

Health and Social Justice Conference Abstracts

Workshops

An Equitable Approach: Using a Community-Based Participatory Approach to Screen and Address Social Determinants of Health in a Pediatric Population

Joshua Arthur, Gene LaBarge, Ellen Barnidge, Katrina Brown

Child poverty is an important driver of adverse health outcomes in children, prompting both the American Academy of Pediatrics and the Academic Pediatric Association to identify it as a key priority. The causal pathway from poverty to adverse health outcomes includes social determinants of health. By identifying and addressing these factors, pediatric clinics can play a vital role in improving the overall health and well-being of their patients. This workshop will provide a framework for addressing health inequities related to food, housing, utilities, diapers and finances and should be useful for doctors, nurses, support staff and public health workers who provide medical care in low-income settings, particularly in the specialty of pediatrics. Community-based participatory approaches have been used in public health to address numerous health inequities. Our program brings together the strengths and unique skills of health care providers, public health researchers, community-based social and financial service agencies, and caregivers of pediatric patients to address social determinants of health. In our workshop we will describe the approach, provide examples of how we are attending to the approach in our partnership work, and share lessons learned and pitfalls along the way to developing our program. First, we will briefly review the scope of child poverty and its effect on child health. We will then discuss examples of ways healthcare systems across the country are working to address resource insecurity and provide participants with a toolkit of practical tips including presentations from faculty at multiple institutions. We will highlight broad concepts that can be applied to any social determinant of health, including the formation of a multidisciplinary task force and training of health advocates. Participants will then break into small groups to discuss potential interventions for social determinants of health at their own institutions. The workshop will conclude with the opportunity for participants to share their ideas. Upon completion of this workshop, participants will have a clear understanding of how medical systems can address social determinants of health and will feel empowered to apply an intervention in their own clinical practice settings.

DEAR Man: A Trauma-Informed Approach to Addressing Racism in the Clinical Setting

Roy Collins, Alaina Curry and SNMA Volunteer

In the American Public Health Association's advocacy statements, it notes that despite major advances in public health, biotechnology, economic prosperity, and wealth, race-based differences in health outcomes are fueled by racism, manifested on cultural, institutional, interpersonal, and internalized levels. Even perceptions of discrimination based on race/ethnicity are prevalent and are associated with substantially lower assessments of overall care, with the lowest ratings resulting in potentially poorer outcomes. However, there is little discussed from provider's perspective. We created the DEAR MAN Workshop. The workshop aims to define trauma, empathy, and thought distortions for healthcare providers. The program includes real-life scenarios in which these concepts can be applied in situations commonly experienced by the participants. Participants are encouraged to reflect upon their previous experiences and cultural awareness before and after completion of the program and leave with applicable takeaway action plans in order to properly implement the lessons of the workshop in the real world. 'DEAR MAN' is an acronym for 'Describe' 'Express' 'Assert' 'Reinforce' '(Stay) Mindful' 'Appear Confident' and 'Negotiate,' tactics used to improve effective communication in interpersonal conflicts. The workshop aims to not only teach participants to reflect upon and discuss cultural competency, but also to utilize the DEAR MAN principles to resolve conflict when it arises.

Lean Six-Sigma in Healthcare Laboratories: The Unclaimed Opportunity

Katie Castree

This interactive presentation will share lessons learned from the implementation of Lean Six Sigma in the healthcare laboratory, including real-life examples from a quality practitioner who has applied the tools, methodologies, and techniques. Specific areas of focus within the case studies will be challenges faced, how each was handled and overcome, and the real-world solutions that led to results. In today's world where we must sustain a culture of excellence in a world of disruption, innovation, and change, this presentation will discuss how the healthcare laboratory is an unclaimed opportunity for better patient care. With the multitude of challenges facing healthcare systems, the time is now to claim the opportunity that healthcare system labs can provide for quality improvement leading to better patient care. Healthcare systems across the country are discovering that a hospital or clinic's laboratory can be one of their most vital

strategic assets. Labs have a direct impact on the quality of service physicians receive, and the patient care they deliver. At peak performance, labs can be a new business generator and an extension of a health system's brand. The pre-analytical phase of the lab process occurs first. This phase may include specimen handling issues and delays that occur even prior to the time the specimen is received in the laboratory. Important errors can occur during the pre-analytic phase in specimen handling and identification or in the form of delays. Therefore, the pre-analytical phase must have rigorous processes in place to avoid unwittingly allowing problems or errors to travel further "downstream" and to avoid delays in testing results which impact patient care. The second phase is the analytic phase, which includes what is usually considered the "actual" laboratory testing or the diagnostic procedures, processes, and products that ultimately provide results. The post-analytic phase is the final phase of the laboratory process, which culminates in the production of a final value, result, or diagnostic pathology report (Lab CE, "Pre-analytical, Analytical, and Post-analytical Phases of Testing"). This presentation will share laboratory case studies from the pre-analytical phase of the lab process - a best practice called Phlebotomy Swarm

Learning While Serving: An Opportunity for Vocational Development as a Student Physical Therapist in Southern Belize

Carol Beckel, Caroline Kelly, Emma London

This presentation will examine the role of an academic institution in providing students enrolled in a professional program the opportunity to gain knowledge not only in a career but a vocation. While it could be assumed that students training as health care professionals should naturally identify with vocational aspirations, it requires more intentionality. This presentation will examine the case of an international clinical placement offered through the Program in Physical Therapy at Saint Louis University and the alignment of this opportunity with academic learning outcomes, program vision, and professional standards. The target audience for this presentation is students, staff and faculty in professional programs at the University interested in engaging students at the vocational level of their profession. This presentation will outline the alignment of the University learning outcomes, the Program Vision, and American Physical Therapy Association Code of Ethics and Core Values with the learning opportunities provided through an international clinical experience at Hillside Health Care International. Two students completing clinical placements at HHCI will reflect on the impact of the experience on their development as physical therapists.

Music Therapy in Health Care: Past, Present, and Future

Crystal Weaver and Andrew Dwiggin

The idea of music as a healing influence which could affect health and behavior is as least as old as the writings of Aristotle and Plato; however, the music therapy profession formally began in the 20th century after World War II when community musicians went to Veterans hospitals around the country to play for the thousands of veterans suffering both physical and emotional trauma from the wars. The patients' notable physical and emotional responses to music led the physicians and nurses to request the hiring of musicians by the hospitals. Since the establishment of music therapy, the profession has expanded beyond Veterans hospitals. The American Music Therapy Association now defines music therapy as an established health profession in which music is used within a therapeutic relationship to address physical, emotional, cognitive, and social needs of individuals. Today, music therapy is utilized throughout the world in countries, such as: England, Argentina, Australia, India, South Korea, and the United States. Music-based interventions can now be implemented in multiple settings, such as: burn units, traumatic brain injury units, behavioral health units, rehabilitation centers, extended care facilities, and oncology clinics. This workshop will take attendees on a journey through the past, present, and future of the music therapy profession.

Value Based Healthcare: A New Flight Pattern

Robert Salter

In health care, the days of business as usual are over. Around the world, every health care system is struggling with rising costs and uneven quality despite the hard work of well-intentioned, well-trained clinicians. Health care leaders and policy makers have tried countless incremental fixes—attacking fraud, reducing errors, enforcing practice guidelines, making patients better “consumers,” implementing electronic medical records—but none have had much impact. At its core is maximizing value for patients: that is, achieving the best outcomes at the lowest cost. We must move away from a supply-driven health care system organized around what physicians do and toward a patient-centered system organized around what patients need. We must shift the focus from the volume and profitability of services provided—physician visits, hospitalizations, procedures, and tests—to the patient outcomes achieved. And we must replace today's fragmented system, in which every local provider offers a full range of services, with a system in which services for particular medical conditions are concentrated in health-delivery organizations and in the right locations to deliver high-value care.

Panels

A Longitudinal Underserved Community Curriculum for Residents

Christine Jacobs, Kanika Turner, Michael Donovan

Cultural competence is a key strategy for addressing growing health disparities. Postgraduate medical cultural competence education has traditionally been a knowledge-based approach to diverse cultural beliefs, values and behaviors. However, didactic approaches may fail to acknowledge diversity within groups and potentially reinforce stereotyping. A more effective approach may be to engage residents directly with patients to explore social, cultural and economic factors that influence healthcare decisions and treatment adherence. This experiential skills-based approach can equip physicians with tools that are effective across diverse populations. Although the relationship between provider cultural competence and clinical outcomes needs further study, research suggests that lack of attention to cultural issues can negatively impact patient satisfaction and treatment adherence. Educators recommend multifaceted cultural competence education taught throughout the duration of medical education. However, there is limited data on longitudinal residency curriculum to increase the cultural competence of physicians in an urban underserved area. In 2011, the Saint Louis University Family Medicine Residency opened, with a three-year Longitudinal Underserved Community Curriculum designed to produce well-trained family physicians to improve access to quality health care for underserved patients. We will present a panel discussion by the lead faculty, a current resident, and a recent graduate to present this curriculum, parts of which can be generalized to other health and human service educational programs at SLU, as well as undergraduate programs with a community focus.

Communication, Social Justice, and Human Flourishing

Timothy Huffman, Jennifer E. Ohs, April Trees, Daniela Pedraza

Human health and wellbeing are complex. Bodily, relational, communal, and cultural factors all influence each other. This panel focuses on the intersection of communication, human thriving, and justice in society. It takes up the ways unjust social conditions negatively impact communicative and bodily wellbeing. It also considers how communication can be used to seek human flourishing and create social arrays that are more fair and free. Panelists will take look at communication

phenomena ranging from interpersonal, organizational, communal, cultural, rhetorical, and mediated contexts and related it to various aspects of human thriving.

Conscientious Action in Health Care

Jason Eberl, Becket Gremmels, Christopher Ostertag, Abram Brummett

In 1973, in light of the U.S. Supreme Court's decision in Roe v. Wade legalizing abortion, the U.S. Congress passed the Public Health Service Act – generally known as the "Church Amendment" – which protects the right of health care institutions, and individual providers employed by such institutions, that receive federal funding to refuse to offer abortion or elective sterilization procedures. Recently, debate over whether health care institutions or individual providers should have a legally protected right to conscientiously refuse to offer legal health care services to patients who request them has grown exponentially due to expanded legalization of physician-assisted suicide/aid-in-dying in various countries and U.S. states, as well as greater recognition of the rights of transgender individuals who may request gender transforming/confirming hormonal treatments or surgeries. Other cases of conscientious refusals to provide health care services involve pharmacists who refuse to fill prescriptions for emergency contraception and refusals by some fertility specialists to provide assisted reproduction services to LGBT individuals. A counterpoint to arguments supporting legal protections for conscientious refusals advocates similar protections for providers who offer morally contested services against the policies of the institutions in which they are employed. This panel will comprise three presentations each providing a distinct perspective concerning whether there should be legal protections for individual health care providers or institutions either to conscientiously refuse or to conscientiously provide specific health care services.

Disability, Race, and Barriers to Health and Life in Community

Elizabeth Pendo, Harold Braswell, Kimberly Lackey

Nearly 30 years after passage of the Americans with Disabilities Act (ADA), inequities in health and health care for individuals with disability persist. The intersections between disability, race, and ethnicity compound these concerns. This panel will offer different perspectives on these inequities, and examine barriers to health care services, hospice services, and life in the community, and offer opportunities for progress. The panel will draw upon the initial findings of a report, the Healthy People 2020 Law and Health Policy Project Disability and Health Report. The report addresses the role of law and policy in progress toward specific national disability health

goals: (1) reducing delays in receiving primary care and preventive services; (2) reducing barriers to independent living and full participation in community life; and (3) improving data about people with disabilities necessary to address disability health disparities. It will outline the legal framework applicable to these goals and include brief case studies describing innovative initiatives or policies that are successfully addressing these subject areas at federal, state, and local levels. Many people will experience disability at the end of life. This panel will outline the significant disparities in access to hospice by African Americans and situate the black community's historic "mistrust" of hospice in the context of anti-black housing discrimination. Such discrimination is significant because, as a result of the structure of the Medicare Hospice Benefit, US hospice care is primarily based in the home. It will argue that this discrimination has not figured into bioethics discussions of "freedom" at the end-of-life, which primarily has focused on physician-assisted suicide (PAS). It will argue for self-conscious "racialization" of "freedom" at the end-of-life, which will thicken our conceptual repertoire, and further mobilize the resources necessary to alleviate racist disparities in access to US hospice care. The panel will address how discrimination and barriers to independent living impact the lives and health of people with disabilities in the St. Louis community. It will also outline how, through the work of community partners, people with disabilities are being empowered to increase their health and independent through choice and opportunity.

Health Criminology Panel: Perspectives on Prevention, Clinical Intervention, and Policy at the Intersection of Health, Crime, and the Criminal Justice System

Jennifer Bello Kottenstette, Michael Vaughn, Lisa Jaegers, Christopher Collins

This multidisciplinary panel will bring together faculty from the School of Social Work, Doisy College of Health Sciences, and the School of Medicine, each with a diverse perspective on ways to impact the health and well-being of marginalized populations at-risk for and/or already engaged with the criminal justice system. The three panelists serve as leaders of SLU's Health Criminology Research Consortium (HCRC). The HCRC is an interdisciplinary collaboration of SLU researchers and national partners investigating the nexus of health, crime, and the criminal justice system as well as how to improve effectiveness in the areas of prevention, clinical intervention, and policy. The session will begin with an overview of the mission of the HCRC, a description of its two research clusters, as well as a vision for the future that includes development of the Dismas Clark Center. The first presenter will discuss the development of the Dismas Clark Center, a lifespan prevention

and intervention approach that includes the advancement of local, national, and international efforts that lead to more effective policy, practices, and outcomes for those not only in the criminal justice system but also research and practice focused on life-course risks that often lead to early conduct problems and short-term (e.g., detention, jail) and long-term (e.g., prison, parole) contact. The first panelist will describe specific examples of ongoing health and justice system research and implications for informing policy to improve the health of vulnerable individuals in our society who are at high risk of interfacing with the criminal justice system. The second panelist will describe SLU's Transformative Justice Initiative. This program capitalizes upon interprofessional expertise for justice facility reform using participatory approaches to workplace health promotion and transition interventions. The final panelist will lead a discussion on how patient care in a correctional health setting informed a research program to address the pre-pregnancy health of incarcerated women with substance use disorders.

Health Law Through Experiential Learning

John Ammann, Josephine Butler, Amy Sanders, Amanda J. Schneider, Cora Faith Walker

This panel will bring together current law students working in required experiential learning field placements, alumni who completed work in these placements, and current community partners who supervise these students. The Panelist will discuss a range of ways law students and lawyers engage with health law and social justice through policy advocacy, daily lawyering, and impact litigation. The panel will also explore the importance of involving students in this work as a part of law student professional formation and the lawyer's professional call to further social justice in our civil society.

Health, Legal and Ethical Implications in Allocating Scarce Resources Post-Mass Casualty Events

Joanne Langan, Terri Rebmann, Rachel Charney

The number of natural disasters and the negative impact of these events have been increasing over the past decade. It's essential that agencies and communities prepare for disasters by developing surge capacity in the form of extra beds, equipment/supplies, medication or vaccine, and healthcare personnel so that there is sufficient capability to provide care for disaster victims. Many hospitals and regions have invested resources in building caches/stockpiles of medication, supplies, and equipment to be deployed during a disaster. In addition, the CDC has developed the Strategic National Stockpile, a repository of medication and supplies that can be

deployed after a disaster. Despite extensive planning and stockpiling, the U.S. simply does not have sufficient resources to address everyone's needs during a disaster. Historically, low-income individuals, pregnant women, newborns and/or infants, and those with medical or mental health challenges are most at risk of severe complications, negative outcomes, or death during disasters. In addition, healthcare personnel are at high risk of exposure, infection, or death during disasters. Decisions need to be made regarding which patients or healthcare personnel will receive treatment or vaccine when supplies are limited and which will be turned away or given supportive therapy only. This panel discussion will address the legal and ethical considerations involved in disaster planning, including the social justice issues that arise during disaster response. Crisis standards of care for hospitals and other healthcare agencies that have already been developed will be discussed and presented, and gaps that still exist in disaster planning will be explained. Additionally, novel methods of meeting surge needs within existing hospital planning and structure will be discussed.

Homelessness, Justice, and Wellbeing

Tim Huffman, Debra Rybski, Chris Franco

This panel takes up the question of health and wellbeing related to the social justice issue of homelessness. Living without stable shelter has a variety of negative health outcomes. People without homes are more likely to suffer from health issues that range from asthma to tuberculosis and diabetes to hepatitis, depression and other mental health issues, and being the victim of crime. Further, living without shelter also effects people's ability to relate interpersonally, participate organizationally or politically, and it subjects them to cultural constructed stigma. The panelists in this project each describe a research project that takes up some issue related to homelessness and wellbeing.

How Christian Anthropology Can Enhance Ethics of Health Sciences Research, Clinical Care, and Public Health

Michael McCarthy, Mary Homan, Michael Rozier

Although the Christian understanding of the human person and human community is not universally held, our panel will show that a Christian anthropology can provide correctives to what is lacking in many areas of contemporary health sciences. Each panelist will take on three tasks. First, each will describe key challenges in their given area of health sciences. Second, they will offer aspects of Christian anthropology that are relevant to their discipline. Third, and finally, the presenter will describe how the challenges of their discipline would be lessened by the insights of the human person and human community offered by Christian tradition.

Impact of Medical Students on Health Prevention in Community Outreach in the Saint Louis Area

Aimee Nguyen, Anh Ta, Loretta Corvin, Michael Railey

This panel is designed to review three different community outreach programs in which SLU SOM students have participated, focusing on the effects on both student education and community health. The first part of the panel will be a brief introduction of the different organizations, their missions and any specific populations they target. The second part will be focused on different benefits among the organizations for medical students as well as disadvantages of choosing one experience over another. The third section will examine the benefit of these outreach programs to the Saint Louis community. The final part is to talk about the overall benefits and disadvantages of medical student volunteering within these different groups and ways it can be improved and further studied. Ideally, questions from the panel will be research topics for others including student interest groups and community partners. Questions from the moderator will be developed from a survey sent out to SLU SOM students involved with student-run health initiatives. A literature review of student-run healthcare initiatives will be used to develop the survey.

Interprofessional Geriatric Assessment Clinic: A Strategy for Teaching and Service

Julia Henderson-Kalb, Marla Berg-Weger, Jill Fitzgerald, Andrea Vaughan

Since its inception just over a year ago, 94 students have participated in the Geriatric Assessment Clinic. Furthermore, 31 patients and families have been provided with a well-rounded, holistic screening of their physical and cognitive health at no cost to them. This panel will provide an overview of the clinic, including faculty and student perspectives on the experiential interprofessional learning occurring at the clinic, how the clinic is meeting the needs of a vulnerable population and strengths and areas for development within the clinic. It will also include a discussion about current/potential research focus within the clinic as well as how this model of experiential learning could be used in other situations.

Social Justice after Ebola: Pandemics and Outbreak of Emerging Pathogens

Rob Gatter and Terri Rebmann

There are many lessons to be learned from Ebola crisis of 2014-2016. Chief among them is that biosecurity and population health require social justice. The standards and process for quarantine raise fundamental legal, ethical and

practical concerns, as do policies and procedures for implementing differing levels of protective measures across various settings. For example, situating individuals ill with a contagious and dangerous pathogen in "regular" hospitals as compared to centers with biocontainment units. Changing control measure recommendations mid-way through an infectious disease crisis through a political solution of acting with an "abundance of caution" without basing the new guidelines on scientific evidence raise the same concerns. This panel will address these concerns in an interdisciplinary manner, concluding that settling on fair policies and procedures as part of infectious disease disaster preparedness and then sticking to those policies and procedures during a crisis is essential to social justice.

**Undertaking Research with Marginalized Populations:
Lessons from the Field**

Katie Heiden-Rootes, Lee Smith Battle, Gretchen Arnold, Max Zubatsky

Research is not a neutral endeavor, despite its empirical origins. In many communities it may serve an intervention that disrupts or changes their lives. Though this change may not always be positive even with the good intentions of the researcher. Faculty members from several disciplines will share their experience in undertaking research with marginalized populations. One faculty member who conducts studies with LGBTQ young adults and their parents from religious homes; Another researches the impact of nuisance laws on battered women; and finally, the third conducts research focuses on teenage mothers and their families. Issues to be addressed include research ethics; participant recruitment; participant and researcher vulnerability; data collection; analysis; and presentation of findings. The ethical imperative of doing justice to participants' lives will be highlighted and discussed in light of the implications of study findings for social policy, clinical practice, and professional education. The motivation of the researcher and the question of who should be telling their stories will be discussed. Additionally, how the researchers personally and professionally are giving back to the communities they research from will also be highlighted. The moderator for the panel will be a faculty member of SLU who also works with a vulnerable population in geriatrics. The totality of the panel and moderator will offer a range of experiences and places for self-reflection on the part of current and future researchers.

Papers

Improving Student Wellness and Creating a Culture of Health through an Wellness-Based Interprofessional School Health (WISH) Clinic

Anthony Breitbach, Kathrin Eliot, Leslie Hinyard, Kemba Noel-London

In urban and underserved areas, schools are logical places to provide wellness, health, and preventative care for young persons. Access to high-quality integrated care, provided in a familiar school-based setting, represents best practice when health care resources may be limited. Additionally, managing life threatening issues such as traumatic brain injury, asthma or anaphylaxis requires coordinated care with a rapid response. School Based Health Centers effectively deliver care, but large gaps in knowledge remain. For example, clinic use can be limited by lack of parental consent for services and there is little information on the optimal mix of services for improving academic and health outcomes. Literature indicates that SBHCs offering multiple services are associated with the greatest reduction in ED utilization; however, the effect of provider team composition on health outcomes has not been researched. There is evidence that an Athletic Trainer in a school can decrease ED utilization and more efficiently provide musculoskeletal care and that incorporating a Registered Dietitian can promote healthy food choices and decrease risk of diet-related chronic disease. Saint Louis University provides an AT and RD to augment existing nurse practitioner and behavioral health services in the SBHC at Roosevelt High School in St. Louis, MO. This study aims to answer the research question: How does integrating an interprofessional team including an athletic trainer and a registered dietitian in a school based health clinic improve access, utilization, satisfaction of services and knowledge of the respective professions? This question will be tested with the following aims: Aim 1: Improve clinic utilization and the scope of services provided by the WISH clinic. Electronic Health Record (EHR) data and school census information will be used to quantitatively evaluate clinic utilization comparing three years prior to AT integration compared to the three years post AT integration and two years post RD integration. Aim 2: Assess knowledge of the AT and RD professions in the school community. Aim 3: Assess the effectiveness of a team training intervention on provider satisfaction and collaboration skill development. The team training intervention will be developed based on team areas for improvement as identified by the Health Care Team Fitness Test (HCTFT). Post-intervention change will be assessed through the HCTFT and semi-structured interviews with the provider team. The goal of

this project is to begin to demonstrate the utility of AT and RD placement in SBHCs and the impact on clinic utilization, knowledge of roles and services of the AT and RD professions, and interprofessional team development. It is hoped that we can demonstrate a sustainable model that can be replicated with underserved populations in urban and rural school settings.

The Limits of Humanae Vitae in Today's Culture

Cara Buskmiller

Humanae Vitae, a seminal encyclical by Pope Paul IV, celebrates its fiftieth anniversary this year. Humanae Vitae was written before huge shifts in sociology occurred, particularly in the spheres of marriage and sexual behavior. The language of Humanae Vitae is unclear on whether contraception is impermissible in all situations on voluntary sexual activity, or whether contraception is illicit only in sacramental marriage only. While most sexual activity was enshrined in the latter situation while Pope Paul VI wrote Humanae Vitae, in today's world, sexual activity is usually found outside of sacramental marriage today. Clearly, adherence to Humanae Vitae requires acceptance of the premise that contraception is illicit in sacramental marriage. Catholic scholarship has recognized that in involuntary sexual activity, prophylactic and emergency contraception, as long as there is no embryonic death, is licit. But there is a vast spectrum of sexual activity between these nodes. Do Pope Paul IV's arguments about contraception extend to non-sacramental marriages such as legal marriages, common law marriages, civil unions, temporary exclusive relationships, casual hookups, and voluntary sex work? There is a deeply habituated culture of sexual activity outside of sacramental unions meant to be permanent, and this culture especially extends to the poor and to minorities. Thus, there is additional work in the sphere of moral theology to be done, to determine whether contraception can be licit with any intention in any of these situations. This paper proposes to examine these situations one by one, working from an understanding of the biological, psychological, philosophical, and theological aspects of sex and the will, to sketch out a preliminary understanding of the liceity of contraception outside of sacramental marriage.

Maternity Homes: Social Support and Social Justice for Homeless Pregnant Women

Cara Buskmiller

Lack of social support is associated with adverse obstetric outcomes. Maternity group homes (MGHs), residential programs for pregnant women that provide various social

services, have been found to improve social support in small studies. This cross-sectional survey aimed to confirm that MGHs improve social support, determine which women report the greatest improvement in support associated with MGHs, and identify a way to predict which women may benefit most from MGHs.

The Ethics of Interstitial and Cesarean Scar Ectopic Pregnancies: Four Cases and a Review of the Literature

Cara Buskmiller

Catholic bioethicists have extensively addressed extrauterine tubal pregnancies, which represent the great majority of ectopic pregnancies. However, additional management options have been developed for the other 7-10% of ectopic pregnancies. Using two cases of interstitial pregnancy (IP) and two cases of cesarean scar pregnancy (CSP) seen at St. Louis University, a Catholic tertiary care center, this article discusses options including expectant management, systemic methotrexate, intragestational methotrexate, intragestational potassium chloride, uterine artery embolization, dilation and curettage, vasopressin use, cornuostomy, cornual wedge resection, CSP evacuation, CSP scar excision, CSP salvage, and hysterectomy. Cornual wedge resection, vasopressin use, and CSP scar excision are morally acceptable; less clearly licit are aspiration of gestational sac contents, cornuostomy, gestational excision for CSPs, and methotrexate. Certainly, illicit are any techniques leading to direct abortion such as D&Cs on live embryos or fetuses, double-balloon catheter placement, and use of potassium chloride.

Cryopreserved Embryo Adoption: Not Now, Maybe Later

Cara Buskmiller

Cryopreservation and vitrification are techniques employed in fertility clinics to preserve embryos not used in in vitro fertilization cycles. These frozen embryos carry the dignity of persons, and it has been suggested that they could be unfrozen and adopted. Experts have offered divergent opinions on the legitimacy of this practice. This paper reviews the debate and offers a phenomenological description of embryo adoption considered in itself, as well as reflections on current circumstances which the author proposes make embryo adoption not only imprudent but illicit.

Conjoined Twins: Is Separation About Quality or Quantity of Life?

Mackenzie Carroll

With time and the advancement of technology, there has been an increased desire to separate conjoined twins. This begs the

question, is it always necessary to attempt to separate conjoined twins? I will argue that, simply because technology allows for it, this is not grounds for attempting separation in every case of conjoined twins. Conjoined twins ought to be handled on a case by case basis, with medical professionals acting in ways that align with the moral beliefs of all those involved. This includes the morals of the professionals, the family, and any spiritual beliefs. The medical community ought to do whatever possible refrain from putting cases of conjoined twins in the public spotlight with the intention of allowing moral decisions to be made without scrutiny from society. In certain cases of conjoined twins, attempts at separation have presented medical professionals with the most gruesome of decisions: sacrificing one twin to save the other. A great number of the medical community believe that this is the lesser of two evils, and generally more morally acceptable than passively allowing the death of both twins. I will argue that this is not the case. This form of sacrifice is no different from other sacrificial practices that are viewed as impermissible, therefore this form cannot be accepted as permissible. Quality of life as well as quantity of life should be considered when morally deciding how to handle these special cases.

Shared Technology, Competing Logics: Use of Prescription Drug Monitoring Programs in Healthcare and Law Enforcement

Liz Chiarello

As our society becomes increasingly prone to surveillance, social science researchers have become fascinated by how new technological tools help to reshape professional work. From police body cameras to big data analytics in law enforcement and electronic medical records in healthcare, technological advances have transformed various workers' daily routines. However, most research on technological innovation focuses on changes within a single field. This leaves unanswered questions about how technologies that are shared across fields impact work in each field and relationships between fields. This research focuses on the contemporary U.S. opioid crisis, a social problem shared across the fields of healthcare and criminal justice, to examine how state-level Prescription Drug Monitoring Programs (PDMPs) shape frontline work and interprofessional relationships. I focus on two types of professionals who use this data—enforcement agents such as DEA, board investigators, and local police and pharmacists, underexamined healthcare professionals who exert significant discretion over opioid provision. I ask: 1) How does the PDMP transform practice? 2) How does the PDMP affect workers' relationships to professionals in adjacent fields? and 3) Under what circumstances do workers resist field change wrought by PDMP use? This paper concludes by

discussing the implications of new surveillance technology for relationships within and between professional fields and the potential consequences of intense monitoring for patients' access to care and exposure to criminal justice.

Preimplantation Genetic Diagnosis & Savior Siblings: A "Slippery Slope" to Eugenics

Sarah Coe

In my paper, I will argue Preimplantation Genetic Diagnosis (PGD) is impermissible when used for the creation of Savior Siblings by showing the serious eugenic implications that arise when PGD is used in the creation of Savior Siblings and how history has proven eugenics to be dangerously impermissible. I will begin by providing general background information on PGD including what the procedure is, why and how the procedure is performed, a general history of PGD in both the United States and across the world and an introduction to the ethical issues that surround PGD. This background information will also include other reproductive technology such as In Vitro Fertilization (IVF) that is often used in conjunction with PGD. I will introduce case studies that personify the issue and gives a closer inspection of how personal the ethical issue of PGD can become. I will explain how PGD diagnosis is often used in the creation of Savior Siblings. I will provide background information on what a Savior Sibling is and the purpose of creating Savior Sibling via PGD. I will connect the creation of Savior Siblings to the eugenics movements by analyzing how the creation of savior siblings could be a 'slippery slope' eugenics movement. Next, I will move onto my second element of my thesis explaining why eugenics is impermissible. I will look at the eugenics movement through a historical lens and analyze the negatives consequences of previous eugenic movements and the serious physical and physiological effects eugenics has caused. Specifically, I will show how healthcare technology abuse in the past has led to dangerous eugenic movements. I will also address counter-arguments to my position and attempt to refute those counter-arguments. I will refute these arguments by stating the harm of eugenics outweighs these concerns and analyze other negative ethical implications of Savior Siblings such as limited medical body and government regulation of PGD, especially in terms of legal guidance.

Between the Cracks: Identifying and Caring for Young Carers - Literature Review

Roy Collins

Young Carers are youth that care for the chronically ill parents or guardians. With the rise of Metabolic syndromes, opiate and other drug abuse and HIV in adult populations, there has been a rise in the number of youths caring for their

parents. This is an overlooked and vulnerable population that requires special consideration by health care professionals. This abstract presents a review of literature on the demographics and psychosocial and mental health needs of the young carers. The studies that have been reviewed on young carers highlight the need for more research. This small and difficult to reach population requires innovative and large sampling research designs to accurately identify young carers and develop interventions to address the unique psycho social and mental health needs of the population. Looking ahead, a pilot study directed at potential interventions for youth caretakers will be conducted.

Discovering the Goods of Aging

Kirsten Dempsey

The aging population is significantly growing and the market for retirement communities, nursing homes, nurses, and caretakers are growing with it. Current philosophical and gerontological theories on aging emphasize an active, social, and dynamic aging period, addressing goods insofar as they relate to self-actualization and the liberal ideal of agelessness. They often miss the goods available within the frail, sickly side of aging. To remediate this gap, I draw on Edmund Pellegrino's four-fold notion of the good of the patient to articulate goods of aging that encompass both illlderly and welllderly (as Harry Moody terms the less healthy and healthier elderly) among the 65-and-older population. The uniqueness of this project comes from my specific accumulation of six goods of aging, taking Pellegrino's four goods and adding an additional two, in attempt to form a comprehensive account for goods of aging possible within all states of the older population.

Pope Francis' Bioethical Vision

Jason Eberl

Unlike his predecessors, particularly Popes John Paul II and Paul VI, Pope Francis has not put himself at the forefront of tendentious issues in bioethics, noting that the Roman Catholic Church's position on abortion, human embryonic stem cell research, cloning, contraception, and euthanasia are well-known. Some commentators have construed Pope Francis's de-emphasis of such issues to signal a potential change of authoritative Catholic teaching. A careful review of various addresses, as well as assertions made in authoritative magisterial documents such as *Evangelii Gaudium* (2013) and *Laudato Si'* (2015), however, make clear that Pope Francis affirms the Church's teaching on these issues as defined by his predecessors. Nevertheless, he has proffered an additional moral lens through which to evaluate them, namely, how they factor into the "culture of waste" that informs global society's "sin of indifference" to both environmental degradation and

these associated life issues. In this regard, Pope Francis is recovering the “consistent ethic of life” popularized by the late Joseph Cardinal Bernardin. The moral conclusions Pope Francis draws, far from advancing any sort of departure from previous Catholic teaching, instead provide an even stronger foundation for supporting a “culture of life” that crosses conservative and liberal political boundaries. I elucidate the continuity and development of the Catholic bioethical vision as evident in Pope Francis’s writings, interviews, and addresses, as well as the implications thereof for the issues of abortion and euthanasia. Although I will emphasize the continuity of Pope Francis’s teachings with his predecessors, it is undeniable that he has advocated for and exemplified a shift in the Church’s approach to bioethical issues, changing the tone from mere condemnation to an emphasis on mercy and joy. He has also reoriented Catholic teaching from a narrow focus on particular issues to the wider context in which such issues arise and must be addressed systemically in order to create a “culture of encounter and peace.”

Parenting in a Technological World: Social Justice and Focal Practices in the Neonatal Intensive Care Unit Annie Friedrich

As physician and bioethicist John Lantos aptly notes, neonatal intensive care units (NICUs) are morally charged spaces in which parents have to make difficult decision about the treatment of their newborn, decisions often complicated by the parents’ lack of health literacy. Health literacy is the ability to obtain, process, and understand health information to make knowledgeable health decisions, and studies have shown that about one-in-three parents in the NICU have suspected limited health literacy. The growing use of technologies exacerbates this lack of health literacy, as parents are increasingly unfamiliar with the complicated machinery that is keeping their baby alive. While improved technologies have greatly increased infant survival rates, they also create issues of social justice, as parents as a social group are often unable to make fully informed decisions, thus damaging the parental role and causing parental stress. If parents do not fully understand what is going on, how can they make the decision that is best for their child and their family? In this presentation, I will argue that the technological character of the NICU fundamentally alters the parenting role and thus creates a divide between parent and child. By using Albert Borgmann’s notion of focal things and practice, I will argue that in order to overcome this divide and restore social justice in the NICU, we can begin to articulate parenting a child in the NICU as a focal practice around which the family can come together to create a practice of engagement that centers their lives in morally meaningful ways. By working with parents to increase their health literacy and their

understanding of the technology, health providers can restore the importance of the parenting role in a technological world and can begin to remedy issues of social justice in the NICU.

Bioethics and Bonhoeffer: Modern Selves and Moral Reasoning Dallas Gingles

Bioethicists have paid surprisingly little attention to Dietrich Bonhoeffer, and Bonhoeffer scholars have paid surprisingly little attention to bioethics. I offer a small corrective to that neglect in this paper by developing an account of Bonhoeffer’s approach to moral reason as related to current bioethical concerns. In a brief first section, drawing on the recent work of Gerald McKenny, I sketch a few of the contemporary Christian bioethics questions about the normative status of human nature. In the second section, I relate Bonhoeffer’s accounts of human nature and natural goods to his understanding of the divine mandates, arguing that the mandates a primary key to understanding Bonhoeffer’s account of moral reason. In the third section I test this account of Bonhoeffer against understandings of the self in contemporary bioethics. I argue that the emphasis on autonomy ignores the social dimension of moral decision-making, and that this contributes, ironically, to the viciousness of social conversations about bioethical issues. Bonhoeffer’s account might go some way toward rectifying those problems by confusing the lines that define ‘conservative’ and ‘liberal’ approaches about bioethical issues like transgenderism or transhumanism. On the one hand, Bonhoeffer’s approach might correct the ‘liberal’ position by strongly arguing that we are not constituted by, nor are we reducible to, our individual wills (naïve autonomy). On the other, it might correct the ‘conservative’ positions by arguing that the plasticity intrinsic to the social framing of goods allows for more malleable social norms than the ‘conservative’ position countenances.

Medicine: A Modern Day Freak Show Lohitha Guntupalli

The freak show has traditionally been characterized as a space where those that were ostracized by the community due to their phenotypical appearances or other extraordinary features were displayed. The condition of the Freak was thought to be due to possessing unfortunate circumstances or having a bad aura. However, with the medicalization of society, and the shift from the miasmatic theory to medical somaticism, the malformations that characterized freaks are explained by various medical diagnoses. As the Human Rights Movement grew momentum, we witness the disappearance of traditional freak shows and its restructuring to create modern freak shows. In this critical review of the progression of freak shows, the author argues that medicine continues to perpetuate freak shows within 1) the rhetoric utilized in case

reports, 2) the way physicians address patients behind closed doors, and 3) the way in which novel patients are used as teaching experiences. The vernacular used when referring to patients with unique diseases and conditions closely parallels that way in which freaks were described and regarded. Postmodern medicalization of the body, the normate body becomes the definition of order, and those that diverge are revered in awe and fascination. These individuals are perceived as distinct and having differing characteristics or personality traits from those that conclude a human as a “normal” human. This paper discusses the different aspects of the above characterizations of freaks and how it is perpetuated in modern medicine.

Prosthetic Devices and Society’s Acceptance of Amputees Cassandra Halsted

The absence of a limb or appendage does not go easily unnoticed. It would be a stretch to say that a person without legs fits into what society would deem normative. In fact, those with missing limbs have historically been spectacles to behold in freak shows. However, it is accurate to assert that the body of an amputee is no longer something that disturbs or shocks modern society. It instead invokes a more uncomplicated reaction, a reaction centered on the tragedy or conquest over adversity that brought about this non-normative feature. Although society is still intrigued by the life and day-to-day modifications someone with a missing limb must make, individuals who have undergone amputation do not fit neatly into the category of freak. It will be the purpose of this paper to argue that the driving force behind amputee patients being able to escape this label has been the incredible advancements made in prostheses. This paper will be exploring the significance of prostheses advancement in an amputee patient’s ability to achieve a more satisfactory quality of life. An assortment of prosthetic devices will be discussed and compared to alternative options that are available to patients facing amputation. These alternative options can include transplant, crutches, wheelchairs, or even the rejection of any assistive device. This paper will seek to outline the many advantages of the utilization of prosthetic limbs or appendages.

Empathy in Medicine Rachel Holtgreive

This paper argues for the physician to be empathetic while working with patients however it does not require physicians to be sympathetic. In fact, sometimes sympathy can be a dangerous emotion for the physician to have. Empathy can be described as an understanding of an experience or an emotion. Whereas sympathy is an emotional resonance between two

people. For example, it would be if the surgeon feels saddened by the patient's sadness. This can be dangerous because the surgeon can become too attached to the patient and can prevent a clear mind for decision-making. Therefore, the surgeon should express empathy while practicing medicine but stray away from sympathy. In this paper, I will be arguing that the role of the physician above all is to be a healer that serves with benevolence. When physician's act with empathy it will increase patient satisfaction, improve quality of work, result in better patient health outcomes, and prevent feelings of dehumanization.

Against the Separation of Conjoined Twins

Luke Kallberg

I argue that the surgical separation of conjoined twins in infancy and childhood is consistently - though not necessarily - unethical. I present two arguments. My first argument is that historical and biographical studies show that twins who remain conjoined will very probably experience a uniquely valuable intimate relationship with each other that cannot be experienced by the unconjoined and that more than compensates for losses in quality of life due to their conjoinment. Separation would thus probably take away a very valuable good without sufficient compensation. The only case in which separation (and the loss of the valuable intimate relationship) would clearly be giving a twin an improvement in life quality is when her own death is the alternative. This makes it relevant to consider "sacrifice separations" - when both twins will die if left conjoined, but one will survive if they are separated. My second argument concludes that "sacrifice separations" are unethical because they are ethically equivalent to nonconsensual living organ donations that kill the donor. In "sacrifice separations" these parts are vital organs, and it is unethical to force a person to donate a vital organ even when it will save someone else's life. I argue that "sacrifice separations" can constitute moral dilemmas in which there is no morally permissible option, and consider how to approach such a situation. I also argue that the objection that early childhood separations are more successful than separations later in life is misleading - the variance in success is not as great as has been claimed. I also note that though unrecorded, a case where both twins lives could be saved by separation might escape both of my arguments. I conclude that separations are ethical only when the twins have matured enough to reliably predict that their developing personalities and environments are such that they will likely not achieve that valuable intimate relationship with each other. Such an outcome is rare among conjoined twins, but has been recorded. This prediction likely could not be made in infancy or early childhood, which is why separations are unethical until later in life.

Toward a Thomistic Response to the Opioid Epidemic

Kyle Karches

The opioid epidemic currently ravaging the United States epitomizes the old maxim about medicine, "the cure is worse than the disease." Physicians once thought powerful opioid pain medications would provide a solution to chronic pain, a problem that has vexed countless physicians and patients. Yet the widespread prescription of opioids has contributed to a crisis of addiction and overdose that claims over fifty thousand American lives every year. As physicians reduce opioid prescriptions in an attempt to curb abuse, they will again have to face the original problem of chronic pain. In this presentation, I will show how Thomas Aquinas's account of pain might help physicians and patients reconsider how best to manage chronic pain. I will first explain how the opioid epidemic stemmed from a well-intended, if ultimately misguided, approach to pain. I will then describe Aquinas's conception of pain, showing how he ties it to his understanding of the good life for human beings. I then present Aquinas's own remedies for pain and use them to propose alternative means by which physicians might address chronic pain today. Yet I also caution that, although some of these suggestions seem promising and even anticipate recent findings in pain research, physicians must at least partially share Aquinas's notion of the human good in order to make use of these remedies as he had described.

On Medicine's Responsibility for the Common Good

Kyle Karches

Medicine is often defined as a practice aimed at the individual good of the patient rather than at the common good. Pellegrino and Thomasma, for example, argue that the physician's duty is to promote the unique good of each individual patient he or she encounters, setting aside questions about the common good to be decided in the realm of politics. Yet in the Aristotelian-Thomistic tradition, in which Pellegrino and Thomasma claim to take part, the individual good cannot be so neatly separated from the common good. For Aquinas, the common good not only supersedes the individual good in importance but also serves as the root of personal dignity. In this presentation, I aim to apply this conception of the individual and common goods to the practice of medicine. I will first explain the Aristotelian-Thomistic concept of the common good and show how it differs from the more modern notion on which Pellegrino and Thomasma rely. Whereas modern political theory treats the common good as simply the aggregate of all individual goods, Aristotle and Aquinas contend that certain human goods can only be achieved cooperatively. Not only should government

take responsibility for promoting this common good, but also each individual ought to participate in it as part of his or her own good life. This notion of the common good places more responsibility on the doctor-patient relationship than does modern political theory, going beyond simply those goods that individuals might happen freely to choose to pursue together. Furthermore, although modern political theory distinguishes only between the individual and the sovereign state as political actors, both Aristotle and Aquinas consider other institutions, practices, and voluntary associations, including medicine, to be participants in political activity as well. Thus these communal activities have responsibility for the common good as well. I will then point out that, in fact, Aquinas's understanding of political activity is already implicit in some aspects of medical practice, such as the administration of vaccines, and I will argue that physicians ought to recognize and defend these practices as contributors to the common good.

Neurobehavioral Outcomes of Preterm Infants Whose Mothers Were and Were Not Administered Antenatal Steroids Prior to Delivery

Katie Kersting

Prenatal steroids are often prescribed when preterm birth is threatened. They are given intravenously to the mother prior to birth. Prenatal steroids can accelerate lung development in the infant, leading to improved medical and developmental outcomes. It is not well understood what factors relate to decisions about receiving prenatal steroids. In addition, it is not understood how prenatal steroids may contribute to early neurobehavioral outcomes in preterm infants. Objective: To investigate differences in neurobehavioral at term equivalent among preterm infants whose mothers were and were not administered prenatal steroids. Study Design: This prospective cohort enrolled 64 preterm infants born less than 28 weeks gestation. Whether or not the mother of each infant received prenatal steroids was tracked. Neurobehavioral testing at term equivalent age or before hospital discharge was conducted using standardized measures. Results show use of prenatal steroids was more common in mothers who had more prenatal visits, and mothers of infants that received prenatal steroids achieved better orientation scores. Therefore, prenatal care is important, as the use of prenatal steroids was more often observed in mothers with more visits to a doctor for prenatal care. Infants who receive prenatal steroids show advantages in early neurobehavior by term equivalent.

A Patient-Centered, First-Person Approach to Surgical Outcomes

Jason Keune

Predicting patient outcomes after surgery has become more effective with big data. Exclusive and dominant in surgical outcomes are prospectively maintained databases that include discrete details about patients, procedures, and postoperative morbidity and mortality. Knowledge is created using standard statistical approaches to analysis of these quantitative data sets: it is summarized and preoperative factors are associated with common postoperative outcomes. This method of knowledge generation, which eclipses all other forms, has resulted in an epistemic narrowness, however. It includes no information about functional outcome, enhancement or diminishment of capabilities, well-being, or how measured outcomes tend to integrate into individual lives. It also ignores marginalized populations, producing outcomes statistics that apply very accurately to an “average” human who might fit in one of several broad demographic categories. I will describe a project in which I bring a qualitative approach to surgical outcomes that can address these deficiencies. The project consists of collecting a large set of first person patient testimonies that are solicited and organized based on the Capabilities Approach, which is notable for its ability to open a broad evaluative space, respect plurality, and incorporate a relational ontology when applied to the clinical context. Through a series of cases involving marginalized patients, I will show that challenging the dominant method of knowledge generation in surgery by rendering the patient experience in its particularities will allow surgery to mature in the era of personalized medicine.

Rejecting Systems of Violence: A Response to Child Sexual Abuse Employing Womanist Methodology

Jaime Konerman-Sease

As a nation, our collective horror toward child sexual abuse was recently visible in public response to the testimonies of victims of Larry Nassar. Public outrage at the sexual abuse of children has resulted in a number of policy and legal efforts to end the sexual abuse of children including the Child Protection Act and Jessica’s Law. These policies index perpetrators into a national database, make such information available to the public, and establish minimal sentences for first-time offenders and life time monitoring after release. These policies buy into the belief that sexual abuse is only caused by perverted individuals. However, womanists have argued that the sexual abuse of children reflects a larger culture of domination and violence – clearly demonstrated by the number of perpetrators who have been abused as children. Not only do these policies fail to keep children safe, they harm

those most at risk for violence: children, especially girls, of color. In this paper I argue that zero-tolerance policies that enforce security fail to prevent the sexual abuse of children because they ignore the cultural nature of sexual abuse. Rather, these approaches lead to greater harm to marginalized communities who are already victims of over policing. Instead of strict policies that enforce a culture of violence, I aim to show that the only liberating response to child sexual abuse is a Womanist-informed response.

The Sacrament of Pharmakon: Physician-Assisted Suicide as Medical Ersatz Liturgy

Kimbell Kornu

Standard arguments for and against physician-assisted suicide (PAS) are generally reduced to, on the one hand, patient autonomy and compassion for the suffering patient, and contrariness to medical tradition and the slippery slope to abuse, on the other. However, one type of argument that is typically excluded from the PAS debate is the religious argument because it relies on a particular tradition that is not universally acceptable to all. Yet, many physicians and patients are deeply committed to religious beliefs and practices that are constitutive for one’s being. Thus, excluding religious arguments from the PAS debate as a premise of public reason is not universally held by all, thereby undermining the secular requirement for universal agreement. I challenge the requirement of religious neutrality and argue that PAS is a quasi-religious practice because it assumes a view of the good life, which is radical autonomy and freedom from pain and suffering. PAS is a medical ersatz liturgy that effectively administers the sacrament of pharmakon, which means both poison and remedy in Greek. Drawing on Michel Foucault’s work on governmentality as pastoral power and Giorgio Agamben’s genealogy of technical effectiveness modeled after the Christian liturgy, I show three liturgical dimensions of PAS: (1) shepherding the patient unto salvation from suffering through death; (2) the physician-priest becomes an instrumental cause through the administration of the sacrament of pharmakon which “cures” through poison; and (3) legalization of PAS cultivates habits and practices oriented towards the “good life” of radical autonomy through the medicalization of death. In conclusion, in contrast to the Christian liturgy that brings about salvation and healing through the Incarnational death and life in Christ, PAS as pharmakon functions as an extension of medicine’s biopolitical power over life and death precisely as an ersatz liturgical practice and, thus, should not be legalized.

Social Determinants of Health: A Global Comparison

Ik-Whan Kwon

The American healthcare system has become a subject of an intensive debate by many global health care professionals who argue, justifiably to some extent, that the United States spends more than similar countries on health care, yet the health outcomes measured by life expectancy and infant mortality rates of this country hover bottom for industrialized nations. Previous studies on social determinants in health speculate that social determinants play more significant roles than medical spending in determining the health outcomes. But these studies limit their scope of study to the United States only or advanced industrialized countries. This study proposes to investigate statistically the relationship between social determinants and health outcomes for 3 different groups of country. Two research outcomes are to be expected from this study. If health outcomes are influenced more by social determinants than medical investment, national policy on health care improvement needs to be re-evaluated to get a better return from spending on health care improvement. Secondly, if there is a difference in factors (variables) determining health outcomes by the different economic developing stages, different health care policy needs to be addressed to improve health outcome around the globe.

Caring for Transgender Patients and Clients: Nutrition-Related Clinical and Psychosocial Considerations

Rabia Rahman, *Whitney Linsenmeyer*

An estimated 0.6% of adults in the United States identify as transgender, a figure has approximately doubled in the last decade. Primary care and preventative health services for the transgender population has focused primarily on the specific issues of HIV, cholesterol screenings, tobacco use, pelvic health, and insurance coverage. Though nutrition is a key aspect of preventative health, minimal research exists on the diet and nutritional needs of this population. Nascent evidence suggests considerable diet-related clinical and psychosocial concerns of transgender individuals. These include: changes in weight status and body composition, altered lipid profiles and blood pressure levels, altered hemoglobin and hematocrit levels, disordered eating patterns and eating disorders, and poor diet quality. The transgender population is of particular importance to the nutrition profession given the interventions undertaken to medically transition. In the nutrition and dietetics literature, differences in gender-specific diet and nutrition-related considerations have traditionally been framed as occurring between cisgender, heterosexual males versus cisgender, heterosexual females. It is incumbent upon health care providers and agencies to adopt culturally competent, gender-affirming practices to ensure optimal

health care access and provision. As the transgender population increasingly seeks medical treatment, nutrition professionals are in a position to provide appropriate, patient-centered and compassionate care.

LAUNCH-ing into Healthcare: A Social Justice Framework for College-and-Career Readiness

Sobia Shariff Hussaini, Donovan Livingston

Young people need to be made aware of career opportunities that align with their ever-evolving interests. This paper outlines an intrainstitutional partnership between a medical school and a university, designed to engage high school students about healthcare careers and pathways to higher education. In 2017, the Student Inclusion and Diversity Committee of the medical school identified three strategic goals: (1) develop pipeline programming, introducing younger students to healthcare careers (2) recruit students from diverse backgrounds; and (3) create programs aimed at student retention. The university introduced the College LAUNCH program, designed to prepare high school juniors to be college-ready, social justice advocates. Monthly College LAUNCH sessions introduce students to various careers (healthcare, journalism, nonprofits), develops professional skills (resume writing, interviewing, financial literacy), and in doing so, links these emerging mindsets to concepts in social justice (human rights advocacy, antiracism, policy reform). Upon recognizing their intertwined goals, the medical school and College LAUNCH created LAUNCHing into Healthcare, a session exploring healthcare careers with an emphasis on health inequities. Students interact with healthcare providers, including MDs, PAs, and Social Workers. Using a case study, students address a patient's physiological needs and social determinants of health, including medical history, insurance status, mental health, and access to community resources. Students learn how healthcare providers respond to patient needs in the framework of their community. The unique intrainstitutional partnership between the medical school and College LAUNCH provides a social justice framework for high school students to explore healthcare careers and identify healthcare inequities in their community.

Chemotherapy and Court-Ordered Mandates: The Problems with the Best Interests Standard as a Basis for Legal Decision Making

D. Robert MacDougall

Two recent cases in Ontario involved aboriginal girls with leukemia who both pursued traditional aboriginal treatments instead of potentially lifesaving chemotherapy. Many physicians and bioethicists wrote critically about the decisions

of child protective services and the courts in these cases, claiming that these legal authorities should have acted in the children's "best interests" by seeking or providing court-ordered mandates for treatment. In this talk, I assess the limitations of the best interests standard, and argue that while the standard is helpful for clinical decision making, it is a liability when used in legal decision making for cases like these. The primary ethical issue from the perspective of the state is not the nature of the child's best interest, but rather two issues best dealt with from a theory of justice. I defend the actions of the physicians, who were right to utilize the best interests standard and subsequently to report the cases to authorities. Because children are usually unable to act autonomously, physicians should report decisions that appear not to be in the best interests of children. Physicians' determinations about the child's best interests should be limited in two important ways: their judgments should be based on the narrow self-interest of the child and on purely medical assessments of interests. These limitations are beneficial aspects of clinical decision making, I argue, because they substantially simplify clinical decisions, and because they encourage physicians to make judgments strictly within their professional competencies. I argue that the limitations of the best interests standard—the same limitations that make the principle beneficial when applied by physicians—can become a liability when used by legal authorities. While physicians should consider the narrow self-interest of children, the state must take into consideration the competing interests of a variety of parties. The state (unlike physicians) has a responsibility to assess competing interests and balance them against each other. In this case the state plausibly has a duty to consider not only the interests of the child but also the interests of the community from which she comes and the precedent a decision will set for similar future cases. Legal authorities cannot limit their interpretation of "best interests" to purely medical determinations. While the state has no special competency to judge medical or other kinds of interests, it does have a responsibility to mediate in cases characterized by competing interpretations of a child's interests. In such cases, the state cannot simply justify a decision by referring to the child's best interests, since the content of the child's interests is precisely what is at issue. I conclude that questions about balancing competing interests of different parties and mediating disputes about the nature of a child's interests are best dealt with from within a theory of justice, rather than on the guiding principles familiar from clinical practice.

Health Justice and the Moral Specialness of Health

D. Robert MacDougall

Norman Daniels offers a well-known philosophical account of health care justice and, more recently, health justice. Daniels builds his ultimate conclusions about health justice on a foundational argument that health should be considered "morally special," which he defends by appealing to both a theory of health (Boorse's biostatistical theory, or BST) and a theory of justice (Rawls' justice as fairness). In this talk, I argue that Daniels' argument for the specialness of health has structural flaws, and that available options for fixing the argument are deeply problematic. For these reasons, I argue that Daniels-type accounts of the moral specialness of health fail, and subsequently that Daniels' theory of health justice should not be considered a plausible Rawlsian account of health justice.

An Educational Text Messaging Intervention to Improve Healthcare Utilization Among Infant Caregivers with Low Health Literacy

Brendan McEney

Health care utilization is an issue germane to health care providers, insurers, and patients alike. There are barriers to educating patients about more appropriate HCU, such as low health literacy. A recent pilot study of healthcare utilization at Danis Pediatrics showed a positive relationship between families that received educationally-directed text messages and a significantly reduced number of visits to the emergency department. This study seeks to evaluate whether text messages have an effect on non-urgent emergency department (ED) visits among infants 0-12 months of age and its associated costs. Results show the feasibility of sending educational text messages has been demonstrated and many patients have scheduled and/or attended well-child visits within the recommended time frame. This study anticipates that receiving educational text messages will reduce the number of non-urgent visits to the ED across all levels of health literacy.

Social Innovation for Social Justice: How Public Health and Social Work Partner to Support Mental Health in St. Louis

Stephen Edward McMillin

Most mental health professionals in the U.S. are social workers, who contribute to public health by treating traumatized populations. This runs a high risk of burnout, compassion fatigue, and secondary trauma, with prevalence of symptoms as high as 70% for social workers. Helping professions in the US are largely female, as seen in mental health professionals such as social workers, counselors, and

psychologists. In addition to these professional stresses, women spend nearly an hour more per day on household chores than men do on average. This second shift of household labor as well as the compression of the middle class and the decline of flexible working arrangements since the Great Recession likely also contribute to stress for female workers. The helping profession extends beyond commonly recognized boundaries and involves additional workplace stress for workers similar to that of social workers: a public library may serve as a "de facto day shelter" for the homeless while also assisting patrons in crisis facing issues such as domestic violence and heroin overdoses, credit unions in high-poverty neighborhoods face challenges in helping patrons transition from payday loans to mainstream checking accounts, apartment managers commonly serve impoverished tenants who may have unstable roommate arrangements and little money left for food or utilities after paying their rent. These "accidental social workers" likely face forceful workplace mental health stressors without being formal mental health professionals. Community-focused secondary prevention efforts targeted to helping professionals, focusing on education and motivation sessions to stop or slow burnout and unhealthy stress these workers are highly likely to experience, were piloted in St. Louis by a university/community partnership. Two main outcomes were measured: 1) Cohorts who attended seminars consistently showed posttest improvement; 2) Agencies that participated in as few as three seminars made organizational changes to improve self-care practices for staff. Conclusions: The St. Louis mental wellness program improved self-care knowledge and built capacity through education and by influencing participating agencies to make organizational changes to support staff. Capacity-building in these agencies to improve mental wellness among helping professionals improves public health and mental health equity, especially for women.

Defending the Value of Health by Recourse To Well-Being and Intrinsic Value

Dane Muckler

A debate has raged for over 40 years about two broad approaches to theorizing about health: normativism and naturalism. Most normativists maintain that health and disease are mixed descriptive-evaluative concepts (e.g. 'courageous,' 'murderer'). In their view, to declare a condition 'pathological' or 'diseased' is to make a judgment about the value of that condition. Naturalists challenge normativism by arguing that medical judgments are somehow value-free. Christopher Boorse argues that medical professionals use the concepts of health and disease in a way that is incompatible with health and disease being mixed descriptive-evaluative concepts. In his recent book, *Valuing Health*, Daniel Hausman

reinvents Boorse's argument, contending that the difficulty of identifying the relevant value that motivates judgments of health and disease demonstrates that normativism is nonviable. I argue that Hausman and Boorse presuppose that a close conceptual relationship between health and value could only hold if healthy parts and processes are always better for the organism than unhealthy parts and processes. I argue that this presupposition is false: intrinsically good parts and processes need not always be overall better for the organism than unhealthy parts and processes. Healthy parts and processes could be intrinsically valuable for the organism, and yet contingent circumstances might sometimes make it better for the organism to sacrifice some degree of health for another self-interested good.

The Internal Morality of the Practice of Prenatal Genetic Counseling

Christopher Ostertag

The Internal Morality of the Practice of Prenatal Genetic Counseling

According to the National Society of Genetic Counselors, the number of genetic counselors has increased by 85% since 2006, evidencing an explosion in the field. Furthermore, many think genetic counseling will continue to grow over the next two decades by as much as 25%. While these statistics bode well for students interested in this field, such rapid growth necessitates reflection on the nature of genetic counseling qua a discipline. I problematize nondirectiveness in prenatal genetic counseling, then elucidate the ethos of prenatal genetic counseling as it relates to disability and Catholicism.

The Technological Leviathan: Mythology, Ontology, and Transhumanism

Benjamin Parks

When discussing transhumanism it is tempting to dust the tale of Prometheus off and use it as warning against seeking a human perfection that is not proper to humans. However, the Promethean myth gives us a false dilemma and fails to address the underlying problem with transhumanism. According to this myth we can either be like Prometheus and storm heaven to lay claim to something that properly belongs to God alone, or we can go our own way a part from God, which is its own form of arrogance because it says to God that we do not need Him. In more strictly technological terms, the Promethean myth gives us the option of either arrogant technological advancement that runs the risk of unleashing evil on the world or rejecting technology altogether. Neither option is desirable. Moreover, the Promethean myth fails to adequately address the problem of transhumanism because it cannot speak to transhumanism's - and technology in general's - ontology. In

order to move beyond the Promethean dilemma and begin addressing transhumanism's ontology I propose turning to creation myths instead. In the various myths from the ancient pagan religions, the world was not created ex nihilo. Instead, the created order is a result of a hero god's victory over chaos. It is only through the raw power and might of the hero god imposing his will on chaos that something new can be created and sustained. Thus, any human creative act would likewise have to be an imposition of order over the chaotic natural realm. This is in stark contrast to the Genesis narrative in which there is no primordial contest between order and chaos. The creation of the world, according to the ancient Hebrews, is peaceful as everything is brought into existence by God. There is no struggle, no imposition of will. Instead, there is a loving community of Three Persons working together in perfect harmony to create a good world that is a gift to be used by humanity. Given this creation narrative, any human creative act ought to be motivated by love and done in and through the natural order, not imposed by force on to nature. I will summarize the relevant Ancient Near Eastern creation myths and describe the ontology they set up. Then, I will show how this ontology has come down to us through history and become the ontology at the base of transhumanism. Finally, I will pivot to Genesis and the Christian understanding of creation which is a counter to the pagan myths and the ontology of transhumanism.

Simon Says: On the Magical Impulse of Studies on the Efficacy of Intercessory Prayer

Benjamin Parks

The formal statistically driven empirical study of prayer has an almost 150-year-old history. The first person to conduct such a study was Francis Galton whose retrospective statistical analysis comparing life expectancy to the amount someone prayed and was prayed for concluded that intercessory prayer for longevity is ineffective. Since Galton there have been a host of studies conducted to test the efficacy of intercessory prayer (IP), most notably the separate experiments conducted by Robert C. Byrd; William S. Harris, et al; and Herbert Benson, et al; to test the efficacy of IP in cardiac care units. All of these studies starting with Galton share the common problems of defining prayer and controlling for bias. In order to better control for bias, subsequent research teams have had to continually refine their methodology, which means placing more and more restrictions on prayer. Most notably, Byrd, Harris, and Benson, prescribe the exact phrasing of the prayer to be said for the cardiac patients. The controls placed on prayer will only increase with future studies, if researchers are serious about removing potential sources of bias. Thus there is a deep irony at the foundation of such studies, the more "scientific" they become the deeper they go into the realm of

magic. Although magic today is more commonly understood in terms of fantasy fiction, witchcraft, or synonym for amazing, the concept and practice of magic has a more essential meaning. Magic is the attempt to subject supernatural forces to a person will via a specific ritual. By testing if particular sets words and styles of prayer will bring about a desired result, researchers are trying to find the proper incantation and actions for manipulating God into healing a patient. This hold whether or not researchers realize that they are doing so. This paper will proceed as follows. First, I will set forth the definition of magic as an attempt to bring the supernatural, specifically the Christian God, under human control. Second, I will give an overview of the progression of empirical studies of the efficacy of IP and how they have become increasingly magical in their assumptions. I will argue that because Christianity condemns the use of magic no Christian should be involved in such research and Christian institutions should refuse to support such studies in any way.

Developing a Sustainable Sickle Cell Program for Underdeveloped Countries

Tim Randolph

Sickle Cell Disease (SCD) is a life-threatening hemoglobinopathy. The highest frequency of the sickle gene is found in sub-Saharan Africa, where each year approximately 250,000 babies are born with SCD (Hb SS), representing 0.74% of all live births occurring in this area. In contrast, approximately 2600 babies are born annually with SCD in North America and 1300 in Europe including 2,000 annual African American births. The sickle mutation is becoming more prominent in southern India where an estimated 25,000 babies are born annually with SCD. Sickle cell disease is also found in Central and South America and in Caribbean countries like Haiti where the sickle gene/hemoglobin has been reported at a frequency of between 8% and 15%. Problem: The poorest countries in the world have the highest frequency of sickle cell and substandard healthcare systems making them unable to adequately diagnose and treat SCD resulting in high mortality rates compared to developed countries. It has been reported in Africa that the mortality rate for children born with SCD ranges from 50-90% before age 5 years depending on the economics of the area. In comparison, the mortality rate of children with SCD in the US is between 1-2% which is a reflection of early diagnosis and ongoing medical care. The lack of diagnostic testing and limited therapeutic interventions present in underdeveloped countries result in high mortality rates before the age of 5 years. The solution requires a countrywide sickle cell program delivered through a comprehensive sickle cell center with the following elements: accurate laboratory & imaging diagnostics; a comprehensive standard of care; ongoing patient monitoring;

educational programs targeting patients, caregivers, and Haitian healthcare professionals; and access to the program for all patients regardless of their ability to pay. Most importantly, the sickle cell program must be financially solvent and sustainable. We propose to develop a comprehensive and financially sustainable sickle cell program in Haiti delivered through a sickle cell center. Our laboratory has created and patented two laboratory methods to diagnose sickle cell and monitor therapy with two additional diagnostic methods in development to support a sickle cell program in underdeveloped countries.

Medicine and Nanorobots: The Role of Law in Ensuring Access to Emerging Health Technologies

Ana Santos Rutschman

This paper examines the role of different branches of the law in promoting access to emerging innovations in the fast-growing field of medical nanorobotics. Nanoparticle technology is changing the way medical professionals treat patients. In the United States alone, over 200 medical therapies relying on nanotechnology have been submitted to the Food and Drug Administration (FDA) for regulatory approval. Since 2005, the National Institutes of Health (NIH) have funded and coordinated nanomedicine research through eight Nanomedicine Development Centers, and the number of nanomedicine startups has grown exponentially over the past decade. R&D in the area of medical nanorobots has so far faced two types of constraints: first, the underlying science is still young; and second, existing funding streams are limited and directed towards limited areas. As the field develops, new constraints are likely to arise. Different sets of laws and regulations are—or will soon be—applicable to several aspects of the development, testing and use of medical nanorobots. While designed with the goal of promoting the safety of innovative medical technologies, our current laws were not crafted with the specifics of nanorobotics in mind. This will soon prove problematic. In this paper, I argue that this misalignment will have undesirable consequences that will ultimately translate into inequitable access to life-altering and life-saving technologies. To begin with, some laws are likely to disfavor research on (and development of) certain types of medical nanorobots, including diagnostic nanorobots. For the types of medical nanorobots that do get developed, different sets of regulations pose additional hurdles to the testing of nanorobots in human subjects. Finally, and perhaps more problematically, the combination of current patent and reimbursement laws will render state-of-the-art medical nanorobots unaffordable to large segments of patient populations. The paper then presents a proposal to introduce a set of minimal changes to our legal and regulatory frameworks

that would address the three types of problems identified above.

Transhumanism and Discrimination

Carrie Schafer

In this paper, I will argue that transhumanism is detrimental to combatting racism and lessening the disparity between social and economic classes. By exploring the origins and ethics behind transhumanism, current efforts to improve the human body, and the implications that belong the transhumanistic movement, I can determine that technological and artificial enhancements to humans, as moving today, is discriminatory. I will look into the origins and ethics behind transhumanism in order to look into the basis for current transhumanistic thoughts. Additionally, as transhumanist and biopolitics begin to take hold in modern society, the arguments for why transhumanism is discriminatory begin to take hold more firmly. As political parties in support of artificial self-improvement grow, motives should be questioned, as these politics could lead to greater disparity in between disadvantaged populations and the wealthier ones. It is important to look at what the future may bring for transhumanist politics as technology continues to improve. The most visible evidence of artificial self-improvement lies in the hands of college students. Pressure mounts on college kids to perform and this pressure can lead to kids taking prescribed non-medical stimulants. While this in itself is a problem, it also becomes a problem when the proportions of who is taking these drugs to excel tend to already be in an advantageous position compared their peers. Economic class and access to healthcare are linked, and those without access tend to be of a lower class. With many technological and medical advances, those seeking bodily and mental improvement will flock towards the healthcare sector in order to access these interventions. Those without health insurance or poor access to care would not be able to access these improvements with the same ease and ability as their peers. This can create an unequal environment and continue the discrimination seen by the lower class and minorities.

An Interactive Guided Web- based Alcohol Screening and Brief Intervention for Curriculum Based Programs

Leigh Tenkku Lepper, Genevieve Del Rosario

Alcohol use is the fourth leading preventable cause of death in the United States. Excessive alcohol use can lead to the development of a host of health and social conditions. Asking

patients about their alcohol use can be challenging and uncomfortable for both provider and patient. Alcohol Screening and Brief Intervention (aSBI) training helps providers to increase confidence and build key skills to seamlessly integrate aSBI into daily clinical practice. Initial development of an online comprehensive and interactive aSBI training curriculum for Physician Assistants (PA) began beta testing in October 2015. A final version was launched in November 2016 which includes three elements: online didactic alcohol and aSBI training, an interactive guided aSBI encounter with a virtual simulated patient, and an aSBI encounter with a live standardized patient via videoconference. Patient education materials were given to trainees to augment application of learned skills during the live aSBI encounter. Evaluation of this web-based educational training assesses pre/post change in knowledge confidence, skills confidence, and overall satisfaction with the online training medium. Implementation of this curriculum has occurred within the four PA programs in Missouri and also at a PA program in Tennessee. Each implementation of this curriculum required adaptations to meet the requirements and needs of the individual PA program. The aSBI course is also now available to the larger audience at our learning management system website, catalystlearningcenter.com. Results: Ten cohorts of students have completed the online aSBI training thru October 2017 (n=305). Preliminary results indicate an increase in knowledge on alcohol education and screening and brief intervention between pre and post mean scores. Conclusions: Initial evaluation results of the online aSBI program indicate significant increases in knowledge, skills, and confidence in implementing aSBI with adult men and women. Comprehensive and interactive aSBI training methods can teach healthcare professionals the tools to confidently and seamlessly integrate conversations about alcohol use into daily practice.

Injustice in Access to Health Care: The Continuation of Structural Racism in The United States

Ruqaiyah Yearby

According to John Rawls, justice encompasses fairness and equity, and "denies that the loss of freedom for some is made right by a greater good shared by others. It does not allow that the sacrifices imposed on a few are outweighed by the larger sum of advantages enjoyed by the many." Tom Beauchamp and James Childress submit that Egalitarianism imposes a "positive societal obligation to reduce and eliminate barriers that prevent fair equality of opportunities. An obligation that extends to programs to correct or compensate for various disadvantages." Based on the civil rights laws, the United States government has a positive societal obligation to

eliminate racism that prevents the fair equality of opportunities and resources. However, structural racism persists because the government has failed to enforce civil rights laws in housing, employment, and health care. Structural racism operates at the societal level and is the power used by the dominant group to provide members of the group with advantages, while disadvantaging the non-dominant group. The dominant group uses structural racism to not only obtain opportunities and resources, such as wealth, employment, income and health care, but it also uses structural racism to limit the non-dominant group's access to these opportunities and resources. During the Jim Crow era, structural racism sponsored by the federal and state governments explicitly advantaged Caucasians and disadvantaged African Americans. Even after the passage of the Civil Rights Acts, structural racism still exists because the federal government has failed to fulfill its positive societal obligation to eliminate barriers that prevent African Americans' fair equality of opportunities to housing, employment, and health care. The paper will discuss the federal government's failure to fulfill its positive societal obligation to eliminate structural racism that prevents the fair equality of opportunities, the impact of structural racism on racial disparities in health status and access to health care, and solutions to ending structural racism.

Posters

African American Elders Respond Positively to Community-Based Cognitive Stimulation Therapy Group for Dementia

Whitney Postman, Sydney Rosenthal, Laura Sankey, Samantha Thompson

Population trends indicate that low-income African American elders experience greater prevalence but inadequate detection of dementia, increased numbers of preventable hospitalizations, and higher healthcare cost burden. A well-researched, evidence-based group intervention for elderly people living with mild to moderate dementia is Cognitive Stimulation Therapy (CST). CST has been endorsed as an effective non-pharmacological dementia treatment resulting in significant improvements in quality of life and cognitive-communicative functioning without any adverse side-effects. This study is the first to investigate CST in medically underserved and economically disadvantaged African American elders. Methods In partnership with Myrtle Hilliard Davis Comprehensive Health Centers (MHD) of North St. Louis, we have established a CST group of 12 elderly African American clients with cognitive-communicative decline as measured by our standardized assessments (e.g., Saint Louis University Mental Status exam). During our weekly group sessions at MHD's Homer G. Phillips Hospital location, we conduct culturally, and linguistically appropriate activities chosen with input from group members to stimulate social interaction and cognition. To illustrate, each session is initiated with a prayer improvised by a group member. Discussions emphasize health topics relevant to dementia risk in African Americans such as care for chronic diseases (e.g., diabetes, hypertension); prevention of hearing loss with provision of free services such as hearing screenings and, if needed, hearing aids; nutrition; stress management; and special topics covered by guest lecturers (e.g., Alzheimer's Association care consultant, Figures 1,2). Results Participant Satisfaction Questionnaires reveal that all participants expressed appreciation for the fostering of respectful and responsive interactions within group sessions that generalized to improved socialization between group sessions. They report implementation of actionable new knowledge relevant to healthy aging presented in our activities and discussions (e.g., increased daily cardiovascular exercise). Moreover, they report experiencing decreased stigma surrounding their perceived disabilities—an expected outcome given the goal of CST to reduce negative self-stereotyping. Conclusions Further outcome measures (e.g., caregiver reports) of changes in participants' home and community environments are being collected. Current findings suggest that the standard CST

protocol can be adapted to the specific needs of African American elders at risk for dementia.

African American Youth Killed by Police: Suicide or Conduct Disorder *Sohail Nibras, Alicia Barnes*

Sean a 17-year-old African American (AA) Male with past psychiatric history of Attention Deficit Hyperactivity Disorder (ADHD), Major Depressive Disorder, Cannabis Use Disorder presented to child and adolescent community psychiatry clinic for an evaluation. Sean presented with chief complaint of "a mental break down at school". His behavioral issues started as early as elementary school. His behaviors became more verbally aggressive worse in 8th grade when Michael Brown was killed his mom noticed changes in his behavior, he was more aggravated, more irritable and sadder, withdrawing, not participating. He began cannabis use at age 14. He was expelled from school for suspected distribution of marijuana in school. Sean describes his mental breakdown as unable to calm down and throwing chairs and running away from home. He stole his mom's gun and who then called police with a stolen gun report. He was incarcerated for 24 hours and then hospitalized for 5 days. He was started on Abilify, Wellbutrin, and Hydroxyzine. He was out of his medications for a month due to lack of immediate access to outpatient child psychiatry. During the evaluation, Sean was able to describe social stressors including domestic violence and economic hardship contributing to his the "mental breakdown". He denied suicidal ideations and risky behaviors during the evaluation. Subsequently, our clinic discovered that Sean was shot and killed by police, while in a stolen car with 3 other adolescents. Mom voiced concerns over the phone that her son was shot and did not believe the story told by police. In this paper, we discuss the complications of untreated depression and ADHD and lethal consequences of poor access to care. How do we address the criminalization of male AA youth as child psychiatrist? How Child and Adolescent Cultural Practice Parameters and National Culturally and Linguistically Appropriate Services Standards apply, should there be more specific parameters?

Aging and the Environment - A Program Evaluation

Selena Washington

Purpose: The purpose of this study evaluates how a nonprofit weatherization/ home modification program addresses the person-environment-occupation dynamic (Law et al., 1996) within the older adult population. The evaluation specifically focuses on the housing needs and housing conditions of low income older adults in Saint Louis City and County which are addressed by this nonprofit, and its impact on health

conditions and functional independence. Background: EnergyCare, a nonprofit weatherization and home modification program; enables vulnerable, low-income older adults to live independently in their own homes, safe from the threats of hypothermia and homelessness during the winter months. Typically, recipients of the services provided by EnergyCare are those who might otherwise "fall through the cracks" of the existing outreach by governmental agencies and other nonprofit organizations. For example, in the winter of 2015-2016 28% of the clients served had previously been homeless and 61% were struggling with the cost of housing; with the assistance of EnergyCare, 97% of aforementioned older adults served were still living in the same home a year later following the program's intervention. Rationale: Aging in place is the ability of an older adult to remain in one's own home throughout the progression of their lifespan (National Institute on Aging, 2017; American Association of Retired Persons, 2017). This topic has received an increasing amount of attention in recent years due to the increase of the >65 years and older adult population, chronic disease and disability, and an inadequate U.S. long-term health care system (US Department of Health and Human Services, 2016). The evidence that weatherization/ home modifications can improve overall health, independence, and safety of older adults with or without functional limitations is growing (Mulry et al., 2017; Safran-Norton, 2010; Stark et al., 2015, 2017); and programs/intervention that address aging in place through cost-effectiveness and prevention effectiveness is warranted. In this evaluation, we utilize a Healthy People 2020 (US Department of Health and Human Services, 2016) ecological model and the person environmental occupation model to describe and explain the effects and interplay among functional independence and environmental factors in the older adult population serviced by the EnergyCare nonprofit organization.

At the Intersection of Mental Health and HIV Medical Adherence Among Ryan White Clients in the St. Louis Region *Stephen Scroggins, Enbal Shacham*

Background: The objective of this study was to examine mental health service needs and their association with missing HIV medication. Methods: Ryan White clients throughout the St. Louis region completed an anonymous electronic survey in 2017 (n=593). Based on responses to survey questions, respondents were stratified into one of three groups for analysis: individuals who reported needing, but not receiving mental health services (n=43), individuals receiving mental health services (n=41), and individuals who reported not needing or receiving mental health services (n=509). Results: Descriptive analysis showed individuals who needed but weren't enrolled in mental health services missed HIV

medication more frequently than both individuals who received mental health services ($p=0.011$), and individuals who reported not needing mental health services to stay in care ($p<0.001$). Conclusion: This study highlights the persistent role that psychological distress plays in managing HIV infection and how receipt of needed mental health services may improve health behavior and outcomes.

Atherosclerosis Environmental Risk Factors *Corey Grejtak-Heaps*

While traditional risk factors for the development of atherosclerosis are well known, research is continually evolving to investigate the body's reactions to the environment it exists in as well as the environment it developed in. This paper sought to investigate to investigate lesser analyzed environmental factors leading to the development of atherosclerosis. Exposure to particulate matter (PM) as well as exposure to trauma in childhood were the focus environmental risk factors in this literature review. The literature analyzed suggest that there is a direct pathway between PM and atherosclerosis via the cumulation of ultrafine particulate matter in the vascular endothelium. While this phenomenon has yet to be observed in human studies, but in vivo and in vitro studies on animals have indicated that there is a strong link between UFPs and cardiovascular disease. Similarly, evidence of an indirect pathway through the inhalation of ambient particulate matter leading to an "inflammation related cascade" was explored in depth. Childhood trauma and adult risk for cardiovascular disease are thought to be caused by abnormalities of the hypothalamic-pituitary-adrenal axis which can cause an elevation in the amount of pro-inflammation cytokines brought on by chronic stress. Factors such as parental warmth and history of sexual abuse were also investigated in the review. The mounting evidence towards the need for protection against particulate pollution and psychosocial trauma in early life will result in new and effective interventions.

The Case for Nursing Leadership at the Bedside and Beyond *Kristine L'Ecuyer, Gerrie Meyer*

Identification of the problem: Leadership is needed in nursing now more than ever. Problems such as fragmented care, missed care, patient and nurse satisfaction, fall rates, infection rates, delays in discharge to home are some examples of healthcare delivery services influenced by nurse leaders. National strategies: The Clinical Nurse Leader (CNL), the first new role in nursing in 40 years, was proposed by academic leaders in nursing in 2003 in response to nationwide trends

calling for changes in the healthcare delivery system to address issues of fragmented care and poor patient outcomes. CNLs have been described as change agent's charged with improving processes of care to better manage patient outcomes and the care environment. With the Clinical Nurse Leader, nurses have a new ally in the care of their patients. As a Master's prepared nurse armed with a unique set of leadership skills, the Clinical Nurse Leader works to improve processes of care that directly impact quality and safety of patient care. Innovations at SLU SON: Saint Louis University School of Nursing, a national leader in innovation, developed the first pre-licensure accelerated MSN in the region. Launched in 2010, the program has graduated over 150 pre-licensure MSN CNL students who are working across the nation. In this innovative model, graduates begin careers as bedside nurses and are rapidly assimilating to leadership roles. The employment rate is 100%. In 2005, the CNL option expanded to deliver CNL education to practicing nurses through the MSN-CNL option. These 10 graduates have assumed numerous leadership positions. Impact: Studies have shown that the Clinical Nurse Leader role impacts quality processes, patient safety, patient satisfaction, and fiscal responsibility. In addition, Clinical Nurse Leaders have been recognized for their contribution to a healthy work environment by elevating professional nursing practice, ensuring quality outcomes, and creating an environment in which nurses feel supported and empowered. The faculty at SLU SON have committed to embedding the Jesuit ideals into this nursing leadership program. The poster presentation will highlight selected outcomes. Conclusion: The master's prepared, certified Clinical Nurse Leader possesses a diverse and unique set of skills. Although a relatively new role, Clinical Nurse Leaders have established themselves as experts in the coordination of care and continue to work to improve patient care, ensure quality outcomes, and balance fiscal responsibility. There is an urgent and global need for nursing leadership at the organizational and unit levels. The innovative Clinical Nurse Leader role is well suited to ensure championship and sustainability of initiatives to improve processes of care that impact the efficiency and quality of patient care across the continuum and in a variety of settings.

Developing Trauma Sensitive Strategies for Interpersonal Relationships in Nursing: A Social Justice Imperative *Patricia E. Freed*

Background: Traumas (adverse childhood experiences) such as child abuse, family dysfunction and violence are now recognized as contributing to an enduring array of mental and physical health problems and unhealthy behaviors which heighten early mortality (Anda, et al., 2006). Screenings for trauma in healthcare settings are becoming more common as

failure to recognize the impact of trauma can contribute to misdiagnosis, treatment resistance, greater risk for relapse and worse outcomes (SAMSHA, 2014a). A social justice approach requires that nurses recognize that trauma is in itself a powerful determinant of health. However, screening alone does not guarantee that individuals needs will be addressed or that nurses will have the necessary knowledge, skills and attitudes for developing trauma-sensitive therapeutic relationships. Trauma informed principles, strategies and skills can be integrated in nursing curricula to help nurses address trauma-related prevention, intervention and treatment. Purpose: The purpose of this project was to help student nurses develop awareness, attitudes and skills necessary to establish relationships and to communicate more effectively with those who have experienced trauma. This project is a subset of the larger foundational nursing course which includes aspects of developing the nurse-patient relationships and communication skills, building basic nursing concepts and skills, and provides the student's first clinical nursing experience. Description: The fundamentals nursing course in our pre-licensure nursing program already contained a communication lab in which small groups of students spend two hours each week in an action- methods classroom (McLaughlin, & Freed,), learning communication skills and therapeutic strategies. The strands for developing trauma-sensitive approaches were threaded through the seven (7) existing communication lab sessions. Trauma content for the communication lab was selected using SAMSHA's guiding principles for trauma-informed care (SAMSHA, 2014b). 1. Safety 2. Trustworthiness and transparency 3. Peer support and mutual self-help 4. Collaboration and mutuality 5. Empowerment, voice, and choice 6. Cultural, historical, and gender issues. Faculty Guide Weekly Topics and activities Week 1 - Introduce the concept of trauma (ACE study), discuss effects on developing brain; principles of Trauma-informed care. Interview Exercise: Mini Cultural Assessment Week 2- Creating a therapeutic, safe space – SURETY nonverbal listening through a trauma sensitive lens. Exercise: Mindful Pronoun Use. Week 3- Introduce dissociation and grounding techniques, discuss the concept of triggers; Mindfulness practice Week 4- Therapeutic (safe) touch Week 5- De-escalation Strategies- Exercise: Attunement, Emotional Self Control Week 6 - Building Resilience – Exercises for Self-Care and Self- Compassion Week 7 -Therapeutic Goodbyes (mindful of earlier losses) careful termination emphasis on growth of nurse and patient, and accomplishments Conclusion: While this project focused on building a trauma focus in a beginning nursing course, trauma-informed principles must be pulled through and reinforced across the entire curriculum (Girouard, & Bailey, 2016). Establishing trauma-safe, positive work environments for patients and health professionals alike, is essential to preventing health inequities and providing quality

care. Integrating trauma-informed principles and developing resilient and trauma-sensitive practitioners, should be a social-justice priority for curriculum developers in all health professions.

Development of A Free Yoga Program at a Community Health Center *Catherine Cai*

Mindfulness practices such as yoga and meditation can reduce stress, lower high blood pressure, and increase overall wellbeing. In addition, these exercises can be practiced in one's own home with little to no equipment. For these reasons, yoga could be a useful wellness promoting tool for an under-resourced patient population. We have provided weekly yoga classes free of charge to Affinia healthcare patients for more than three years. We recently surveyed participants to understand how participation in this program has impacted their daily living. We launched our yoga program in 2012 at Affinia healthcare. Affinia healthcare is a federally qualified health care center serving more than 43,000 patients, 88% of whom earn below the federal poverty line and 42% of whom do not have insurance. Many of our patients and program participants are recovering from physical injuries, coping with mood disorders, and/or struggling with financial stresses. Since 2012, we have recruited 5 volunteer-based yoga instructors, and we have averaged 4 students per class in recent years. Through an email survey, we learned that the majority of participants rated our program as "excellent" or "very good." Respondents believed that participation in the program improved their physical and mental health. For many, participation in the free yoga program served as their sole form of exercise. Barriers to participation included time, motivation, transportation, and childcare. Common complaints included the limited physical space and time slots for the classes to take place, indicating potential areas for improvement in the future. Overall, we found that participants of our free yoga classes enjoyed the program and believed that it improved their mental and physical health. These findings support efforts to sustain and bolster the yoga program at Affinia healthcare and potentially develop similar programs at other community clinics.

The Evolution of Telehealth and Tele- medicine: To What Degree are Patients Receiving Quality Care? *Laura Silva*

Did you know that we can use our electronic devices for more than just calling our friends or surfing the social media world? Health care systems have been adapting easier ways for patients to connect to their providers from the comfort of their home. In fact, 71 percent of healthcare providers use telehealth and telemedicine tools. (mhealthintelligence.com)

Former American Telemedicine Association CEO Jonathan Linkous once said, "Telemedicine and Telehealth has been around for about 40 years, but in the last five years it's been exponentially growing in all sectors." This study will focus differentiating telemedicine from telehealth, since they are similar and often used interchangeably, there are several differences between the two. This study will focus on the comparison of the use of telehealth/telemedicine services from five years ago, to today's relevancy with the use of patient input through a satisfaction rate of getting fast and quality care. This study will also focus on the health professionals that make telemedicine/telehealth services work in the first place, as well as the collaboration and communication from one provider to another, especially if the other provider is practicing in a different country. Finally, the study will give information about the current challenges with telemedicine and why the progression in the U.S has been long and challenging. I will also give a brief input on my internship experiences and recommendations from that to ensure that patients get the quality care that they deserve.

Exploring the Relationship Between Child Maltreatment In Children with Cognitive Disabilities, Health Outcomes, and Adverse Life Events: A Literature Review *Cathy Koetting*

This review of the literature centers on the relationship of cognitive disability with child maltreatment, adverse life events and health outcomes. Research undertaken in the general population shows that exposure to adverse child events or ACES has a significantly detrimental impact on health and well-being across the life course. Subsequent studies since the original study by Felliti and Anda (1998), show that specific traumatic experiences create a cumulative environmental adversity during childhood that results in poor outcomes, and mediates biological, social and psychological pathways through which these adversities impair health. Recent research studies have also shown that children with cognitive disability are more vulnerable to experiencing adverse life events such as abuse, family violence and parental separation and statistics show they are about 3 times more likely to experience these adverse life events than their non disabled peers. We also know however, data from various countries including the US shows that children with cognitive disabilities have poorer health outcomes than their non-disabled peers. These studies point to the possibility that child maltreatment, adverse child events, health outcomes and cognitive disability may be related in important ways. While it is very clear that adverse life events play a significant role in shaping health outcomes for the general population, it is not so clear for children with cognitive disability. There is a great need to understand more about how all these factors are related to eliminate this health inequity for this population

particularly as they age. Children with cognitive disabilities are considered a vulnerable population when discussing violence and victimization. A recent study by Drake, et al., (2018) showed that forensic nurses seek more evidence-based information on vulnerable populations. Moreover, forensic nurses in the study showed a need for more information on providing trauma-informed care for this vulnerable population. Lastly, Recent statistics published by the Bureau of Justice Statistics show that among individuals with disabilities, persons aged 12 to 15 had the highest rates of violent victimization (Harrell, 2017). In conclusion, it appears that this population experiences a large amount of violence, and future research may help us answer the role of violence and adverse life events making this a social justice priority.

Factors Affecting Uncertainty in Women with High Risk Pregnancies *Ashley Schmuke*

One in four women are diagnosed with or considered to have a high risk pregnancy. While much research has focused largely on the physiological maternal and fetal/neonatal outcomes, the ways in which women process and experience a high risk pregnancy is limited. Faced with the threat of pregnancy complications and the joy of pregnancy, women may experience intense feelings of uncertainty and decision conflict, accompanied by anxiety and psychological distress. Objective: To evaluate the state of the science regarding uncertainty in high risk pregnancy and identify factors that influence uncertainty in women diagnosed with a high risk pregnancy and to synthesize findings from empirical sources on uncertainty in high risk pregnancy. Data Sources: Primary research articles from CINAHL, Ovid MEDLINE, Scopus, PsychINFO and ProQuest written in English, without date restrictions on uncertainty in high risk pregnancy. Nineteen articles were identified, including eleven qualitative studies and eight quantitative studies. Data Extraction: This integrative review was guided by Whitemore and Knaf's methodology. Data was extracted and organized under the following headings: author and year, purpose, theoretical framework, design/methods, setting and sample, measurement, data analysis, findings, and limitations. Data Synthesis: Studies were synthesized according to the antecedents to uncertainty described by Mishel (1988) in the Uncertainty in Illness theory: stimuli frame, cognitive capacity, and structure providers. Other factors affecting uncertainty and outcomes of uncertainty were identified. Conclusion: Uncertainty is a prominent theme in women experiencing a high risk pregnancy. The state of the science is largely descriptive, cross-sectional, and prone to sampling bias. Current findings suggest uncertainty is influenced by various personal, pregnancy-related, demographic, and health care-related factors. Future research is needed to explore factors

affecting uncertainty and to develop, implement, and evaluate interventions aimed at reducing uncertainty in high risk pregnant women.

Health and Hobbies Among Correctional Officers: An Occupational Perspective *Emily Pestello, Lisa Jaegers*

Background: Correctional officers are an underserved and at-risk population of workers. They experience higher rates of depression and chronic disease as compared to the general population. The application of healthy leisure occupations or activities are known to contribute to stress reduction (Anderson, & Gustavson, 2016). Hobby is a broad term used to categorize engagement in non-work activities including leisure (Gelber, 1999). Hobbies have been implicated in improving health for a variety of diagnoses in clinical settings and have been shown to improve life expectancy, feelings of fulfillment, and increase overall health (Yatczak, 2011; Tomioka, Kurumatani, & Hosoi, 2016) Hobbies have also been shown to decrease compassion fatigue in nurses (Anderson, & Gustavson, 2016). Hobbies add fulfillment to life are an important aspect of well-being. The purpose of this study was to describe the hobbies of correctional officers and their relationship to mental and physical health. Given the health promotion benefits hobbies have demonstrated in previous studies, we hypothesize that those who engage in healthy leisure or social participation hobbies will experience better health outcomes than those who do not engage in healthy hobbies. Methods: We conducted a cross-sectional survey with correctional officers and sheriff's deputies at 4 jail facilities (N=320). Variables included age, ethnicity, gender, PROMIS Global Physical Health and Mental Health, job stress, and the Center for Epidemiologic Studies Depression Scale 10 item short form (CES-D-10). Descriptive analyses were used to describe demographics and health characteristics. Hobbies were explored through open-ended survey items that were coded based on seven occupational performance indicators including: activities of daily living, instrumental activities of daily living, rest/sleep, education, work, play, social participation, and leisure. Results: Nearly 80% of correctional officers completed the survey. The sample included more women (53%) than men and 78% identified as African American. Based on our qualitative analysis, correctional officers most often reported engaging in leisure (65%), instrumental activities of daily living (4%), social participation (1%), and mixed hobbies (19%). 11% of correctional officers did not report any hobbies. Analysis of the relationship between hobbies and health outcomes is in progress. Discussion/Conclusion: This project is unique in its approach to examining the relationship between hobbies and health outcomes by using an occupational science lens Using this

perspective to analyze correctional officer hobbies has the potential to contribute to the understanding of their health.

Health Resource Center Pro Bono Physical Therapy Services: Justice in Resolving Barriers to Care *Lexi Bonefas, Barb Yemm*

Background: The Health Resource Center (HRC) Physical Therapy Clinic can address pain concerns, loss of function or post-surgical rehabilitation. Teams of students evaluate and treat patients under observation of a licensed physical therapist. Our student run physical therapy clinic began providing services to under and un-insured patients in January 2014 and has provided over 250 visits per year. Once a physician referral or prescription for a patient is attained patients are scheduled for an appointment. Appointments are available Saturdays from 8 a.m. to noon. A review of scheduling revealed that 43% of patients who were scheduled for an appointment did not utilize arrive to utilize the services. Purpose: According to the initiative Healthy People 2020, "un-insured people are less likely to receive medical care, more likely to die early (and) more likely to have poor health status". Physical therapy is a key player of the health care team in serving this population by improving quality of life through a variety of skilled interventions. As the only pro-bono clinic in the St. Louis area, the HRC strives to provide quality care to this vulnerable population. However, it is critical that this population has access to the HRC to get the care that they need in order to meet these goals. The purpose of this quality assurance research project was to identify the barriers to care in receiving physical therapy services at the HRC, with the intent of improving upon these obstacles to increase future utilization of physical therapy by the un-insured population. Methods: Current patients completed surveys in the HRC, and patients from 2016 were contacted by phone. Results: The data showed that primary barriers include transportation and scheduling issues surrounding only appointments available on Saturday mornings. Conclusion: Understanding these obstacles lay the foundation for scheduling adaptations, interventions aimed at decreasing barriers at the HRC, and suggest future research continue to optimize services provided by our physical therapy clinic.

Junior Nursing Student Day of Reflection, Developing a Reflective Soul

Cristina McGroarty, Margaret Bultas

Outcomes from a "Day of Reflection" for Nursing Students Background: At Saint Louis University School of Nursing, the vision for our baccalaureate programs is to provide an educational experience that cultivates a well-developed mind,

a generous heart, and a reflective soul in each student. The School of Nursing offers a challenging curriculum to develop our students' minds as they deepen and strengthen their knowledge base. Students come to our program with a generous heart that desires to serve humankind. In response to faculty concerns regarding an increase in student anxiety and stress related to the beginning of clinical rotations in nursing school, the School of Nursing faculty developed a Day of Reflection. The goal of the Day of Reflection was to lead students to further develop their reflective souls by offering them the opportunity to contemplate their identity as Jesuit-educated nurses. The "Day" was a collaborative effort between nursing faculty, Campus Ministry, and volunteer upper level nursing students who served as small group discussion leaders. Intervention: The goal of the day long retreat was to call focus on three principles: Self Actualization, Self-Management, and Self Care Skills. The retreat included witness talks by Senior level students who helped plan and implement the event. The talks were followed by time for personal reflection as well as group sharing. In addition, there was a faculty panel discussion, group activities as well as lunch with faculty and community members. The day concluded with a "Blessing of the Hands" ceremony. Results: One hundred and fourteen Junior level students at Saint Louis University School of Nursing participated in the Day of Reflection. At the start of the day long program, students were asked to identify personal goals and to name what excited them as well as their fears in regards to their Junior level experience. Post-retreat, students were asked about their fears, concerns, and new strategies they had learned for achieving goals and reducing stress as they move through their Junior year. Overall, students rated the experience as moderately helpful (mean 3.1/5; N = 114) and provided feedback related to improving the event or the next cohort of students. Qualitative data about their excitement, concerns, fears, and goals for their nursing school experience will also be presented. Conclusion: As a Jesuit School of Nursing which embraces the construct of Cura Personalis, this Day of Reflection speaks to our commitment to fulfilling the University's vision for baccalaureate programs. This Day of Reflection is unique within a school of Nursing. As a faculty we are committed to teaching the whole nursing student as they prepare to care for others in the profession of Nursing. The Day of Reflection is currently being planned for 2018 incorporating the feedback received from students in order to improve the experience even more.

Molecular Analyses and Phylogeny of the Herpes Simplex Virus 2 Us9 and Glyco- proteins Ge/Gi Obtained from Infected Subjects During the Herpevac Trial for Women *Kelsey Rowe, Miguel A. Minaya*

Herpes simplex virus 2 (HSV-2) is a large double-stranded DNA virus that causes genital sores when spread by sexual contact and is the leading cause of encephalitis in newborns. Viral glycoproteins facilitate virion entry into cells, making glycoproteins a prime target for vaccine development. A truncated glycoprotein D2 (gD2) vaccine candidate, recently tested in the phase 3 Herpevac Trial for Women, did not prevent HSV-2 infection in initially seronegative women. Some women who became infected experienced multiple recurrences during the trial, whereas others did not. The Us7, Us8, and Us9 genes, which encode glycoprotein I (gI), glycoprotein E (gE), and the Us9 tegument protein respectively, are important in viral spread across cell junctions and facilitate anterograde viral transport in neurons, prompting us to investigate whether sequence differences in these genes could be associated with frequent recurrence. First, we compared the nucleotide sequences and the dN/dS ratio of the Us7-Us9 region from viral isolates of individuals who experienced multiple reactivations with those who had had a single episode of disease. No polymorphism(s) consistently distinguished the recurrent isolates and thus no polymorphism that might enhance neural transport was revealed. Sequence conservation in the Fc binding domains of gE (235-264) and gI (128-145) was observed, which is consistent with their previously described function as an Fc receptor. Sequence variability in the gE CTL epitope region (518-526) was also observed, which is consistent with its role as an immunodominant epitope. In frequently recurring subjects' isolates, the low dN/dS ratio of gI suggests this glycoprotein has a specific role in exiting neurons during reactivation that must be conserved, while the higher variation (dN/dS ratio) of gE in recurrent strains may allow the virus to evade the immune system during the reactivation. Phylogenetic reconstruction of the Us7-Us9 region revealed nine strongly supported clusters within the 59 North America HSV-2 strains sampled. Twelve nucleotide variations were shared between non-related strains, likely due to extensive recombination previously described within the HSV-2 genome. Thus, although we have demonstrated different evolutionary variations in the Us7-Us9 complex within the North American HSV-2 strains and supported previous findings regarding the function of the Us7-Us9 complex, we found no molecular evidence of sequence variation in Us7-Us9 that distinguished isolates from subjects with frequent recurrent episodes of disease.

Occupational Therapy: A Partner for Health and Justice
Tiare Sadarananda, Claire Elbert

Occupational therapy's role in rehabilitation is widely recognized, but the profession's connection and commitment to justice is less well known. This poster presentation aims to

increase occupational therapy's visibility as a partner for justice by describing and providing examples of its occupational justice perspective of health (Wilcock & Hocking, 2015). By providing a brief history of the emergence of occupational justice, defining its significance and implications for occupational therapy, and illustrating examples of justice-focused occupational science and occupational therapy education, this presentation will demonstrate the potential of an occupational justice perspective for both individual and community health. Over the past 25 years, occupational therapists and occupational scientists have asserted that justice is occupational therapy's "social vision" (Townsend, 1993). This assertion rests on an understanding of everyday human activities – what we call 'occupations' – as vehicles for healthy survival, well-being, meaning, and identity (Wilcock & Hocking, 2015). People who take up this occupational perspective value the dignity of humans as occupational beings and believe that the ability to participate in occupations is a right that all humans must be afforded (Hammell, 2008). Given this view of occupation as a right, and inspired by larger ideas about social justice (Bailliard, 2016; Hocking, 2017), occupational therapy has increasingly been conceptualized as a political practice (Pollard, Kronenberg, and Sakellariou, 2008) that must attend to the conditions that facilitate or hinder people's access to occupations (Aldrich, Boston, & Daaleman, 2017). Occupational justice – a state in which people are able to freely engage in meaningful occupations (Durocher et al., 2014) – is thus seen as one outcome of occupational therapy practice (Bailliard & Aldrich, 2016; Hammell, 2008). An occupational justice perspective of health argues that occupational therapists must identify barriers to occupational participation and combat instances of occupational injustice (Hocking & Townsend, 2015; Sakellariou & Pollard, 2013). Through developing its educational programs around the notion of occupational justice, Saint Louis University's Department of Occupational Science and Occupational Therapy (SLU-DOSOT) has embraced this call to action (Aldrich, 2018). SLU-DOSOT students and faculty uphold a commitment to justice through projects inside and outside the classroom that support the right of all humans to access occupations. This poster will showcase curricular and extra-curricular activities in SLU-DOSOT that exemplify the commitment to occupational justice. These examples will also highlight the potential for interprofessional and interdisciplinary collaborations at Saint Louis University. Through educating others about the promotion and pursuit of occupational justice, this presentation will reaffirm occupational therapy's commitment to health and justice and provide a foundation for new partnerships in those arenas.

Palliative Care Considerations of Head and Neck Cancer Patients and their Caregivers

Verna Hendricks-Ferguson, Margaret Bultas

Background Research provides evidence that the public is misinformed about the purpose of palliative care (PC). Facilitating awareness about the purpose and benefits of PC, particularly at diagnosis, is an ethical duty of health-care providers. Fostering accurate understanding about PC may empower individuals to initiate PC conversations with their providers throughout their active treatment. Purpose To evaluate PC perspectives held by patients with head and neck cancer (HNC) and their caregivers. Methods A descriptive-qualitative design was used for this pilot study. The sample included 10 patient-caregiver dyads (i.e., 10 patients newly diagnosed HNC and 10 primary caregivers) recruited from a radiation oncology clinic. Open-ended questions guided the subjects' interviews. Data were analyzed using semantic content-analyses procedures. Results A total of 20 adults participated in this study (i.e., 10 patients with HNC and 10 FCs). Demographic information for the enrolled HNC-patient participants included: (a) 60% (n=6) were male and 40% (n=4) were female; (b) 80% (n=8) were married; (c) 100% were Caucasian; (d) mean age was 61 years; and (e) 100% had completed 6 weeks of radiation- oncology treatments. Demographic information for the enrolled FCs included: (a) 77% (n=7) were female; (b) 80% (n=8) were married to the HNC patient; (c) 98% were Caucasian; and (d) mean age was 61 years. Following are the three most common coded meaning phrases and the total summary of the counted meaning phrases according to frequency. The three most common symptoms of concern reported by HNC patients included: (a) pain symptoms (i.e., throat/jaw, pain, mouth sores, ear pain, and headache); (b) dry mouth and swallowing difficulties; and (c) significant weight loss (e.g., 35-50 pound weight loss). The three most common home-care concerns reported by HCs included: (a) negative coping responses by the HNC patient (i.e., irritated, scared, demanding, moody, depressed, angry & short tempered, easily annoyed); (b) alterations in oral taste (e.g., no taste, little taste, food tasted like tin or metal at times); and (c) significant weight loss (i.e., 35-50 pounds during 6 weeks of radiation-oncology treatments). Also, 100% of the patients and FCs indicated the interview questions were appropriate and that the questions caused them no emotional distress. Conclusions Delivery of PC education by health-care providers is critical to increasing comprehension of the benefits of PC during treatment. It is important to assist patients and caregivers with understanding the differences between PC and EOL care. More evidence-based research is needed to equip oncology nurses to plan effective PC-educational strategies that inform family caregivers about the benefits of PC support for patients with HNC. Future studies

are needed to determine the best methods for: implementing PC education during the diagnosis and delivery of oncology treatments for HNC patients and utilizing health-care providers to increase community awareness of the benefits of PC.

Penetrating Ocular Trauma from a Bean Bag Gun: A Case Report and Review of less-lethal Force and Their Consequences *Eric Rohe, Daniel Wehrmann*

Background: Bean bag guns are considered a “less lethal” form of law enforcement and have become an alternative to traditional bullets amongst law enforcement in order to control crowds, riots and to subdue potentially dangerous individuals. Though their use has become an acceptable alternative to pacify suspects, these blunt projectiles are associated with risk of injury (1). Our patient presented with a traumatic, penetrating head and neck injury as the result of bean bag gun usage. The purpose of this study was to perform a literature review of morbidity and mortality associated with less lethal munitions and also make physicians aware of the possible injuries related to this form of law enforcement. Methods: Case report of a patient presenting with a traumatic, penetrating ocular injury following the use of a bean bag gun. A review of the literature from 1994-2016 was performed searching for reported morbidity and mortality associated with bean bag gun use. A description of the pre-operative assessment and surgical intervention of our case is also provided. Results: 131 injuries and one fatality from bean bag gun usage were reported. Six percent of cases (8) were in the head/neck region. Only one penetrating orbital trauma has previously been described in the literature; however, in that case the bean bag and the casing did not separate and both were removed from the orbit. Conclusion: The patient described in this case report suffered traumatic globe evisceration as well as a skull-base fracture after being struck by a bean bag. Although “less lethal” forms of law enforcement are safer than traditional bullets, patients presenting with bean bag gun associated injuries warrant a high clinical suspicion for injury to deeper structures.

Physician Assisted Suicide and Disability *Sabrina Bruozas*

For my paper, I chose to write about physician assisted suicide (PAS) in the context of disability, more specifically, if people with disabilities should be presented the option of PAS. From a patient autonomy perspective, PAS can devalue the life of a terminally ill patient, justifying suicide as a valid option for vulnerable patients: patient with disabilities. Paul Longmore, a disability rights activist, states “until such time as people with disabilities are ensured their rights to independent living,

equal physical and social access, and appropriate psychological and social services-in other words, the right to true self-determination-we must oppose public and particularly legal and judicial support of physician-assisted suicide.” While this may be true, patients with disabilities who seek PAS do so not because of their disability, but because of societal discrimination (Longmore). For example, in the case of David Rivlin and Larry McAffe (two quadriplegic patients), both individuals sought PAS not because of their disability status, but because of the neglect and disrespect they faced while being transferred from nursing home to the next. Both patients were determined competent to seek PAS even though their primary reason was due to the mistreatment of the staff as well as the mental and emotional pain faced during this time. With this being said, most people find it reasonable that a disabled patient would seek PAS to relieve pain and suffering, as any other competent, abled patient would. Therefore, patients with disabilities should be presented with the option of PAS for end-of-life or terminal illness procedures. Patients with disabilities should be treated equally and fairly as patients without disabilities, including knowledge of all treatment options – PAS being one of those. In medicine, the autonomy of all patients must be respected. In this paper, I will respond and argue against Paul Longmore’s argument that we must fix the life of disabled individuals before we fix their death. I will argue that Longmore is wrong because (1) dying equally cannot be separated from living equally; there is no timing when it comes to improving the life AND death of disabled individuals and (2) being pressured into PAS would be unlikely because disabled patients will be given the choice to say yes or no to PAS, just as any abled patient would have: having choice spills over into having the choice over certain medical interventions.

A Pilot Study Investigating the Habits and Barriers to a Preventive Health Lifestyle for Pregnant and Postpartum Women Living in Transitional Homelessness *Christina Vivit, Jessica Barreca*

Authors Christina Vivit and Jessica Barreca, PT, DPT Institution Saint Louis University Program in Physical Therapy Project Title A pilot study investigating the habits and barriers to a preventive health lifestyle for pregnant and postpartum women living in transitional homelessness. Purpose The purpose of this study is to report and discuss the self-identified habits and barriers to a preventive health lifestyle of pregnant and postpartum women living in transitional homelessness. The categories of preventive health behaviors included in this study are exercise, sleep, nutrition, and stress management. Subjects Participants were recruited from June to August 2017, for a voluntary preventative health education program held at a women’s shelter. Participants consisted of pregnant and

postpartum women living at the shelter during the time of the preventative health education program. The survey data was collected prior to each educational session. Participants’ mean age is 29 years old with the range: 18 - 42 years old. Women voluntarily participated in seven educational interventions and results included in the study are from the following educational interventions: Exercise (N=8), Sleep (N=7), Nutrition (N=7), Stress Management (N=9). Methods Archival survey data was taken from a preventative health education program at a maternal shelter for pregnant and postpartum women. The program was available to all pregnant and postpartum women living at the shelter from June to August 2017. The program featured educational classes on exercise, sleep, hydration, posture and positioning, prenatal vitamins, nutrition, and stress management. The survey regarding habits and barriers was provided prior to each education session and left anonymous. This study’s archival data includes completed surveys that contain information on reported habits and barriers to various health topics discussed during the preventive health education program. Results Through conversations with leadership staff and individual peer sessions with women living at the shelter, the followings themes were identified by the participants as high priority areas of need for further education: exercise, sleep, nutrition, and stress management. The results of the survey outlined the top three habits and barriers that the women identified within the collected survey data from each of these themes. Survey results will be provided in table format Conclusion By surveying the women prior to educational intervention, we were able to identify habits and differentiate between perceived and actual barriers to health. This information enabled us to provide customized education and mentorship to facilitate individual goal setting and ultimately empower the women to take a more active role in one’s health. Funding source This project was funded through the Presidential Workshop Series and Small Grant Program through the SLU Center for Service and Community Engagement.

Racial Microaggressions in the Clinical Encounter

Anne M. Sescleifer, Jason D. Keune

The exchange of goods and services for payment, a key business concept, is applicable to a clinical setting as patients pay for an expected level of medical service. Unfortunately, the presence of microaggressions create situations where the level of service falls short of expectations. Microaggressions are everyday indignities that occur intentionally and unintentionally and communicate derogatory messages to members of minority groups. Despite steps towards racial

equality, microaggressions still permeate interracial interactions in clinical encounters, even after accounting for social determinants of health. Perceived microaggressions, whether or not intentional on the part of the provider, can have deleterious consequences for patient care. Patients who feel distant from their providers are less likely to be engaged in their care plan, and damaged provider-patient relationships result in lower levels of engagement, poor clinical outcomes, and higher costs. Doctor-patient encounters are private, complicating the study of clinical microaggressions, and highlighting the need for further probing into the ethical consequences of inequitable care. For example, do minority populations routinely consider the ethical implications of clinical microaggressions, or are microaggressions simply accepted? To what degree are providers responsible for mitigating the effects of microaggressions, and how might they be expected to do so? Do institutions have an ethical obligation to ensure that provider demographics reflect patient demographics? Finally, as long as microaggressions persist, is it ethical for providers to charge minority populations the same rates for clinical encounters, while knowing that the care provided is of poorer quality than that provided to majority populations? Although intangible and difficult to identify, microaggressions in clinical encounters must be addressed if we are to pursue ethical medical business practices.

A Retrospective Examination of Issues Addressed During Music Therapy Sessions with Adult Bone Marrow Transplant Recipients Crystal Weaver *Andrew Dwiggins*

Introduction: Bone marrow transplant recipients may experience psychological and physical issues throughout the treatment process which can adversely affect outcomes. Music therapy is a complementary treatment that may be implemented in tandem with conventional forms of treatment to address these issues. Music therapy is an established health profession in which music is used within a therapeutic relationship to address physical, emotional, sensory, and social issues. Recently, the music therapy profession has expanded in the medical model to address the needs of adult bone marrow transplant recipients. Unfortunately, little is known regarding the predominate issues that are addressed during music therapy sessions with these individuals. Method: Institutional Review Board approval was received to perform a retrospective examination of music therapy sessions conducted with adult bone marrow transplant recipients at a Midwest region health care institution from 06/20/2011 through 06/20/2016. 128 medical charts were reviewed and a total of 823 music therapy sessions were identified. Issues that were addressed during music therapy sessions were categorized into the following groups: socio-cultural suffering,

sensory deprivation, emotional suffering, and physical pain. Percentages for each group were determined by dividing the number from each group with the total number of all the groups and multiplying by 100. Percentages for each group were compared to determine which issue was predominately addressed during music therapy sessions. Results: Socio-cultural suffering was addressed most frequently during music therapy sessions (33%); followed by sensory deprivation (29%), emotional suffering (21%), and physical pain (17%). Discussion: Goals most frequently established during music therapy sessions to address socio-cultural suffering included: increasing meaningful social interaction, decreasing isolation, and increasing self-expression. Music therapy interventions were structured to achieve these goals and included: utilizing significant songs, providing opportunities for self-expression, normalizing the experience, and providing a means for control over the environment. The efficacy of music therapy interventions was assessed by patients' ability to: actively participate, maintain eye contact, attend to task, and appropriately express emotions during music therapy sessions. Conclusion: Socio-cultural suffering is the predominant issue addressed during music therapy sessions with adult bone marrow transplant recipients as determined by board-certified music therapists through observational data, clinical data, and self-reported data from patients. A future study may be implemented to determine if this focus changes if an adult bone marrow transplant recipient transitions to hospice care.

Risk of Adverse Swallowing Events and Choking During Deworming for Pre- school-Aged Children James Kernell

In areas where the prevalence of soil-transmitted helminth (STH) infection is >20%, the World Health Organization (WHO) recommends that deworming medication be given periodically to preschool-aged children (PSAC). To reduce risk of choking-related deaths, WHO recommends that deworming tablets be crushed and given with water to children <3 years old. Albendazole distributions for STH were observed for children 1-4 years old in 65 sites in India and Haiti. Information was recorded on child demographics and demeanor before delivery; tablet form (i.e., crushed or not); and adverse swallowing events (ASEs), which included choking, spitting; coughing; gagging; vomiting; and expelling a crushed tablet in a 'cloud' of powder. Of 1677 children observed in 65 sites in India and Haiti, 248 (14.8%) had one or more ASEs. ASE risk was 3.6% with whole tablets, 25.4% with crushed tablets, and 34.6% when crushed tablets were mixed with water. In multivariate analysis, ASE risk was significantly associated with children 1 year (OR 1.9) or 2 years (OR 2.1) of age; male gender (OR 1.7); non-content child demeanor just before albendazole administration (OR 3.6); child struggling

when given albendazole (OR 2.7); a crushed tablet (OR 3.5); and giving the child water (OR 2.1). Eighteen (1.1%) children choked, none fatally. Seventeen choking episodes occurred with crushed tablets. In multivariate analysis, risk factors for choking included child age 1 year (OR 6.2), non-content demeanor (OR 4.9.1), and water (OR 11.1). ASEs and choking could be significantly reduced by postponing or, if necessary, foregoing albendazole administration at two specific time points: 1) just before administration if the child is fussy, fearful, or combative; and 2) during administration if the child begins to struggle. The degree to which adherence to this policy would reduce deworming drug coverage is unclear. Not routinely giving water would also reduce risk, and observations suggest that correct positioning of the child's head (not hyperextended) and body (upright) would reduce risk further. These findings have implications for PSAC deworming programs using currently available drug formulations.

Social Justice and Self -Healing in a Polarized Racial Society Dannielle Joy Davis, Freddie Wills, Michael Jones

Continued racial discrimination and lack of protection under the law for racial minorities (Chaney, 2018); racist micro-aggressions (Davis & Chaney, 2017); and colorism (Thomas, 2018) between and within groups have resulted in prejudice and maltreatment, stress, minimized sense of self, and inequitable opportunities for racial minorities. Racism has been linked to numerous negative psychological and physical health consequences for African Americans. Stress associated with witnessing and experiencing overt and covert racism has been connected to: -Depression (Brondolo et al, 2016; Liu & Suyemoto, 2016) -Post-Traumatic Stress Syndrome (Sule et al, 2017) -Heart Disease, Cancer & Stroke (Chae et al, 2015; Smilowitz et al, 2016) This work features self-healing solutions to racism which include forming communities of support, spiritual and physical tools, and employing one's creative genius. Professional applications of these strategies promise to yield more healthy and inclusive work environments.

Sociodemographic Correlates of Occupational and Recreational Noise Exposure among Adults in the United States Allison Knewitz, Matthew Simpson

Introduction: Noise exposure, both occupational and recreational, is a preventable but known cause of hearing loss. Recognizing the population at risk for the increased noise exposure is imperative to providing appropriate preventative measures. Objective: To determine if there are sociodemographic factors associated with occupational and recreational noise exposure. Methods A cross-sectional survey, using a nationally representative data. Participants in

the 2011-2012 National Health and Nutrition Examination Survey (NHANES) ages 20-69 were asked about being exposed to loud noise at work or outside of work. Participant demographics were weighted to reflect the United States population, and weighted multivariate logistic regression determined estimates of exposure to work and non-work noise, yielding adjusted odds ratios (aOR) and 95% confidence intervals (CI). Results There were 4,675 participants ages 20-69 included in the study, 51% female, and 65% white. Occupational noise exposure was more prevalent than recreational exposure (34% vs. 12%). Compared with females, males were four times more likely to be exposed to occupational noise (aOR=4.08, 95% CI 3.30, 5.04) and two times as likely to be exposed to recreational noise (aOR=2.63, 95% CI 1.88, 3.70). Compared with whites, blacks (aOR=0.67, 95% CI 0.47, 0.95), Hispanics (aOR=0.61, 95% CI 0.45, 0.84), and Asians (aOR=0.25, 95% CI 0.18, 0.33) were less likely to have occupational noise exposure. Hispanics and Asians were also less likely to be exposed to non-work noise compared to whites (aOR=0.57 and 0.27, respectively). Participants who were college graduates were 74% less likely to have work noise exposure than those with less than a high school education (aOR=0.26, 95% CI 0.19, 0.37), and participants with insurance were 26% less likely to have work noise exposure than those without insurance (aOR=0.74, 95% CI 0.60, 0.93). Conclusions There are sociodemographic correlates of occupational and recreational noise exposure among adults in the United States, and males, whites, and those with the least education are most likely to be exposed to occupational noise. Future noise reduction and occupational hearing loss prevention interventions may target sociodemographic groups identified in our study with greater odds of noise exposure.

Standardizing Cancer Screening and Diagnosis Protocols: The Effect of the Urgent Referral Pathway on Breast Cancer Outcomes in the United Kingdom Niraj Patel

The urgent referral pathway was instituted by the National Institute for Health and Clinical Excellence (NICE) to address higher cancer mortality rates in the UK in comparison to Western European counterparts. The goal of the pathway is to improve early detection of cancer at less advanced stages for improved outcomes and survival through urgent referrals and the two-week rule (TWR). The main purpose was to analyze Royal Surrey County Hospital (RSCH) data and compare local NHS trust performance to national averages and targets in the years 2009-10 and 2016-17. An analysis of changes in referral rates, referral priority types, and mortality rates between 2009-2010 and 2016-2017 was performed. Micro and macro-level factors accounting for these changes were investigated. Referral details, patient information and events to diagnosis were recorded, including days from referral to review, days to

diagnosis, and mortality. Interviews with providers were then initiated. Overall, 99.4% of RSCH breast patients were appropriately evaluated within the TWR target. The average days from TWR referral to evaluation increased from 6.62 to 10.20 for suspected breast cancer cases. For individuals with non-specific symptoms, the TWR referral decreased from 16.89 to 12.04 days. While there has been an increase in the TWR for patients with suspected breast cancer, the overall patient load has increased from 833 to 3186. Furthermore, a higher percentage of patients have access to radiotherapy. Investigation into drivers of increased referrals and their effect on mortality rates is ongoing, including comparative analysis of the pathway on major cancer sites.

Study of an Enhanced Consent Tool in ICU Settings: Interim Update and Trial Design Ryan Sanchez, Cara Buskmitter

Background In the U.S., approximately 20% of deaths occur in the ICU setting, and the majority of these deaths involve the decision to withdraw life-support One study reported that 17% of family members were dissatisfied with the information they received about a diagnosis and over 30% were dissatisfied with information they received about the cause of death. A multicenter study surveying over 540 family members of patients in the ICU identified that 75.5% and 82.7% of family members and spouses, respectively, have symptoms of anxiety or depression. Objectives The objectives of this study were to create a tool to incorporate Catholic Medical Ethics into a decision making tool based on the Ethical and Religious Directives for Catholic Health Care Services, to provide practitioners with a systematic design, guiding them to effectively identify a treatment's benefits and burdens with the goal of improving informed consent, and to categorize and define several Catholic bioethical principles to ensure the decision made conforms to the objective reality of human nature. Methods A tool was created using Catholic Medical Ethics principles and proposed to an Ethics Committee and two focus groups to obtain feedback and identify ways to improve the tool for use in the ICU setting. The tool was studied by two focus groups and by the SSM St. Mary's Ethics Committee with positive and negative feedback reviewed within the body of the poster. Future Research A follow-up study is planned and was designed to evaluate whether a two page worksheet helps patients and/or families think through their own beliefs, concerns, and understanding of medical treatments, especially withdrawal from ventilators and acceptance of palliative care from an ICU. This poster reviews the design of this proposed prospective, non-randomized cohort study evaluating the tool created. A survey instrument was created to evaluate the tool using the International Patient Decision Aids Standards Collaboration Publication, which reviewed 86 trials from the Cochrane Review of PtDA in

2011, which evaluated the tools used to measure five key decision making process constructs and decision quality constructs. The research objectives of the proposed study are reviewed in the present poster, and are patient and/or family satisfaction with the tool, patient and/or family satisfaction with their own decision, patient and/or family concordance with healthcare team recommendations, and time (in days) between concordance of patient and/or family decision and healthcare team recommendations (if applicable).

Taking Prevention Against the Risk of Emerging Zoonotic Diseases Among Farm and Animal Workers Katherine Bowman

Occupational diseases effect many career fields; however, agricultural workers have a special dynamic due to confounders: emerging zoonotic diseases, lower health literacy and limited access to healthcare. The World Health Organization estimates that more than half of all human pathogens are zoonotic in origin. Common zoonotic diseases, including Campylobacter, Salmonella, E.coli, and Cryptosporidium, are repeatedly cited within public health. However, the WHO also has reported that nearly all the emerging diseases within the last decade have also been zoonotic. These emerging zoonotic diseases include Swine Influenza, Avian Influenza, and Methicillin-resistant Staphylococcus aureus (MRSA). The healthcare community has an outbreak plan for these emerging diseases within the human population. There are vaccine protocols in place and a system of treatment. Knowing that prevention is always better than treatment, the plans need to shift from healthcare into their animal origins, agriculture. Currently, agriculturalists are given the same set of guidelines that healthcare workers are given: handwashing techniques, proper food prep and designated areas, proper clothing, personal protective equipment, etc. However, a major difference between agriculturists and healthcare workers that this current system overlooks, is that oftentimes the farm worker lives and works in the same vicinity. The places are one in the same, without boundaries, physically, mentally, emotionally, even socially. The lack of social boundaries leads to the second and third confounders: lower health literacy and limited access to healthcare. By nature, farm workers, and their families live in rural areas lacking in proper healthcare, leading to a lower health literacy. This deficiency in knowledge only creates a system of unaccountability for proper healthful behaviors. Without proper education on prevention, farm workers do not have the appropriate tools to avoid the spread of these emerging zoonotic diseases. In fact, as of 2012, a study suggested that the common bacterium Campylobacter was still prevalent in poultry flocks because the epidemiology is misunderstood. Proper research, education, and tools are vital

to preventing the spread of emerging zoonotic diseases. Not only are they an occupational health risk to the farm workers and their families, the diseases are also a risk to the general population as it grows and becomes more dependent on large scale commercial farming.

Understanding the Dual Minority Paradox: Resiliency in Black Versus Hispanic Sexual Minority Males *Matthew Ellis*

Sexual minority males (SMM) of color may experience greater minority stress due to their intersectional identity. However, resilience theory suggests that dual minority status may be protective alongside other socio-cultural factors. While research often collapses SMM of color into one population, resiliency and its effects may differ significantly not only from White SSM, but between Black and Hispanic SMM as well. Data were analyzed on 1,507 White, Black and Hispanic SMM surveyed from the national Social Justice Sexuality Project. Minority stress was calculated as discomfort in one's intersectional identity (racial/ethnic*sexual) and compared across racial groups, along with physical and mental health scales. Resilience-promoting factors (i.e., outness, sociopolitical involvement, social supports, religion/spirituality) were used to predict health outcomes. Black and Hispanic SMM reported significantly different levels of minority stress (11.2 vs. 9.94, $p < 0.001$), with both exceeding White SMM (5.28, $p < 0.001$). However, they also reported significantly higher levels of physical health (Hispanic=3.87, Black=3.77, White=3.61, $p < 0.001$) and mental health (Hispanic=3.38, Black=3.24, White=3.23, $p < 0.01$). Resilience-promoting factors showed marked differences, with spirituality significantly predicting positive mental health in Black SMM ($p < 0.001$) and family support in Hispanic SMM ($p < 0.001$). In line with resilience theory, these data suggest that although SMM of color may experience greater minority stress, their physical and mental health exceed that for white SMM. However, notable differences existed between Black and Hispanic SMM in terms of minority stress, health outcomes and resilience-promoting factors. Information gained from this study can be used to address racial health disparities present in both Black and Hispanic SMM.

Unilateral Vocal Cord Paralysis Following Vincristine Therapy *Julie Friend, Zachary Oman*

Introduction Vincristine is a vinca-alkaloid chemotherapeutic agent that is used in treatment of neoplastic disease. While it has many possible adverse reactions, vocal cord paralysis has rarely been documented. Of the published cases, bilateral vocal cord paralysis of children is most common. We present a

case of unilateral vocal cord paralysis of an adult patient leading to stridor, dysphagia, and vocal hoarseness one month after receiving first dose of Vincristine. To our knowledge, this is the first case of an adult experiencing unilateral vocal cord paralysis after administration of single dose of Vincristine therapy. **Patient Presentation** A 60-year-old woman was diagnosed with B-cell acute lymphoblastic leukemia (ALL), positive for Philadelphia 1 chromosome and p190 mutation. She presented for induction chemotherapy with R-Hyper CVAD (Rituximab, Cyclophosphamide, Vincristine, and Doxorubicin) plus Methotrexate and Cytarabine. One month after receiving her first dose of Vincristine 2mg on day 4 of cycle 1A, she presented with stridor, hoarseness, dysphagia, and shortness of breath. Urgent laryngoscopy revealed left vocal cord paralysis. No other focal neurological deficits were found on physical examination. A Gel-Foam injection of left vocal cord was performed for appropriate medialization and temporary relief of symptoms and Vincristine was held from her chemotherapy regimen. Her presenting symptoms completely resolved 5-months later. **Discussion** Vincristine has been shown to cause neuropathies in 19.6% of patients⁶. This is thought to be secondary to binding of alpha-tubulin dimers which disrupts the formation of microtubules causing alteration in size and orientation which leads to impaired axonal transport with subsequent axonal degeneration². Sensory fibers are usually affected earlier and more severely than motor fibers⁵. Studies show that 60% of patients experiencing neuropathy begin to manifest a clinically significant sensory or sensorimotor neuropathy at cumulative doses ranging from 30–50 mg⁶. Vocal cord paralysis caused by Vincristine use can be unilateral or bilateral, however bilateral involvement has been more commonly reported in the literature at this time. Bilaterally affected vocal cords can be life-threatening requiring intubation and mechanical ventilation⁴. Vincristine-induced vocal cord paralysis has no specific treatment, however the use of pyridoxine and pyridostigmine has been associated with a more rapid recovery time in a series of patients who experienced peripheral neuropathy secondary to vincristine. Most reported cases of vincristine-induced vocal cord paralysis have shown that it is usually reversible and complete resolution can occur within 6-9 months⁵. **Conclusion** We present a rare case of Vincristine induced unilateral vocal cord paralysis successfully managed with conservative therapies. We recommend that this novel approach be considered in future Vincristine induced unilateral vocal cord paralysis without respiratory distress.