction And Employment Longevity Of Respiratory Therapists." F. Herbert Douce, advisor

Nikki Johnson, Heather Zuber: "The Role of the Respiratory Therapist in Providing Smoking Cessation Education." Georgianna Sergakis, advisor

Sarah McNee, Christine Snider, Katrina Strayer: "The Use of Airway Clearance Techniques in Ohio Hospitals." Sarah Varekojis PhD advisor

**Nine 2005 RT Seniors Present Posters @ Denman**

**Ardito Wins 1st at 2005 Denman**

Marjorie Ardito "Smoking Cessation Protocols in Ohio Hospitals," won 1st place in the Health Science -Clinical division at the 10th annual Denman Undergraduate Research Forum on May 18, 2005. Marjorie is an NCAA Academic All-American and Allied Medicine Honors student; her project advisors were Dr. Sarah Varekojis and Georgianna Sergakis.

Melissa Bishop, Matthew Kovar: "Management Strategies Focusing on Staff Retention in Ohio's Respiratory Therapy Departments"

Anne Carvi, Holly Schmidt: "The Role of the Respiratory Therapist in Providing Smoking Cessation"

Jeff Hunter, Rory Mullin: "Effects of Syringe Material, Sample Storage Time and Temperature on Blood Gases and Oxygen Saturation in Arterial Blood Samples"

Letitia Wiltshire, Sharma Hodge: "Health Literacy and Prenatal Education: A Review of Nursing and Respiratory Therapy Practices"

**One RT Senior Does 2004 Denman**

**Ayotte 1st RT Wins 2nd at 2004 Denman**

Respiratory therapy senior Christina Ayotte won 2nd place in the Health Sciences division at the 2004 OSU Denman Undergraduate Research Forum. Her project was titled: "The Current Use of Non-Invasive Ventilation with Cystic Fibrosis Patients: A National Study" Her advisor was Dr. Sarah Varekojis