I am pleased to present the College of Allied Health Professions’ 2020 Charles R. O’Malley Charitable Trust Endowed Professorships Report. This O’Malley Trust, and many other generous donors have made possible several endowed professorships within the College of Allied Health Professions.

This report chronicles the research accomplishments of the talented faculty who hold these professorships. As you will see, the financial support from these professorships has facilitated numerous accomplishments including the development of innovative and reflective teaching practices, the exploration of the role of diet in respiratory outcomes, and the development of best practices for promoting weight loss for individuals living in rural communities.

I encourage you to read more of the exciting and innovative scholarship accomplished as a result of these professorships. The College of Allied Health Professions is immensely grateful to the O’Malley Trust, and the many other generous donors who made possible the endowed professorships within the College of Allied Health Professions.

Laura Bilek, PT, PhD
Associate Dean for Research and Linder Professor

University of Nebraska Foundation Fund Management & Investments

Private gifts to the UNMC College of Allied Health Professions’ endowed faculty positions have been invested in the University of Nebraska Foundation Fund A. Fund A, the foundation’s main endowment fund, is divided among dozens of professional managers, is broadly diversified, and is governed by the policy set by the foundation’s investment committee. Fund A works like a mutual fund, with each endowed fund owning units of Fund A. As of October 1, 2015, the foundation’s spending policy stipulated that the income distribution for each unit of Fund A will be 4.25 percent of a 20-quarter moving average of the market value-per-unit.

Financial Summary Definitions

Book Value: The original value of the gift(s) plus any additional deposits.
Cash to Invest: Cash to be invested.
Gifts to the Fund: Includes all gifts received from January 1, 2019 through November 30, 2019.
Income: Income credited to the fund between January 1, 2019 and November 30, 2019.
Market Value: An endowed fund’s value as of November 30, 2019.

O’Malley gifts generated during 2009-2014 were part of the CAHP Capital Campaign Committee:

Dennis F. Strauss, M.D., Co-Chair
Chris Strauss, Co-Chair
Jay Burr
Mary Haven
Rick Kolkman
Karen Linder
Kyle Meyer, Ph.D.
Carol A. McGlade
Patty Sherman
Connie Spellman
Karen J. Honeycutt, PhD, MEd, MLS(ASCP)CM,SMCM is the Gilg Professor and the Director of the Medical Laboratory Science program in the College of Allied Health Professions. She received a Bachelor of Science Degree in Medical Technology from UNMC and a Master of Education Degree from the University of Nebraska at Lincoln (UNL). She earned a PhD in Educational Studies with an Instructional Technology specialization from UNL in 2019. Karen has been involved in clinical laboratory education since 1984 and has served as program director since 2013. She served on the American Society for Clinical Pathology (ASCP) Board of Certification examination committees from 2005-2012. She was granted ASCP Mastership professional designation in 2014.

Match Donor: Mary Haven | Appointed April 2016

Completed Activities

Presentations & Publications
- Bishop S, Honeycutt K. Medical Laboratory Science Undergraduate Management Curriculum Development Using Practitioner Reported Job Tasks, Journal of Clinical Laboratory Science, Jan. 2020. DOI: https://doi.org/10.29074/ascls.120.002238

Financial Summary as of November 30, 2019
- Book Value - $290,936
- Market Value - $283,335
- Income - $12,025
- Available for Spending - $34,196

Planned Activities
- Incorporation of virtual microscopy in the UNMC MLS curriculum – ongoing
- Reinforcing Medical Laboratory Science Student Technical Skill Performance with Video-based Peer-evaluation Cognitive Procedural Practice – a research project, (data analysis 2019, manuscript 2020)
- UNMC High School Alliance Program Outcome Assessment: Learners Understanding of the Healthcare Team: ongoing data analysis (2017-19 academic year)
- Incorporation of Clinical Practicum Student Reflection – Developing Professional Reflection Skills: data collection (2018-19 academic year) – a research project (manuscript development)
- ASCP BOC Microbiology Core Competency Committee – developing MLS and MLT Program BOC Examination Compendium

Committee Service
- Member, Microbiology Core Competency Committee, American Society for Clinical Pathology
Joseph C. Anderson, M.D. & Darlene Anderson Distinguished Professorship of Imaging Sciences

The purpose of this Fund is to advance research and program development in the imaging sciences.

Kimberly (Kim) K. Michael, MA, RT(R), RDMS, RVT, FDMS, is the Anderson Professor and the Director of the Diagnostic Medical Sonography Education program in the CAHP at UNMC. She received a Bachelor of Science Degree from UNMC and a Master of Arts degree from the University of Nebraska at Omaha. Kim has been involved in sonography education at UNMC since 1991 and has served as the program director since 1998. She serves on the Board of Directors for the Society of Diagnostic Medical Sonography and its Foundation. She has authored over 50 publications, many in the Journal of Diagnostic Medical Sonography.

Match Donors: Dr. Joseph C. & Mrs. Darlene Anderson | Appointed March 2014

Completed Activities


Research Studies

- Development of a rating instrument for evaluating interprofessional educational activities. Manuscript in progress with target submission date of February 1st, 2020 to Journal of Interprofessional Education and Practice.
- The Role of Spatial Ability and Student Achievement in Medical Imaging and Therapeutic Sciences. Study in the final year of data collection.
- Using the Flipped Learning Approach in the Genitourinary Ultrasound Classroom: A Qualitative Case Study of Student Beliefs & Perceptions. Study in the final year of data collection.
- Improving Student Wellness and Success: An Interprofessional Approach to Exploring Social and Psychological Capital in Allied Health Programs. Study currently in progress.

New Appointments

- Affiliative Faculty, Medical Humanities, College of Arts and Sciences, University of Nebraska at Omaha

Awards/Honors


Publications


International Meetings

- Michael K. Getting Educator Buy-In on Peer Review of Teaching. Presented at: Academies Collaborative Annual Meeting; AAMC Learn, Serve Lead November 8, 2019; Phoenix, AZ.
Invited Presentations at Regional and National Meetings


- Custer T, Michael K. Following the Growth of Sarah's Baby: An IPE Activity for Medical Nutrition and Diagnostic Medical Sonography Students. Presented at: Heartland Interprofessional Education Conference; August 2, 2019; Omaha, NE.

- Smith, C, Michael K. Changing Perceptions: Applying Interprofessional, Near-Peer Teaching Strategies to Point-of-Care Ultrasound Education. Presented at: Society of General Internal Medicine Midwest Regional Meeting; September 2019; Minneapolis, MN.


- Roberts M, Goss S, Michael K, Collaborative Approaches to Healthcare Education. Presented at: Society of Diagnostic Medical Sonography Annual Conference; September 26, 2019; National Harbor, MD.

- Custer T, Michael K. An Introduction to Mindfulness for Imaging Professionals. Presented at: Investing in You Cassling Seminar; October 2, 2019; Omaha, NE.

- Michael K, Custer T. The Benefits of Being Present: Adding a Mindful Practice in Allied Health Courses. Presented at: Association of Schools of Allied Health Professions Annual Conference; October 17, 2019; Charleston, SC.


Invited Presentations within Nebraska Outside of UNMC

- Michael K, Custer T. Mindfulness Meditation Practice for Imaging Professionals. Presented at: Nebraska Society of Radiologic Technologists Annual Conference; April 26, 2019; Kearney, NE.

- Custer T, Michael K. An Introduction to Mindfulness for Imaging Professionals. Presented at: Nebraska Society of Radiologic Technologists Annual Conference; April 26, 2019; Kearney, NE.

- Michael K, Custer T. Mindful Pause Practice: The How To's and Why To's of adding Mindfulness to your Course. Presented at: Innovation in Pedagogy and Technology Symposium; May 7, 2019; Lincoln, NE.

Presentations at UNMC


- Custer T, Michael K. Incorporating Mindfulness into the Classroom. Presented at: Interprofessional Academy of Educators Spotlight on Scholarship; May 9, 2019; Omaha, NE.

- Custer T, Michael K. Mindful Pause Practice in Sonography Education. Presented at: Interprofessional Academy of Educators Premier Education Event; August 27, 2019; Omaha, NE.

Committee Service

- At-Large Director for the Society of Diagnostic Medical Sonography
- Board of Directors for the Society of Diagnostic Medical Sonography Foundation
- Ethics Committee Chair, Society of Diagnostic Medical Sonography
- Editorial Board Liaison, Journal of Diagnostic Medical Sonography
- Society of Diagnostic Medical Sonography Membership & Awards Recognition Committee Board Liaison
- Society of Diagnostic Medical Sonography CME Reviewer
- Wellbeing Coordinating Council, UNMC
- Assessment Committee, UNMC
- College of Allied Health Professions, UNMC
- Chair of Wellness and Recognition Committee
- Promotion and Tenure Committee
- Research Development and Management Committee
- MITS Leadership Committee
- MITS Program Priority Committee

Financial Summary as of November 30, 2019

- Book Value - $252,516
- Market Value - $242,949
- Income - $10,311
- Available for Spending - $12,232

Planned Activities

- Michael K, Custer T. Mindful Pause Practice in Medical Imaging. Presented at: Association of
Collegiate Educators in Radiologic Technology Annual Conference; February 2020; Las Vegas, NV.


- **Michael K**, Custer T. Mindful Practice In Sonography Education Presented at: International Foundation for Sonography Research and Education; July 2020; Costa Mesa, CA.

- Roberts M, Goss S, **Michael K**, Collaborative Approaches to Healthcare Education. Society of Diagnostic Medical Sonography Virtual Educators Conference; Fall 2020.


**Grants**

- Title: Introducing Mindful Pause Practice in Sonography Education: A strategy to improve classroom presence Funding Agency: Society of Diagnostic Medical Sonography Start and End Dates: March 2018 – December 2019 Total Dollars: $2,500 Role: Principal Investigator, Co-I: Tanya Custer

- Title: The Impact of Case-Based E-learning on Student Knowledge and Critical Thinking in the Imaging Sciences Curriculum Funding Agency: American Society of Radiologic Technologists Start and End Dates: December 2017-December 2019 Total Dollars: $9,980 Role: Co-Investigator, PI: Tanya Custer, Co-I Kim Michael
M. Patricia and James W. Leuschen Professorship for Advancing Research in the Allied Health Sciences
The purpose of this Fund is to advance research in the allied health sciences.

Corrine (Corri) K. Hanson, PhD, RD, LMNT, is Associate Professor and Leuschen Professor. She received her Bachelor of Science in Human Nutrition from UNL in 1989, Master of Science in Human Nutrition from UNL in 1993, and her Doctor of Philosophy from UNMC in 2010. With over 30 years of combined clinical and academic experience, Dr. Hanson currently serves as the Associate Director of the Medical Nutrition Education program and is a Fellow in the Academy of Nutrition and Dietetics. She has extensive regional, national and international research collaborations, and multiple organizations fund her work, including the National Institute of Health, the Department of Veteran’s Affairs, and the Nebraska Department of Health and Human Services. Her research focuses primarily on fatty acids and fat-soluble compounds during pregnancy and the early newborn period, and the role of nutrition in the prevention and development of respiratory diseases.

Match Donor: M. Patricia Leuschen    |    Appointed July 2013    |    Reappointed July 2016

Completed Activities
• Academy of Nutrition and Dietetics: 2019 Chronic Obstructive Pulmonary Disease Evidence-Based Nutrition Practice Guideline: As the Chair of the Academy of Nutrition and Dietetics (AND) Evidence Analysis Library (EAL) Project for Chronic Obstructive Pulmonary Diseases, Dr. Hanson developed and published clinical practice guidelines that support evidence-based care in the nutrition management of COPD, a disease which is currently the third leading cause of death in the United States. These guidelines play a critical role in moving forward evidence-based care in the field of nutrition.
• Omega-6 Intake Modifies Respiratory Health and Response to Indoor Air Pollution in Children with Asthma: This study evaluated the impact of ultrafine particulate matter exposure on pediatric asthma health, and described a modification effect of indoor air pollution on asthma by omega-3 and omega-6 fatty acids. This work was published in the prestigious journal American Journal of Critical Care and Respiratory Medicine, and was widely featured in media outlets including the New York Times and NPR.
• Associations of prenatal dietary inflammatory potential with wheeze trajectory in Project Viva: Asthma and wheeze are common conditions in childhood, and inflammation may contribute to their development and progression. As dietary factors can contribute to inflammation, consideration of the inflammatory potential of diet may be lead to possible interventions. In a study published in the Journal of Allergy and Clinical Immunology: In Practice, Dr. Hanson used the large and well-characterized Project Viva cohort and describe the finding that a more pre-inflammatory diet in the first trimester of pregnancy was associated with a higher risk for the development of an early wheeze during childhood decreased measures of lung function at 7 years of age in the child.
• The Gut-Lung Axis in COPD: The Role of the Microbiome and Dietary Fiber Intake. This study was funded by a grant from the Nebraska Department of Health and Human Services. Dr. Hanson and her collaborators conducted a mechanistic analysis of fiber intake in relation to the composition of the gut microbiome, and found relationships between the gut microbiome and COPD severity and outcomes. Grants have been submitted to the National Institute of Health to continue this work.

Educational and Mentoring Activities
• Mentor on 2 NIH funded K-type training awards, titled “Relationship Between Indoor Ultrafine Particle Exposure and Respiratory Morbidity, Inflammation, and Oxidative Stress in Children with Asthma (Emily Brigham, PI, Johns Hopkins University); and “The Role of Omega-3 Fatty Acids and Bioactive Lipid Signaling in Airway Inflammation and Resolution Following Organic Dust Exposures” (Tara Nordgren, PI, University of California-Riverside)
• Students/mentees have been involved in 7 publications and 9 abstracts presented at national meetings since the last report.

Awards/Honors
• March 2019 – Significance in Research for Distinguished Faculty Award, College of Allied Health Professions
• March 2019 – 2018 UNMC Distinguished Scientist

Publications
• Thompson M, Hein N, Hanson C, Smith L, Anderson-Berry A, Richter C, Stessy Bisseou K, Adams KA,


Abstracts at National and International Meetings


• Thoene M, Anderson-Berry A, Furtado J, Van Ormer M, Hanson C. Maternal and social and demographic factors influence placental concentrations of lutein+zeaxanthin. European Society of Pediatric
Gastroenterology, Hepatology, and Nutrition, Glasgow, Scotland June 2019
- Snowden J, Anderson-Berry A, Furtado J, Van Ormer M, Hanson C. Maternal serum nutrient levels are associated with biomarkers of inflammation at the time of delivery. European Society of Pediatric Gastroenterology, Hepatology, and Nutrition, Glasgow, Scotland June 2019
- Snowden J, Hanson C, Furtado J, Van Ormer M, Anderson-Berry A. Maternal tobacco use affects the relationship between nutritional anti-oxidants and infant inflammation Pediatric Academic Societies Meeting, Baltimore, Maryland, April 2019
- Snowden J, Hanson C, Furtado J, Van Ormer M, Anderson-Berry A. Infant serum nutrient levels are associated with biomarkers of inflammation at the time of delivery. Pediatric Academic Societies Meeting, Baltimore, Maryland, April 2019
- Evans S, Hanson C, Khandalvala B, Timmerman M, Geske J. Effects of month-long Interprofessional nutrition rotation on medical student Interprofessional attitudes. Society of Teachers of Family Medicine Annual Meeting, Dallas, TX May 2019

Presentations
- Hanson, C. Inflammatory Potential of Diet during Pregnancy and Lung Function Outcomes in the Offspring in Mid-Childhood. Preterm Birth International Collaboration meeting, Dubrovnik, Croatia, April 2019
- Hanson, C. The Fatter, the Better? Results of a Systematic Analysis of Body Composition on COPD Outcomes. European Respiratory Society, Madrid, Spain, September 2019
- Hanson, C. Provision of Optimal Nutrition to Preterm Infants. Shanghai First Maternity and Infant Hospital, Tongji University School of Medicine, Shanghai, China. October 2019
- Hanson, C. Bench to Bedside: How and Why Dietary N-3 PUFA Intake Mediates the Response to Environmental Exposures. American Thoracic Society meeting, Dallas, TX May 2019
- Hanson, C. Take a Deep Breath: COPD Systemic Review Evidence Analysis Library Update. Academy of Nutrition and Dietetics 2019 Conference and Expo, Philadelphia, PA, October 2019

Grants: Active/Funded since Last Report
External
- Priority Research Center on Lifecourse Nutrition Funding Agency: University Board of University of Agder Start and End Dates: October 2018-September 2023 Total Dollars: $1,202,080 Role: Co-Investigator; Principal Investigator: Nina Overby, PhD
- Targeting Airway Inflammation from Concentrated Animal Feeding Dust Funding Agency: United States Department of Veteran’s Affairs Merit Award Start and End Dates: October 2018-September 2022 Total Dollars: $497,850 Role: Co-Investigator; Principal Investigator: Debra Romberger, MD
- Relationship Between Indoor Ultrafine Particle Exposure and Respiratory Morbidity, Inflammation, and Oxidative Stress in Children with Asthma Funding Agency: National Institute of Environmental Health Sciences K23 Start and End Dates: July 2018-June 2023 Total Dollars: $983,805 Role: Mentor; Principal Investigator: Emily Brigham, MD
• Comparing Urban and Rural Effects of Poverty on COPD (CURE COPD) Funding Agency: National Institute of Health/National Institute on Minority Health and Health Disparities Start and End Dates: July 2015-June 2020 Total Dollars: $4,997,009 Role: Co-Investigator (UNMC site PI); Principal Investigator: Nadia Hansel, MD

Internal
• Determining Microbiota Accessible Carbohydrates in a Human Clinical Intervention Trial and the Link to Dietary Fiber Intake. University of Nebraska Food for Health Center. July 2019-December 2020 Total dollars: $141,00.00 Role: Co-Investigator.
• The Role of Specialized Pro-Resolving lipid Mediators in Placental Tissue and Perinatal Health. University of Nebraska Collaboration Initiative. July 2019-June 2020. Total Dollars: $20,000.00 Role: Co-Investigator
• The Role of Omega-3 Fatty Acid-Derived Pro-Resolving Mediators in Maternal-Fetal Health. UNMC Child Health Research Institute. June 2019-May 2020. Total dollars: $50,000.00 Role: Co-Investigator.

Grants completed since last report
• The Effect of Dietary Fiber and the Gut Microbiome on COPD Funding Agency: Nebraska Department of Health and Human Services, LB506 Start and End Dates: July 2018-June 2019 Total Dollars: $50,000 Role: Co-Principal Investigator with Tricia LeVan, PhD
• Effect of Vitamin D Supplementation on Balance in Patients with Chronic Kidney Disease Funding Agency: University Committee on Research and Creative Activity Start and End Dates: December 2018-December 2019 Total Dollars: $5,000 Role: Co-Investigator
• Impact of Obesity on Omega-3 Fatty Acid-Derived Pro-Resolving Mediators in Maternal-Infant Health: Funded through a grant from the Nebraska Society for the Prevention of Obesity-Related Diseases, the aim of this study is to define the relationships between omega-3 fatty acid intake, fatty acid metabolism, production of inflammation-resolving compounds, and maternal-fetal health outcomes in obese compared to normal weight pregnancies.
• Targeting Airway Inflammation from Concentrated Animal Feeding Dust: This study is funded by a Veteran’s Affairs Merit Award. In collaboration with Dr. Deb Romberger, this study will identify how the lung responds to and repairs damage caused by dust exposure, including how the pro-repair molecule amphiregulin is regulated by cell signaling responses to inflammation and dietary fatty acids.
• Identification of Bioenergetic Markers in Patients with Refractory Epilepsy: Epileptic seizures are some of the most difficult to treat neurological conditions. One potential therapy for epilepsy is the ketogenic diet. While potentially effective, the ketogenic diet is difficult and has serious side effects. This study will use metabolomic profiling of patients with epilepsy to identify a “metabolic signature” related to diet and seizures, and assess whether some of the identified compounds could be used as therapeutic interventions.

Committee Service
• UNMC Faculty Senate President
• Chair, Academy of Nutrition and Dietetics Evidence Analysis Project for Pulmonary Disease
• Chair, Nutritional Analysis, UK Biobank
• Nebraska Food for Health Center
• Nebraska Society for the Prevention of Obesity-Related Diseases

Financial Summary as of November 30, 2019
• Book Value - $261,736
• Market Value - $271,191
• Income - $11,510
• Available for Spending - $11,676

Planned Activities
• Impact of Obesity on Omega-3 Fatty Acid-Derived Pro-Resolving Mediators in Maternal-Infant Health: Funded through a grant from the Nebraska Society for the Prevention of Obesity-Related Diseases, the aim of this study is to define the relationships between omega-3 fatty acid intake, fatty acid metabolism, production of inflammation-resolving compounds, and maternal-fetal health outcomes in obese compared to normal weight pregnancies.
• Targeting Airway Inflammation from Concentrated Animal Feeding Dust: This study is funded by a Veteran’s Affairs Merit Award. In collaboration with Dr. Deb Romberger, this study will identify how the lung responds to and repairs damage caused by dust exposure, including how the pro-repair molecule amphiregulin is regulated by cell signaling responses to inflammation and dietary fatty acids.
• Identification of Bioenergetic Markers in Patients with Refractory Epilepsy: Epileptic seizures are some of the most difficult to treat neurological conditions. One potential therapy for epilepsy is the ketogenic diet. While potentially effective, the ketogenic diet is difficult and has serious side effects. This study will use metabolomic profiling of patients with epilepsy to identify a “metabolic signature” related to diet and seizures, and assess whether some of the identified compounds could be used as therapeutic interventions.
Karen Linder Distinguished Professorship for Women’s Health
The purpose of this Fund is to advance women’s health research within the CAHP.

Patricia A. Hageman, PT, PhD, FAPTA is Professor and Linder Professor. She received her Bachelor of Science in Physical Therapy from UNMC (1979), Master of Science in Health, Physical Education and Recreation from University of Nebraska at Omaha (1985) and her Doctor of Philosophy from UNMC (1994). With 40 years of combined clinical and academic experience, Dr. Hageman served as UNMC PT Program Director for 19 years (1989-2006) and has authored over 42 publications, the majority as first author. She collaborates with an interprofessional team of researchers continuously funded by the National Institutes of Health since 2001. Dr. Hageman provides leadership in research using mHealth interventions to influence lifestyle behavior changes for healthy eating and activity to improve physical function and quality of life in rural women and, more recently, rural men.

Match Donor: Karen Linder | Appointed May 2013 | Reappointed July 2016-2019
Completed Term June 2019

Completed Activities
• Moderate effects of cognitive-behavioral variables on the effectiveness of two different long-term web-based weight loss interventions among women living in rural underserved areas. Hageman PA, Kupzyk K, Yoerger M, Pullen CH. This study investigated the differences between two-augmented web-based weight-loss interventions, with differences observed between high and low performers based upon the type of augmented web-based weight loss intervention. Study findings were presented as a peer-reviewed presentation at the 2018 American Physical Therapy Association Combined Sections Meeting with a manuscript accepted by the Journal of Behavioral Nutrition and Education.

• User engagement associated with web-intervention features to attain clinically meaningful weight loss and weight maintenance in rural women. This study examines level of website feature engagement with the likelihood of attaining ≥5% bodyweight loss after 6 and 18 months participation in a web-based intervention, among rural women at high risk of obesity-related diseases and disability. Findings indicate that higher engagement with messaging features is associated with attaining clinically meaningful short-term and longer-term weight loss. Study findings were presented as a peer-reviewed presentation at the 2019 American Physical Therapy Association Combined Sections Meeting with a peer-reviewed manuscript published in the journal PLoS ONE.

• Activity patterns of rural women with obesity and arthritis enrolled in a lifestyle weight loss program. This exploratory study examines whether rural women with physician-diagnosed arthritis and obesity would experience change in weight, physical activity by accelerometry, and/or perceived benefits and barriers to physical activity, following their 30 month participation in a weight management program. Findings indicate the rural women were active at baseline, meeting or exceeding daily guidelines for moderate or greater intensity activity. Women lost weight over time, losing weight from baseline to 6 months, with weight regain at 18 and 30 months, yet ending the study with lower weight than at baseline. Study results will be presented at the 2020 American Physical Therapy Association Combined Sections Meeting. A manuscript for a peer-review submission will be submitted to the Journal of Community Health Nursing.

• Community-informed outreach produces engagement with overweight and obese, rural, midlife men in a clinical trial. Eisenhauer C, Pullen CH, Hageman PA. This study assessed the feasibility of community-informed outreach strategies to recruit rural men in a 6 month mobile technology weight loss trial. Findings indicate recruitment using social media and community outreach methods being favorable, and recruitment from rural health providers producing no referrals. Study results were presented as a peer-reviewed presentation at the 2019 Annual Research Conference of the Midwest Nursing Research Society.
Physical Therapy student perspectives on dual-campus cohesiveness and technology. **Hageman PA**, Venema D. This project focused on student perspectives about effective learning and teaching related to dual-campus class cohesiveness and the effectiveness of educational technology. Lessons learned include the need for: 1) faculty to focus on transparency about campus differences with stakeholders, and 2) ongoing training for faculty and students related to technology to optimize effective education. This project was presented as a peer-reviewed presentation at the 2019 Innovation in Occupational and Physical Therapy Education Summit.

**Mentorship**
- Mentorship/Financial Support for PhD Student
  - Mentored and supported 1 PhD Graduate Student (J Mroz, Jan 2018-May 2019).
- Supervisory Committee Member for a Doctor of Health Care Education and Leadership (EdD) at Clarkson College, Omaha, NE
- Supervisory Committee Member for two Master of Science Students in Medical Sciences Interdisciplinary Area at UNMC, Omaha, NE
- Expanded Role as Senior Faculty Mentor for Academic Success
  - Mentored 5 Junior CAHP PT Faculty Members and 1 CON Faculty Member

**Publications**

**Peer-reviewed Presentations**

**Eisenhauer C, Pullen CH, Hageman PA.** Community-informed outreach produces engagement with overweight and obese, rural, midlife men in a clinical trial. 43rd Annual Research Conference of the Midwest Nursing Research Society, Kansas. City, MO March 27-29, 2019

**Hageman PA,** Venema D. Physical Therapy student perspectives on dual-campus cohesiveness and technology. Innovation in Occupational and Physical Therapy Education Summit 2019, Creighton University, Omaha, NE, June 27-28, 2019

**Grant (External) Active**
- **Title:** Engaging Rural Men with Mobile Technologies for Weight Loss. A Randomized Controlled Trial.
- **ID Number:** R15NR017522
- **Funding Agency:** DHHS/NIH/NINR
- **Project Period:** 2017-2020
- **Total Dollars:** $380,566
- **Role:** Co-Investigator (C Eisenhauer, PI)

**Grant (Internal) Active**
- **Title:** A Physical Activity Profile of Midlife, Community-dwelling Rural Men Using Advanced Deep Learning Data Analytics
- **Funding Agency:** UNMC Just-in-Time CENTRIC grant
- **Project Period:** 2019-2020
- **Total Direct Costs** $7,200
- **Role:** Co-Investigator (C Eisenhauer, PI)

**Manuscript Reviewer (2019)**
- BMC Women’s Health
- BMJ Open
- Contemporary Clinical Trials

**Committee Service**
- **National**
  - Member, Council of Catherine Worthingham Fellows of the American Physical Therapy Association
- **University**
  - Chair, College of Allied Health Professions (CAHP), Promotion and Tenure Advisory Committee
  - Member, Division of Physical Therapy, Admissions Interview Committee
  - Member, Division of Physical Therapy, Curriculum Committee Vice-Chair, Division Kearney Omaha Response (KOR) Team

**Financial Summary as of November 30, 2019**
- **Book Value** - $253,122
- **Market Value** - $263,211
- **Income** - $11,171
- **Available for Spending** - $21,833
Planned Activities

- Mentorship of junior CAHP and PT faculty, professional and graduate students
- Prioritize manuscript submission of completed projects to increase CAHP visibility nationally and internationally

Complete research as indicated below:

- **Engaging rural men with mobile technologies for weight loss: A randomized controlled trial.** Co-investigator on an NIH funded project designed to evaluate a basic mobile application (app) intervention with a more comprehensive intervention using app combined with culturally based text messaging, to achieve weight loss in rural men. This work will also allow for gender comparison of behavior change approaches for weight loss, healthy eating and activity.
- **Exploring physical activity profiles of midlife, community-dwelling rural men using advanced deep learning analytics.** Co-investigator on a UNMC CENTRIC grant to use traditional and novel analysis of activity using accelerometry in rural men, for traditional and custom bout and sedentary analysis. Plans include collaboration with UNO faculty to examine rural men’s patterns of activities throughout a day, to better understand how the presence of daily routines may be an important aspect of behavior modification for increasing activity.

Karen Linder Distinguished Professorship for Women’s Health

The purpose of this Fund is to advance women’s health research within the CAHP.

**Laura Bilek, PT, PhD** is Associate Dean for Research and Linder Professor. She received her Bachelor of Science in Physical Therapy from UNMC (1988) and her Doctor of Philosophy from UNMC (1994). Dr. Laura Bilek’s current research focuses on the relationships between exercise, muscle and maintenance of bone health across the lifespan. She has worked with a wide variety of populations at risk of poor bone health, including post-menopausal women, persons undergoing bariatric surgery, and most recently, pediatric cancer survivors. Dr. Bilek was co-Principal Investigator of the Heartland Osteoporosis Prevention Study, a large clinical trial funded by NIH that compared the effect of medication and exercise on bone health. This study was successfully completed in 2019, with over 300 women enrolled. Dr. Bilek is currently a co-investigator on a small business administration grant with a California based company through which she is managing a clinical trial to test a medical device designed to prevent bone loss in post-menopausal women. Dr. Bilek is also a member of a newly developed interdisciplinary team with a goal of addressing bone health in pediatric cancer survivors to prevent fractures and long-term disability.

Match Donor: Karen Linder | Appointed July 2019
Charles R. O’Malley Chair of Radiation Science Technology Education

The purpose of this Fund is to advance research and program development in the division of radiation science technology education, currently known as the Department of Medical Imaging and Therapeutic Sciences (MITS).

Lisa Bartenhagen, MS, RT(R)(T), is the O’Malley Chair and Director of the Department of Medical Imaging and Therapeutic Sciences at the University of Nebraska Medical Center. She is also the Program Director of the Radiation Therapy Program. She received a Bachelor Degree in Radiation Science Technology Education from the University of Nebraska Medical Center. After graduation Bartenhagen became certified and registered in Radiography and Radiation Therapy by the American Registry of Radiologic Technologists. She went on to obtain a Master of Science in Radiologic Science from Midwestern State University.

Donors: Charles R. O’Malley Charitable Lead Trust through the New York Community Trust | Appointed January 3, 2018

Completed Activities

- The O’Malley funds continue to sponsor an activity that originally took place in February, 2019 in the Advanced Anatomy Lab. This simulated lab session is part of an ongoing research study involving Interprofessional Education (IPE), between Diagnostic Medical Sonography students (DMS) and Nephrology fellows. The aim is to improve DMS students’ perceived competence for their role in ultrasound guided renal biopsy exams while working collaboratively with the nephrology team. A peer-reviewed publication has resulted.
- Oxidants-Antioxidants Status in Workers Occupationally Exposed to Long Term Low Levels of Ionizing Radiation. The purpose of this project is to study the long-term effect of low levels of Ionizing Radiation (IR) on x-ray workers’ antioxidant status and to quantify superoxide levels on those workers at different occupational settings. Since the pilot study, funding for this study has continued to include professionals from radiation therapy and nuclear medicine. Initial results have been published.
- Virtual Environment Radiotherapy Training (VERT) curriculum expansion. Funding for interactive case-based instructional modules allowed for students to better understand interactions of radiation on the body.
- Improving Student Wellness and Success: An Interprofessional Approach to Exploring Social and Psychological Capital in Allied Health Programs. Purpose: To describe the interprofessional interactions (connections and patterns of knowledge exchanged) that facilitate wellness among students in the College of Allied Health Professions. Funding has allowed for purchase of validated surveys to measure social and psychological capital in UNMC CAHP students.
- Statistical analysis of the study A Video Intervention for Head and Neck Cancer Patients data.

Presentations and Publications

- Ahmad IM. Occupational Health Hazards: Oxidative Stress, DNA Damage and Inflammation Biomarkers in Radiography. Department of Epidemiology, College of Public Health, UNMC, Omaha, NE. Feb 4, 2019
- Ahmad IM; Abdalla MY; Moore TA; Bartenhagen L; Case AJ; Zimmerman MC. Health care Workers Occupationally Exposed to Ionizing Radiation Exhibit Altered Levels of Inflammatory Cytokines and Redox Parameters. Antioxidants. 8(1) pii: E12. 2019. https://doi.org/10.3390/antiox8010012.

Committee Service

- President, Board of Trustees- American Registry of Radiologic Technologists, July 2019-present
- Chair, Ethics Committee, Board of Trustees- American Registry of Radiologic Technologists, July 2018-2019
- Vice President, Board of Trustees- American Registry of Radiologic Technologists, July 2018-2019
- Chair, Investment Committee, Board of Trustees- American Registry of Radiologic Technologists, July 2019-present
- Member, Editorial Review Board: American Society of Radiologic Technologist, July 2014-present
- Member, Interprofessional Academy of Educators, UNMC, September 2016-present
- Member, Radiation Therapy Examination Committee, American Registry of Radiologic Technologists, July 2013-present
- Member, Radiation Therapy Practice Analysis
Committee, Board of Trustees- American Registry of Radiologic Technologists, July 2019-present
• Secretary, UNMC Interprofessional Academy of Educators- Simulation Interest Group, October 2016-2019
• Member, UNMC Interprofessional Academy of Educators Premier Education Planning Committee, January 2017-September 2019
• Member, UNMC Interprofessional Academy of Educators Member Nominations Committee, April 2019-present
• Member UNMC Campus Climate Committee, December 2019-present
• Member CAHP By-laws Committee, June 2019-present
• Member, CAHP Promotion and Tenure Committee, January 2013-present
• Member, CAHP Financial Stewardship Committee, January 2017-present
• Chair, CAHP Alpha Eta Nomination Committee, April 2019-present
• Member, CAHP Leadership Council, March 2000-present
• Member, CAHP Admissions Committee, January 2019-present
• Member, CAHP PA Program Search Committee; 2019
• Chair, MITS Leadership Council, April 2017-present
• Co-Chair/Member, MITS Student Advisory Committee, January 2018-present
• Chair, Radiation Therapy Program Advisory Committee, January 2017-present

Financial Summary as of November 30, 2019
• Book Value - $500,000
• Market Value - $543,407
• Income - $23,063
• Available for Spending - $49,539

Planned Activities
• Expand the study of Oxidants-Antioxidants Status in Workers Occupationally Exposed to Long Term Low Levels of Ionizing Radiation to include Diagnostic medical sonographers and MRI technologists.
• Present findings of the study A Video Intervention for Head and Neck Cancer Patients at the American Society of Radiologic Technologists.
• Submit article for publication on the Video Intervention for Head and Neck Cancer Patients to a peer-reviewed journal.
• Present at the International Society of Radiographers & Radiological Technologists Annual Congress. Virtually Preparing Patients for Radiation Therapy Treatment.
• An Interprofessional approach to exploring social and psychological capital in Allied Health Programs- IPE event presentation, luncheon and focus groups.

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Mr. Charles R. O’Malley was a businessman, educator and philanthropist. At age 17, during the depths of the Great Depression, the Perry, Iowa native rode a freight train to Boston where he became a nurse. He eventually settled in New York City. Over the years, he worked for Pan American Airways, Mobil Oil and the T.J. Stevenson Shipping Company. Mr. O’Malley met and interacted with many powerbrokers, including Aristotle Onassis. He represented the Plough group of more than 50 radio and TV stations in their dealings with ad agencies, and served as director of the Columbia Scholastic Press Association. Mr. O’Malley passed away on March 19, 2008, at the age of 93. His estate created the Charles R. O’Malley Charitable Trust, whose wonderful generosity to non-profit organizations across the country provides a living legacy.