

SCHOLARLY ACTIVITY IN THE HONORHEALTH PHYSICAL MEDICINE & REHABILITATION RESIDENCY PROGRAM

2020-2021 EXECUTIVE SUMMARY

Overview

Clinical training focused on medical knowledge alone is not sufficient to prepare Physical Medicine and Rehabilitation (PM&R) residents for the practice of medicine. As part of improving their patient care, residents must be well-versed in inquiry: research, quality improvement, leveraging human and electronic resources, and applying research findings to improve patient care.

The Scholarly Activity Program (SAP) for the Physical Medicine and Rehabilitation program provides residents with a strong foundational skillset, ensuring their effectiveness in evaluating the care of the patient in terms of best practices and their proficiency in critical appraisal of peer-reviewed literature, which will help residents develop a pattern of lifelong learning habits. Residents learn the basic principles of how research and Quality Improvement (QI) is conducted, evaluated, explained to patients, and applied to their patients' care. The Scholarly Activity Program is designed to fulfill the residency program's Practice-Based Learning goals. Scholarly activities of residents and faculty are documented and assessed regularly as part of the Physical Medicine and Rehabilitation Program evaluation and through the annual Faculty and Residents Survey.

This executive summary is organized into three parts. In Part I, scholarly activity processes and structures are identified and described. Part II provides details regarding resources in place to support scholarly research activities. Part III includes a list of recent faculty and resident activities.

PART I – Processes for Scholarly Activity & Research

The Scholarly Activity Program is administered through a variety of teaching strategies, including regular instruction through didactics sessions, engaged participation in QI or research projects, journal club, and presentations at residency-based conferences (Grand Rounds, M&M, etc). Residents are also required to regularly submit scientific abstracts, posters and/or manuscripts to professional associations and publishers with the intent to present at conferences or publish in peer-reviewed journals. The sections below provide further details for each type of scholarly activity.

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Faculty Research and Scholarly Activity

PM&R faculty are required to demonstrate involvement in resident scholarly activity by providing guidance and support to residents and participating in clinical discussions and conferences. Faculty are responsible for committing and scheduling a portion of their time to supporting the scholarly activities of residents. During such time, faculty may provide direct consultation and advisement on scholarly topics, the research process, or provide ongoing guidance throughout a project's entire timeline. Faculty also select peer-reviewed and clinically significant research articles for residents to review, appraise and present during journal club activities.

Faculty are also responsible for the development and implementation of their own scholarly activities in order to expand their own knowledge base and contribute to the body of literature in their specialties. To foster faculty interest and engagement in research, HonorHealth offers a faculty development series as well as workshops provided through the ResQIPS program (see below). In addition, teaching faculty will be required to participate in clinical discussions and conferences along with on-site faculty development and training. All faculty will be encouraged to participate in national and regional professional organizations.

ResQIPS Curriculum and Workshop Series

HonorHealth has developed an innovative framework and curriculum called ResQIPS (Research, Quality Improvement and Patient Safety), linking education and support on research and QI/PS activities to scholarship, and with the intent of increasing scholarly projects and improving outcomes. ResQIPS is designed to support the advancement of research, quality improvement and scholarship for the network's medical residency and fellowship programs and, more broadly, across multiple disciplines in the network. The ResQIPS learning objectives are as follows:

- Design a significant clinical question that aligns with the ResQIPS Framework
- Describe the steps involved in conducting investigator-initiated human subject research & prepare for IRB application submission
- Use Quality data and tools to support practice or improvement initiatives
- Describe methodology and design considerations for QI and Research projects
- Identify tools, resources and mentors needed to support research activities
- Develop a scholarly project
- Collect and analyze data
- Disseminate findings through local, regional or national presentations and/or through peer-reviewed journal article publication

ResQIPS didactic initiatives include grand rounds presentations, faculty development sessions, workshops. 'snippet sessions' (short, 15-minute presentations on a research topic of interest), ResQIPS newsletters, 1:1 mentoring sessions, and statistical consultations. Fellowship/Residency, Faculty and IPE projects are showcased to the organization in poster and presentation sessions annually.

Journal Club

Journal club is designed to expand skills in appraisal and assimilation of evidence from scientific studies. It is a monthly, resident-led, interactive session under the supervision of Core Faculty and faculty members with content expertise relevant to the topics chosen for presentation. Reading assignments and participation are mandatory. Journal club activities are intended to assist residents in critically analyzing their own care against the most up-to-date information on diagnosis and treatment effectiveness.

Morbidity and Mortality Conference

Residents participate in interprofessional review of patient complications and discussion of action steps to prevent similar events in the future. Cases can include unexpected deaths, delay in care or diagnosis, procedural complication, avoidable medical events such as CAUTI or falls, or near miss events such as medication errors, lab events or errors, or failure to act. When appropriate Root Cause Analysis (RCA) is included as part of the discussion. During each session, the goals, guiding principles and privileged nature of the discussion and materials are introduced. Sessions are directed and supervised by a Board-Certified physician and focus is on education and potential patient care or system improvement. The discussion is summarized, and a list of action items or best practices may be developed.

Anatomy Lab

Residents complete a six-week anatomy session designed to complement their physiatry core knowledge by reinforcing knowledge of musculoskeletal and neuroanatomy. Anatomy workshops are conducted at the Mayo Medical School, Scottsdale, AZ. Anatomy Lab uses a combination of cadaver and virtual anatomy sessions, providing instruction on cadavers with correlation with imaging and with particular focus on the spine and extremities.

National and Local Conference Presentations

Residents are expected to present a scholarly research project at a local, regional and/or national meeting. Presentations may include a published work, poster and/or podium presentation representing a research project completed during their PM&R residency. Presentations will be prepared under supervision of residency faculty and/or physician researcher.

Residents' scholarly projects are frequently submitted to the annual "Academic Excellence Day", sponsored by the University of Arizona, College of Medicine Phoenix, which is designed for residents and fellows and includes poster and oral presentations of case reports and research projects. Selection of showcased projects is through a competitive abstract selection process overseen by the ResQIPS Director and her team. Those selected compete in a poster and/or oral presentation competition that is judged by UA-College of Medicine faculty and invited GME faculty from various organizations.

Case Conferences and Grand Rounds

HonorHealth Case Conferences and Grand Rounds (IM, FM, etc) include a series of Resident Conferences, giving PM&R residents an opportunity to present clinical topics. Residents may also have opportunity to present at the residency offerings for Grand Rounds as part of their external rotations.

In February 2020, the PM&R Residency program also received approval to begin an HonorHealth PM&R Grand Rounds program for continuing medical education credit that will be open to clinicians across the system. Topics will be presented by residents and faculty of the program as well as local and regional experts in the field. These presentations will focus on the evolving nature of PM&R including changes in procedures, medications/substances used for treatment, available technologies and exercise/therapy guidelines that are not assimilated in practice instantaneously. Although this series was temporarily paused with the Covid-19 onset, it resumed in a live/virtual format in Spring 2021.

Quality Projects & Teams

All residents are required to participate in a quality team and/or a quality improvement project within the base hospital institution. Residents complete CITI human subject protections training at the start of their residency and are trained regarding the organization's policies and processes for reporting medical errors and near misses.

During their residency, PM&R residents also participate in a Lean Six Sigma training course focused on quality improvement, such as preventing errors, reducing waste, and collecting and analyzing data in order to improve processes and performance or enhance patient outcomes. After completing training, residents work with a faculty mentor and identify a QI "yellow belt" project that they will complete during their PGY3 year. The project's focus may be on quality measures, patient safety, efficient workflows, improved patient outcomes, or risk management.

Narrative Reflection

At least semi-annually, residents participate in a narrative reflection workshop. Creative media such as poems, videos, and artwork are used. Narrative reflections generally follow a loose-theme (ex: physician-patient relationships, physician wellness, etc). They are designed to promote communication, build team trust, and to offer the opportunity for resident reflection and expression of their thoughts.

Scholarly Research/QI Project

All residents receive didactic training from research faculty on research methodology, study design, biostatistics, appraisal and application of evidence-based medicine, ethics in the context of research, developing research questions, and disseminating and presenting results of research projects. Residents also attend HonorHealth's Research, Quality Improvement and Patient Safety sessions (ResQIPS) which are collaborative, interprofessional events planned by Academic Affairs, Quality, HonorHealth Research Institute, Center for Clinical Excellence and Library Services. Academic Affairs also subscribes to IHI Open School which offers QI and Patient Safety modules to the residents. Residents are encouraged to complete these modules during their residency and may be assigned one or more modules for completion as part of their didactics requirements, especially if deemed relevant to implementation of their scholarly project.

SCHOLARLY PROJECT Residents are required to be actively working on a QI or research project throughout residency including completion of a "yellow belt" project during their residency. Projects must be reviewed and discussed with the program director, mentor/advisor, ResQIPS Program Director or a faculty advisor. Appropriate timelines will be determined in order to complete QI project or research. Program Directors will not sign off on promotion and/or program graduation if QI or research project is incomplete.

Residents As Teachers

Residents have multiple opportunities to practice and develop their teaching skills. In addition to the teaching demands required from daily interaction with patients, families, and other health care professionals, residents participate in leading interactive didactic sessions such as Grand Rounds or teaching a didactic session for one of the GME Residency Programs. Additionally, faculty model and mentor teaching skills on clinical rounds, in didactic sessions, through committee work, and in nearly all aspects of clinical practice for which they provide supervision. Residents have numerous opportunities to teach and counsel patients. These interactions are frequently supervised by faculty, offering opportunities for feedback and improvement. As residents advance, they are expected to take on a greater teaching role, including teaching more junior residents and leading in interactive didactic sessions.

Multiple tools are utilized to assess and provide feedback for improvement on skills at educating patients, families, students, and peers. Faculty provide daily, face-to-face feedback on resident teaching and counseling skills. Residents incorporate this real-time feedback into their daily practice. At the conclusion of each rotation, residents are evaluated by faculty in the six ACGME competencies, including issues relevant to their teaching performance. Residents review these evaluations at the end of each rotation. Medical students complete an evaluation form of residents involved in their instruction. Resident peers are periodically called upon to evaluate each other. Teaching skills are included in this assessment. Finally, the faculty advisors and Program Director provide a semiannual Milestone review at which feedback from all these sources is provided. Residents utilize this feedback to improve upon their teaching skills.

PART II - Resources for Scholarly Activity & Research

PM&R Residency Program Resources

The PM&R Residency Program provides access to HonorHealth resources and PM&R-specific resources including an American Academy of Physical Medicine and Rehabilitation membership for the PM&R residents. This membership offers access to workshops including a national grand rounds series, podcasts, journal subscriptions, themed case studies (brain injury, cancer rehabilitation medicine, pediatric rehabilitation, new technologies etc), self-assessment tools, certification (Qbank) questions, and a robust online learning portal.

Other program-specific resources include a Physical Medicine and Rehabilitation Residency Resource guide (<https://azhin.org/honorhealth/respmr>) tailored to the program and curated by the HonorHealth librarians, and which includes specialty e-journals and ebooks, videos and podcasts, links to professional organizations, and other PM&R resources housed together in one guide for ease of access.

Academic Affairs has purchased Bridge, a learning management system software for the administration, tracking, reporting and delivery of educational course content as well as training and development programs. This will offer additional resources and learning modules most of which can be accessed “on demand” at a convenient time for busy residents and faculty. Implementation will begin in July 2021.

In 2020-21, residents were also provided with a one year membership to the American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM), a medical society for the medical subspecialty of neuromuscular and electrodiagnostic medicine. In addition to access to workshops and a national conference, AANEM offers mentoring and networking opportunities, podcasts and a wealth of online resources, including extensive Covid-19 guidance for in-person and telemedicine patient care.

See Appendix A for PM&R Didactics Schedule

HonorHealth Library Resources

ACCESSIBILITY HonorHealth Osborn Medical Center, Shea Medical Center and John C Lincoln Medical Center libraries provide 24/7 access to single workstations as well as meeting/collaboration space. In 2021 at Thompson Peak Medical Center, a physical library site will be incorporated into a new Learning and Simulation Center at that campus. The libraries also maintain a Web-based library portal which is available on-site through the employee intranet and off-site through Athens (authentication software). Librarians provide mobile app support for several key resources:

- UpToDate clinical decision support system
- Elsevier’s ClinicalKey resource which contains the FirstConsult clinical decision support system along with thousands of high-impact electronic textbooks and journals, practice guidelines, over 340 procedure/skills videos, image library and PresentationMaker component to support

presentations

- Micromedex drug information, IV compatibilities, drug/herbal/food interactions, other pharmaceutical tools & calculators; also includes Pediatric Essentials & NeoFax Essentials
- Access Medicine and Access Emergency Medicine series

LIBRARIAN SUPPORT A wide range of library services are provided by the HonorHealth librarian team, which consists of 4.0 FTE American Library Association accredited medical librarians. Outside of physically staffed hours at each location, librarians can be emailed or contacted by phone at the health science library locations.

Personalized services available at HonorHealth libraries include:

- Mediated (librarian-assisted) literature searching using databases and search engines that access published and unpublished evidence (results delivered with 48 hours of receiving request)
- Mediated “state of the science” literature reviews, including a synopsis of findings and critical appraisal of the literature, to support patient care needs
- Mediated searching for acute & chronic disease management and general health & wellness information for patients & families (results delivered within 48 hours of receiving request)
- Research consultations, including research question brainstorming and development using the PICOT algorithm, identification of appropriate resources for searching, search strategy development and database manipulation guidance
- Citation management, presentation and publishing support, including identification of appropriate journals to consider for submission and formatting, reference lists and footnoting support according to publisher’s instructions for authors.
- Document retrieval & delivery (delivery frequently same-day, otherwise 1-3 days of receiving request)
- One-on-one and small group training on all library databases & tools, ranging from quick overviews of resources & research tools to advanced/expert search strategy training
- Technical assistance and training for the UpToDate clinical decision website and mobile app, the ClinicalKey site and mobile app, and the Micromedex suite and mobile apps.
- Meeting and collaboration space which includes a large conference table with electrical outlets
- Provision of reliable, easy-to-read, evidence-based consumer health & wellness resources for patients & families as well as for residents & faculty as they communicate with and educate their patients
- Health literacy consultation services, including review of proposed patient education & discharge instructions and recommendations to improve readability and comprehension, which improves patient outcomes overall and reduces hospital readmissions

CONTENT HonorHealth Library Services provide access to numerous print & electronic resources. Many have been acquired through membership to the Arizona Health Information Network (AZHIN), a statewide consortium uniting communication technology and resource access in the Arizona health care and health education communities. Other resources are acquired through Library Service's operation budget and HonorHealth Foundation funding. Resources include:

- Evidence-based medicine (Cochrane Library, Access Medicine, UpToDate, FirstConsult)
- Journal literature databases (PubMed, Ovid Medline, Ebsco Medline with Full Text, CINAHL Complete, Health Business Elite)
- Research and scholarly project tools (research instruments/scales, theses/dissertations)
- Faculty resources (ProceduresConsult, Teacher Reference Center)
- eBooks, Full-text (ClinicalKey, Access Medicine and EM, TDS (formerly STAT!Ref), Ovid Books)
- eJournals, Full-text (JAMA and JAMA Archives, Lancet, NEJM, and thousands more through Medline with Full Text, CINAHL Complete, ClinicalKey and other database collections)
- Drug information (Micromedex and Lexi-Comp via UpToDate)

See Appendix B for detailed descriptions of these resources.

HonorHealth Research Institute

The HonorHealth Research Institute (HRI) provides both institutional and scientific review for all research activities at the organization, including the scholarly projects of residents and faculty. All research performed at HonorHealth is based on scientific principles and carried out using the highest quality standards. The HRI assists in setting the standard for excellence in personalized healthcare by developing a culture of inquisitiveness, leading to the provision of the best evidence-based medicine to patients and the community. HRI provides the following:

- research administration staff responsible for ensuring that all research performed at HonorHealth is in compliance with relevant state and Federal requirements and that it fulfills the HonorHealth mission;
- documentation to guide researchers through the process of both investigator- and sponsor-initiated studies;
- guidance on scientific and institutional review board submissions;
- access to human subject protections training;
- access to local resources, including statisticians and other personnel experienced in research;
- Office of Sponsored Programs (OSP), which is responsible for supporting researchers in the identification and submission of grants.

PART III – INVENTORY OF SCHOLARLY ACTIVITIES

Resident Activities

CASE CONFERENCE

Resident Name	PGY Year	Scholarly Project Title	Completion Date
Kandel, S.	PGY2	Resident Case Presentation: "Incomplete SCI Patterns"	5/18/21
Hills, A.	PGY2	Resident Case Presentation: "Tendinosis"	5/4/21
Lopez, T.	PGY1	Resident Case Presentation: "Burn rehabilitation"	3/30/21
Kandel, S.	PGY2	Resident Case Presentation: "MERRF"	3/2/21
Lopez, T.	PGY1	Resident Case Presentation: "Trial of Dexamethasone for chronic subdural hematoma"	2/2/21
Kandel, S. Hills, A.	PGY2 PGY2	Resident Case Presentation: "Thiamine Deficiency / Rash Post-Trauma"	1/12/21
Lopez, T.	PGY1	Resident Case Presentation: Nontraumatic SCI - Spinal tumors	12/15/20
Lopez, T.	PGY1	Resident Case Presentation: "Immune reconstitution inflammatory syndrome"	10/27/20
Kandel, S. Stokke, J.	PGY2 PGY1	Resident Case Presentation: "Subclavian Steal Syndrome Lower extremity weakness / CIDP"	10/6/20
Lopez, T.	PGY1	Resident Case Presentation: "Malignant MCA syndrome"	9/15/20
Lopez, T.	PGY1	Resident Case Presentation: "Peripheral arterial disease"	8/25/20
Hills, A.	PGY2	Resident Case Presentation: "Complete Paraplegia"	7/28/20
Kandel, S.	PGY2	Resident Case Presentation: "Hyponatremia in Traumatic Brain Injury"	7/21/20

PRESENTATIONS/POSTERS/JOURNAL CLUB PRESENTATIONS

Resident Name	PGY Year	Scholarly Project Title	Completion Date
Stokke, J.	PGY1	Presentation: Stokke, J. "Effectiveness of high-intensity interval training vs moderate-intensity continuous training in patients with fibromyalgia: a pilot randomized controlled". Journal Club, HonorHealth, Scottsdale, AZ. May 11, 2021.	5/11/21
Kandel, S.	PGY2	Presentation: Kandel, S. "Acute fifth metatarsal tuberosity fractures: A systematic review of nonoperative treatment". Journal Club, HonorHealth, Scottsdale, AZ. May 11, 2021.	5/11/21
Lopez, T.	PGY1	Presentation: Lopez, T. "Effectiveness of progressive tendon loading exercise therapy in patients with patellar tendinopathy". Journal Club, HonorHealth, Scottsdale, AZ. April 13, 2021.	4/13/21
Lopez, T.	PGY1	Presentation: Lopez, T. "Burn Rehabilitation". Didactic Case Presentation, HonorHealth, Scottsdale, AZ. March 30, 2021.	3/30/21
Stokke, J.	PGY1	Presentation: Stokke, J. "Use of modified diets to prevent aspiration in oropharyngeal dysphagia: is current practice justified?". Journal Club, HonorHealth, Scottsdale, AZ. March 9, 2021.	3/9/21
Hills, A.	PGY2	Presentation: Hills, A. "Early subthreshold aerobic exercise for sport-related concussion: a randomized clinical trial". Journal Club, HonorHealth, Scottsdale, AZ. March 9, 2021.	3/9/21
Kandel, S.	PGY2	Presentation: Kandel, S. "MERRF". PGY-3 Presentation, HonorHealth, Scottsdale, AZ. March 2, 2021.	3/2/21

Hills, A.	PGY2	Poster Presentation: Hills A, Crawford C, Keole NS. "Providers' Views on Telemedicine within the Department of Physical Medicine and Rehabilitation Services during the COVID-19 Pandemic". AAP Annual Assembly. February 9-13, 2021.	2/12/21
Hills, A.	PGY2	Presentation; Hills, A. "Autoimmune Encephalitis". PGY-3 Presentation, HonorHealth, Scottsdale, AZ. February 11, 2021.	2/11/21
Lopez, T.	PGY1	Presentation: Lopez, T. "Trial of Dexamethasone for chronic subdural hematoma". Journal Club, HonorHealth, Scottsdale, AZ. February 9, 2021.	2/9/21
Stokke, J.	PGY1	Presentation: Stokke, J. "Role of colchicine in stroke prevention: An updated meta-analysis". Journal Club, HonorHealth, Scottsdale, AZ. February 9, 2021.	2/9/21
Kandel, S.	PGY2	Presentation: Kandel, S. "Effect of NSAIDs on Bone Healing Rates: A Meta-analysis". Journal Club, HonorHealth, Scottsdale, AZ. January 19, 2021.	1/19/21
Hills, A.	PGY2	Presentation: Hills, A. "Gait Velocity and Joint Power Generation After Stroke". Journal Club, HonorHealth, Scottsdale, AZ. January 19, 2021.	1/19/21
Kandel, S.	PGY2	Presentation: Kandel, S. "Thiamine Deficiency". PGY-3 Presentation, HonorHealth, Scottsdale, AZ. January 12, 2021.	1/12/21
Hills, A.	PGY2	Presentation; Hills, A. "Rash Post-Trauma". PGY-3 Presentation, HonorHealth, Scottsdale, AZ. January 12, 2021.	1/12/21
Lopez, T.	PGY1	Presentation: Lopez, T. "Nontraumatic SCI – Spinal Tumors". Didactic Case Presentation, HonorHealth, Scottsdale, AZ. December 15, 2020.	12/15/20
Stokke, J.	PGY1	Presentation: Stokke, J. "Analysis of observational studies: A guide to understanding statistical methods". Journal Club, HonorHealth, Scottsdale, AZ. December 1, 2020	12/1/20
Hills, A.	PGY2	Presentation: Hills, A. "Psychometric Properties of the Multidimensional Impression of Change in a Cohort of Pediatric Patients with Pain". Journal Club, HonorHealth, Scottsdale, AZ. December 1, 2020	12/1/20
Hills, A.	PGY2	Presentation: Hills, A. "Discrete and Dynamic Postoperative Pain Catastrophizing Trajectories Across 6 Months: A Prospective Observational Study". Journal Club, HonorHealth, Scottsdale, AZ. December 1, 2020	12/1/20
Kandel, S.	PGY2	Presentation: Kandel, S. "Long-term functional outcome after laryngeal cancer treatment". Journal Club, HonorHealth, Scottsdale, AZ. November 3, 2020	11/3/20
Lopez, T.	PGY1	Presentation: Lopez, T. "Progressive resistance training in head and neck cancer patients during concomitant chemoradiotherapy – design of the DAHANCA 31 randomized trial". Journal Club, HonorHealth, Scottsdale, AZ. November 3, 2020	11/3/20
Stokke, J.	PGY1	Presentation: Stokke, J. "Comparison of hospital based and home based exercise on quality of life, and neck and shoulder function in patients with spinal accessory nerve injury after head and neck cancer surgery". Journal Club, HonorHealth, Scottsdale, AZ. November 3, 2020.	11/3/20
Lopez, T.	PGY1	Presentation: Lopez, T. "Immune Reconstitution Inflammatory Syndrome". Didactic Case Presentation, HonorHealth, Scottsdale, AZ. October 27, 2020.	10/27/20
Kandel, S.	PGY2	Presentation: Kandel, S. "Are Mindful Exercises Safe and Beneficial for Treating Chronic Lower Back Pain? A Systematic Review and Meta-Analysis of Randomized Controlled Trials". Journal Club, HonorHealth, Scottsdale, AZ. October 13, 2020.	10/13/20
Stokke, J.	PGY1	Presentation: Stokke, J. "Associations between initial clinical examination and imaging findings and return-to-sport in male athletes with acute adductor injuries". Journal Club, HonorHealth, Scottsdale, AZ. October 13, 2020.	10/13/20
Stokke, J.	PGY1	Presentation: Stokke, J. "Lower extremity weakness: CIDP Case presentation". PGY-2 Presentation, HonorHealth, Scottsdale, AZ. October 6, 2020.	10/6/20
Kandel, S.	PGY2	Presentation: Kandel, S. "Subclavian Steal Syndrome". PGY-3 Presentation, HonorHealth, Scottsdale, AZ. October 6, 2020.	10/6/20

Lopez, T.	PGY1	Presentation: Lopez, T. "Malignant MCA Syndrome". Didactic Case Presentation, HonorHealth, Scottsdale, AZ. September 15, 2020.	9/15/20
Stokke, J.	PGY1	Presentation: Stokke, J. "Comparison of brain structure between pain-susceptible and asymptomatic individuals following experimental induction of low back pain". Journal Club, HonorHealth, Scottsdale, AZ. September 8, 2020.	9/8/20
Hills, A.	PGY2	Presentation: Hills, A. "Repeat procedures and prescriptions opioid use after lumbar medial branch nerve radiofrequency ablation in commercially insured patients". Journal Club, HonorHealth, Scottsdale, AZ. September 8, 2020.	9/8/20
Stokke, J.	PGY1	Presentation: Stokke, J. "Clinicians view on their role in self-management approaches". Journal Club, HonorHealth, Scottsdale, AZ. September 1, 2020.	9/1/20
Hills, A.	PGY2	Presentation: Hills, A. "Moral distress in rehabilitation professionals". Journal Club, HonorHealth, Scottsdale, AZ. September 1, 2020.	9/1/20
Lopez, T.	PGY1	Presentation: Lopez, T. "Peripheral Arterial Disease". Didactic Case Presentation, HonorHealth, Scottsdale, AZ. August 18, 2020.	8/18/20
Stokke, J.	PGY1	Presentation: Stokke, J. "In situ decompression vs conservative treatment for mild ulnar neuropathy". Journal Club, HonorHealth, Scottsdale, AZ. August 11, 2020.	8/11/20
Kandel, S.	PGY2	Presentation: Kandel, S. "Quality of Electrodiagnostic Studies for CTS". Journal Club, HonorHealth, Scottsdale, AZ. August 11, 2020.	8/11/20
Stokke, J.	PGY1	Presentation: Stokke, J. "Neurological Manifestations of COVID, Respiratory Rehab in COVID, Systematic rapid living review on rehabilitation needs due to COVID-19". Journal Club, HonorHealth, Scottsdale, AZ. August 4, 2020.	8/4/20
Hills, A.	PGY2	Presentation; Hills, A. "Complete Paraplegia". PGY-3 Presentation, HonorHealth, Scottsdale, AZ. July 28, 2020.	7/28/20
Kandel, S.	PGY2	Presentation: Kandel, S. "Hyponatremia in Traumatic Brain Injury". PGY-3 Presentation, HonorHealth, Scottsdale, AZ. July 21, 2020.	7/21/20
Hills, A.	PGY2	Presentation: Hills, A. "Risk for Suicide". Journal Club, HonorHealth, Scottsdale, AZ. July 14, 2020.	7/14/20
Kandel, S.	PGY2	Presentation: Kandel, S. "Duration of American Football Play and Chronic Traumatic Encephalopathy". Journal Club, HonorHealth, Scottsdale, AZ. July 14, 2020.	7/14/20

PROFESSIONAL ACTIVITIES/COMMITTEES

Resident Name	PGY Year	Scholarly Project Title	Completion Date
Kandel, S.	PGY2	Amputee Committee	2020-2021
Stokke, J.	PGY1	Spinal Cord Injury Committee	2020-2021
Hills, A.	PGY2	Spinal Cord Injury Committee	2020-2021
Hills, A.	PGY2	Stroke Committee	2020-2021
Lopez, T.	PGY1	Brain Injury Committee	2020-2021
Hills, A.	PGY2	House Leadership Committee	2020-2021

PUBLISHED JOURNAL ARTICLE/ABSTRACT/SUBMITTED MANUSCRIPT

Resident Name	PGY Year	Scholarly Project Title	Completion Date
Hills, A.	PGY2	Submitted Abstract: Hills A, Crawford C, Keole NS. "Providers' Views on Telemedicine within the Department of Physical Medicine and Rehabilitation Services during the COVID-19 Pandemic". AAP Annual Assembly. February 9-13, 2021.	Feb 2021

SCHOLARLY PROJECTS IN DEVELOPMENT

Project/Protocol	Residents (PGY)	Mentor(s)	Project Status*
<p>LEMG/NCS Machines (Yellow Belt Project)</p> <p>Description: New EMG/NCS machines arrive without standardized normal values programmed. There is no process for programming the normal values into the system and need for an established system for programming new EMG/NCS machines to avoid potential misdiagnosis of patients.</p>	Kandel (PGY 2)	Keole Zaza Shea	1,3
<p>Orientation/new resident onboarding (Yellow Belt Project)</p> <p>Description: With the expansion of the program, there is a need to create an onboarding checklist to streamline the licensing/training requirements that need to be in place for the first rotation. The lack of a streamlined process creates delay to resident education and could impact their ability to provide treatment to veterans in a timely manner.</p>	Hills (PGY 2)	Keole Brenda	1
Wheelchair study	Hills (PGY2)	Keole Subbarao	1

1=Project Identified, 2=Literature review, 3=Proposal development, 4=Data collection and analysis, 5=Presentation/publication

Faculty Activities

PRESENTATIONS/POSTERS/ABSTRACTS

Faculty Name(s)	Scholarly Project Title
De Luigi, A.	Presentation: De Luigi, A. "Tweaking the Mechanics: Shoulder Injuries of the Throwing Athlete". 5th Annual Mayo Clinic Sports Medicine for the Clinician 2021, Orlando, FL. February 2021.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Foot and Ankle". 4th Annual Mayo Clinic Sports Medicine Summit 2021: Care of the Athlete, Tempe, AZ. February 2021.
Keole, N.	Poster Presentation: Hills A, Crawford C, Keole NS. "Providers' Views on Telemedicine within the Department of Physical Medicine and Rehabilitation Services during the COVID-19 Pandemic". AAP Annual Assembly. February 9-13, 2021.
Quang, R.	Presentation: Quang, R. "Stroke Rehabilitation". HonorHealth Rehabilitation Hospital, Scottsdale, AZ. February 9, 2021.
Quang, R.	Presentation: Quang, R. "Stroke Syndromes". HonorHealth Rehabilitation Hospital, Scottsdale, AZ. January 19, 2021.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound in Olympics and Paralympics: A Case Based Discussion". AAP Annual Meeting, Anaheim, CA.
De Luigi, A.	Presentation: De Luigi, A. "Adaptive Sports Medicine: The Role of the Team Physician". AAP Annual Meeting, Anaheim, CA.
Keole, N.	Presentation: Keole, N. "ResQIPS: A structured curriculum to Improve Research understanding and Participation". AAPMR 2020.
Wilner, L.	Presentation: Wilner L. "Pediatric TBI and SCI". HonorHealth PM&R Residency Didactics, Phoenix, AZ. December 2020.
Wilner, L.	Presentation: Wilner L. "Cerebral Palsy". HonorHealth PM&R Residency Didactics, Phoenix, AZ. December 2020.
Wilner, L.	Presentation: Wilner L. "Growth and Development". HonorHealth PM&R Residency Didactics, Phoenix, AZ. November 2020.
Wilner, L.	Presentation: Wilner L. "Introduction to Pediatric Rehabilitation". HonorHealth PM&R Residency Didactics, Phoenix, AZ. November 2020.
De Luigi, A.	Presentation: De Luigi, A. "Adaptive Cycling: Common Orthopedic and Medical Issues". AAPM&R Annual Assembly, San Diego, CA. November 2020.
De Luigi, A.	Presentation: De Luigi, A. "Administration of Platelet Rich Plasma Reduces Pain and Improves Function for Patients with Hip Labral Tears". Mayo Clinic-Karolinska Institutet Regenerative Medicine Conference. Stockholm, Sweden. September 2020.
De Luigi, A.	Presentation: De Luigi, A. "Fracture and Dislocation Management". Mayo Clinic 9th Annual Comprehensive Sports Medicine Update and Board Review, Minneapolis, MN. June 2020.
De Luigi, A.	Presentation: De Luigi, A. "Cartilage and Joint Injuries and Conditions". Mayo Clinic 9th Annual Comprehensive Sports Medicine Update and Board Review, Minneapolis, MN. June 2020.
De Luigi, A.	Presentation: De Luigi, A. "Bone Injuries and Conditions". Mayo Clinic 9th Annual Comprehensive Sports Medicine Update and Board Review, Minneapolis, MN. June 2020.
Keole, N.	Poster Presentation: Essary AE, Keole NS, Hills A, et al. "Dissemination of an evidence-based public health curriculum in pain and addiction for interprofessional learners using the Project ECHO model". NIDA Clinical Trials Network Annual Steering Committee Meeting, Bethesda, MD. March 23, 2020.
Quang, R.	Poster Presentation: Quang, R. "West Nile Encephalitis in the Setting of a Prior Hemorrhagic Stroke, a case presentation". AAP National Meeting, Orlando, FL. March 7, 2020.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guided Surgery". AAP Annual Meeting. Orlando, FL. March 2020.
De Luigi, A.	Presentation: De Luigi, A. "The Role of a Physiatrist in Sports and Spine". Mayo Clinic Advances & Innovations in Complex Neuroscience Patient Care: Brain & Spine. Sedona, AZ. February 2020.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Shoulder". Mayo Clinic Sports Medicine Summit 2020. Tempe, AZ. February 2020.
De Luigi, A.	Presentation: De Luigi, A. "Concussion: Sideline Evaluation". Mayo Clinic Sports Medicine Summit

	2020. Tempe, AZ. February 2020.
Keole, N.	Presentation: Keole, N. "Rehabilitation in Brain Tumors". Neurology Grand Rounds. Carl T Hayden VA Medical Center, Phoenix, AZ. Jan 10, 2020.
Langley, N.	Presentation: Langley, N. "Variation: The Rule, Not the Exception". American Association of Clinical Anatomists Annual Meeting. Tulsa, OK. 2019.
Langley, N.	Presentation: Langley, N. "Develop a Teaching Portfolio" Career Development Committee Breakfast Seminar, Association of Clinical Anatomists Annual Meeting. Tulsa, OK. 2019.
Langley, N.	Presentation: Langley, N. "Mind the Gap: How Reference Samples Impact Skeletal Age Estimation in Forensic Casework". American Association of Anatomists Annual Meeting. Orlando, FL. 2019.
Langley, N.	Presentation: Langley, N. "Core Competencies and Entrustable Professional Activities: A Model for Forensic Anthropology Qualifications". American Academy of Forensic Sciences Annual Meeting. Baltimore, MD. 2019.
Langley, N.	Poster Presentation: Langley, N. "The Phrenic Nerve: You Can Use It or Abuse It". Cardiovascular and Interventional Radiological Society of Europe. Barcelona, Spain. 2019
Langley, N.	Poster Presentation: Langley, N. "'Must See' Videos? Why Educators Need Better Video Analytics to Measure Learning". American Association of Clinical Anatomists Annual Meeting. Tulsa, OK. 2019.
Langley, N.	Poster Presentation: Langley, N. "Using High Resolution Mass Spectrometry Analysis to Investigate Trabecular Bone Metabolomics for Postmortem Interval (PMI) Estimation". American Academy of Forensic Sciences Annual Meeting. Baltimore, MD. 2019.
Langley, N.	Poster Presentation: Langley, N. "Scanning Electron Microscopes with Energy Dispersive X-Ray Spectroscopy (SEM/EDX) Analysis of Gunshot Residue (GSR) on Pig Bone". American Academy of Forensic Sciences Annual Meeting. Baltimore, MD. 2019.
Langley, N.	Presentation: Langley, N. "Determining Forensic Context". 5th Annual Forensic Science Symposium, Mayo Clinic, Rochester, MN. 2019
Langley, N.	Presentation: Langley, N. "Forensic Anthropology Case Studies". 5th Annual Forensic Science Symposium, Mayo Clinic, Rochester, MN. 2019
McAuliffe, M.	Presentation: McAuliffe, M. "Regenerative Medicine: Stem Cell Treatment in Osteoarthritis Office-Based Application". AAPMR Annual Assembly 2019. San Antonio, TX. 2019.
McAuliffe, M.	Presentation: McAuliffe, M. "Traditional and Leading Edge Therapies for Musculoskeletal Care". Nevada Academy of Family Physicians 2019.
De Luigi, A.	Presentation: De Luigi, A. "Regenerative Treatment of Sports Injuries in Pediatric and Adolescent Athletes: A Review of Techniques and Evidence". AAMP&R Annual Assembly. San Antonio, TX. November 2019.
De Luigi, A.	Presentation: De Luigi, A. "Regenerative Medicine in Pediatric and Adolescent Sports Injuries". AAMP&R Annual Assembly. San Antonio, TX. November 2019.
De Luigi, A.	Presentation: De Luigi, A. "S Ultrasound of the Radial Nerves". AAMP&R Annual Assembly. San Antonio, TX. November 2019.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Evaluation of the Peripheral Nerves". AAMP&R Annual Assembly. San Antonio, TX. November 2019.
De Luigi, A.	Presentation: De Luigi, A. "The Overhead Athlete: Translation of Research to Performance and Back Again". AAMP&R Annual Assembly. San Antonio, TX. November 2019.
De Luigi, A.	Presentation: De Luigi, A. "Sideline Assessment: To Play or Not to Play, That is the Question". AAMP&R Annual Assembly. San Antonio, TX. November 2019.
De Luigi, A.	Presentation: De Luigi, A. "Pearls for the Sports Medicine Physician". AAMP&R Annual Assembly. San Antonio, TX. November 2019.
Sollenberger, J.	Presentation: Sollenberger, J. "Point of care Ultrasound with a Musculoskeletal Focus". Phoenix VA Health Care System CME Lecture Series, Phoenix, AZ. August 21, 2019.
Quang, R.	Presentation: Quang, R. "Stroke rehabilitation". HonorHealth Rehabilitation Hospital, Scottsdale, AZ. August 13, 2019.
Quang, R.	Presentation: Quang, R. "Stroke Syndromes". HonorHealth Rehabilitation Hospital, Scottsdale, AZ. August 6, 2019.
De Luigi, A.	Presentation: De Luigi, A. "Fracture and Dislocation Management". Mayo Clinic 8th Annual Comprehensive Sports Medicine Update and Board Review 2019, Minneapolis, MN. June 2019.
De Luigi, A.	Presentation: De Luigi, A. "Cartilage and Joint Injuries and Conditions". Mayo Clinic 8th Annual Comprehensive Sports Medicine Update and Board Review 2019, Minneapolis, MN. June 2019.
De Luigi, A.	Presentation: De Luigi, A. "Bone Injuries and Conditions". Mayo Clinic 8th Annual Comprehensive Sports Medicine Update and Board Review 2019, Minneapolis, MN. June 2019.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Knee". International Society of Physical and Rehabilitation Medicine (ISPRM), Osaka, Japan. June 2019.

De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Hip". International Society of Physical and Rehabilitation Medicine (ISPRM), Osaka, Japan. June 2019.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Foot and Ankle". International Society of Physical and Rehabilitation Medicine (ISPRM), Osaka, Japan. June 2019.
De Luigi, A.	Presentation: De Luigi, A. "Adaptive Cycling". ACSM, Orlando, FL. May 2019.
De Luigi, A.	Presentation: De Luigi, A. "Management of Low Back Pain in the Field". Prolonged Field Care and Austere Environment Critical Care Series 2019, Phoenix, AZ. May 2019.
Wilner, L.	Presentation: Wilner, L. "Physiatry and Acute Inpatient Rehabilitation: Top Ten Most Frequently Asked Questions". BNI Grand Rounds, Phoenix, AZ. May 2019.
Wilner, L.	Presentation: Wilner, L. "Evaluation of the Clumsy Child: Is There a Problem?" 23rd Annual Barrows Children's Neuroscience Symposium, Phoenix, AZ. April 2019.
De Luigi, A.	Presentation: De Luigi, A. "Sonography of Shoulder Pathology". AMSSM Annual Meeting Fundamentals of Sports Ultrasound Preconference, Houston, TX. April 2019.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Shoulder". AMSSM Annual Meeting Fundamentals of Sports Ultrasound Preconference, Houston, TX. April 2019.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Knee". AMSSM Annual Meeting Fundamentals of Sports Ultrasound Preconference, Houston, TX. April 2019.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Knee". Mayo Clinic Sports Medicine Summit 2019, Tempe, AZ. April 2019.
De Luigi, A.	Presentation: De Luigi, A. "ACL: Epidemiology and Mechanism of Injury". Mayo Clinic Sports Medicine Summit 2019, Tempe, AZ. April 2019.
De Luigi, A.	Presentation: De Luigi, A. "The Role of a Physiatrist in Sports and Spine". Mayo Clinic Advances & Innovations in Complex Neuroscience Patient Care: Brain & Spine, Sedona, AZ. March 2019.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Knee". Foothills Sports Medicine Ahwatukee, AZ. March 2019.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Shoulder". Mayo Clinic Tempe Sports Medicine, Tempe, AZ. March 2019.
De Luigi, A.	Presentation: De Luigi, A. "Getting Back into the Game: A review of return to play protocols for medical illnesses, musculoskeletal and neurologic injuries". Mayo Clinic Rehabilitation Update 2019, Orlando FL. February 2019.
Wilner, L.	Presentation: Wilner, L. "SCI: Considerations for Adolescents and Transition to Adulthood". Barrows Spinal Cord Injury Symposium, Phoenix, AZ. February 2019.
Sollenberger, J.	Presentation: Sollenberger, J. "Musculoskeletal Ultrasound Cases". HonorHealth Internal Medicine Noon Conference, Scottsdale, AZ. February 28, 2019.
McAuliffe, M.	Presentation: McAuliffe, M. "Stem Cell Treatment in Osteoarthritis Office-Based Application". AAPMR Annual Assembly 2018. Orlando, FL. 2018.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Shoulder". Foothills Sports Medicine & EXOS Sports Performance, Scottsdale, AZ. December 2018
Sollenberger, J.	Presentation: Sollenberger, J. "The Role of Musculoskeletal Ultrasound for Primary Care Physicians". 1st Annual Orthopedic & Spine Symposium. The University of Arizona College of Medicine, Phoenix, AZ. November 3, 2018.
De Luigi, A.	Presentation: De Luigi, A. "Osteopathic Manipulative Medicine: Sacro-iliac Complex and the Pelvic Floor Muscles". AAPM&R Annual Assembly, Orlando, FL. October 2018.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound of the Radial Nerve". AAPM&R Annual Assembly, Orlando, FL. October 2018.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound of the Peripheral Nerves". AAPM&R Annual Assembly, Orlando, FL. October 2018.
De Luigi, A.	Presentation: De Luigi, A. "Osteopathic Manipulative Medicine: An Introduction to the Basics". AAPM&R Annual Assembly, Orlando, FL. October 2018.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Knee". AAPM&R Annual Assembly, Orlando, FL. October 2018.
De Luigi, A.	Presentation: De Luigi, A. "Diagnostic Ultrasound of the Lower Extremity". AAPM&R Annual Assembly, Orlando, FL. October 2018.
Langley, N.	Poster Presentation: Langley, N. "Anatomic Evidence of the Effectiveness of Modified Quadratus Lumborum Blocks". American Association of Clinical Anatomists Annual Meetings. Atlanta, GA. July 2018.
Langley, N.	Poster Presentation: Langley, N. "The Role of Thoracolumbar Fascia in Planar Spread of Quadratus Lumborum Blocks". American Association of Anatomists Annual Meetings. San Diego, CA. April 2018.

Sollenberger, J.	Presentation: Makin I, Sollenberger J. "Ultrasound Imaging in the Medical Practice – Diagnosis and Office-based Musculoskeletal Procedure Guidance". AT Still University Primary care Update – Las Vegas 2018, Las Vegas, NV. March 2, 2018
Langley, N.	Presentation: Langley, N. "Authentic assessment of nontraditional discipline-independent (non-technical) skills in basic science curricula". Ottawa-International Conference on Medical Education (ICME) Pre-Conference Workshop. Abu Dhabi, United Arab Emirates. March 2018.
Langley, N.	Poster Presentation: Langley, N. "Analysis of Osteon Pull-out and Collagen Degradation to Establish Fracture Timing". American Academy of Forensic Sciences Annual Meeting. Seattle, WA. February 2018.
Langley, N.	Poster Presentation: Langley, N. "Anatomy and Biological Anthropology: Time for a Family Reunion?". American Academy of Forensic Sciences Annual Meeting. Seattle, WA. February 2018.
Langley, N.	Poster Presentation: Langley, N. "Postmortem Interval (PMI) Estimation Using Bone Lipidomics". American Academy of Forensic Sciences Annual Meeting. Seattle, WA. February 2018.
Sollenberger, J.	Poster Presentation: Quezon I., Sollenberger J., "Diagnostic Ultrasound in the Reevaluation of Shrapnel Injurt Resulting in Sciatica: A Case Report". Atlanta, GA. February 13-17, 2018
Wilner, L.	Presentation: Wilner, L. "Pediatric Spinal Cord Injury Rehabilitation Management". Phoenix Children's Hospital, Phoenix, AZ. January 2018.
Langley, N.	Presentation: Langley, N. "Use of Portable Video Capture Devices for Supplemental Education and Training". International Meeting on Simulation in Healthcare (IHSM) 18th Annual Meeting. Los Angeles, CA. January 2018.
Langley, N.	Presentation: Langley, N. "Teaching the Next Generation" Career Development Committee Breakfast Seminar, American Association of Clinical Anatomists Annual Meeting. Atlanta, GA. 2018.
Langley, N.	Presentation: Langley, N. "Integration of Radiology in Pre-Clinical Anatomy Medical Education". Radiological Society of North America. Chicago, IL. 2018.
Keole, N. S.	Presentation: Keole N. S. "Pain Management in Cancer". Radiation oncology resident and staff. Mayo Clinic Hospital. Phoenix, AZ. December 7, 2017
Keole, N. S.	Presentation: Keole, N. S. "Electrodiagnosis for Primary Care Physicians". Internal Medicine residents. Carl T Hayden VA Medical Center. Phoenix, AZ. November 20, 2017
Wilner, L.	Presentation: Wilner, L. "Role of Psychology on the Inpatient Rehabilitation Unit". Phoenix Children's Hospital Psychology Department, Phoenix, AZ. November and March 2017.
De Luigi, A.	Presentation: De Luigi, A. "Sports Ultrasound: Fundamentals of the Upper Extremity". American Medical Society if Sports Medicine, San Diego, CA. May 2017.
De Luigi, A.	Presentation: De Luigi, A. "Medical Coverage for Olympic and Paralympic Athletes". American Medical Society if Sports Medicine, San Diego, CA. May 2017.
Levine T. D.	Presentation: Levine, TD. "Muscle Disease for 2017". Grand Round SUNY Downstate. Brooklyn, NY. April 2017
Wilner, L.	Presentation: Wilner, L. "Concussion Rehab in Children". Barrow Neuroscience Institute and CACTIS Foundation, Phoenix, AZ. February 2017.
Sollenberger, J.	Presentation: Sollenberger J. "Introduction to Musculoskeletal Ultrasound: Shoulder". Annual Mayo Clinic Medical and Surgical Spine Course: Comprehensive Cervical Spine Update 2017. Mayo Clinic Phoenix. January 12, 2017
Levine T. D.	Presentation: Levine, TD. "Retrospective Analysis of the Renal and Hematologic Side Effects of Chronic High Dose IVIG Therapy in Neurologic Diseases". American Academy of Neurology. Boston, MA 2017
Levine T. D.	Presentation: Levine, TD. "Identification of a Novel Immune Mediated Cause for Small Fiber Neuropathy" American Academy of Neurology. Boston, MA 2017
Levine T. D.	Presentation: Levine, TD. "Non-Amyloidogenic Mutation of Transthyretin Associated with Autonomic Neuropathy". American Academy of Neurology. Boston, MA 2017
Levine T. D.	Presentation: Levine, TD. "Diagnosis and Treatment of Small Fiber Neuropathy". Texas Academy of Neurology. Austin, TX. 2017
Levine T. D.	Presentation: Levine, TD. "Differentiating Multifocal Motor Neuropathy from Other Mimics". Brazilian Academy of Neurology. Rio De Janeiro, Brazil 2017.
Langley, N.	Presentation: Langley, N. "estimating the Postmortem Interval: A Metabolomics/Lipidomics Approach". American Academy of Forensic Sciences Annual Meeting. New Orleans, LA. 2017
Langley, N.	Poster Presentation: Langley, N. "Anatomical Sciences Education among Biological Anthropology

	Graduates". American Association of Clinical Anatomists Annual Meetings. Minneapolis, MN. 2017.
Langley, N.	Poster Presentation: Langley, N. "Making up for Missing Pieces: SEM-EDX Gunshot Residue Analysis of Human Cranial Bone". American Academy of Forensic Sciences Annual Meetings. New Orleans, LA. 2017.
McAuliffe, M.	Presentation: McAuliffe, M. "Regenerative Medicine: Stem Cell Treatment in Osteoarthritis Office-Based Application". AAPMR Annual Assembly 2017. Denver, CO. 2017.
Wilner, L.	Presentation: Wilner, L. "Rehabilitation for the Patient with Cerebral Palsy" PCH pediatric residents. Phoenix, AZ. October 2016.
De Luigi, A.	Presentation: De Luigi, A. "Practicing Sports Medicine with Professional and Olympic Athletes: The Journey to the Peak". American Academy of Physical Medicine & Rehabilitation, New Orleans, LA. October 2016.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guidance for Knee Injections". Wounded Warrior Pain Care Symposium – Naval Medical Center, San Diego, CA. September 2016.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guidance for Hip and Knee Injections". Wounded Warrior Pain Care Symposium – Naval Medical Center, San Diego, CA. September 2016.
Wilner, L. J.	"Rehabilitation services: Levels of care and the Role of the Physiatrist" PCH pediatric residents. Phoenix, AZ. July 12, 2016.
De Luigi, A.	Presentation: De Luigi, A. "Knee Swelling - Football". American College of Sports Medicine, Boston, MA. June 2016.
De Luigi, A.	Presentation: De Luigi, A. "Knee Pain – Atypical Causes of Knee Pain: Remembering Your Differential Moderator". American College of Sports Medicine, Boston, MA. June 2016.
De Luigi, A.	Presentation: De Luigi, A. "Sports Ultrasound: Fundamentals of the Upper Extremity". American Medical Society of Sports Medicine, Dallas, TX. April 2016.
Levine T. D.	Presentation: Levine, TD. "The Use of IVIG in the Treatment of Neurological Disorders". American Association of Electrodiagnostic Medicine, New Orleans, LA. 2016
Levine T. D.	Presentation: Levine, TD. "Biologic Therapies in the Treatment of Neurologic Disorders". American Association of Electrodiagnostic Medicine, New Orleans, LA. 2016
Levine T. D.	Presentation: Levine, TD. "Response to IVIG in Patients with CIDP: The INSIGHTS Quality Improvement Registry". American Association of Electrodiagnostic Medicine, New Orleans, LA. 2016
Levine T. D.	Presentation: Levine, TD. "Multifocal Motor Neuropathy". 2nd International Neuromuscular Clinical Forum, Mexico City, Mexico. 2016
Levine T. D.	Presentation: Levine, TD. "Improving the Approach to the Diagnosis and Management of Immune Neuropathies". Cuban Academy of Neurology, Havana Cuba, 2016.
Levine T. D.	Presentation: Levine, TD. "INSIGHTS: Analysis of IVIG Responsiveness in Patients with Myasthenia Gravis". American Academy To Neurology, Honolulu, HI, 2016.
Levine T. D.	Presentation: Levine, TD. "Response to IVIG in Patients with CIDP: The INSIGHTS Quality Improvement Registry". American Academy of Neurology. 2016.
Levine T. D.	Presentation: Levine, TD. "Outpatient Treatment with Oral Dexamethasone for Intractable Headaches" American Academy of Neurology, Honolulu, HI. 2016.
Langley, N.	Presentation: Langley, N. "Decision Trees and Non-Metric Traits: A More Accurate Approach for Sex Estimation of the Skull". American Academy of Forensic Sciences Annual Meeting. Las Vegas, NV. 2016.
Langley, N.	Poster Presentation: Langley, N. "Body Donation Attitudes of Medical and Physician's Assistant Students. Association of Clinical Anatomists Annual Meeting. Oakland, CA. 2016.
Langley, N.	Poster Presentation: Langley, N. "DCP 2.0: Changes in Data Collection Procedures for Forensic Skeletal Material". Proceedings of the American Academy of Forensic Sciences Annual Meeting. Las Vegas, NV. 2016.
Langley, N.	Poster Presentation: Langley, N. "The Effects of Body Mass Index on cross-Sectional Properties of the Humeral Neck". Association of Clinical Anatomists Annual Meeting. Oakland, CA. 2016.
Langley, N.	Poster Presentation: Langley, N. "Thirty Years if the Forensic Data Bank and Data Collection Procedures (DCP) 2.0: Continuity and Transformation". Proceedings of the American Academy of Forensic Sciences Annual Meeting. Las Vegas, NV. 2016.
McAuliffe, M.	Presentation: McAuliffe, M. "Abdomen and Pelvic Pain Procedures with Ultrasound". AAPMR Annual Assembly 2016. New Orleans, LA. 2016.
Iyamu, M.	Presentation: Iyamu, M. "Physiatry the Hidden Gem: Perception of the PM&R Medical Field". Nova/Larkin PM&R 2016 Inaugural Research Day. Miami, FL. 2016.
De Luigi, A.	Presentation: De Luigi, A. "Adaptive Sports Medicine: The Sochi Experience". Maryland Society of PM&R, Baltimore, MD. November 2015.

De Luigi, A.	Presentation: De Luigi, A. "Manual Manipulative Medicine: A Structural Examination for Lower Back Pain". American Academy of Physical Medicine & Rehabilitation, Boston, MA. October 2015.
De Luigi, A.	Presentation: De Luigi, A. "Manual Manipulation in the Inpatient Setting: From ICU to the Acute Rehab Floor". American Academy of Physical Medicine & Rehabilitation, Boston, MA. October 2015.
De Luigi, A.	Presentation: De Luigi, A. "manual Manipulation for Post Concussive and Whiplash Syndromes". American Academy of Physical Medicine & Rehabilitation, Boston, MA. October 2015.
De Luigi, A.	Presentation: De Luigi, A. "Manual Manipulation and Home Exercises to Compliment Common Injection Procedures". American Academy of Physical Medicine & Rehabilitation, Boston, MA. October 2015.
De Luigi, A.	Presentation: De Luigi, A. "From the Clinic to the Ballpark and Back Again: Preventing Throwing Injuries Before They Happen". American Academy of Physical Medicine & Rehabilitation, Boston, MA. October 2015.
De Luigi, A.	Presentation: De Luigi, A. "Comprehensive Evidence-Based MSK Physical Exam Skill for Assessment of the Injured Athlete". American Academy of Physical Medicine & Rehabilitation, Boston, MA. October 2015.
De Luigi, A.	Presentation: De Luigi, A. "Basics of Manual Manipulation in Physiatry: Start Here!". American Academy of Physical Medicine & Rehabilitation, Boston, MA. October 2015.
De Luigi, A.	Presentation: De Luigi, A. "Adaptive Sports Medicine: A Case-Based Discussion of Injury Management and Prevention". American Academy of Physical Medicine & Rehabilitation, Boston, MA. October 2015.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guided Injections of the Upper Extremity Peripheral Nerves". Wounded Warrior Pain Skills Care Symposium – Walter Reed Military Medical Center, Bethesda, MD. September 2015.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guided Injections of the Lumbar Spine". Wounded Warrior Pain Skills Care Symposium – Walter Reed Military Medical Center, Bethesda, MD. September 2015.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guided Injections of the Lower Extremity Peripheral Nerves". Wounded Warrior Pain Skills Care Symposium – Walter Reed Military Medical Center, Bethesda, MD. September 2015.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guided Injections of the Anterior Abdominal Wall". Wounded Warrior Pain Skills Care Symposium – Walter Reed Military Medical Center, Bethesda, MD. September 2015.
Wilner, L.J.	Presentation: Wilner, L. "Developmental Disabilities through the Life Span: Aging with Cerebral Palsy". Florida State Association of Rehabilitation Nurses Annual Meeting. Orlando, FL. May 8, 2015.
Sollenberger, J.	Presentation: Sollenberger, J. "Physical Exam of the Back and Neck". Pain Residency. Phoenix VA Medical Center. May 6, 2015
De Luigi, A.	Presentation: De Luigi, A. "Wheelchair Sports". American College of Sports Medicine, San Diego, CA. May 2015.
De Luigi, A.	Presentation: De Luigi, A. "Advances in Adaptive Sports Prosthetics". American College of Sports Medicine, San Diego, CA. May 2015.
De Luigi, A.	Presentation: De Luigi, A. "Top 3 Things Every Sports Medicine Should Know About Adaptive Sports". American Medical Society of Sports Medicine, Fort Lauderdale, FL. April 2015.
De Luigi, A.	Presentation: De Luigi, A. "Sports Ultrasound: Fundamentals of the Upper Extremity". American Medical Society of Sports Medicine, Fort Lauderdale, FL. April 2015.
De Luigi, A.	Presentation: De Luigi, A. "Advanced Sports Ultrasound". American Medical Society of Sports Medicine, Fort Lauderdale, FL. April 2015.
Sollenberger, J.	Presentation: Sollenberger, J. "Introduction to Musculoskeletal Ultrasound and Peripheral nerve Blocks". Radiology Resident Lecture Series. Maricopa County Medical Center. Phoenix, AZ. March 12, 2015
Sollenberger, J.	Presentation: Sollenberger, J. "Musculoskeletal Ultrasound". Critical Care and Emergency Ultrasound Course. University of Arizona – College of Medicine- Phoenix. Phoenix, AZ. February 22, 2015
McAuliffe, M.	Presentation: Parekh NN, Simon JI, McAuliffe MB, et al. "Successful Pseudoarthrectomy for Bertolotti's Syndrome: A Case Report". AAPM Annual Assembly, Washington DC. March 2015.
McAuliffe, M.	Presentation: Parekh NN, Simon JI, McAuliffe MB, Furman MB. "Intra-Vascular Penetration Following Lumbar Transforaminal Epidural Injections using the Infraneural Technique". AAPM Annual Assembly, Washington DC. March 2015.
McAuliffe, M.	Presentation: Santiago MJ, McAuliffe M, Vachranukunkiet T, Sridhara CR. "Bilateral common peroneal neuropathy caused by compression stocking use for deep venous thrombosis

	prophylaxis". AAP Annual Assembly, San Antonio, TX. March 2015.
McAuliffe, M.	Presentation: Cuneo A, Santiago MJ, McAuliffe M, Sridhara CR. "Recovery of Traumatic Phrenic Nerve Neurapraxia". AAP Annual Assembly, San Antonio, TX. March 2015.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound: An Evidence Based Approach to the Education of Anatomy and Physical Exam". Association of Academic Physiatrists, San Antonio, TX. March 2015.
Levine T. D	Presentation: Levine, TD. "Acthar in Dermatomyositis and Polymyositis Treatment Registry: An Interim Analysis". American Academy of Neurology. Washington, DC. 2015.
Levine T. D	Presentation: Levine, TD. "Multifocal Motor Neuropathy". 1st International Neuromuscular Clinical Forum, Cartagena, Columbia. 2015.
Levine T. D	Presentation: Levine, TD. "A Pilot Study of Natalizumab in Inclusion Body Myositis". IMACS Meeting. Stockholm, Sweden. 2015
Levine T. D	Presentation: Levine, TD. "IVIg Usage in the U.S. for the Treatment of the Inflammatory Myopathies: Interim Analysis of the Ig Treatment Outcomes Assessment and Clinical Guidelines Study (The "INSIGHTS Study")". IMACS Meeting. Stockholm, Sweden. 2015.
Langley, N.	Presentation: Langley, N. "Computerized Reconstruction of Fragmentary Skeletal Remains". American Academy of Forensic Sciences 67th Annual Meeting. Orlando, FL. 2015
Langley, N.	Presentation: Langley, N. "Evaluation and Reformation of Osteometric Data in Forensic Anthropology: The Foundations of DCP 2.0". American Academy of Forensic Sciences 67th Annual Meeting. Orlando, FL. 2015
Langley, N.	Presentation: Langley, N. "One Hundred Years Since Martin's Lehrbuch: Measurement Confusion and DCP 2.0". American Academy of Forensic Sciences 67th Annual Meeting. Orlando, FL. 2015
Langley, N.	Presentation: Langley, N. "The Anatomy of Age Estimation". American Academy of Forensic Sciences 67th Annual Meeting. Orlando, FL. 2015
Langley, N.	Poster Presentation: Langley, N. "The Effects of Total Hip Arthroplasty on Femur Length and Enthesopathy". American Association of Clinical Anatomists Annual Conference. Henderson, NV. 2015.
Langley, N.	Poster Presentation: Langley, N. "Secondary Pathologies of Clavicle Fractures: Length Discrepancies and Osteoarthritic Changes". American Association of Clinical Anatomists Annual Conference. Henderson, NV. 2015.
Langley, N.	Poster Presentation: Langley, N. "Radiographic Versus Dry Bone Assessment of Sacral Epiphyses". American Association of Physical Anthropologists Annual Meeting. Sr Louis, MO. 2015.
Langley, N.	Poster Presentation: Langley, N. "Osteophytic Lipping in Response to BMIO in the Tibio-femoral and Tibio-talar Joints". American Association of Clinical Anatomists Annual Conference. Henderson, NV. 2015.
Langley, N.	Poster Presentation: Langley, N. "Morphology of Sexually Dimorphic Cranial Traits in Post-Menopausal Females". American Association of Physical Anthropologists Annual Meeting. St Louis, MO. 2015.
Langley, N.	Poster Presentation: Langley, N. "Assessment of Gross Anatomy Boot Camp on First Year Medical Student Performance". American Association of Physical Anthropologists Annual Meeting. St Louis, MO. 2015.
Langley, N.	Poster Presentation: Langley, N. "A Transparent Method for Sex Estimation Using Refined DSP Measurements of the Innominate". American Association of Physical Anthropologists Annual Meeting. St Louis, MO. 2015.
Langley, N.	Poster Presentation: Langley, N. "A Study of Obesity: The Relationship Between BMI and Heel Spurs". American Association of Clinical Anatomists Annual Conference. Henderson, NV. 2015
Langley, N.	Presentation: Langley, N. "Tennessee on the Cutting Edge of Research to Shore Up Forensic Anthropology". Keynote Speaker, Tennessee Annual Laboratory Conference. 2015.
Langley, N.	Presentation: Langley, N. "A Multidisciplinary Forensic Effort Unwraps the Mystery of a Mummified Case". Masters Medicolegal Death Investigation Course. St Louis University, St Louis, MO. 2015.
McAuliffe, M.	Presentation: McAuliffe M, Yucht J, Seidel B, Herbison GJ. "Neurosyphilis causing either Anterior Horn Cell or Radicular Involvement: A Case Report". AAPMR Annual Assembly, San Diego, CA. November 2014.
McAuliffe, M.	Presentation: McAuliffe M, Feeko K. "Avulsion fracture of the common adductor tendon in a cheerleader". AAPMR Annual Assembly, San Diego, CA. November 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound of the Knee". American Academy of Physical Medicine and Rehabilitation, San Diego, CA. November 2014.
De Luigi, A.	Presentation: De Luigi, A. "Overhead Throwers: An Interactive Workshop on History Taking, Physical Examination, and Return to Play in this Unique Population". American Academy of Physical

	Medicine and Rehabilitation, San Diego, CA. November 2014.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Foot and Ankle". American Academy of Physical Medicine and Rehabilitation, San Diego, CA. November 2014.
De Luigi, A.	Presentation: De Luigi, A. "Manual Manipulation for the Adaptive Sports Athlete". American Academy of Physical Medicine and Rehabilitation, San Diego, CA. November 2014.
De Luigi, A.	Presentation: De Luigi, A. "Manual Manipulation for Common Exercise Injuries and the Muscle Energy Home Exercise Program". American Academy of Physical Medicine and Rehabilitation, San Diego, CA. November 2014.
De Luigi, A.	Presentation: De Luigi, A. "Advances in Adaptive Technology: Sports Prosthesis". American Academy of Physical Medicine and Rehabilitation, San Diego, CA. November 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound of the Shoulder: Normal and Abnormal Anatomy". Maryland Society of PM&R, Baltimore, MD. October 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound of the Shoulder". Maryland Society of PM&R, Baltimore, MD. October 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guided Injections of the Shoulder". Maryland Society of PM&R, Baltimore, MD. October 2014.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound: Normal and Abnormal Anatomy". Maryland Society of PM&R, Baltimore, MD. October 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound of the Elbow". PM&R Short Course: Musculoskeletal Ultrasound Conference – USUHS, Baltimore, MD. September 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guided Injections of the Shoulder". PM&R Short Course: Musculoskeletal Ultrasound Conference – USUHS, Baltimore, MD. September 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guided Injections of the Elbow". PM&R Short Course: Musculoskeletal Ultrasound Conference – USUHS, Baltimore, MD. September 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guidance for Shoulder Injections". PM&R Short Course: Musculoskeletal Ultrasound Conference – USUHS, Baltimore, MD. September 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guidance for Knee Injections". Wounded Warrior Pain Care Symposium 2014: Ultrasound Guidance for Chronic Pain – Navel Medical Center, San Diego, CA. September 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guidance for Hip Injections". Wounded Warrior Pain Care Symposium 2014: Ultrasound Guidance for Chronic Pain – Navel Medical Center, San Diego, CA. September 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guidance for Hip and Knee Injections". Wounded Warrior Pain Care Symposium 2014: Ultrasound Guidance for Chronic Pain – Navel Medical Center, San Diego, CA. September 2014.
De Luigi, A.	Presentation: De Luigi, A. "Ultrasound Guidance for Elbow Injections". PM&R Short Course: Musculoskeletal Ultrasound Conference – USUHS, Baltimore, MD. September 2014.
De Luigi, A.	Presentation: De Luigi, A. "Sonographic Evaluation of Elbow Pathologies". PM&R Short Course: Musculoskeletal Ultrasound Conference – USUHS, Baltimore, MD. September 2014.
Sollenberger J	"Introduction to Interventional Spine Procedures". Phoenix VA Health Care System CME Lecture Series. Phoenix, AZ. August 22, 2014
McAuliffe, M.	Presentation: McAuliffe M, Oleson CV. "Multiple Acute Compression Fractures of Spine in Patient with Long-standing Cushing's Syndrome and Severe Osteoporosis". (Accepted for presentation at the May 2014 ASIA Annual Assembly in San Antonio).
De Luigi, A.	Presentation: De Luigi, A. "PRP, Stem Cells, and Emerging Therapies for the Treatment of Athlete's Shoulder". MedStar Sports Medicine: The Athlete's Shoulder. Washington, DC. May 2015.
De Luigi, A.	Presentation: De Luigi, A. "Musculoskeletal Ultrasound of the Shoulder". MedStar Sports Medicine: The Athlete's Shoulder. Washington, DC. May 2015.
De Luigi, A.	Presentation: De Luigi, A. "Elbow Pain in a 15 Year Old Flame Thrower". American College of Sports Medicine. Orlando, FL. May 2015.
De Luigi, A.	Presentation: De Luigi, A. "Adaptive Sports Medicine". American College of Sports Medicine. Orlando, FL. May 2015.

CLINICAL RESEARCH

Faculty Name(s)	Scholarly Project Title
Levine T. D.	"Memantine in ALS". Steering Committee. 2016 – Present.
Levine T. D.	"Octagam in Dermatomyositis". Steering Committee. 2016– Present.
Levine T. D.	"Acthar Gel in ALS". Steering Committee. 2016 – Present.
Levine T. D.	"Study of Patient Satisfaction with their Treatment of CIDP". Steering Committee. 2016– Present.
Levine T. D.	Principle Investigator: "Fycopai in Small Fiber Neuropathy". 2015 – Present
Levine T. D.	Principle Investigator: "Transthyretin Mutations in Small Fiber and Autonomic Neuropathy".
Levine T. D.	Principle Investigator: "Study of Subcutaneous Immunoglobulin (SCIg) in Myasthenia Gravis". 2015 – Present.
Levine T. D.	Principle Investigator: "Study of Immune Globulin in Symptomatic patients with Myasthenia Gravis". 2015 – Present
Levine T. D.	Principle Investigator: "Study of Immune Globulin in (IVIg) in Corticosteroid Dependent patients with Myasthenia Gravis". 2015– Present
Levine T. D.	Principle Investigator: "Study Looking at Biomarkers in CSF in ALS". 2014– Present.
Levine T. D.	Principle Investigator: "Study Looking at Biomarkers in Myositis". 2014– Present.
Levine T. D.	Principle Investigator: "Natalizumab in Inclusion Body Myositis". 2014 – Present.
Levine T. D.	Principle Investigator: "Study of Subcutaneous Gammaglobulin in Myasthenia Gravis". 2014 – Present.
Subbarao B.	Arnold C, Bushnell M, Subbarao B. "The Psychoneuroendocrinological Effect of Mild Traumatic Brain Injury in the Veteran Population". Research ongoing.

PROFESSIONAL ACTIVITIES/COMMITTEES

Faculty Name(s)	Scholarly Activity	Completion Date
Keole N. S.	AANEM Edx Lab Accreditation Subcommittee	(Present)
Keole N. S.	AANEM New Science Editorial Board	(Present)
Keole N. S.	Cancer Committee – Phoenix VA Medical Center	(Present)
Subbarao B.	American Academy of Physical medicine and Rehabilitation	(Present)
Subbarao B.	American Osteopathic College of Physical Medicine and Rehabilitation	(Present)
Subbarao B.	American Osteopathic Association	(Present)
Nieman, T. R.	Chronic Pain Committee and Consulting Management Committee	(Present)
Zaza D.	AANEM – American Association of Neuromuscular and Electrodiagnostic	(Present)
Quang R.	American Academy of Physical Medicine and Rehabilitation	(Present)
Weng, J	American Academy of Physical Medicine and Rehabilitation	(Present)
Weng, J	American Medical Association	(Present)
Sezginis, A.	American Academy of Physical Medicine and Rehabilitation	(Present)
Sezginis, A.	Interventional Spine Intervention Society	(Present)
Sezginis, A.	American Academy of Pain Medicine	(Present)
Levine T. D.	American Association of Electrodiagnostic Medicine	(Present)
Levine T. D.	American Academy of Neurologists	(Present)
Quang R.	American Society of Physical medicine and Rehabilitation	(Present)
Quang R.	American Association of Neuromuscular and Electrodiagnostic Medicine	(Present)
Foll C.	American Academy of Physical Medicine and Rehabilitation	(Present)
Foll C.	HonorHealth Osborn Trauma Committee	(Present)
Foll C.	HonorHealth Osborn Medicine/Family Practice Committee	(Present)
Foll C.	HonorHealth Osborn Stroke Committee	(Present)
Foll C.	HonorHealth Osborn Traumatic Brain Injury Committee	(Present)
Lee, R.	American Academy of Physical Medicine and Rehabilitation	(Present)
Lee, R.	North American Spine Society	(Present)
Lee, R.	International Spine Intervention Society	(Present)

Lee, R.	American Society of Interventional Pain Physicians	(Present)
Lee, R.	Arizona Society of Physical Medicine and Rehabilitation	(Present)
Nieman T. R.	American College of Rheumatology	(Present)
Nieman T. R.	Veterans Administration Rheumatology Collaborative	(Present)
Nieman T. R.	Phoenix Rheumatology Association	(Present)
Hennenhoefer, A.	American Academy of Physical Medicine and Rehabilitation	(Present)
Hennenhoefer, A.	American Osteopathic Association	(Present)
Iyamu, M.	American Osteopathic College of Physical Medicine and Rehabilitation	(Present)
Iyamu, M.	American Osteopathic Association	(Present)
Iyamu, M.	American Osteopathic Medical Association	(Present)
De Luigi, A.	American Association of Physical Medicine and Rehabilitation	(2020 – Present)
Keole N. S.	Professional Standards Board – Phoenix VA Medical Center	(2019 – Present)
Keole N. S.	Association of Academic Physiatrists	(2018 – Present)
Keole N. S.	AAP VA Council Secretary	(2018 – Present)
Keole N. S.	American Academy of Electrodiagnostic Medicine	(2015 – Present)
Wilner, L. J	Pediatric Trauma Multidisciplinary Committee	(2015 – Present)
McAuliffe, M.	American Association of Neuromuscular and Electrodiagnostic Medicine	(2015 – Present)
McAuliffe, M.	American Institute of Ultrasound Medicine	(2014 – Present)
Langley, N.	American Association of Clinical Anatomists	(2014 – Present)
Wilner, L. J	MMCP Appeals Committee	(2013 – Present)
Wilner, L. J	Pediatric Stroke Committee	(2013 – Present)
McAuliffe, M.	Spine Intervention Society	(2013 – Present)
Wilner, L. J	Pediatric Cancer Program Committee	(2012 – Present)
Wilner, L. J	Quality and Safety Committee	(2012 – Present)
Wilner, L. J	American Medical Association	(2012 – Present)
Sollenberger, J.	Spine Intervention Society	(2012 – Present)
Sollenberger, J	American Institute of Ultrasound in Medicine	(2011 – Present)
Langley, N.	American Association of Anatomists	(2011 – Present)
De Luigi, A.	Maryland Society of Physical Medicine and Rehabilitation	(2011 – 2018)
McAuliffe, M.	American Academy of Physical Medicine and Rehabilitation	(2010 – Present)
De Luigi, A.	Spine Interventional Society	(2010 – Present)
De Luigi, A.	Wilderness Medical Society	(2010 – Present)
Sollenberger, J	North American Spine Society	(2010 – 2017)
De Luigi, A.	Maryland Society of Interventional Pain Physicians	(2009 – 2018)
De Luigi, A.	British Association of Sports and Exercise Medicine	(2007 – Present)
Sollenberger, J	American Academy of Physical Medicine and Rehabilitation	(2007 – Present)
Weng, J	American Board of Physical Medicine and Rehabilitation	(2007 – Present)
De Luigi, A.	American College of Sports Medicine	(2007 – Present)
De Luigi, A.	American Medical Society of Sports Medicine	(2007 – Present)
Langley, N.	American Association of Physical Anthropologists	(2005 – Present)
Keole N. S.	American Academy of Physical Medicine and Rehabilitation	(2002 – Present)
De Luigi, A.	American Academy of Physical Medicine and Rehabilitation	(2000 – Present)
Langley, N.	American Academy of Forensic Sciences	(1999 – Present)
Wilner, L. J.	American Academy of Cerebral Palsy & Development Medicine	(1991 – Present)
Wilner, L. J.	American Academy of Physical Medicine and Rehabilitation	(1987 – Present)

PUBLISHED JOURNAL ARTICLE/ABSTRACT/MANUSCRIPT SUBMISSION

Faculty Name(s)	Scholarly Project Title
Langley, N.	Gaw CM, Gibbs CM, Knight JA, Hellyer NJ, Langley NR, Van Nuland SE. "Ultrasound-Based Interprofessional Education: Priming Students for Interprofessional Collaboration". <i>Intl J Health Sci.</i> 2020; 8(3):1-6.
Langley, N.	Harbell MW, Seamans DP, Koyyalamudi V, Kraus MB, Craner RC, Langley NR. "Evaluating the extent of lumbar erector spinae plane block: an anatomical study". <i>Reg Anesth Pain Med.</i> 2020 Aug; 45 (8):640-644 Epub 2020 June 15.
Sollenberger, J.	Mardian A, Hanson E, Villarroel L, et al. "Flipping the Pain Care Model: A Sociopsychobiological Approach to High-Value Chronic Pain Care". <i>Pain Medicine.</i> Jan 7, 2020: 1-13.
Langley, N.	Langley NR, Tersigni-Tarrant MT. "Core Competencies in Forensic Anthropology: A Framework for Education, Training, and Practice". <i>Forensic Anthropology</i> (accepted). 2019.
Langley, N.	Langley NR, Wood P, Herling P, Steadman DW. "Forensic Postmortem Interval Estimation from Skeletal Muscle Tissue". <i>Forensic Anthropology.</i> 2019; 2(3):1-6.
Langley, N.	Langley NR, Butaric L. "Anatomical Sciences Education among Biological Anthropology Graduates: A Solution to the Dearth of Anatomy Educators?" <i>Medical Science Educator.</i> Online 24. 2019 Oct.
De Luigi, A.	De Luigi AJ, Blatz D, Karam C, et al. "Use of Platelet Rich Plasma for the Treatment of Acetabular Labral Tear of the Hip: A Pilot Study". <i>Am J Phys Med Rehabil.</i> 2019 May 30.
De Luigi, A.	De Luigi AJ, Saini V, Mathur R, et al. "Assessing the Accuracy of Ultrasound Guided Needle Placement in Sacroiliac Joint Injections". <i>Am J Phys Med Rehabil.</i> 2019 Feb
Subbarao B.	Subbarao B, Eapen BC. "Seizure Medications". <i>Statpearls.com</i> review article. 2018.
Subbarao B.	Subbarao B, Eapen BC. "Post-Craniotomy Headaches". <i>Statpearls.com</i> review article. 2018
Subbarao B.	Eapen BC, Jaramillo C, Subbarao B, Hong S. "Medical Complications After Moderate to Severe TBI". <i>Rehabilitation After Traumatic Brain Injury</i> , edited by David X. Cifu and Blessen C. Eapen. Elsevier Inc. 2018
Langley, N.	Langley N, West JJ, Kunigelis S, Boggs C. "Making up for Missing Pieces: SEM-EDS Gunshot Residue Analysis of Human Cranial Bone". <i>Forensic Anthropology.</i> 2018; 1(1):74-9.
De Luigi, A.	Gordon AH, De Luigi AJ. "Adolescent Pitcher Recovery from Partial Ulnar Collateral Ligament Tear after Platelet Rich Plasma". <i>Current Sports Medicine Reports.</i> 2018; 17(12):407-409.
De Luigi, A.	Adam J, De Luigi AJ. "Blunt Abdominal Trauma in Sports". <i>Current Sports Medicine Reports.</i> 2018; 10(17):317-319.
De Luigi, A.	Thomas RD, De Luigi AJ. "Chest Trauma in Athletes". <i>Current Sports Medicine Reports.</i> 2018; 8(17):251-253
Langley, N.	Langley NR, Jantz LM, McNulty S, Maijanen H, Ousley SD, Jantz RL. "Data for validation of osteometric methods in forensic anthropology". <i>Data Brief.</i> 2018 Aug; 19:21-28
Langley, N.	Pflibsen L, Noland S, Langley N, VanNuland S, Casey W, Smith A. "The best plastic surgeons are the best anatomists: Evaluation of a training method and residents and teachers". <i>Plastic and Reconstructive Surgery - Global Open.</i> 2018 Jul; 6(7):e1815.
Langley, N.	Langley NR, Meadows Jantz L, McNulty S, Maijanen H, Ousley SD, Jantz RL. "Error quantification of osteometric data in forensic anthropology". <i>Forensic Sci Int.</i> 2018 Jun; 287:183-189.
Langley, N.	Langley NR, Dudzik B, Cloutier A. "A Decision Tree for Nonmetric Sex Assessment from the Skull". <i>J Forensic Sci.</i> 2018 Jan; 63 (1):31-37.
Iyamu, M.	Benes JA, House KN, Burks FN, et al. "Regulation of axonal regeneration following spinal cord injury in the lamprey". <i>J Neurophysiol.</i> 2017 Sep 1; 118(3):1439-1456.
Levine T. D.	Levine TD, Bland RJ. "Incidence of Non-amyloidogenic mutations in the transthyretin gene in patients with small fiber and autonomic neuropathy". <i>Muscle Nerve.</i> May 26, 2017.

Levine T. D.	Levine AA, Levine TD, Clarke K, Saperstein D. "Renal and Hematologic side effects of long-term immunoglobulin therapy in patients with neurologic disorders". Muscle Nerve. May 18, 2017.
Levine T. D.	Aggarwal R, Rider LG, Ruperto N, et al; "2016 American College of Rheumatology/European League Against Rheumatism Criteria for Minimal, Moderate, and Major Clinical Response in Adult Dermatomyositis and Polymyositis: An International Myositis Assessment and Clinical Studies Group/Paediatric Rheumatology International Trials Organisation Collaborative Initiative". Arthritis Rheumatol; 2017 April 6
Levine T. D.	Kishnani P, Tarnopolsky M, Sivakumar K, Roberts M, Dasouki M, Dimachkie M, Finanger E, Goker-Alpan O, Guter K, Mozaffar T, Levine T, et al. "Duvoglustat HCl Increases Systemic and Tissue Exposure of Active Acid α -Glucosidase in Pompe Patients when Coadministered with Alglucosidase Alfa". Molecular Therapy. Vol 25(5); 2017: 1199-1208
Levine T. D.	Rodriguez-Leyva I, Chi-Ahumada E, Mejia M, Castanedo-Cazares J, Eng W, Saikaly S, Carrizales J, Levine Td, Norman RA, Jimenez-Capdeville M. "Presence of alpha-synuclein in skin from melanoma and Parkinson's disease patients". Movement Disorders in Clinical Practice. March 19, 2017
Subbarao B.	Georgekutty J, Subbarao B, Eapen BC. "Migraine Headaches". Published on AAPM&R Knowledge NOW. September 15, 2016.
Subbarao B.	Subbarao B., Andar H, Mandell S. "The Role of Age in Concussion Recovery in Sports: A Retrospective Look at Mixed Martial Arts Fighters and Their First Knockout Losses". Presentation at the AAPMR Annual Assembly, New Orleans, LA. October 20, 2016.
Levine T. D.	Levine TD, Miller RG et al. "Phase I clinical trial of safety of L-serine for ALS patients". Amyotroph Lateral Scler Frontotemporal Degener. 2016, Sept 2: 1-5
McAuliffe, M.	Simon JJ, McAuliffe M, Smoger D. "Location of Radicular Spinal Arteries in the Lumbar Spine from Analysis of CT Angiograms of the Abdomen and Pelvis". Pain Med. 2016 Jan;17(1):46-51.
Levine T. D.	Levine TD, Saperstein D, et al. "HP Acthae Gel in dermaromyositis and polymyositis treatment registry". Journal of Neurological Disorders. 2016. 4:292-8
Levine T. D.	Levine TD MD, Statland JM MD, and Mazen M. Dimachkie MD. "Emerging therapies for inflammatory myopathies". In Press. 2016.
Langley, N.	Herling PJ, Mohseni BT, Hill DC, Chelf S, Rickert JA, Leo JT, Langley NR. "Impact of Anatomy Boot Camp on Students in a Medical Gross Anatomy Course". Anat Sci Educ. 2017 Jun; 10 (3):215-223 Epub 2016 Sept 23.
Langley, N.	Mahfouz MR, Mustafa A, Abdel Fatah EE, Herrmann NP, Langley NR. "Computerized reconstruction of fragmentary skeletal remains". Forensic Sci Int. 2017 Jun; 275:212-223 Epub 2017 Mar 31.
De Luigi, A.	Gordon AH, De Luigi AJ. Medial Elbow Pain – Young Baseball Medicine & Science in Sports & Exercise. 2017 May; 48(5S):503-4.
Langley, N.	Stadem P, Ginsburg AD, Hafferty F, Lachman N, Pawlina W, Langley N. "Sink, swim, or grab a lifesaver: first year medical student perception of academic performance and tutoring in an anatomy course" Faseb Journal. 2017 Apr; 31 (1 Suppl):732.16.
Langley, N.	Reep M, Wheeler R, Langley NR. "The effects of body mass index on cross-sectional properties of the humeral neck". Clin Anatomy. 2017;30(5):680.
Langley, N.	Wheeler R, Langley NR, Dudzik B. "Body Donation Attitudes of Medical and Physician Assistant Students". Clin Anatomy. 2017;30(5):685.
Langley, N.	Langley NR, Dudzik B. "Sex Estimation Oxford Bibliographies in Anthropology". Ed. John Jackson, New York: Oxford University Press. Available at: http://www.oxfordbibliographies.com/view/document/obo-9780199766567/obo-9780199766567-0152.xml?rskey=rXYygw&result=126 . 2016;().
De Luigi, A.	Diamond M, De Luigi AJ. "Education of Coaches Significantly Reduces Head Impacts During Practice in American Youth Football Players". Sports Rev J. 2016: 2(2):14-5.
De Luigi, A.	De Luigi AJ, Kennedy DJ. "Safety Implications for Lumbar Epidural Injections: Caudal, Interlaminar, and Transforaminal Approaches". Cur PMR Reports Interventional Pain Management. 2016 Jun; 4(2):00-107
De Luigi, A.	Gordon AH, De Luigi AJ. Knee Swelling – Football Medicine & Sciences in Sports & Exercise. 2016 May; 48(5 Suppl):174.

De Luigi, A.	De Luigi AJ. Atypical Causes of Knee Pain: Remembering Your Differential Medicine & Science in Sports & Exercise. 2016 May; 48(5 Suppl 1):174.
Langley, N.	Langley NR. "The lateral clavicular epiphysis: fusion timing and age estimation". Int J Legal Med. 2016 Mar; 130: (2)511-7.
Langley, N.	Langley NR, Jantz RL, Ousley SD. "The Effect of Novel Environments on Modern American Skeletons". Hum Biol 2016 Jan; 88 (1):5-13.
Langley, N.	Langley NR, Wu J. "Skeletal Age-at-Death Estimation from the Pubic Symphysis: A Test of Three Methods in a Chinese Population". Austin J Forensic Sci Criminol. 2016;3:(2):1054.
Langley, N.	Langley NR, Cridlin S. "Changes in Clavicle Length and Maturation in Americans: 1840-1980". Hum Biol. 2016 Jan; 88 (1):76-83.
Langley, N.	Langley NR, Dudzik B. "To Lump or to Split: Age Estimation in Forensic Anthropology". AJPA. 2016;159:(S62)202.
Langley, N.	Dudzik B, Langley NR. "Estimating age from the pubic symphysis: A new component-based system". Forensic Sci Int. 2015 Dec; 257:98-105.
Langley, N.	Wheeler RL, Hampton AD, Langley NR. "The effects of body mass index and age on cross-sectional properties of the femoral neck". Clin Anat. 2015 Nov; 28: (8)1048-57.
McAuliffe, M.	Simon JI, McAuliffe M, Parekh NN, et al. "Intra-vascular penetration following lumbar transforaminal epidural injections using the infraneural technique". Pain Medicine. 2015 Aug;16(8): 1647-49.
Subbarao B.	Subbarao B, Mandell S. "Late Encephalopathy Due to a Single Traumatic Brain Injury: A Case Study". Presentation at the AOC PME Mid-Year Meeting. April 9, 2015.
Levine T. D.	Levine, TD, Saperstein DS. "Routine use of punch biopsy to diagnose smaller fiber neuropathy in fibromyalgia patients". Clin Rheumatol. 2015. Mar 34(3) 413-7
Langley, N.	Shirley NR, Ramirez Montes PA. "Age estimation in forensic anthropology: quantification of observer error in phase versus component-based methods". J Forensic Sci. 2015 Jan; 60 (1):107-11 (Maiden last name: Shirley)
Levine T. D.	Boylan K, Levine TD, Lomen-Hoerth C, et al. "Prospective Study of cost of care at multidisciplinary ALS centers adhering to American Academy of Neurology ALS practice parameters". Amyotroph Lateral Scler Frontotemporal Degener. 2015.; 17(1-2)
McAuliffe, M.	Simon JI, McAuliffe M, Beredjiklian P, et al. "Musculocutaneous Neuropathy Following Insertion of Cosmetic Silicone Biceps Implants: A Case Report". American Journal of Cosmetic Surgery. 2015; 32 (3), 187-190.
Langley, N.	Vas CA, Anthony S, Shirley NR. "The Effects Of Total Hip Arthroplasty On Femur Length and Enthesopathy". Clin Anatomy. 2015;29:(1)102.
Langley, N.	Colvin LD, NC Elwert, Shirley NR. "Secondary Pathologies Of Clavicle Fractures: Length Discrepancies and Osteoarthritic Changes". Clin Anatomy. 2015;29:(1)83.
Langley, N.	Patel S, Sachdeva S, Shirley NR. "Osteophytic Lipping in Response to BMI in the Tibio-femoral and Tibio-talar Joints". Clin Anatomy. 2015;29:(1)97.
Langley, N.	Kuik J, Shirley NR. "A study of obesity: the relationship between BMI and heel spurs". Clin Anatomy. 2015;29:(1)90.
Langley, N.	Baumgarten SE, Ousley SD, Decker SJ, Shirley NR. "A Transparent Method for Sex Estimation Using Refined DSP Measurements of the Innominate". AJPA. 2015;156:(S60)80.
Levine T. D.	"Studies of environmental risk factors in amyotrophic lateral sclerosis (ALS) and a Phase I clinical trial of L-serine". Neurotoxicity Research. (in press).
Levine T. D.	Levine TD. "Small fiber neuropathy: disease classification beyond pain and burning. (manuscript submitted).
Subbarao B.	Subbarao B, Eapen BC. "Essentials of Physical Medicine and Rehabilitation, Fourth Edition". Edited by Walter R. Frontera, Julie K. Silver, and Thomas D. Rizzo, Jr. In press.
Subbarao B	Eapen BC, Subbarao B, Tapia R. "Managing Dismounted Complex Blast Injuries in Military and Civilian Settings: Guidelines and Principles". Edited by Dr. Joseph Galante, Dr. Matthew Martin, and Dr. Carlos Rodriguez. In press.

PUBLISHED CHAPTER/TEXTBOOK

Faculty Name(s)	Scholarly Project Title
Langley, N.	Garvin HM, Langley NR. Case Studies in Forensic Anthropology: Bonified Skeletons. Garvin HM, Langley NR. 1st Edition. Boca Raton, FL: CRC Press; 2019 Nov.
De Luigi, A.	De Luigi AJ, Guerreo LA. Principles of Rehabilitation Medicine. In: Mitra RA, editor(s). The Role of the Team Physician. Chapter 25. New York: McGraw Hill; 2018.
De Luigi, A.	De Luigi AJ, Guerreo LA. The Role of the Team Physician. In: Mitra RA, editor(s). The Role of the Team Physician. Chapter 25. New York: McGraw Hill; 2018.
Langley, N.	Langley NR, Tersigni-Tarrant MT. Forensic Anthropology: A Comprehensive Introduction. Langley NR, Tersigni-Tarrant MT, editors. 2nd Edition. Taylor and Francis Group Publishing; March 9, 2017.
Langley, N.	Langley NR. The Biological Profile: Stature Estimation. In: Langley NR, Tersigni-Tarrant MT, editor(s). Forensic Anthropology: A Comprehensive Introduction. 2nd ed. Taylor and Francis Group Publishing; 2017.
Langley, N.	Langley NR, Fazlollah AE, Tersigni-Tarrant MT. The Biological Profile: Age Estimation. In: Langley NR, Tersigni-Tarrant MT, editor(s). Forensic Anthropology: A Comprehensive Introduction. 2nd ed. Taylor and Francis Group Publishing; 2017.
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APPENDIX A – DIDACTICS SCHEDULE

	8-8:45	9-9:45	
Dates	Monthly Rehabilitation Topics	Bedside Rounds	Interactive sessions
July 2020/Jan 2021	General Rehabilitation Principles		Physiatric examination
July 2020/Feb 2021	Stroke Rehabilitation/Cardiopulmonary		Stroke therapies
July 2020/Mar 2021	Brain Injury/Sports Medicine		Speech communication and swallow strategies
July 2020/June 2021	Geriatrics		Balance therapies
July 2020/June 2021	Spasticity Management/P&O		P&O
July 2020/June 2021	Cancer Rehabilitation/Therapies		Adaptive equipment
July 2020/June 2021	Spinal Cord Injury		Wheelchair and seating evaluation
July 2020/June 2021	Neurology/Electrodiagnosis		Gait aids
July 2020/June 2021	Neurology/Electrodiagnosis		Modalities in therapies
July 2020/June 2021	Rheumatology		MSK ultrasound with Dr. Sollenberger
July 2020/June 2021	Pain		Botox
July 2020/June 2021	Ethics		Billing and coding
July 2020/June 2021	Occupational Medicine		Functional capacity evaluation
Aug 2020/June 2021	Evidence Based Medicine		Medical writing
Sept 2020/June 2021	Pediatrics		Pediatric therapies
Oct 2020/June 2021	Practice Management		
Nov 2020/June 2021	Burn Rehabilitation		
Dec 2020/June 2021	Radiology/Musculoskeletal Ultrasound		

APPENDIX B – Description of HonorHealth Library Services Resources

A. Evidence-based medicine

- The Cochrane Library is a collection of databases that contain high-quality, independent evidence to inform healthcare decision-making. It includes Cochrane Database of Systematic Reviews (CDSR) Cochrane Central Register of Controlled Trials (CENTRAL) and Cochrane Clinical Answers (CCA).
- MedCalc 3000 is a collection of over 520 calculators, clinical criteria sets and decision trees that are indispensable to anyone practicing, teaching or studying evidence-based medicine. With every search you perform, TDS (formerly STAT!Ref) automatically presents links to relevant tools within MedCalc 3000. The complete contents of MedCalc 3000 include: Clinical Criteria Set, Decision Trees, Medical Equations, Unit and Dose Converters, Calculations and Equations by Specialty.
- UpToDate is an ACCME-accredited evidence-based clinical decision support resource provided for healthcare practitioners to help them make the right decisions at the point of care.
- FirstConsult (via ClinicalKey) is an authoritative, evidence-based and continuously updated clinical information resource for healthcare professionals. Designed for use at the point-of-care, it provides instant, user-friendly access to the latest information on evaluation, diagnosis, clinical management, prognosis, and prevention.
- Two-Minute Medicine (via Access Medicine) – concise and curated reviews and summaries of new medical studies. Studies are rated for the appraisal of evidence-based medicine.

B. Journal literature databases:

- The MEDLINE database is the premier biomedical database in the United States. It contains over 23 million references to more than 5,600 journals in life sciences with a concentration on biomedicine generally dating back to about 1949, with some older material. The subject scope of MEDLINE is biomedicine and health, broadly defined to encompass those areas of the life sciences, behavioral sciences, chemical sciences, and bioengineering needed by health professionals and others engaged in basic research and clinical care, public health, health policy development, or related educational activities. Access is provided via 3 different search platforms: Ovid, EBSCO, and National Library of Medicine (PubMed). All HonorHealth journal content is accessible through link resolvers in all 3 search platforms, making it easy for researchers to access full-text articles in real-time.

- CINAHL (Cumulative Index to Nursing and Allied Health Literature) provides indexing for more than 3,000 journals from the fields of nursing and allied health. The database contains more than 2.6 million records dating back to 1981. Offering complete coverage of English-language nursing journals & publications from the National League for Nursing and the American Nurses' Association, CINAHL covers nursing, biomedicine, health sciences librarianship, alternative medicine, consumer health and 17 allied health disciplines.
- Health Business Elite database covers the journal literature concerning the business of health care. It provides full-text coverage of more than 130 well-known administrative journals such as H&HN: Hospitals & Health Networks, Health Management Technology, Modern Healthcare, and many others, Critical for hospital administrators and managers, this subset of Health Business™ Elite includes publications covering topics such as staffing, health care regulation, health care facilities management, marketing, finance and more.

C. Research/Scholarly Activity and Faculty resources

- Research instruments (scientific scales, tests & measurements) from a variety of indexes and sources, such as the American Psychological Association, the National Library of Medicine and ETS.
- Theses & dissertations published by colleges and universities throughout the world (via interlibrary- loan), found in indexes such as ERIC, Networked Digital Library of Theses & Dissertations, OpenTheses.org, Registry of Open Access Repositories (ROAR), and OCLC WorldCat.
- Arizona Department of Health Services (state and local public health data)
- Guidelines Trust (ERCI) and National Quality Measures (from the U.S. Agency for Healthcare Research and Quality)
- TOXNET, a National Library of Medicine database on toxicology, hazardous chemicals, environmental health and toxic releases
- GreenFILE database of published literature concerning environmental issues

D. Faculty Resources

- ProceduresConsult (via ClinicalKey) provides over 300 educational videos on procedures in Emergency, Internal Medicine, Anesthesiology, General Surgery, Cardiology and other specialties.
- Teacher Reference Center, an index of 280 peer-reviewed journals for teachers, covering topics like assessment, best practices, continuing education, and curriculum development

E. Textbooks (electronic & print)

- ClinicalKey contains over 1100 medical and nursing e-textbooks and manuals.
- TDS (formerly STATRef) includes over 140 medical and nursing e-textbooks.
- Ovid Books provides a small collection of LWW medical & nursing reference e-books
- HonorHealth Library Services provides immediate, direct access to over 1,900 clinical texts, 240 leadership & management books, and over 1,800 consumer health & wellness books. These collections cover a wide range of specialty and subject areas (see below). Library Services also provides rapid interlibrary loan (ILL) services for any texts we do not own in our collection. Typical response time on ILL requests is 2 business days. Categories include:
 - a) Primary care/Family Medicine/Internal Medicine
 - b) Obstetrics & Gynecology
 - c) Surgery & Perioperative Care
 - d) Oncology
 - e) Subspecialties including Gastroenterology, Neurology, Orthopedics, Heart & Vascular, Dermatology, Psychiatry, Pediatrics, and Geriatrics
 - f) Business leadership & management
 - g) Health business, management and leadership
 - h) Professional development & certification (“test prep”) materials
 - i) Various consumer health & wellness and chronic disease management topics, in alignment with HonorHealth priorities

F. eJournals, Full-text

- JAMA and JAMA Archives, JAMA Dermatology, Lancet, NEJM available electronically
- Thousands of journal titles available through Medline with Full Text, CINAHL Complete, ClinicalKey and other database collections (title lists available upon request).

G. Drug information

- Micromedex provides information and complete monographs on thousands of drugs. It includes toxicity information, therapeutic doses, pill identification, and dosing calculators. The complete drug monographs in this resource are often considered to be the “gold standard”.
- Lexi-Comp, available through UpToDate, is another drug information product, with features including aural pronunciation of the drugs’ names and chemotherapy regimens.

- FDA Electronic Orange Book (consumer information on generic drugs)

H. Herbals & Supplements

- National Center for Complementary & Integrative Health (NCCIH) resources (including clinical practice guidelines and literature reviews for health care professionals)

I. Patient Education/Consumer Health/Literacy resources

- MEDLINEplus (Consumer health info from the National Library of Medicine)
- CareNotes patient education resources (via Micromedex suite)
- Basics & Beyond the Basics series (via UpToDate)
- ExitCare (via ClinicalKey)
- Healthwise patient education resources
- A wide variety of health literacy toolkits and resources, including resources for Ask Me 3 and TeachBack