Faculty Education & Scholarship Summary Report
July 1, 2018 – June 30, 2019
Department of Physical Medicine and Rehabilitation
UNC School of Medicine

Faculty
Joshua Alexander, MD
JM Baratta, MD, MBA (began April 2019)
Christine Cleveland, MD (began November 2018)
Keturah Faurot, PhD, MPH, PA
William Filer, MD
Susan Gaylord, PhD
Mathew Harris, PhD, ABPP(CN)
James Hill, MD, MPH
Michael Ingraham, MD
Angela Lipscomb-Hudson, MD
Kimberly Rauch, DO
Lee Shuping, MD, MPT
Raj Telhan, MD, MFA
Karla Thompson, PhD
Tanya Zinner, MD

Bibliography

REFEREED PAPERS


IN SUBMISSION/IN PRESS


10. Wang C, Li KG, Gaylord S. Use of Complementary and Alternative Medicine Approaches Among U.S. Children with ADHD: Results from the 2012 and 2017 National Health Interview Surveys. (Submitted to JAMA Pediatrics, December, 2018.)


12. Zieff, Gabriel H; Stone, Lee; Frank, Barnett; Gaylord, S; Battle, Kate and Hackney, Anthony C. Do Aerobic Exercise and Mindfulness Act Synergistically to Mitigate Psychological Distress in College Students Experiencing High Levels of Stress? Medicine & Science in Sports & Exercise (under submission).

13. Phillips, Kamaira; Brintz, Carrie; Moss, Kevin; Gaylord, S. Didgeridoo Sound Meditation for Stress Reduction and Mood Enhancement in Undergraduates. (Submitted to Global Advances in Health and Medicine, May, 2019).

14. Brintz, Carrie E; Miller, Shari; Olmsted, Kristine; Bartoszek, Michael; Cartwright, Joel; Kizakevich, Paul; Butler, Michael; Asefnia, Nakisa; Buben, Alex; Gaylord, S. Adapting Mindfulness Training for Military Service Members with Chronic Pain. (Submitted to Military Medicine, May, 2019.)


BOOK CHAPTERS


PUBLISHED ABSTRACTS

MEETING ABSTRACTS/POSTERS


8. Brintz C, **Faurot K**, Rao S, **Gaylord SA**. Feasibility of a 4-week Adapted Mindfulness Program for Adults with Chronic Pain. Society of Behavioral Medicine National Conference. (Submitted Nov. 9, 2018.)


10. Jessica Barnhill, MD¹, Isabel Roth, DrPH, MS, Gilson Honvoh, MS, Chanee Lynch, MPH, **Kim Faurot**, PA, PhD, Karla Thompson, PhD and **Susan Gaylord**, Ph.D. Applying a holistic curriculum at a rehabilitation center to advance integrative health services. American Public Health Association Nov 2-6 2019 Philadelphia, PA.


**NEWSLETTER ARTICLES**

**PM&R Departmental Newsletter:**

1. Thompson, K. Part 1 of Sleep – July 6, 2018
2. Thompson, K. Part 2 of Sleep – July 20, 2018
3. Thompson, K. How to Avoid the Health Risks That Come with Financial Stress – August 16, 2018
4. Gaylord, S. Mindfulness for Managing Stress and Maximizing Resilience – August 30, 2018
5. Thompson, K. 6 Ways Pets Can Improve Your Health – September 28, 2018
6. Thompson, K. New Study Links Mindfulness, Brain Changes, and Pain Sensitivity – October 12, 2018
7. Thompson, K. More Than Cooking... – October 26, 2018
8. Harris, M. Wellness for the Holidays – December 14, 2018
9. Harris, M. Mediterranean Diet – January 1, 2019
10. Faurot, K. Treating your Pain Without Drugs – January 18, 2019
11. Alexander, J. Wheel of Wellness – February 1, 2019
12. Gaylord, S. Intermittent Fasting and Health – February 15, 2019
13. Harris, M. Wheel of Wellness – March 1, 2019
14. Gaylord, S. Humor for Healing and Health – March 1, 2019
15. Alexander, J. Spirituality and Wellness – March 15, 2019
16. Thompson, K. Wheel of Wellness, – March 15, 2019
17. Alexander, J. 12 Wellness Apps to Try – March 29, 2019
18. Hudson, L. How does caffeine affect weight? – April 12, 2019
19. Hudson, L. Culinary Medicine – April 26, 2019
20. Thompson, K. Book review of “How not to die” – June 7, 2019
21. Thompson, K. Do we need more leafy greens? – June 21, 2019
22. Gaylord, S. Wheel of Wellness – June 21, 2019

**Grants, Contracts & Clinical Trials**

**FUNDED**
SBIR R43/R44 1R43MD012223-01  Gaylord (PI)  07/11/2017-02/28/2019
Brim Technologies/NIMHD  $61,626
Project Title: SBIR: Artificially Intelligent Diabetes Assistant (AIDA) for African Americans with Type 2 Diabetes
Goal: The goal is to build an artificially-intelligent diabetes assistant (AIDA), a chatbot-powered telehealth platform that is designed to provide highly interactive, automated diabetes self-care support to African Americans with type 2 diabetes.
Faculty:
- **Alexander** Role: Co-I (1% effort)
- **Gaylord** Role: PI (10% effort)
- **Faurot** Role: Co-I (8.5% effort)

UNC PM&R Innovation Fund Award  Lipscomb-Hudson (PI)  10/4/2017-10/3/2018
University of North Carolina  $10,000
Project Title: Weight Loss and Lifestyle Medicine (WeLL-Me) Clinical Program
Goal: The WeLL-Me program is designed to assist and teach patients with a body mass index > 30 healthy lifestyle and weight loss approaches to improve their nutrition, physical activity, functioning, quality of life, and mental health.
Faculty:
- **Lipscomb-Hudson** Role: PI (no salary support)

1R01EB024570-01  Huang (PI)  08/15/2018 – 08/14/2021
NCSU/NIH
**Title: Error Tolerance in Wearer-Robot Systems**
Goal: The objective of this study is to investigate novel fault-tolerant mechanisms, inspired by human motor control principles, to improve the robustness and safety of powered transfemoral (TF) prostheses. We will accomplish our research objectives by pursuing three specific aims: 1) To systematically determine the effects of imposed prosthesis errors on objectively measured walking stability of amputee-prosthesis systems. 2) To systematically determine the effects of imposed prosthesis errors on perceived walking stability in amputees. 3) To demonstrate the capacity of robust lower limb prosthesis control by mimicking human motor control mechanisms.
Faculty:
- **Filer** Role: Co-I (9% effort)

R00HD091375  (Cassidy)
NIH/NICHD
**Title: Brain Network Connectivity Measures In Early Stroke Rehabilitation**
Goal: This project will use multi-modal neuroimaging (EEG and resting-state fMRI) to derive biomarkers of motor recovery in individuals early post-stroke admitted to an inpatient rehabilitation facility.
Faculty:
- **Baratta** Role: Consultant (no salary support)

NC TraCS $2K.  Faurot, PI  05/15/2019-05/14/2020
“Development of a Novel mHealth Application for Dietary Supplement Tracking--Acquiring Patient Perspectives” Grant # 2KR1151904
Goal: To develop and test an mHealth application for dietary supplement tracking in three patient populations.
- **Faurot** Role: PI (in kind)
- **Gaylord** Role: Co-I (in kind)

NC TraCS $2K.  Stakeholder Engagement Voucher  Roth, PI  05/15/2019-05/14/2020
“Engaging Stakeholders in Research on a Telephone-delivered Mindfulness Intervention for Rural, African American Families” Grant # SE1907

Goal: To cultivate stakeholder engagement for our already funded NIH/National Institute on Aging parent grant (which is to develop a telephone-based delivery of a mindfulness-based intervention for rural African American informal caregivers of those with dementia) in rural Wayne and Lenoir counties, NC.

Roth: PI (in kind)
Gaylord: Role: Co-I (in kind)

R21 Gaylord, PI 02/01/2019-1/31/2021
NIH $271,981

Project Title: Easing the Burden of Dementia Caregiving: A Telephone-delivered Mindfulness Intervention for Rural, African American Families

Goal: The project’s specific aims are: 1) to determine the feasibility and acceptability of a telephone-delivered mindfulness training intervention (TMT) in decreasing caregiver burden among rural, African American informal caregiving teams of people with dementia; 2) to explore effects of the training on relevant secondary outcomes for both caregiving team members, including emotional regulation; tolerance of uncertainty; emotional and physical health; family conflict within the informal caregiving team; and self-efficacy; 3) to explore comfort with and willingness to adopt technologies (e.g. telephone-based, web-based) to access mindfulness practices and existing caregiving educational resources.

Faculty: Gaylord Role: Co-I (15% effort)
Faurot Role: Co-I (10% effort)

UNC PM&R Innovation Award Gaylord, PI 08/2018-06/2019
$30,000

Project Title: Whole Health at the Center for Rehabilitation Care: An Integrative Health Model

Goal: To test the feasibility and acceptability of the Personal Health Inventory and Whole Health model approach at the UNC Center for Rehabilitation Care, including piloting the implementation health self-efficacy groups, assessing utilization and interest in CAM modalities among adult PM&R patients, and developing patient and provider education in CAM and integrative health modalities.

Faculty: Gaylord Role: PI
Barnhill Role: Co-PI
Faurot Role: Co-I
Thompson Role: Co-I

R21/R33 MH100250 (Penn, PI) 04/04/2014-03/31/2019
National Institute of Mental Health $18,460

Project Title: Targeting Stress Reactivity in Schizophrenia: Integrative Coping Awareness Therapy

Goal: To develop/test mindfulness & positive psych intervention for stress reactivity in early schizophrenia.

Faculty: Gaylord Role: Co-I (7.5% effort)

1 R34 AT008822-01A1 Gaylord, PI 09/01/2016- 08/31/2019
NCCIH $150,677

Project Title: Making Friends with Yourself: A Depression Prevention Program for Adolescents

Goal: The primary goal of this research project is to refine and test the feasibility and acceptability of an innovative depression-prevention program, "Making Friends with Yourself" (a developmentally appropriate
adaptation for adolescents, based on the adult Mindful Self-Compassion program), in comparison to an attention-control program, "Taking Care of Yourself" (involving education and discussion on healthy lifestyles), with adolescents who are experiencing subsyndromal depression.

Faculty:
- **Gaylord** Role: PI (15% effort)
- **Faurot** Role: Co-I (9% effort)

**T32-AT003378**
(Mann/Gaylord (PIs))

NIH $464,764

*Project Title: Research Training Fellowship in Complementary and Integrative Healthcare*

Goal: The goal of this T-32 Research Fellowship is to cultivate well-trained, independent researchers for leadership in investigating efficacy, effectiveness, safety and mechanisms of action of complementary therapies and integrative health-care approaches.

Faculty:
- **Gaylord** Role: MPI (No Salary Support)

**1 R61 MH110027-01A1**
(Dichter, PI) 02/01/2017-01/31/2019

National Institute of Mental Health $135,468

*Project Title: Development of A Novel Transdiagnostic Intervention for Anhedonia*

Goal: The goal of this experimental therapeutics trial is to validate Behavioral Activation Treatment for Anhedonia in a transdiagnostic sample of anhedonic patients first with 7T fMRI and then with a randomized clinical trial.

Faculty:
- **Gaylord** Role: Co-I (15% effort)

**W81XWH-15-2-0059**
(Faurot/Mann, PI) 01/01/2018 – 12/31/2018

HJF for the Advancement of Military Medicine $142,965

*Project Title: Targeted Alteration in Omega-3 and Omega-6 Fatty Acids for Post-Traumatic Headache (Nutrition for PTH).*

Goal: The purpose of this multi-site study is to evaluate the efficacy of a high omega-3/low omega-6 dietary intervention (the H3-L6 Diet) vs. a Control Diet in reducing headache pain and improving function in soldiers, veterans and military healthcare beneficiaries with post-traumatic headache (PTH). In addition, the study will examine the effects of the diet interventions on anti-nociceptive and pro-nociceptive lipid mediators derived from omega-3 and omega-6 fatty acids.

Faculty:
- **Faurot** Role: Site Lead PI, Data manager, Internal monitor (22% effort)
- **Gaylord** Role: Co-I (17% effort) (25% effort in no cost extension)
- **Faurot** Role: Project Manager (28.8% effort) (20.4% effort in no cost extension)

**CLINICAL TRIALS**
16-01878  (Lipscomb-Hudson)  08/30/2016-08/29/2018
Wake Forest University Health Sciences  $14,105
Project Title: COMprehensive Post-Acute Stroke Services (COMPASS) Study RELATED 4100614
Goal: The purpose of this pragmatic study is to investigate whether implementation of a comprehensive post-acute stroke service model that integrates Early Supported Discharge (ESD) and Transitional Care Management (TCM) for stroke survivors improves functional outcomes post-stroke, reduces caregiver stress, and reduces readmission rates
Faculty: Lipscomb-Hudson Role: PI (No Salary Support)

AbbVie, Inc (Kaufer)  01/04/2016-06/01/2019
$9651.03
Project Title: A Phase 2b, double-blind, randomized, placebo-controlled study of RVT-101 in subjects with dementia with Lewy Bodies (DLB)
Goal: To assess the effects of RVT-101 versus placebo on global function as measured by the Clinician’s Interview-Based Impression of Change Plus Caregiver Input (CIBIC+) after 24 weeks of treatment
Faculty: Harris Role: Technical Staff (No Salary Support)

SUBMITTED

PCORI (Blatt)  01/01/2018-12/31/2020
Improving Healthcare Systems  $364,978
Project Title: Comparison of telemedicine-based with traditional on-site childhood cancer survivorship clinics
Goal: The purpose of this study is to compare the use and impact on quality of life (QoL) for patients and families of two comprehensive care coordination programs—a telemedicine-based “Clinic” with a traditional on-site University–based clinic—in managing children and adult survivors of childhood cancer. The goal is to engage primary and subspecialty health care providers (HCPs) in integrating local and tertiary center survivorship care.
Faculty: Alexander Role: Telemedicine Consultant (2% effort)

1R21HD095139-01 (Kamper)  04/01/2018 – 03/31/2020
NCSU/NIH
Title: Improving Dexterity in Children with Cerebral Palsy by Training Finger Individualization
Goal: The goal of this project is to examine the efficacy of a novel training paradigm to improve fine control of the impaired hand in children and young adults with cerebral palsy. To accomplish this we propose two specific aims: 1) Explore the neural correlates of diminished finger individuation and its rehabilitation; 2) Use intensive training of finger individuation to improve manual dexterity
Faculty: Alexander Role: Co-I (6% effort)

R01 (Proposal 19-5337) (Hu (PI))  03/01/2020-02/28/2025
BME/NCSU
Title: Neural Mechanisms of Impaired Finger Independence in Stroke Survivors
Goal: Spatial muscle activation patterns in the upper limb (intrinsic and extrinsic finger muscles) will be evaluated using high-density surface EMG recordings in stroke survivors and age-matched controls. Then, using a new technique called event-timing coherence analysis, these activation patterns will be mapped to spinal, subcortical and cortical levels of control in order to better understand normal and maladaptive
activation patterns in the patient with stroke-related hemiparesis. We will also analyze individual motor units
to determine if there is evidence of axonal reinnervation following stroke. Through these findings, we hope to
establish a theoretical foundation that can provide guidance for the development of centrally or peripherally
targeted rehabilitation strategies to maximize hand functional recovery of stroke survivors.

Faculty:

Filer Role: Co-I (5% Effort)

R01 Huang (PI) 01/01/2020-12/31/2024
BME/NCSU
Title: Real-time direct control of a powered prosthetic ankle using surface electromyography.
Goal: Commercially available powered prostheses for the lower limb utilize pre-programmed pattern
generators based on common movement patterns such as walking or stair-climbing. Unfortunately, this control
strategy struggles to adapt to less-common or multidirectional tasks often encountered by lower limb
amputees. This study will test a direct myoelectric control strategy of a powered ankle prosthesis and measure
the cognitive load of such a control strategy. We will also test this control strategy for both cyclical and non-
cyclical tasks in comparison to existing methods of motor control.

Faculty:

Filer Role: Co-I (15% Effort)

R01 Huang (PI) 03/01/2020-2/28/2025
BME/NCSU
Title: Modulation of a Powered Knee Prosthesis using a novel Reinforcement Learning-based tuning system
and Visual Biofeedback
Goal: The objective of this study is to implement a novel machine learning strategy (Reinforcement Learning)
to tune a powered-knee prosthesis for subjects with a unilateral above knee amputation. Effects on gait
metrics (biomechanics, symmetry, perceived effort) will be measured for prosthetic and intact limbs.
Subsequently, a visual biofeedback system will be employed to train subjects in the use of the device, with the
goal of additional improvement in gait biomechanics.

Faculty:

Filer Role: Co-I (10% Effort)

R01 (NIH # R01HD101602) Sharma (PI) 04/01/2020 to 03/31/2025
BME/NCSU
Title: Adaptive Coordination of Functional Electrical Stimulation with a Powered Exoskeleton to Improve
Sitting-to-Standing in People with Paraplegia
Goal: The long-term goal of the research program is to enable people with spinal cord injury (SCI) to stand and
walk by using a hybrid exoskeleton technology that combines functional electrical stimulation (FES) with a
lower-limb powered exoskeleton. The central objective in this application is to validate new controllers that
adapt to day-to-day and inter-person variabilities in muscle responses, optimize coordination between FES-
assist and the exoskeleton based on a user specific muscle fatigue and recovery model, and assess the ability
of the controllers to reduce FES-induced muscle fatigue by using ultrasound imaging as a sensing modality.

Faculty:

Cleveland Role: Co-I (5% Effort)

NIH UG3/UH3 (Asher—UNC primary)
$458,901 (direct) (Year 1 – planning year)
Title: Carolina Alliance to Study Acupuncture for Back Pain in Older Adults—Phase 1, Feasibility: Pragmatic RCT
to test effectiveness of mindfulness training to improve pain and function in a chronic low back pain
population
Submitted March 15, 2019.

Faculty:

**Faurot** Role: Co-I (Co-author of proposal) (25% effort Y1; 30% Yrs 2-3; 40% effort Yr 5)

**NIH UG3/UH3**

(Gaylord—subaward to Boston Medical Center*)

$109,999 (direct) (Year 1 subaward – planning year)

Title: Group-based mindfulness for patients with chronic low back pain in the primary care setting

Goal: Pragmatic RCT to test effectiveness of mindfulness training to improve pain and function in a chronic low back pain population

Submitted February 8, 2019.

**Gaylord** Role: PI (10% effort Y1; 20% Yrs 2-5)

**Faurot** Role: Co-I (5% effort Y1; 20% Yrs 2-5)

(Morone (Lead PI – Boston Medical Center; Gaylord (UNC Site PI)).

**R01**

(Giscombe (Lead PI); Gaylord (PI)

NIH $349977 (year 1, direct)

Title: The HARMONY Study – A culturally relevant, randomized controlled stress management intervention to reduce cardiometabolic risk in African American women.

Goal: To test a culturally tailored mindfulness-based diet and exercise intervention vs. a conventional diet and exercise intervention for African American Women with cardiometabolic risk.

Submitted February 2, 2019.

Faculty:

**Gaylord** Role: PI (20% effort in year one)

**Faurot** Role: Co-I (10% effort in year one)

**R21-AT010026**

(Frohlich)

NIH $150,000

Title: Physiological Mechanism of Action of Transcranial Photobiomodulation of Prefrontal Cortex for Modulating Top-Down Control of the Autonomous Nervous System

Goal: The objective of this application is to study if tPBM can decrease neuronal activity in the rPFC and thereby modulate the stress response.

Submitted in November 2018.

Faculty:

**Gaylord** Role: Co-I (5% effort)

**OTHER RESEARCH ACTIVITIES**

**Alexander**

Advisor on IRB – “Transition of Youth with Cerebral Palsy”

Co-Investigator on IRB – “Hand Motor Control in Individuals with Cerebral Palsy”

**Cleveland**

Co-Investigator – “Mental health services needs of individuals with spinal cord injury” (with Dr. Blaise Morrison) (IRB Number: 19-1338)

Co-Investigator – “Educational needs of mental health providers with an interest in providing clinical services to survivors of spinal cord injury” (with Dr. Blaise Morrison) (IRB Number: 19-0990)

**Faurot**

Research on Statistical Analysis on the Association between Nutritional Factors and Key Health Outcomes (funded by a gift to the department)
Systematic Review: Mind-body Interventions for Opioid-treated Pain (with Eric Garland and team)
Systematic Review: Interventions for Cancer-related Cognitive Impairment (with Zev Nakamura, Aaron Piepmeier, Jeffrey Scott Weffel, and Gilson Honvoh)
Research on Brief Mindfulness Intervention for Chronic Pain, with Carrie Brintz (PI on TraCs $2K; Faurot, Co-I).
Filer
Co-investigator – “Efficacy of scratch-collapse test in dx of Carpal Tunnel Syndrome (supervising Dr. Areson)
Gaylord
Research on Brief Mindfulness Intervention for Chronic Pain, with Carrie Brintz (PI on TraCs $2K; Gaylord, Co-I).
Systematic Review: Mind-body Interventions for Opioid-treated Pain (with Eric Garland and team)
Research on Mindfulness and Exercise for Dept. of Exercise Physiology (Interventionist for Gabriel Zieff, PI, for his master’s thesis research).
Data Safety Monitoring Committee, November 2018 and May 2019, Serenity Study/Mindfulness for Hypertension.
Harris
Lead investigator – ”Use of the Structured Inventory of Malingered Symptomatology (SIMS) in a Neuropsychological Patient Population” (IRB Number: 19-1587)
Hill
Data Safety Monitoring Committee (Nutrition for Lumbar Radiculopathy)
Lipscomb-Hudson
Patient recruitment – Whole Health for Life Model Study
Rauch
Patient recruitment – GPS Community Study for Adults with CP
Shuping
Patient recruitment – Nutrition for Lumbar Radiculopathy Study
Patient recruitment – Acute/Better Back Care Studies
Co-investigator – Efficacy of scratch-collapse test in dx of Carpal Tunnel Syndrome (supervising Dr. Areson)
Co-investigator – Utilization of opiates in AIR setting (with Dr. Francis)
ASSM/AANEM poster – Triceps hypertrophy as a cause of ulnar entrapment (In development, with Dr. Boyd and Tyler Washburn, MS1)
Thompson
Co-investigator – Whole Health at the CRC model study (with Dr. Gaylord)
Lead investigator – “Interest in and Utilization of Complementary and Integrative Medicine in a Rehabilitation Population” (part of the Whole Health grant) (IRB Number 18-2420)
Co-Investigator – “Mental health services needs of individuals with spinal cord injury” (with Dr. Blaise Morrison) (IRB Number: 19-1338)
Co-Investigator – “Educational needs of mental health providers with an interest in providing clinical services to survivors of spinal cord injury” (with Dr. Blaise Morrison) (IRB Number: 19-0990)
Co-Investigator – “Describing cognitive and psychological functioning in former professional American football players” (with Dr. Merz) (IRB Number: 17-2754)
Co-Investigator – “Memantine for Prevention of Cognitive Decline during Adjuvant or Neoadjuvant Chemotherapy in Patients with Breast Cancer” (with Dr. Zev Nakamura – K2 grant)

Presentations

National Presentations (solicited)
2018 “Adaptation of Mindfulness Training to Treat Chronic Pain in the Military.” In Progress Review (IPR) for NIH-VA initiative on Non-Pharmacological Approaches to Managing Pain and Co-Morbid Conditions in U.S.
Military Personnel, Veterans, and their Families (AT14-003,004,005). National Center for Complementary and Integrative Health, Bethesda, MD. 07/2018. (Gaylord)


2019  “Diagnosis and Management of Non-Sports Related Concussion (nSRC): An Interdisciplinary Approach” Accepted as a 4-hour symposium to be given, American Congress of Rehabilitation Medicine, Chicago, IL. 11/2019. (Shuping)

**Presentations (Invited)**

*Cleveland*

“AD, Bowel, and Bladder Dysfunction in SCI Rehab Patients – Part 1,” Lecture at the Rehabilitation Nursing Retreat, Chapel Hill, NC, 02/2019.

“AD, Bowel, and Bladder Dysfunction in SCI Rehab Patients – Part 2,” Lecture at the Rehabilitation Nursing Retreat, Chapel Hill, NC, 02/2019.

*Faurot*


*Filer*

“Effective Feedback in Teaching and Academics” Grand Rounds Lecture to UNC Department of PM&R, Chapel Hill, NC, 07/2018.

“Case Presentations,” Lecture at UNC’s September 8th mTBI and nSRC Symposium, Chapel Hill, NC, 09/2018.

*Gaylord*

“Mindfulness for Preventing Burnout and Enhancing Resilience.” UNC Medical Student Wellness Week - Keynote speaker. Chapel Hill, NC, 03/2019.

“Mindfulness for Wellness and Management of Cardiac Disease.” UNC Meadowmont Wellness Center. Invited Speaker. UNC-CH Cardiac Support group. Chapel Hill, NC, 04/2019.

*Harris*

“Evaluation and Treatment of Cognitive, Behavioral and Emotional Manifestations,” Lecture (with Amber Corbin, SLP) at UNC’s September 8th mTBI and nSRC Symposium, Chapel Hill, NC, 09/2018.


*Hill*

“Sports Related vs Non Sports Related Concussion, Comparing and Contrasting,” Lecture at UNC’s September 8th mTBI and nSRC Symposium, Chapel Hill, NC, 09/2018.

“Occupational Health Update: Long Term Care Facilities”, Statewide Program for Infection Control & Epidemiology (SPICE), 03/2019.


“Pain and Disability,” Lecture to UNC Pain Fellows, Chapel Hill, NC, 04/2019.

*Hudson*


*Ingraham*

**Shuping**

“Medical Management and Evaluation of Concussion,” Lecture at UNC’s September 8th mTBI and nSRC Symposium, Chapel Hill, NC, 09/2018.

“Medicine and Pharmacology of Concussion,” Lecture at UNC’s September 8th mTBI and nSRC Symposium, Chapel Hill, NC, 09/2018.

“Case Presentation,” Lecture at UNC’s September 8th mTBI and nSRC Symposium, Chapel Hill, NC, 09/2018.

“Medical Management and Pharmacology of Concussion/mTBI” UNC School of Nursing Center for Lifelong Learning, Chapel Hill, NC 02/2019.

**Telhan**

“General PM&R,” Grand Rounds Presentation at National Rehabilitation Hospital, Washington, DC, 03/2019.

**Thananopavarn**

“Introduction to Rehabilitation and Post-Acute Care in the U.S.” Chinese Visiting Scholars in Rehabilitation at UNC Hospitals, Chapel Hill, NC, 03/2019.

“Trauma Rehabilitation and Post-Acute Care,” UNC Acute Care Surgery Conference, Chapel Hill, NC, 04/2019.

“The PM&R Consult: Adding Value to Rehabilitation Care,” UNC Department of PM&R Grand Rounds, Chapel Hill, NC 06/12/2019.

**Thompson**


**Teaching Activities**

**FORMAL SEMESTER COURSES**

**Faurot**

PUBH 741 – Quantitative Methods for Healthcare Professionals

PASC 736/806 – Evidence-based Medicine I & II—Fall and Spring Semesters of 2018-2019

DPET 831—Quantitative Methods for Clinical Research—Spring 2019

**Gaylord**

PME 452 – Fieldwork in Alternative and Complementary Therapies – Fall and Spring Semesters of 2018-2019

PME 450/250 – Principles and Practices of Alternative and Complementary Therapies of Fall 2018

FMED APS 401 – CAM Selective (7 blocks out of 12 each year) – Fall and Spring Semesters of 2018-2019

PME 601 – Mindfulness and Self-Compassion for Caring Professions – Spring Semester of 2019

**Harris**

EDUC 763: Biological Basis of Development and Behavior

**Shuping**

PME 401: Introduction to Physical Medicine and Rehabilitation

PME 401 B: Science of Medicine Selective: Introduction to Physical Medicine and Rehabilitation

PME 401 03: Fourth Year Student Advanced Clinical Selective: Introduction to Physical Medicine and Rehabilitation

**Telhan**

MTEC121: Social and Health Systems 1 and Social and Health Systems 2. Dr. Telhan holds a Secondary Appointment in UNC’s Social Medicine Department as an Assistant Professor, responsible for 14 students and teaches 12 sessions per semester, covering topics including: medical humanities, literature, bioethics,
healthcare policy, and leadership.

MTEC 304: Social and Health Systems 4 is a required course for all Application Phase medical students based at the Chapel Hill campus of the UNC School of Medicine. It is a year-long course that provides a setting in which students can reflect on and discuss aspects of the practice of medicine that they will encounter in their clinical experiences, but may not otherwise be a part of the formal curriculum in the clinical clerkships. The course includes three component content areas: (A) Clinically Relevant Basic Science, (B) Population Health, and (C) Critical Reflection, Inter-professional Education (IPE), Advanced Communication Skills and Ethics (RICE).

HSS SOCM Scholarly Selective: 3rd and 4th Year Medical Student Advanced Humanities Selectives.

OTHER

Alexander
“Caring for the Child with Disabilities,” Pediatric Capstone Lecture, UNC School of Medicine, Chapel Hill, NC, 03/2019.

Cleveland
“Introduction to SCI Rehab,” Lecture to the Visiting Scholars, UNC Department of Physical Medicine and Rehabilitation, Chapel Hill, NC 03/2019.
“ASIA Exam in the SCI Population,” Lecture to UNC Rehabilitation Therapy Staff, UNC Healthcare, Chapel Hill, NC, 03/2019.

Filer
“Medical and Pharmacological Management of Traumatic Brain Injury” Lecture To Consultation-Liaison Psychiatry Fellows, Chapel Hill, NC 10/24/2018.
“Orthotics for Neuromuscular Gait Disorders” Lecture for UNC Neurology Residents and Neuromuscular Fellowship, Chapel Hill, NC, 05/29/2019.

Gaylord
“Mindfulness for Pain Management.” Four-week (8-hour) course for patients with chronic pain at CRC (with Carrie Brintz), Chapel Hill, NC, 07-08-2018.

Shuping
“Introduction to Physical Medicine and Rehabilitation” lecture to PMRIG (medical students), 10/2018.

Thompson
“Neuropsychology,” lecture presented to UNC Geriatric Medicine fellows, Chapel Hill, NC, 02/2019.
“Neurodegenerative Disorders,” for course CRMH 704, Chapel Hill, NC, 02/2019.
“Mini-Mental Status Exams,” lecture presented to the UNC Geriatric Medicine fellows, Chapel Hill, NC, 03/2019.
Zinner
“Education on Neuro Examination,” 1-on-1 Teaching APP’s, 10/2018.
“Neurogenic Bowel and Bladder,” Teaching RRNCC Nursing Staff, 04/2019.
Various Medical Topics Relating to Subacute Care, Pre-Med Student Shadow, 05/2019.

Professional Service

National and Regional Organizations

AMDA – The Society for Post-Acute and Long-Term Care Medicine
Member (Thananopavarn)
Member (Zinner)

American Academy of Clinical Neuropsychology (AACN)
Member (Harris)

American Academy of Pediatrics
Chair, Section on Telehealth Care (Alexander)
Member, National Task Force on Pediatric Practice Change (Alexander)

American Association of Neuromuscular & Electrodiagnostic Medicine
Symposia Committee Member (Filer)
Course Director (2019), Assistive Technology for Gait Disorders (Filer)
Co-Course Director (2019), Neuroprosthetics (Filer)

American College of Occupational & Environmental Medicine
Task Group, ACOEM Guidelines for the Medical Evaluation of Law Enforcement Officers (Hill)

American Congress of Rehabilitation Medicine (ACRM)
Member (Thompson)
Task Group, Complementary and Integrative Rehabilitation Medicine (Thompson)

Academic Consortium for Integrative Medicine & Health
Member, Research Working Group (Faurot)
Member, Steering Committee (Gaylord)
Member, Research Committee (Gaylord)
Member, Policy Committee (Gaylord)

Association of Academic Physiatrists
Member, Chair’s Council (Alexander)
Member, Abstract Reviewer at the 2019 Annual Meeting (Alexander)
Member, Program Committee (Hill)
Member, Rehabilitation Medicine Scientist Training Program (Hill)
Member, National Online Residency Curriculum Committee (Filer)
Member, Residency and Fellowship Program Director Council (Filer)
Regional Mentor (Shuping)

American Public Health Association
Executive Committee Program Planning Co-Chair, Treasurer, Section Councilor, Section on Integrative,
Complementary, and Traditional Health Practices (*Faurot*)
Member, Sections on Food and Nutrition, Epidemiology (*Faurot*)
Member, NC Public Health Association (*Faurot*)
Member, Sections on Integrative Complementary and Traditional Health Practices; Environment; and Alcohol and Substance Abuse (*Gaylord*)

*Evidence-based Complementary and Alternative Medicine Journal*
Editorial Board (*Faurot*)

*Foundation for Physical Medicine and Rehabilitation*
Member, Pediatric Advisory Committee (*Alexander*)

*International Neuropsychological Society (INS)*
Member (*Harris*)

*Journal of Comparative Effectiveness Research*
Ad Hoc Reviewer (*Faurot*)

*NIH NCCIH Study Section*
Ad Hoc Reviewer (*Faurot*)
Grant Review Panelist (*Gaylord*)

*North Carolina Academic PM&R*
Host, Annual Conference (*Alexander*)

*North Carolina Integrative Medical Society*
Member of Outreach Committee (*Gaylord*)

*PM&R Journal*
Ad Hoc Reviewer (*Faurot*)

*Sports Neuropsychology Society*
Member (*Thompson*)

*SPROUT-CTSA Collaborative Telehealth Research Network*
Member for 2019-2024, Advisory Committee (*Alexander*)

**UNC-Chapel Hill Organizations**

*Alexander*
Chair, PM&R
Chair, Concussion Symposium Planning Committee, PM&R
Medical Director, UNC Center for Rehabilitation Care
Director of Pediatric Rehabilitation, UNC SOM and NC Children's Hospital
Host and Mentor, UNC BME Students’ Capstone Project, UNC/NCSU
Member, Wellness Committee, PM&R
Member, Dean's Advisory Committee, UNC SOM
Member, Faculty Physicians Board, UNC Hospitals
Member, Search Committee for Chair of Neurology, UNC SOM
Member, Standards 1&2 Subcommittee of the UNC School of Medicine LCME Accreditation Process, UNC SOM
Member, UNC Inpatient Rehabilitation Leadership Committee, UNC Hospitals
Member, Hillsborough Hospital Planning Committee
Member, Hillsborough Hospital Design Committee
Member, Residency Program Evaluation Committee, PM&R
Member, Space Committee, PM&R
Member, Promotions Committee, PM&R
Member, Diversity and Inclusion Committee, PM&R
Member, Spine Center Executive Committee, UNC Hospitals
Member, Medical Staff Executive Committee, UNC Hospitals
Member, Hillsborough Tower II Steering Committee, UNC Hospitals
Member, Spina Bifida Family Conference Planning Committee, Neurosurgery and PM&R

Baratta
Medical Director of Stroke Rehabilitation, PM&R
Member, Rehab Administrative Committee, UNC Hospitals

Faurot
Assistant Director, Program on Integrative Medicine
Member, PM&R Wellness Committee
Member and Coordinator, PM&R Research Committee

Filer
Program Director, PM&R Residency Program
Facilitator, Grand Rounds, PM&R
Member, Clinical Competency Committee, PM&R
Member, Education Leadership Committee, PM&R
Member, Graduate Medical Education Committee, UNC Hospitals
Member, Peer Coaching Program, UNC Center for Faculty Excellence
Member, Concussion Symposium Planning Committee, PM&R
Member, Program Evaluation Committee, PM&R
Member, Rehab Administrative Committee, UNC Hospitals

Gaylord
Director, Program on Integrative Medicine
Director, UNC Mindfulness-Based Stress and Pain Management Program
Member, UNC School of Medicine Well-Being Committee
Co-Director/Member, PM&R Wellness Committee
Member and Chair PM&R Research Committee

Harris
Member, Wellness Committee, SOM
Member, Rehabilitation Patient and Family Advisory Board, UNC Hospitals
Member, Passing the Torch, UNC Academy of Educators, UNC SOM
Member Concussion Symposium Planning Committee, PM&R

Hill
Medical Director, Occupational Health, UNC Chapel Hill
Associate Medical Director, Occupational Health, UNC Hospitals
Director, Quality Improvement, PM&R
Certifying Medical Authority, Biosurety Program, UNC Chapel Hill
Member, Clinical Competency Committee, PM&R
Member, Education Leadership Committee, PM&R
Member, Program Evaluation Committee, PM&R
Member, Emergency Threat Assessment Response Team, UNC Chapel Hill
Member, Clinical Occupational Exposures Subcommittee for Students, UNC Chapel Hill
Member, Environment, Health and Safety Leadership Team, UNC Chapel Hill
Member, Clinical Safety Committee, UNC Chapel Hill
Member, Controlled Substances Assessment Team (CSAT), UNC Hospitals
Member 2018-2020 Accreditation Working Group, Curricular Management, Evaluation, and Enhancement Standard, Liaison Committee on Medical Education (LCME), UNC SOM
Member, Concussion Symposium Planning Committee, PM&R

Hudson
Co-Chair, Diversity and Inclusion Committee, PM&R
Director, Weight Loss and Lifestyle Medicine (WeLL-Me) Program, UNC Chapel Hill
Member, UNC Hospital Weight Management Clinical Advisory Committee
Member, Search Committee for OB/Gyn Chairman, UNC School of Medicine
Member, Total Well-Being Advisory Board, UNC Chapel Hill
Member, Faculty Search Committee for Pediatric Rehabilitation and Neuro-Rehabilitation positions
Member, Interdisciplinary Stroke Committee, UNC Hospitals
Member, Clinical Competency Committee, PM&R
Member, Program Evaluation Committee, PM&R
Member, Rehab Administrative Committee, UNC Hospitals
Member, Wellness Committee, PM&R

Rauch
Associate Program Director, PM&R
Facilitator, Journal Club, PM&R
Member, Program Evaluation Committee, PM&R
Member, Education Leadership Committee, PM&R
Member, Rehab Administrative Committee, UNC Hospitals
Member, Clinical Competency Committee, PM&R

Shuping
Director, Medical Student Education, PM&R
Medical Director, Carolina Concussion Clinic, PM&R
Associate Medical Director, Occupational Medicine, UNC Chapel Hill
Faculty Advisor, UNC SOM PM&R Interest Group, UNC Chapel Hill
Advisor, Medical Student Career Advisor, UNC Chapel Hill
PM&R Career Advisor, UNC Chapel Hill
Co-Director, Concussion Symposium, PM&R
Member, Infection Control Committee, UNC Hospitals
Member, Program Evaluation Committee, PM&R
Member, Rehab Administrative Committee, UNC Hospitals
Member, Faculty Search Committee for Neurorehabilitation and Pediatric Rehabilitation positions, PM&R

Telhan
Advisor, Larry Keith Advisory College, UNC Office of the Dean of Student Affairs
Member, Advisory Board for Literature, Medicine & Culture, UNC SOM
Member, Admission Committee, Master’s in Literature, Medicine & Culture, UNC SOM
Member, Course Planning and Curriculum Development Committee, Department of Social Medicine
Member, Interventional Access Committee, UNC Hospitals
Member, Program Evaluation Committee, PM&R
Member, Clinical Competency Committee, PM&R
Member, Passing the Torch, UNC Academy of Educators, UNC SOM

Than
Medical Director, Acute Inpatient Rehabilitation Center, UNC Hospitals
Medical Director, UNC-Rex Rehabilitation and Nursing Care Center of Apex
Member, Clinical Competency Committee, PM&R
Member, Program Evaluation Committee, PM&R
Member, Credentials Committee, UNC Hospitals
Member, Utilization Committee, UNC Hospitals
Member, Academy of Educators, UNC SOM
Member, Rehab Administrative Committee, UNC Hospitals

Thompson
Director, Psychological Services and Neuropsychology Program, PM&R
Co-Chair, Wellness Committee, PM&R
Member, School of Medicine Wellbeing Committee
Member, Program Evaluation Committee, PM&R
Member, Concussion Conference Planning Committee, PM&R

Zinner
Medical Director, Subacute Rehab Services, Rex/UNC
Member, Lean Six Sigma Pain Project, RRNCC (July 2018-January 2019)
Member, QAPI Committee, RRNCC
Member, Transitions of Care, Rex/RRNCC
Member, Osteoporosis Prevention Performance Improvement, RRNCC
Member, Antibiotic Stewardship Committee, RRNCC
Member, Medicare Readmissions Committee, RRNCC
Selected Member, Leadership Advanced Series Program 2018-2019, UNC Center for Faculty Excellence
Mentor and Advisor, Senior Project Engineering Program, UNC/NC State BME

Honors
Alexander

Hill

Ingraham

Lipscomb-Hudson
Carolina Care Excellence Award, UNC Health Care and UNC Faculty Physicians, 03/2019.
Educational Module of the Year Award, UNC Physical Medicine and Rehabilitation, 06/2019.

Shuping
Carolina Care Highlight, UNC Healthcare Newsroom, 07/2018.
Appendix A – Departmental Teaching Summary by Faculty

Rotation Directors

**Alexander**
Pediatric Rehabilitation (Director)

**Baratta**
Inpatient Rehabilitation (Co-Director)

**Cleveland**
Spinal Cord Injury (Director)

**Filer**
Electrodiagnostic Medicine (Co-Director)
Inpatient Rehabilitation (Co-Director)

**Lipscomb-Hudson**
Inpatient Rehabilitation (Co-Director)

**Rauch**
Inpatient Rehabilitation (Co-Director)
Outpatient Clinic Rehabilitation (Director)

**Shuping**
Electrodiagnostic Medicine (Co-Director)
Outpatient Clinic Rehabilitation (Director)

**Telhan**
Spine Clinic (Director)

**Thananopavarn**
Inpatient Rehabilitation (Co-Director)
Subacute Rehabilitation (Co-Director)

**Zinner**
APP Education (Director)
PA Education (Co-Director)
Subacute Rehabilitation (Co-Director)

Didactic Block Responsibility

**Alexander**
Pediatric Rehabilitation Module, 3 weeks

**Filer**
Intro to Rehab, 4 weeks
Bone Joint and Connective Tissue, 3 weeks
Brain Injury, 2 weeks
Workshops (Anatomy, PE, US), 7.5 weeks

**Gaylord**
Complementary and Alternative Medicine Module, 2 weeks

**Hill**
Professionalism/Business/Quality Improvement, 3 weeks
Occupational Medicine and Burn, 2 weeks
Research, 2 weeks

**Lipscomb-Hudson**
Stroke, 3 weeks
Neuro Rehab (MS, Parkinson’s, Gillian-Barre), 3 weeks
Rauch
Orthotics, 3 weeks
Prosthetics, 3 weeks
Case Presentations and Oral Board Reviews, 2 weeks
Shuping
Sports Module, 3 weeks
Modalities Module, 3 weeks
Workshops (Anatomy, PE, US), 7.5 weeks
Telhan
Spine and Pain, 3 weeks
Thananopavarn
Geriatric Medicine, 3 weeks
Integrative Medicine, 2 weeks (Co-director)
Cancer and Cardiac Rehab, 2 weeks
Zinner
Importance of Pressure Relief and Proper Transfer Techniques, Ongoing to CNA’s

**Lectures Given to UNC PM&R Residents**

**Alexander**
08/02/2018 – “Introduction to Pediatric Rehabilitation”
08/02/2018 – “Typical Development”
08/09/2018 – “Cerebral Palsy”
08/09/2019 – “Spina Bifida”
08/16/2018 – “Brain Injury”
08/16/2018 – “Neuromuscular Disorders of Childhood”

**Cleveland**
11/15/2018 – “ASIA Exam”
12/20/2018 – “Complications of SCI (Orthostatic Hypotension, AD, HO, Fxs, OP, DVT, Bowel)”

**Filer**
07/05/2018 – “Introduction to Rehab”
07/12/2018 – “Introduction to Rehabilitation Medicine (Rehab Procedures)”
07/26/2018 – “Knee Anatomy and Exam”
10/25/2018 – “Distal Lower Extremity Musculoskeletal Ultrasound Workshop”
11/08/2018 – “Spasticity”
11/21/2018 – “Ulnar Neuropathy”
01/24/2019 – “Hand/Wrist Anatomy and Exam”
03/28/2019 – “Ultrasound and Injection Technique”
06/27/2019 – “Introduction to Rehab”

**Hill**
09/20/2018 – “Occupational Medicine and Burns”
09/27/2018 – “Occupational Medicine and Burns”
10/18/2018 – “Occupational Medicine and Research”
Hudson
08/30/2018 – “Oral Board Neurorehabilitation Cases”
02/07/2019 – “Stroke Rehabilitation from a Medical Perspective”

Rauch
11/01/2018 – “Oral Board Review”
01/31/2019 – “Oral Board Review”
02/13/2019 – Journal Club Moderator: “Platelet-Rich Plasma Versus Hyaluronic Acid Injections for the Treatment of Knee Osteoarthritis: Results at 5 Years of a Double-Blind, Randomized Controlled Trial” Di Martino, et al.
04/10/2019 – Journal Club Moderator: “Compounded Topical Pain Creams to Treat Localized Chronic Pain: A Randomized Controlled Trial”
05/08/2019 – Journal Club Moderator: “Heading in soccer increases serum neurofilament light protein and SCAT3 symptom metrics”
05/27/2019 – “Oral Board Review”
05/30/2019 – Journal Club Moderator: “Efficacy of Whole-Body Vibration Board Training on Strength in Athletes After ACL Reconstruction: A Randomized Controlled Study”
06/12/2019 – Journal Club Moderator: “Tau PET in Former NFL players”
06/13/2019 – “Orthotics Part I”
06/20/2019 – “Orthotics Part II”

Shuping
08/23/2018 – “Foot and Ankle Anatomy and Exam”
09/01/2018 – “Concussion” (*Given to residents and PM&R Interest Group Students)
09/27/2018 – “Proximal Lower Extremity US”
01/03/2019 – “Introduction to Modalities”
01/10/2019 – “Therapeutic Exercises and Board Review”
01/17/2019 – “Modalities Workshop”
02/28/2019 – “Shoulder and Elbow Anatomy and Exam”
04/04/2019 – “Sports I”
04/11/2019 – “Sports II”
04/18/2019 – “MSK SAE Review”
04/25/2019 – “Proximal Upper Extremity MSK/Ultrasound”
05/09/2019 – “Brain Injury Concussion”
05/20/2019 – “Distal upper extremity MSK ultrasound”

Thananopavarn
11/08/2018 – “Intro to Spinal Cord Injury (Demographics, Outcomes, Acute Mgt., Syndromes)”
03/07/2019 – “Physiology of Aging, Geriatric Assessment, and Falls”
03/14/2019 – “Medicare and Post-Acute Care/SNF Rehab”

Thompson
07/19/2018 – “Physician Wellness & Burnout”
05/16/2019 – “Physician Wellness & Burnout”
Mentorship Responsibilities

To UNC PM&R Residents

Filer
3 PGY-1’s (Riden, Vijayaraghavan, and Yeste)

Hudson
1 PGY-3 (Franklin)
1 PGY-4 (Francis)

Ingraham
1 PGY-2 (Sainburg)

Rauch
1 PGY-4 (Lambertus)
1 PGY-2 (Truong)

Shuping
1 PGY-4 (Law)
1 PGY-2 (Patel)

Telhan
2 PGY-3’s (Boyd and Punzell)
1 PGY-4 (Areson)

To Others

Faurot
Doctoral Dissertation Committee member, Henry Zhang, Epidemiology, UNC Gillings School of Global Public Health
Mentor for T32 Predoctoral Fellow, Gilson Honvoh
Mentor for T32 Postdoctoral Fellow, Jacob Hill
Mentor for T32 Postdoctoral Fellow, Vanessa Miller
Co-mentor for T32 Postdoctoral Fellow, Isabel Roth
Research Mentor for Resident Simone Francis
Research Mentor for Resident Greg Franklin
Mentor for T32 Predoctoral Fellow, Ray Antonelli (July/August 2018)
Mentor for T32 Postdoctoral Fellow, Nicholas Wise (July 2018)
Mentor for Visiting Scholar, Jinyoung Park
Mentor for Physician Assistant students (Capstone papers)

Gaylord
Mentor for T-32 Postdoctoral Fellow Carrie Brintz
Mentor for T-32 Postdoctoral Fellow Jessica Barnhill
Mentor for T-32 Postdoctoral Fellow Christine Lathren
Mentor for T-32 Postdoctoral Fellow Isabel Roth
Program mentor/co-mentor for All six post-doctoral fellows, along with Doug Mann.
Mentor for Visiting Scholar, Dr. Claudia Wang, PhD, July-Sept., 2018
Mentor for post-doctoral fellow Dr. Jeffrey Proulx, PhD, Oregon State University on his NIH NCCIH K99/R00 award on Mindfulness to manage diabetes in Native Americans.
Reader for Physician Assistant Student. Jeremy Jones (Reiki capstone paper).
Mentor for Psychiatry Resident, Madison Piotrowski, MD (Research Track – Project: Lifestyle Medicine)
Mentor for Zachary Boggs, 2nd Year Medical Student, on Medical Student Wellness Committee