

3rd ANNUAL SCIENTIFIC MEETING MOLA LATINO HEALTH SYMPOSIUM

# Moving **forward** Hacia **adelante**

CHICAGO, IL - OCTOBER 4-5, 2019

Co-hosted by the Northwestern University, Feinberg School of Medicine, Office of Diversity and Inclusion



Medical Organization for Latino Advancement



# MOLA's Education & Research Committee

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- Isabel Castrejón, Md, Phd, Symposium Academic Program Co-chair
- Jonathan Moreira, Md, Scholarship Subcommittee Co-chair
- Matías Pollevick, Symposium Medical Student Co-chair
- Erika Arias, Symposium Medical Student Co-chair
- Senta Berggruen, Md
- Miguel Carabaño, Md

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- Isabel Castrejón, MD, PhD, Rush University Medical Center
- Diana Andrea Chirinos Medina, PhD, Northwestern University, Feinberg School of Medicine
- Joseph Cooper, MD, University of Illinois College of Medicine
- Joaquín Estrada, MD, Advocate Illinois Masonic Medical Center
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- Joseph Cooper, Md Emmanuel Eguía, Md
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- Karina Reyes, Mola Intern
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- Gabriela Saldaña, Volunteer Coordinator
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# **Table of Contents**

Editorial Committee 1
Editorial 2
Symposium Highlights
Oral Presentations
Posters
MOLA Awards44
Author Index48

# Editorial

#### MOLA's Third Annual Latino Health Symposium: Moving Forward / Hacia Adelante

The Medical Organization for Latino Advancement (MOLA) is proud to disseminate the academic innovative work that is being actively pursued by our members, including physicians, trainees, researchers, public health professionals. and students. MOLA is a non-profit association of Chicagoland Hispanic/Latino physicians working for career advancement, linguistic and cultural competency, personal wellness, and reduced health disparities for the good of entire Hispanic/Latino the community.

Our third annual Latino Health Symposium, executed through October 4, 2019-October 5, 2019, in partnership with the Northwestern University Feinberg School of Medicine's Office of Diversity and Inclusion, boasted of an attendance of over 250 health

It is with great orgullo (pride) in our community of professionals and students that we submit this report highlighting the abstracts, many of which I am certain will lead to successful publications, new research ideas, and impactful solutions to the health issues that uniquely affect our underserved Hispanic/Latino community. MOLA's Symposium is one of few academic events in the nation that features health-related academic work and community solutions by Latinos, for Latinos.

We look forward to featuring your work and achievements next year at our next Symposium! To keep up to date on MOLAs news and announcements, please visit www.chicagomola.com On behalf of MOLA's Board of Directors and Scientific Committee, we extend a heartfelt ¡Enhorabuena! (Congratulations!) to all our poster and oral presenters and wish you sincere success in all your future endeavors at improving health equity and workforce diversification for Latinos in the U.S. and beyond.

#### ¡Muchísimas gracias!

#### Pilar Ortega, MD

President Medical Organization for Latino Advancement



## Symposium Highlights





"I gained the perspective that my identity as a bisexual latinx person can be helpful to patients identifying similarly"

"Thinking about the impact I can have on a patient is what makes me happy."

"I gained confidence and knowledge in moving forward with whatever career I choose"

"Visualizing goals first is essential to move forward!"



## Symposium Highlights

"It was inspiring to be in a room with Hispanic/Latinx physicians/medical students/professionals"



"Realizing that I am a part of a growing generation of Latinx physicians that will better serve our community makes me happy."

"I enjoyed hearing the women in the medicine talks, especially because I felt like I could relate. I felt empowered"



"Seeing so many Hispanic medical professionals in one event- inspiring and reassuring."

"It made me happy to see so many brilliant & inspiring Latinos in medicine. Especially being on clerkship when it is such a rare sighting! It is comforting and reassuring that I'm not alone. Thank you MOLA!"

"Leaving competition behind and making connections instead. To influence others while being influenced."

## **Oral Presentations**

## LGBTQ Latino Health

#### Oral 01

LGBTQ Healthcare Training in Obstetrics and Gynecology Residency Programs

K. D. Guerrero MD\*, R. Zuckerman MD, I. Romero MD, J. Chor MD, MPH. University of Chicago Hospitals

**Background:** Obstetrician-Gynecologists (Ob/Gyns) are often a point of contact between lesbian, gay, bisexual, transgender and queer (LGBTQ) patients and the healthcare system. However, how well Ob/Gyn residency prepares trainees to address the health needs of this population is understudied.

**Objectives:** To assess Ob/Gyn resident physician experiences with and preferences for LGBTQ healthcare training and education.

**Methods:** A cross-sectional, web-based survey was deployed to current residents from all 13 accredited Illinois Ob/Gyn training programs. Residents with active emails were eligible to participate in the study. Demographic and training questions were modified from a published survey of Ob/Gyn resident ethics education, and knowledge-based questions were modified from a previously published survey regarding Ob/Gyn attending physicians' attitudes and knowledge about caring for LGBTQ patients. Descriptive statistics were used to analyze data.

**Results:** Of the 257 eligible Ob/Gyn residents, 105 (41%) responded to the survey. Most respondents were from university-based (n = 62, 59%), non-religiously affiliated institutions (n = 60, 57%). Half (n = 52) of residents felt unprepared to provide healthcare for lesbian or bisexual patients and 76% (n = 80) felt unprepared to provide healthcare for transgender patients. Regarding training, 62% (n = 65) and 63% (n = 66) of participants stated their programs dedicate 1-5 hours per year to lesbian/bisexual healthcare training and transgender healthcare training, respectively. Few residents reported training through supervised clinical involvement in caring for LGBTQ patients (n =16, 15.2%) and almost all, 92% (n = 97), desired more education on how to provide healthcare to LGBTQ patients. Perceived barriers to receiving more training in LGBTQ healthcare included crowding in the curriculum (85%, n = 89) and a lack of experienced faculty (77%, n = 80).

**Conclusion:** Our assessment indicates that Ob/Gyn Illinois residents feel inadequately prepared to address the healthcare needs of LGBTQ patients. Although barriers such as curricular crowding and faculty inexperience exist, residents desire more education and training in providing healthcare to the LGBTQ community. Future work is needed to address this gap, to ensure that Ob/Gyn residency graduates are prepared to provide equitable care to LGBTQ patients.

## Oral 02

Dermatologic Disparities: Essential Considerations in Patient Care

M. L. Espinosa BS\*, P. A. Lio MD. University of Chicago Pritzker School of Medicine

**Background:** Healthcare disparities exist in all fields of medicine, including dermatology. These are differences in healthcare access, quality of care, or outcomes that vary by sex, race, sexual orientation, age, socioeconomic status, and more.

**Objectives:** To identify dermatologic healthcare disparities in lesbian, gay, bisexual, and transgender (LGBT) community and racial minority groups, including African Americans, Hispanics, and Asian/ Pacific Islanders.

**Methods:** The PubMed database was queried using keywords (atopic dermatitis, melanoma, hidradenitis suppurativa, melasma, and vitiligo). A systematic review was completed to collect data related to differences in epidemiology, presentation of disease, response to treatments, and socioeconomic influences for each of the above-mentioned diseases.

**Results:** A total of 48 articles were utilized. Transgender men undergoing transition have a high rate of acne vulgaris and androgenic alopecia. Atopic dermatitis has an increased prevalence with greater socioeconomic status, yet increased severity of disease was associated with lower socioeconomic status. Only 5% of melanoma cases occur in African American or Hispanic patients but survival rate is much lower than in Caucasians (72-81% compared to 90%) due to more advanced stage at diagnosis and tendency towards acral lentigenous subtype. Hispanic populations are about 20% less likely than non-Hispanic to perform self-skin examinations and the prevalence of physician skin exams varied according to language capabilities. Hidradenitis suppurativa is more common in African American and Hispanic patients, which may be correlated with the increase risk of having metabolic syndrome. Treatment response to melasma varies, with darker skin individuals being at higher risk for post-inflammatory

hyperpigmentation after laser therapy. Finally, the psychosocial burden of vitiligo may be more dominant in African- American patients who may experience loss of racial identity.

**Conclusion:** In this select group of dermatologic conditions, there were several disparities affecting LGBT patients and patients with skin of color. The embodiment of several of these identities may put patients at a higher risk of having poor outcomes, higher prevalence of disease, or increased severity of disease. There is a need for increased public education on skin exams and skin protection, increased diversity of dermatologists, and increased diversity of enrollment in research trials.

#### Oral 03

Burnout and Work-Life Balance Amongst Latino Medical Students S. Imran\*, C. Onyejiaka, E. James, A. Williams Darrow MD, M. Rodriguez MD, K. Xie DO. University of Illinois at Chicago College of Medicine

**Background:** Burnout in the medical field has long been documented in the literature. However, studies surrounding burnout amongst medical students are sparse. This is even more so with respect to burnout amongst Latino medical students, who are an underrepresented minority in medicine.

**Objectives:** It is important to understand the experiences of Latino individuals at an early stage of medical training, as it may affect their future experiences in medicine and their involvement in academic roles. This study aims to identify any existing differences between Latino medical students and the rest of their peers with respect to various indicators of burnout and work-life balance.

**Methods:** A survey was sent to UIC medical students. It utilized a series of Likert scales to assess students' experiences and perceptions regarding burnout and work-life balance, using questions adapted from published literature. Race demographics were elicited. Participants rated how often they experience various indicators of burnout. They also indicated their degree of agreement with statements focusing on their expectations of work-life balance in their future careers.

**Results:** Preliminary data is being reviewed and data collection is ongoing. Amongst initial respondents (n=80), 16.25% identified with some Hispanic background. For most measures of burnout, Hispanic students reported similar experiences as their non-Hispanic peers. This aligns with published data that has demonstrated comparable burnout rates between minority and non-minority medical students. However, differences were noted in the long-term expectations between the comparison groups. Hispanic medical students were more likely than their peers to put thought into finding a balance between career and family in their future work. On average, they also agreed more that family would dominate their life in the future and that they would be satisfied with their future work-life balance. The survey will be expanded to collect a larger data sample. Preliminary data is presented in our poster. Final results will ultimately be reflected.

**Conclusion:** This investigation will highlight the unique experiences and perceptions of Latino medical students with respect to burnout and work-life balance. A thoughtful understanding of these experiences and perceptions can help guide medical education in promoting and ensuring Latino representation in medicine.

#### Latino-focused Medical Education

## Oral 04

Medical Student-led Quality Improvement of Linguistic Educational Opportunities at Northwestern Feinberg School of Medicine

E. Arias\*, M. Pollevick, S. Carbunaru, H. Hanna, V. Reguitti, A. Reyes, S. Libfraind, V. Bishop MD, J. Moreira MD, P. Ortega MD. Northwestern Feinberg School of Medicine

**Background:** Due to the growing population of Spanish-speaking patients with limited English proficiency, there is an urgent need for bilingual physicians. In response to this need, the Northwestern Feinberg School of Medicine is developing an intensive medical Spanish course for fourth year medical students. However, first, second, and third year medical students have expressed interest in improving their Spanish speaking capabilities prior to fourth year, and language learning literature supports longitudinal acquisition of skills rather than a single educational exposure.

**Objectives:** The purpose of this project is to assess medical student interest in linguistic educational opportunities for learning medical Spanish.

**Methods:** As a quality improvement initiative, the Latino Medical Student Association (LMSA) Northwestern chapter leadership distributed a one-time voluntary survey to a Northwestern Listserv consisting of approximately 800 medical, physician assistant, and physical therapy students in February 2019.

**Results:** Seventy-three students completed the survey (response rate =  $\sim$ 9%), mostly medical students (81%). First-year medical students had the highest participation among the four medical student classes (34 first-year medical students, 21% of the first-year class). Seventy-nine percent (79%) of respondents reported lack of opportunities to practice Spanish as a major barrier to Spanish language improvement. A majority (81%) reported learning Spanish best when speaking with others. The top three activities students were interested in were casual Spanish-speaking groups (77%), lunch talks led by Spanish-speaking faculty (66%), and shadowing Spanish-speaking physicians (63%).

**Conclusion:** This survey provides a framework for the development of opportunities to learn and practice Spanish to supplement a fourth year formal elective course in medical Spanish. These opportunities would support a gradual and longitudinal integration of medical Spanish skills throughout the four years of medical school. Further study and development of medical Spanish courses represents a valuable opportunity for the Northwestern LMSA leadership to work with Feinberg faculty and administration to develop innovative programs to engage and teach students in this area of need.

## Oral 05

"Musculoskeletal Medical Spanish Curriculum"

I. López-Hinojosa\*, P. Ortega MD. University of Chicago Pritzker School of Medicine

**Background:** The growing linguistic diversity of the U.S population and federal mandates to provide equitable care regardless of language support the need for bilingual physicians who can provide language concordant medical care. Spanish is the second most common language spoken in the U.S. indicating an increasing need. Currently, medical schools lack a standardized curriculum with identified core competencies to assess proficiency.

**Methods:** We developed Medical Spanish curriculum for fourth year medical students that focuses on both medical and cultural topics. This module specifically addressed the Musculoskeletal physical exam with added components of dermatological systems and informed consent. For the cultural component, we elaborated on screening and counseling for domestic violence. Medical students were assessed on skills pertaining to domains of vocabulary, grammar, and comprehension as well as self-reported comfort level before and after the module.

**Results:** Data review in progress during MOLA summer research program.

**Conclusion:** Data is expected to demonstrate that there is a positive change in student skills in the three medical Spanish domains for the subject matter presented in the module and improved comfort level. The competencies highlighted in our curriculum serve as a foundation for standardizing Medical Spanish nationwide.

#### Oral 06

Educational Needs and Preferences Assessment of Latino Physicians and Medical Trainees: An Exploratory Survey Study to Complement the MOLA Mentorship Program

S. Salazar MD\*, M. Riad MD, P. Ortega MD, I. Castrejon MD, PhD. Pontificia Universidad Católica del Ecuador

**Background:** Mentoring and being part of an active network of peers are known to be essential elements of successful careers in academic medicine. The need for mentoring and educational resources is even greater for underrepresented minority (URM) groups in medicine, including Latinos. Although the Hispanic population is significantly growing and expected to be 28% of the US population by 2060, there is an important shortage of Latino physicians. Understanding young Latino healthcare professionals' educational needs and preferences may help to enhance mentorship programs and support Latino physicians and trainees in academic medicine.

**Objectives:** To identify potential unmet educational needs and preferences of the Latino physician population.

**Methods:** Members of the MOLA Research and Education committee piloted an initial two-page survey based on previous surveys and adapted to identify educational needs for Latino physicians and trainees. A seven-step survey scale design process was utilized through first conducting a literature review followed by assembling a focus group to ensure that each item is aligned and relevant to the population of interest. The survey draft has been disseminated between 15 participants for preliminary results and further development. The final survey will be anonymous and distributed via SurveyMonkey to MOLA members and Latino Medical Associations. Latino US/international medical graduates (IMGs), medical/premedical students, clinical residents, fellows, physicians and researchers will be invited to participate. Scores from the focus group have been divided into Latino and Non-Latino groups to identify potential

#### differences.

**Results:** The preliminary results for the focus groups comprised 15 subjects, 67% (n=10) Latinos and 33% (n= 5) non-Latinos. Overall 40% of the Latino group and 26% of the non-Latino group had an age range between 26 and 35. More than half of the Latino group identified unmet needs in the information available about ongoing projects, academic and financial support, enough time to explore options available, and access to departmental and alternative funding. Compared with non-Latino participants, Latino reported less academic support (60% vs 40%), limitations to afford education (60% vs 40%), lack of time (62% versus 50%), and non-access to departmental or alternative funding (55-62% versus 25%).

**Conclusions:** Lack of academic support and funding tend to be higher in the Latino pilot group. These specific unmet needs will be better characterized in the final survey. Providing adequate and tailored academic support may help to reduce healthcare disparities and promote an increase in the number of Latino US physicians.

## Oral 07

Building the Pipeline: Review of Best Practices Proven to Develop and Sustain a Mentorship Program

E. García\*, J. Estrada MD. University of Illinois College of Medicine

**Background:** Mentorship and the advancement of Latinos in medical careers are core aspects of the mission of the Medical Organization for Latino Advancement (MOLA). Data demonstrates that despite increased attention to diversity and inclusion efforts nationally, there has been little change in the underrepresentation of Latinos in medical careers. Pipeline mentorship programs have been proposed to increase representation in medical careers through outreach into the underserved communities as a source of future physicians. After engaging multiple Chicago Public Schools in MOLA's Mentorship Program, the purpose of this project is to discover effective teamwork strategies needed to sustain participation in a mentorship program and learn on the development of leaders so that MOLA may help students navigate the academic pipeline towards a career in the medical field.

**Methods:** In order to use best practices proven in mentoring research, MENTOR: The National Mentoring Partnership's resources and publications will be primarily evaluated. Furthermore, The Chronicle, an online collection of publications sponsored by MENTOR, will be researched for current information regarding evidence-based mentoring. Since teamwork highly impacts the function of a mentorship relationship, the Harvard Business Review will be assessed to determine how MOLA can create an environment in which students and mentors best utilize one another to accomplish their goals. Lastly, MedEdPortal: The Journal of Teaching and Learning Resources, sponsored by American Association of Medical Colleges, will be used to discover modules previously created for workshops dedicated to developing students as leaders in medicine.

**Results:** In progress, pending literature review indicated above.

**Conclusion:** Desired impact is to assist MOLA in further developing their mentorship program designed to help minority students gain accessibility and guidance in medical careers. MOLA hopes to increase the likelihood of Chicago Latinx high school and undergraduate students remaining interested in pursuing health careers and ultimately matriculating in their chosen health career. Furthermore, MOLA's mentorship program may be replicated in other cities and health professions in the future to continuously impact national under-representation of minorities in healthcare. Women in Medicine: Clinical Practice, Research, and Beyond

## Oral 08

eHealth Interventions Reduce Cancer-Related Symptom Burden in Hispanic Breast Cancer Survivors

A. Cruz\*, F. Fimmel BA, G. Fierro, L. B. Oswald PhD, S. H. Baik PhD, D. Buitrago BA, F. Iacobelli PhD, A. Perez-Tamayo MD, J. Guitelman, F. J. Penedo PhD, J. Buscemi PhD, B. Yanez PhD. Northwestern University Feinberg School of Medicine

**Background:** Breast cancer is a leading cause of death among Hispanic/Latina women. When compared to non-Hispanic breast cancer survivors (BCS), Hispanic BCS have reported an overall poorer health-related quality of life (HRQOL) and greater cancer-related symptom burden. Despite this difference, few psychosocial interventions have been designed to alleviate the breast cancer-related symptom burden of this specific population.

**Objectives:** This study is a randomized control trial (RCT) to evaluate the feasibility and efficacy of the eHealth intervention, Mi Guia, against Mi Salud, an active comparator. Mi Guia is a culturally informed smartphone application that delivers evidence-based techniques intended to help

reduce symptom burden and improve HRQOL among Hispanic BCS, whereas Mi Salud is a health promotion smartphone application which did not contain symptom management information but rather evidence-based lifestyle education.

**Method:** 80 Hispanic BCS were randomized to use the Mi Guia intervention or the Mi Salud control, available in English and Spanish, and were instructed on how to use their respective application. Participants were asked to use the smartphone application for 6 weeks, for 2 hours per week. Across both conditions, participants received motivational telecoaching throughout the course of the study. Outcomes were measured pre-application use (baseline), immediately after use (6 weeks post baseline), and 2 weeks after use (8 weeks post baseline).

**Results:** There was great retention (>90%) and participant satisfaction (>90%). The data showed that there was no significant difference in usage (minutes) between Mi Guia (M=86.58, SD=66.08) and Mi Salud (M=72.80, SD=62.57). Data showed that as usage increased, breast cancer-related symptom burden decreased from baseline to week 6 in both conditions ( $\beta$  =.87, p=0.010). Across both conditions, there was a main effect of time on breast cancer wellbeing in which well-being improved from baseline to week 6 ( $\beta$ =0.46, p=0.006) and was maintained throughout the study ( $\beta$  =0.46, p=0.015).

**Conclusions:** Findings suggest that culturally informed eHealth interventions are acceptable psychosocial tools for Hispanic BCS. An important strength of this study was its recruitment of an underrepresented population in clinical research. Future studies should test this intervention in a larger sample size to further establish effect size on study outcomes.

## Oral 09

The impact of the imposter phenomenon on health and productivity in female scientists

M. J. Galván\*, K. Clancy PhD, M. Rodrigues MD. Department of Anthropology College of Liberal Arts and Sciences, University of Illinois at Urbana-Champaign

**Background:** The term Imposter Phenomenon is used to; "designate an internal experience of intellectual phoniness which appears to be particularly prevalent and intense among a select sample of high achieving women" (Clance & Imes, 1978).

**Objectives:** The objective of our research is to examine how the experience of workplace incivilities and social support influence feelings of the Imposter Phenomenon, and in turn, how the Imposter Phenomenon may impact somatic symptoms, sleep, and success in the workplace.

**Methods:** To gather data on the experiences of Imposter Phenomenon we will code a focus group manuscript of women of color scientist faculty (N=15) discussing workplace experiences for direct mentions or references to experience of Imposter Phenomenon. We will analyze the relation between experiences of workplace incivilities and social support through daily calendar surveys collected from a second sample of women of color scientists for a duration of approximately one month (N=17). In addition, we will utilize surveys of procrastination and avoidance collected from this same sample to measure impacts of stress on efficacy in the workplace. To study the phenomenon from a health perspective, we will analyze daily data on sleep, perceived stress, and somatic symptoms of depression (N=17).

**Results:** Pending summer project outcomes, we hypothesize that feelings of self-doubt and perceived fraudulence will be associated with higher frequency experiences of workplace incivilities, higher somatic symptoms of depression, lower report of supportive social interaction, and staggered sleeping patterns. Our findings will provide a basis for reevaluation of the framework of mentorship of girls and women of color from adolescence into the professional world.

**Conclusion:** Our work points to the importance of support groups so that women of color can have an in-group, candid platform to communicate with one another about their experiences without fear of judgment. Innovations like these may also pave the way for a movement toward extensive implementation by industrial-organizational psychologists in STEM professional settings.

## Oral 10

Moving FQHCs toward value-based care: Risk stratification of patients receiving pregnancy care at Erie Family Health Centers

A. Reyes\*, C. Hoke MD, H. Rowell. Northwestern Feinberg School of Medicine; Erie Family Health Centers

**Background:** Federally Qualified Health Centers (FQHCs) serve as the primary medical home for over 27 million patients, including 1 in 6 Medicaid beneficiaries. FQHC patients are predominantly low-income and 62% are members of racial and ethnic minority groups. FQHCs provide high-quality

care, with patients achieving higher rates of diabetes control than the national average as well as fewer low birth weight babies. However, FQHCs are limited by a traditional, volume-based reimbursement model that prevents them from participating in value-based care approaches. Such approaches place incentive on health outcomes rather than volume of services provided. Value-based care allows for enhanced primary care and better supports the full range of services FQHCs provide, including enrollment assistance, translation services, and case management. Unfortunately, shifting to value-based care comes with challenges, requiring more sophisticated data tracking and analyses. One such analysis is risk stratification, the process of assigning a risk status to a patient and using this information to direct their care. In this project, we conduct a risk stratification for a patient population at one of Chicago's largest FQHCs, Erie Family Health Centers (EFHC). EFHC's patient population is 71% Hispanic/Latino and 45% of their patients are best served in a language other than English. We believe this is a crucial step toward establishing higher quality care for patients at EFHC and other FQHCs.

**Objectives:** 1) To conduct a risk stratification of EFHC's pregnant population. 2) To identify gaps in data tracking at EFHC and propose new data tracking processes within the scope of EFHC's resources.

**Methods:** We will perform a chart review of all patients who received pregnancy-related care in 2018 at EFHC and perform risk stratification based on the National Association of Community Health Centers' Population Health Management Guidelines.

**Results:** Pending summer project outcomes

**Conclusion:** Equipping FQHCs to shift toward value-based care requires enhancing their capacity for data tracking and population risk stratification. This project will provide a framework for further development and will accelerate the movement to provide value-based care for patients at FQHCs. It will also inform future pregnancy care for women at EFHC.

Cutting Edge Research: Featuring Latino Health and Latino Investigators

## Oral 11

Hispanic Patients with Rheumatoid Arthritis Have Greater Discordance between Patient and Physician Global Estimates than Other Ethnic Groups: A Cross-sectional Study from Routine Care M. Riad MD, S. Salazar MD\*, J. A. Block MD, T. Pincus MD, I. Castrejon MD, PhD. Division of Rheumatology, Rush University Medical Center

**Background:** Discordance between patient and physician global estimates for disease severity has been described in patients with rheumatoid arthritis (RA) (1) and has been associated with poorer clinical outcomes including decreased work productivity, greater radiological joint destruction and functional impairment.

**Objectives:** To compare the level of patient-physician discordance according to self-reported ethnicity/race groups.

**Methods:** Patients complete a multidimensional health assessment questionnaire (MDHAQ) as part of routine care, including 0-10 scores for physical function, and visual analogue scales (VAS) for pain, patient global estimate (PATGL), and fatigue, as well as a 0-60 symptom checklist, and a 0-48 RADAI self-report painful joint count.

The treating rheumatologist completes a RheuMetric checklist including a physician global (DOCGL) and 3 subscales for inflammation (DOCINF), damage (DOCDAM) and distress (DOCSTR). Patients with primary diagnoses of RA (ICD codes) were classified into one of 3 groups based on the difference between DOCGL and PATGL: concordant group (PATGL-DOCGL within  $\pm 2/10$ ), negative discordance (DOCGL-PATGL $\geq 2/10$ ), and positive discordance (PATGL-DOCGL $\geq 2/10$ ). Values are reported as medians (standard deviation) and percentages. Comparisons according to self-reported ethnicity/race groups were performed using ANOVA or Chi2.

**Results:** The study included 260 RA patients: 38% White, 25% Black, 23% Hispanic patients, and 14% others who were primarily Asians. Age and sex were similar in all groups. Educational level was highest in others, followed by White, Black and Hispanic patients (p<0.001). Hispanic patients had poorer scores for pain, physical function, fatigue, and RADAI self-reported compared with other groups (p<0.001). Higher scores for PATGL with similar scores for DOCGL lead to higher rate of positive PATGL>DOCGL discordance in Hispanic patients versus others (40% in Hispanic, 19% in Black, 14% in White patients, and 11% in others, p=0.003).

**Conclusion:** Hispanic patients with RA have poorer scores on most MDHAQ self-reported measures compared with non-Hispanic White or Black despite similar physician assessments, leading to higher positive discordance rates. Physicians should promptly reconsider the patient perspective in individuals with positive discordance; interventions aiming at

reducing such discordance might improve clinical outcomes.

# Oral 12

Minorities in Live Donor Kidney Transplantation: Where do we stand?

S. Carbunaru\*, J. Caicedo MD. Northwestern Feinberg School of Medicine

**Background:** Living-donor kidney transplants (LDKTs) are associated with better outcomes relative to deceased donor kidney transplants (DDKT). Multiple initiatives have been implemented to diminish gaps in LDKTs across ethnic/racial groups, yet the effect these have had in reducing disparities remains unclear.

**Objectives:** Our objective was to analyze trends in LDKT and DDKT across ethnic/racial groups at both the national and regional level.

Methods: Data was gathered from the United Network for Organ Sharing (UNOS) based on OPTN files as of June 2019. National trends were analyzed by calculating the ratio of LDKT relative to DDKT per year. In addition, ratios were calculated for the 11 regions established by the OPTN. Results: Among 453,179 kidney transplants identified from 2018-1988, 34% were LDKT. From 1988-2003, all groups exhibited a steady increase in the ratio of LDKT/DDKT, yet ratios have decreased since 2003. Whereas the ratio has more than doubled from 1988 to 2018 in Whites (0.76 vs. 0.30), it has remained virtually unchanged in Hispanics and Blacks (0.34 vs. 0.29 and 0.17 vs. 0.13, respectively). This trend of decline in LDKT/DDKT is partially explained by an increase in DDKTs and a decrease in LDKTs in Whites and Blacks since 2003, However, in Hispanics both DDKTs and LDKTs have increased, but DDKTs have grown at a higher rate. At the regional level, 57.9% of White LDKTs are performed by the top five regions, 54.3% of Black LDKT by the top three regions, and 56.7% of Hispanic LDKT by the top two regions. The regions were most Hispanic (Region 4,5) and Black (Region 2,3,11) LDKTs are performed, have worse LDKT/DDKT rates compared to national averages across all ethnic/racial groups. In Whites, the regions that carry out the majority of LDKT (Region 2,3,5,7,10) perform better than national averages for Whites and Blacks, but not for Hispanics.

**Conclusions:** Disparities in access to LDKT for minorities continues to vex the transplant community. Despite efforts to decrease ethnic/racial disparities in transplantation, Hispanics and Blacks continue to experience lower rates of LDKT relative to Whites.

# Oral 13

Colon Cancer Screening Among Hispanic Men

N. Vázquez\*, J. Moreira MD, Roosevelt University

**Background:** Cancer is one of the leading causes of death for the Hispanic population in the United States. The American Cancer Society (ACS) reported that approximately 149,100 new cases of colorectal cancer (CRC) were diagnosed in 2018, with approximately 42,700 deaths. Amongst Latinos, approximately 14,400 new cases were diagnosed in 2018. Although CRC rates among Latinos are lower compared to Whites, incidence and mortality rates are decreasing at a slower rate amongst Latinos. The ACS reports that CRC screening was significantly lower among Hispanics (50%) versus Whites (65%) in adults 50 years of age and older. Decreased rate of colonoscopy is the most significant contributing factor to disparate screening rates. While different impediments preclude Latinos from obtaining a screening colonoscopy, including limited financial resources, insurance status, and language barriers, sociocultural factors pose a significant obstacle to improved screening colonoscopy rates amongst Latino men.

**Objectives:** Develop a Spanish language educational curriculum to 1) educate Latino men on risk factors, incidence, symptoms and treatment of colorectal cancer, 2) inform Latino men of the role screening colonoscopies play in colorectal cancer diagnosis, and 3) address sociocultural barriers preventing adequate colonoscopy screening rates in this population.

**Methods:** We will conduct an anonymous pre-intervention questionnaire amongst Latino male patients age 18 and older at Community Health Clinic (CHC). The questionnaire will assess health literacy pertaining to risk factors, incidence, symptoms and treatment options for colorectal cancer. The survey will also assess patients' perceived risks and identify sociocultural factors that may prevent adequate CRC screening. We will then conduct an educational session with this cohort at CHC, where CRC incidence, mortality, causes, symptoms, treatment and screening tools will be discussed, particularly screening colonoscopy. Following completion of this session, an anonymous post-intervention questionnaire will be conducted to explore the impact of the educational session on health literacy pertaining to CRC, in addition to exploration of willingness to undergo a screening colonoscopy.

## **Results:** Pending

**Conclusion:** This Spanish language educational program will improve rates of screening colonoscopy amongst Latino men by increasing CRC health literacy and reducing sociocultural misperceptions surrounding screening colonoscopy.

## Oral 14

The association between maternal race and ethnicity and risk factors for primary cesarean delivery in nulliparous women

E. Stark\*, W. A. Grobman MD, MBA, E. S. Miller MD, MPH. Northwestern Feinberg School of Medicine

**Background:** Reducing the rate of cesarean delivery is a critical public health and clinical goal. While numerous maternal characteristic risk factors for cesarean delivery have been identified, they have failed to account for all differences in cesarean delivery rates seen between white and minority women.

**Objectives:** We sought to understand whether maternal, perinatal, and systems-level factors can be identified to explain racial/ethnic disparities in cesarean delivery rates.

**Methods:** This retrospective cohort study included nulliparous women with singleton gestations who delivered at a tertiary care center from 2015 to 2017. Maternal, perinatal, and systems-level factors were compared by race/ethnicity. Multilevel multivariable logistic regression was used to identify whether race/ethnicity was independently associated with cesarean. Effect modification was evaluated using interaction terms. Bivariable analyses and multinomial logistic regression were used to determine differences in indication for cesarean.

**Results:** Of 9,865 eligible women, 2,126 (21.5%) delivered via cesarean. The frequency of cesarean was lowest in non-Hispanic white women (19.2%) and highest in non-Hispanic black women (28.2%) (p <0.001). Accounting for factors associated with cesarean delivery did not lessen the odds of cesarean associated with non-Hispanic black race (aOR 1.58, 95% Cl 1.31-1.91). Compared to non-Hispanic white women, non-Hispanic black women were more likely to undergo cesarean for non-reassuring fetal status (aOR 2.73 95% Cl 2.06-3.61).

Conclusion: Examined maternal, perinatal, and systems-level risk factors

for cesarean delivery did not explain the racial/ethnic disparities observed in cesarean delivery rates. Increased cesarean delivery for non-reassuring fetal status contributed substantially to this disparity.

## Oral 15

Empowering Youth to Become Community Health Advocates: The CHAMPIONS NETWork After-School Club Model

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**Background:** Chicago experiences major socio-economic disparities which adversely impact health and access to care, and specifically impact youth. Health career pipeline programs which address existing educational gaps and aim to diminish health inequities through workforce development have been an integral way to elevate youth. As such, the CHAMPIONS NETWork aims to empower underserved youth, expose them to health science careers, and train them to become community health advocates.

**Objectives:** To describe the structure and curriculum of the UIC CHAMPIONS After-School Club, a health career exposure and community health awareness program for underserved and underrepresented minority Chicago-area high school students.

**Methods:** UIC CHAMPIONS After-School Club is a weekly university-based program open to high school students interested in pursuing a health career. It is funded by the UIC Urban Health Program (UHP). UHP is focused on providing underrepresented minority students the opportunity to learn of varying healthcare professions and supporting these students as they embark on their chosen healthcare career path. A dedicated team of UIC pre-health undergraduate students and medical student program coordinators create content for weekly sessions covering four main curriculum tracks: 1) Health career and health sciences exposure; 2) College readiness; 3) Community and public health; 4) Professional skills development. CHAMPIONS strives to develop student leaders that can serve as advocates for the health of their community.

**Results:** In academic year (AY) 2018-19, a total of 33 sessions were held. The coordinator team was comprised of 7 medical students (M1 - M4), 11 pre-health undergraduate students. An additional three UI Health residents served as program mentors and curriculum consultants. An average of 22 high school students attended weekly sessions representing nine high schools. **Conclusion:** In order to adequately measure program impact, upon completion of AY 2018-19, we will pilot test a brief, electronic program completion survey evaluating workshop quality and relevance, as well as program logistics and overall coordinator performance. Feedback from the survey will be implemented to augment the CHAMPIONS experience. Upon lessons learned, an adapted exit survey will be incorporated into AY 2019-20. Findings from surveys will be incorporated if our proposal is accepted.

## Oral 16

MiMentor Medical School Ready: A Statewide Enrichment Program to Increase the Number of Latino Medical Students in California

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There is a significant underrepresentation of Latino physicians in the United States. In California more than 40% of the population is Latino, but only 5% of physicians and 16.5% of medical students share this background. The mismatch in patient physician cultural and language concordance may contribute to disparities in care. Latino and other underrepresented minority (URM) pre-medical students face additional barriers when applying to medical school. The MiMentor Medical School Ready (MSR) is a year-long program created to guide pre-medical students through the medical school application process and prepare them for medical school. The program incorporated a centering group model emphasizing interactive learning and community building to foster support systems throughout the application process. The MSR program provides participants with knowledge, tools, guidance and mentorship to ensure their story, experiences, abilities and dreams shine through every aspect of the medical school application. Two senior faculty members and two program coordinators from the MiMentor, Alliance in Mentorship board led the program. A total of two cohorts were facilitated during the 2017 - 2018 application cycle - one in Northern California and one in Southern California. Here we assess the efficacy of the Medical School Ready (MSR) program to prepare and matriculate students into medical school. A holistic approach, including the use of online mentoring, to recruit and retain medical school applicants was feasible. Of those who applied, a larger percentage (55%) were accepted to medical school when compared to national acceptance rates (45%). There was a statistically significant unadjusted change in the mean scores for level of support, confidence measures, self-rated verbal and written communication skills, and action plan for medical school application. Future research will entail conducting a multivariate regression to adjust for important student level confounders. As well as focus on understanding the drivers in the program that help students prepare a successful medical school application.

## Oral 17

The Impact of Discovering Health Careers on Urban Youth S. Alvarado\*, S. Kowalski, J. Saavedra, M. Rivera. Ann & Robert H. Lurie Children's Hospital of Chicago

**Background:** The U.S population has become increasingly diverse and health agencies are striving to have a workforce that reflects the population in terms of race, ethnicity, and sociological backgrounds. Yet, today's health professional workforce does not reflect equity in all racial and ethnic groups. The representation of African Americans and Latinx are under-represented among health careers. A diverse workforce is crucial for improved public health by expanding healthcare access for underserved communities, promoting health disparities research, and increasing the number of leaders and policy makers who support diversity in the workforce. Ann & Robert H. Lurie Children's Hospital of Chicago (Lurie) also experiences these disparities among health providers. Programs at Lurie, such as Discovering Healthcare Careers (DHC), are trying to bridge this gap. Since 2001, DHC has been serving minority high school students, interested in pursuing a career in the health field, with anticipation to becoming part of the future workforce at Lurie.

**Objectives:** The main objective of the DHC program is to increase minority representation in the health field by serving only African American and Latinx students. DHC students participate in real-world healthcare industry exposure, leadership development, training workshops, and networking opportunities. These opportunities elevate our students to pursue a successful career in healthcare. This summer will be the pilot for implementing continuous quality improvement evaluations on the DHC program. The evaluations observed the impact the program has on students' preparedness for college, understanding of health topics, and exposure to careers in healthcare. Also, this summer DHC piloted a clinical skills component for students to gain hands-on training and health education. The student feedback and pre- and post- assessments observed the impact the impact this component on students.

**Methods:** Students completed pre- and post- assessments that evaluated the impact and effectiveness of the program. Students also completed

electronic daily surveys to capture in-depth feedback on each component of the program.

**Results:** Through analyzing our pre- and post- assessments, we noticed that the program has a positive impact on students overall. By the end of the programs, we saw an increase in students' knowledge of health careers and pathways. Students also gained a significant increase in the amount of first-hand clinical experiences. Specifically with our clinical skills component, students showed an increase with our health knowledge quiz. This tool measured students' level of understanding within a variety of health topics such as: cardiology, neurology, reproductive health and dentistry.

**Conclusion:** As anticipated, DHC provided a positive impact on students' level of preparedness for college, understanding of health topics, and exposure to careers in healthcare. Student feedback will also be used to create a set of recommendations on the DHC program overall, which can be implemented for the following year. Overall, we anticipate a majority of these students will pursue a career in healthcare.

#### Oral 18

Childhood Vaccinations: A Quality Improvement Project for Latino Populations at PrimeCare Community Health

A. Cabrera\*. University of Illinois at Chicago; PrimeCare Community Health

**Background:** Childhood vaccinations are critical when it comes to preventative care and are important for children to have improved health outcomes. There exists various barriers stemming from financial burden to vaccine misconceptions that are causing parents to either delay or deny inoculations for their children with Latino children being one of those populations impacted. This is why this it is of importance to seek probable evidence-based interventions to increase childhood vaccination rates.

**Objectives:** The objective of this quality improvement project is to assist the federally qualified health center, PrimeCare Community Health, increase their childhood vaccination rates and vaccination awareness for the Latino patient population through data collection which will best inform the decision of an appropriate eventual implementation of an evidence-based intervention.

**Methods:** A literature review will be conducted on what successful interventions have been developed to improve vaccination rates for children

0-2. This will also serve as a reference and guidance for creating survey questions. These surveys will be distributed to two of PrimeCare Community Health's clinical sites where they will be given to parents of pediatric patients when they come in for their well-child visit. These surveys will assess the attitudes towards immunizations and identify facilitators and any barriers to receiving immunizations. Qualitative data such as in-person interviews of clinical staff, such as nurses, practice managers, and physicians, will also be collected to gain perspective of clinic immunization practices and inoculation procedures. The data from the surveys, interviews, and literature review will be analyzed to inform the process of identifying evidence-based interventions to recommend to the clinic sites as well as compare data of the Latino population to non-Latino population. A list of appropriate and plausible evidence-based approaches will then be provided to PrimeCare.

**Results:** Pending summer project outcomes.

**Conclusions:** The expected impact is to use the results to identify an evidence-based intervention to implement at PrimeCare Community Health clinical sites. This implementation will hopefully assist in increasing awareness of the importance and the rates of timely childhood vaccinations at PrimeCare clinical sites for the Latino population.

# **Poster Presentations**

## **Clinical Research**

#### Poster 01

Hospital Based Analysis of Prostate Cancer Disparities in Hispanics within the United States and Puerto Rico Using the NCDB

M. S. del Pino\*, D. Morreira MD, S. Berrios

**Background:** Prostate cancer(PCa) is the most commonly diagnosed cancer and the second leading cause of cancer- related deaths for men in the US. Hispanic ethnicity consists of many sub-groups, yet men identifying as Hispanic are grouped into one category. More precise data regarding PCa screening efficacy and treatment outcomes/practices for Hispanic-Americans could lessen barriers to precision medicine and improve patient outcomes.

**Objectives:** To describe the following for each sub-group of Hispanics utilizing the NCBD from 2005-2015: Characteristics of PCa (i.e PSA level, age, TNM staging and tumor behavior) at time of diagnosis as compared to established studies and trends, PCa treatment options and differences in treatments among sub-groups, the overall mortality of PCa in each Hispanic sub-group.

**Methods:** Using the NCDB database from 2005-2015, individuals diagnosed with PCa were identified. All men self-identifying as Hispanic were included. Tumors with histology inconsistent with adenomatous carcinoma, and without Hispanic ethnicity, were excluded. Each case was characterized by corresponding PSA level, TNM staging, tumor grade, cancer behavior, Charlson/Deyo Score for comorbidities and demographic information, including Spanish origin, educational attainment, age, income, insurance, and race. Data was analyzed using single and multivariable techniques, utilizing Kaplan–Meier and Cox models adjusting for baseline variables using STATA software.

**Results:** Cubans were oldest at diagnosis (median age of 67 [61-74]) while Dominicans and South Central Americans were the youngest at diagnosis (median age 64). Median PSA was highest in Mexicans (7.2) and lowest in Dominicans and Puerto Ricans (6.4). Dominicans presented with the most favorable stage at diagnosis with only 3.45% T3/T4 disease, while 6.7% of Mexicans had T3/T4 disease. N1-3 was most often seen in Mexicans (4.91%) and least commonly seen in Cubans (3.13%). In univariate analysis

Cubans had worse overall survival (HR=1.30, 95% Cl=1.16-1.19) while Dominicans (HR=0.63 95% Cl 0.80-0.90) and South or Central Americans (HR=0.75 Cl=0.67-0.84) had more favorable survival. Cubans were most likely to receive hormone therapy and radiation therapy while being significantly less likely to undergo surgical treatment.

**Conclusion:** There are significant differences in PCa characteristics and treatment choices between Hispanics of different country of origin.

## Poster 02

Prospective trial evaluating the long-term outcomes associated with the use of Musculoskeletal Transplant Foundation allograft cartilage in cosmetic and reconstructive rhinoplasty procedures

M. Carabaño MD\*, A. Hassan, C. Joshi, R. Boyd, R. Wan, J. Liu, R. Galiano

**Background:** Augmentation of the nasal cartilages with cartilage grafts for cosmetic and reconstructive procedures is performed usually by grafting autologous cartilage. Although, it has complications. For this reason, costal cartilage allograft by the Musculoskeletal Transplant Foundation (MTF) provides an alternative in rhinoplasties.

**Objectives:** to compare MTF's allograft costal cartilage with autograft costal cartilage with respect to clinical utility, complications, and patient satisfaction in reconstructive and cosmetic rhinoplasty.

**Methods:** This is a single-center, non-blinded, clinical trial, conducted in healthy adult subjects undergoing a reconstructive or cosmetic rhinoplasty involving the use of cartilaginous graft. This study will evaluate the outcomes and utility of MTF allograft compared to autologous harvest of costal cartilage. 30 subjects will be recruited. Eligible, consenting patients will be grouped into their respective cohort. They will choose to receive either the autologous or cadaveric graft. Prior to surgery, the patients fill out the pre-operative sections of a Face-Q checklist and will have pictures taken for documentation purposes. Subjects will have 1 week, 6 weeks, 12 weeks, 6 months, and 1-year clinical follow-up, which will include, patients completing the corresponding sections of the Face-Q, standardized 2D and 3D photographs. data on adverse effects and discomfort will also be collected throughout the study period. Observers and radiologists involved in outcome assessments will be blinded to study treatments throughout the duration of each patient's evaluation period.

**Results:** 20 patients have been recruited so far and are involved in different

stages of follow up, divide into two groups (MTF and Autologous), both groups show no difference in the pre-operative Face-Q checklist (p-value >0.39). On 1 week, 6 weeks and 12 weeks follow up both groups show no significant difference (p-value >0.56, >0.5,>0.42 respectively). On 6 month and 1 year follow up there is still not enough data to project any results yet.

**Conclusion:** It is expected to prove not a significant difference between MTF and autologous cartilage when it comes to 1-year outcomes in satisfaction, recovery, and complications, leaving the door open for further studies to explore additional benefits of MTF use.

## Poster 03

Top Dermatologic Conditions Examined at a Federally Qualified Health Center Specialized in LGBTQ and Latinx population health

V. Alvarado Jones\*, W. Yang MD

**Background:** Few researchers have examined the leading dermatologic conditions affecting patients of color (POC). A handful of studies have used the National Ambulatory Medical Care Survey (NAMCS) to depict these conditions by each major racial and ethnic group in the United States. Although these studies have identified the major dermatologic conditions in POC over that last few decades, none of these studies have focused on lesbian, gay, bisexual, transgender and queer (LGBTQ) POC populations. We sought to assess the top dermatologic conditions examined and treated at Howard Brown Health, a federally qualified health center that provides health care focused on needs of POC and LGTBQ POC populations, in order to gauge the health needs of both POC and LGBTQ POC poC patients in Chicago, IL.

**Objectives:** To establish common dermatologic complaints at HBH, and improve treatment options for patients with skin of color. To encourage other facilities serving predominantly LGBTQ populations to conduct similar quality improvement projects to improve dermatologic care at their facilities. Lastly, to examine which subset of patients were treated at HBH versus patients referred to a dermatologist.

**Methods:** We evaluated top dermatologic complaints from patients seen and examined at Howard Brown Health (HBH) in Chicago, Illinois, through retrospective analysis by use of the electronic medical records (EMR). Patients were selected as "Latino/a, Hispanic, Latinx" and "LGTBQ" through self-identification or previous identification in the patient chart. Keywords such as "skin, rash, dermatology, acne, bumps, itch, scratch" etc. were used to search records to review the provider encounter notes, final diagnosis and treatment. The medical student reviewed data void of patient identifiers, excluding race, ethnicity and sexual orientation, while HBH physician reviewed fully identified data.

**Results:** Pending project completion.

**Conclusion:** Our project sought to examine the most frequently occurring cutaneous disorders in a racially diverse LGTBQ population within a FQHC. Given the changing racial demographics of the United States, our data, and that of others, provide a basis for needs assessment in diverse populations, disease management, and education for primary care providers on how to be provide medically appropriate and culturally competent care to LGBT and Latinx persons.

## Poster 04

Value of Candida Score in patients with invasive candidiasis. Central Hospital of Maracay 2014 – 2015

P. Chavero MD\*, C. Fuentes MD, D. Guevara MD, H. Rodriguez MD

**Background:** Invasive candidiasis is an important disease due to its frequency, high mortality and association with increased costs and hospital stay, in addition to the difficulty of its differentiation from other infections caused by the absence of specific clinical elements in their signs and symptoms. Candida score is based on the predictive value of risk factors demonstrated for the acquisition of this infection, suggesting the application of a prophylaxis antifungal in those who warrant scores between 0 to 5 points.

**Objectives:** Determine the value of Candida Score in patients with risk factors of developing invasive Candidiasis during their hospitalization at service of internal medicine, Central Hospital of Maracay 2014-2015.

**Methods:** Clinical research study, descriptive, where it reviewed cases of patients with diagnosis of candidiasis invasive admitted during the period April-December 2014 and January-June 2015.

**Results:** Authors reviewed 27 clinical histories, getting 9 patients with Candida Score of 0 pts (Cl: 16.50 - 54.00), 9 with Candida Score equal to 3 pts (Cl: 16.50 - 54.00), 5 with value of Candida score of 2 pts (Cl: 6.30 - 38.10), finally 2 patients with Candida Score equal to 4 pts (Cl: 0.90 - 24.30) and 2 whose Candida Score was equal to 1 pt (Cl: 0.90 - 24.30).

**Conclusion:** Candida Score is a predictive method reliable to determine the risk of invasive infection by Candida in hospitalized patients that must be accompanied by risk factors that the same ones present to establish those who deserve a prophylactic antifungal therapy.

## Poster 05

Is the HEART Score an Effective Clinical Tool to Reduce Admis- sions and Costs in the Public Hospital Setting?

D. Morales\*, A. Edelheit MD, M. Pacifique MD, J. Seidenfeld MD, R. Roxas MD, L. Rizvanolli BS, E. Christian MS, L. M. Smith MD, MBA

The HEART Score is a clinical decision-making tool used to identify low-risk chest pain (CP) patients through their History of the present illness, Electrocardiogram findings, Age, Risk factors, and Troponin. The goal of this study was to determine the effectiveness of the tool in reducing the admission rate of patients presenting with CP and cost of admission in an urban, public hospital emergency department (ED). The results showed a decrease in observation admission rate from 35% pre-intervention to 21% post-intervention and a 40% decrease in observation admission cost. The use the HEART Score has shown to increase the amount of discharges of low-risk CP patients, thus decreasing admission cost.

## **Basic Sciences or Translational Research**

## Poster 06

Acute Lymphoblastic Leukemia in Hispanic Patients: Searching for gremlin genetic variants to explain health disparity

M. Acevedo\*, L. Godley MD, PhD

**Background:** The survival of patients with lymphoid malignancies has improved dramatically in the contemporary era of combination chemotherapy. These survival improvements, however, have occurred in a disparate fashion, with European American (EA) children experiencing the greatest advances, while Hispanic American (HA) children experience a 1.5-fold greater risk of death. This disparity has persisted for 30 years but has worsened since the 1990s. Only an estimated 31% of this discrepancy is attributed to differences in socioeconomic status (SES). These factors suggest that genetic variables may also contribute to disparities in ALL survival and remain to be discovered. An enhanced understanding of these genetic variables will inform the care of HA patients with lymphoid malignancies.

Although most studies have focused on relatively common variants that confer modest impact on ALL leukemogenesis risk, multiple groups have also identified rare, highly penetrant, pathogenic germline mutations that convey a dramatically increased risk for lymphoid malignancies in an autosomal dominant manner. Despite this, many HA patients with a personal and/or family history of lymphoid malignancies are wild type (WT) in these genes. Therefore, additional highly pathogenic germline mutations that explain these Mendelian inheritance patterns remain to be discovered.

Highly pathogenic germline mutations may have significant effects on survival if unrecognized. For example, combination chemotherapy-based regimens, such as those utilized in ALL, do not eradicate underlying pathogenic germline mutations, which places patients with hereditary cancer syndromes (HCSs) at risk for second primary malignancies and ALL relapse. Similarly, ALL patients who receive stem cell transplants from matched related donors (MRDs) who unknowingly carry an identical pathogenic germline mutation are at high risk for relapse and/or the development of a donor-derived leukemia.

**Objectives:** I hypothesize that highly pathogenic germline mutations predisposing to lymphoid malignancies are overrepresented in Hispanic populations and contribute to disparate survival relative to European populations. I will use unbiased next generation sequencing and induced pluripotent stem cells to work at the interface of contemporary bioinformatics, genomics, and molecular genetics to test this hypothesis.

**Methods:** To utilize genetically modified induced pluripotent stem cells to study the effects of candidate variants on hematopoiesis. Multiple Hispanic individuals have enrolled on research studies at The University of Chicago and possess potentially novel pathogenic germline mutations that predispose to ALL.

## Results & Conclusions: Pending

## Poster 07

Local immune responses in epidermolysis bullosa acquisita

## A. Córdova\*, K. Amber MD

Epidermolysis bullosa acquisita (EBA) is an autoimmune subepidermal blistering disease characterized by the development of autoantibodies to

collagen VII. Disruption of anchoring fibrils leads to the development of vesicles and bullae on the skin and erosions on the mucous membranes. Due to our limited understanding of the pathomechanisms involved in the induction and development of EBA, management of EBA has primarily been based on non-specific targets and generalized immunosuppression. Generation of a recombinant murine collagen VII (COLVII) peptide and inoculation of rabbits with this results in generation of rabbit anti-COLVII immunoglobulin (lg). Isolation and repeated administration of this antibody into certain mouse models reliably reproduces the clinical and histological phenotype consistent with the inflammatory variant of EBA. To study the local immune response that results in neutrophil recruitment and cutaneous inflammation, we will utilize a passive transfer model to induce experimental EBA. After generation of disease, we will collect blood and skin to assess differential gene expression. With this approach, we hope to gain significant insight into the direct autoantibodies in inducing an immune response, and the effect of this neutrophil rich response on the skin.

#### Poster 08

Role of the gut mycobiota in the pathogenesis of ileal Crohn's disease

D. Velásquez, Jr.\*, E. Chang MD, PhD, D. La Torre PhD, A. Sidebottom PhD, K. Harris PhD

Little is known about the gut mycobiome in health or disease. Recently, we made the novel and unexpected observation that novel peptide (NP), a gut hormone classically recognized for its role in satiety, is abundantly expressed and packaged in discrete dense core granules of Paneth cells (PC). Its stimulated release by TLR ligands into the lumen suggested a previously unrecognized role as an antimicrobial peptide (AMP). In addition, NP is remarkably similar in structure and charge distribution to a class of AMPs typified by the amphibian magainin-2 peptide. Unlike magainin-2, however, NP has little anti-bacterial activity; instead NP specifically targets the virulent (hyphal), but not commensal yeast forms, of dimorphic gut fungi like Candida albicans. These clues lead us to hypothesize that NP be involved in maintaining fungal commensalism in the healthy gut. Interestingly, Paneth cell dysfunction has been reported in patients with ileal Crohn's disease (iCD). Altogether, these factors can promote fungal virulence that contributes to the pathogenesis of iCD and explain the observed increases in fungal load often associated with risk and severity of iCD, will not only provide key insights into mechanisms and mediators of host-fungal interactions, but also potentially transform our understanding of IBD and identify those patients mostly likely to benefit from measures to restore fungal commensalism. Previous studies show that ex vivo ileal loops stimulated with hyphae, yeast, and LPS exhibit an elevated secretion of NP in the mucus with fungal stimulation. Following these findings, our next objective was to determine the antifungal properties of the novel peptide (NP) against different fungal species reported in iCD, C. albicans, C. tropicalis, C. dubliniensis in mucus. Therefore, we hypothesize that NP in mucus will exhibit an increase in antimicrobial activity against biofilm formation and viability of fungal species: C. albicans, C. tropicalis and C. dubliniensis. In short, our experimental design includes using overnight broth cultures of Candida strains diluted into RPMI with varying mucus concentrations (Sigma Mucin from porcine stomach Type III). Peptides and controls were then added and plated into a 96-well plate in triplicate. For biofilm measurement, plates were gently washed in PBS and then treated with crystal violet staining. For viability assessment, XTT Cell Proliferation solution was added to the plates. The optical density of both assays was measured by the spectrogram at 600 and 660 nm, respectively.

## Poster 09

The Ability of Acoustic Signals to Predict Acute Chest Syndrome in Sickle Cell Disease

J. Alcántar\*, R. Molokie MD, B. Allen, T. Royston PhD

**Background:** Latinos are the second most common ethnic group in the US with sickle cell disease (SCD). Caused by a mutation in the beta-globin gene, allowing hemoglobin to polymerize when deoxygenated, causing lysis of red blood cells, and a cascade of events, causing substantial morbidity and early mortality. Acute chest syndrome (ACS) is a leading identifiable cause of death in SCD. Its onset can be rapid; if not identified early, it can cause death. Currently diagnosing ACS relies primarily on a chest radiograph (CXR). However, characteristic ACS findings can be difficult to detect, which makes early diagnosis challenging. Alternate technologies have been suggested but they are expensive and expose patients to significant radiation and health care costs. The development of an inexpensive, non-invasive technology, usable by patients, their families, as well as in health care settings may change the course of this deadly syndrome.

**Objective:** Investigate if electronic-stethoscope-recorded breath sounds can be used to detect lung sound changes associated with the development of ACS.

**Method:** Using an electronic stethoscope, we obtained breath sounds from at least 6 lung fields from adult subjects with SCD at baseline in clinic

and during hospitalization, data was analyzed using MATLAB spectrogram function, and correlated with radiologic findings and clinical course.

**Results:** At baseline, the amplitude of the moving average of breath sounds at any given point in time did not exceed 0.2 volts. In 2 of the 9 moving averages of acoustic signals captured during episodes of ACS contained an amplitude greater than 0.3 volts in affected lobes for 73% of readings. These features tended not to be present in unaffected lobes patients treated for ACS, and lung sound recordings contained positive findings at least 1 day prior to characteristic findings being evident

**Conclusion:** Despite the need for swift medical treatment of ACS, its diagnosis remains challenging. Earlier, non-invasive detection may improve health outcome. Our findings suggest that changes in breath sounds preceding the development of pulmonary infiltrate may serve as an early marker for its development. Further study is necessary to determine the relationship between ACS and breath sounds. Case Reports

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## Poster 10

Anti-myelin oligodendrocyte glycoprotein presentation in 2 Latina women

Z. Hernández-Peraza MD\*, MS, A. Christiana MD

Neuromyelitis Optica Spectrum Disorder (NMOSD) is a central nervous system inflammatory disease that mimics multiple sclerosis (MS). Over the past decade, anti-myelin oligodendrocyte glycoprotein (MOG) has emerged as an antibody-specific demyelinating disorder distinct from MS. While currently under the title of NMOSD, it is proving itself to be a disease with unique clinical, radiographic, and histological characteristics. Herein we present two cases of anti-MOG associated demyelination disorder in Latina women who demonstrate differences in presentation, treatment complications, and disease progression.

One patient presented with bilateral optic neuritis, with normal MRI neuroaxis and mildly elevation of WBC is CSF with negative blood serology, that responded well to steroids. She eventually developed recurrence of visual symptoms and then found to have positive Anti-MOG titers. She has been relapse-free after a long course of prednisone combined with azathioprine followed by azathioprine monotherapy. Another patient presented with right leg weakness and numbness. Thoracic spine MRI showed an enhancing lesion from T2-T4; biopsy demonstrated demyelination. She had work up with CSF showing 5 WBC, rest of profile

normal, blood serologies largely negative, diagnosed with NMSD NMO ab sero-negative, once became available her anti-MOG ab test was positive. She has had numerous relapses despite Azathioprine, Mycophenolate, Rituximab, oral prednisone, plasmapheresis. Anti-MOG titers have been persistently elevated, suggesting that antibody levels can correlate with disease activity. While there is increasing interest and attention on anti-MOG antibody, there are still limited data on the disease course and no guidelines on diagnosis or treatment. It also remains unclear if Latino ethnicity is a risk factor for this disease, as Latino patients are still underrepresented in clinical studies. Anti MOG can present similarly to MS and NMOSD, although the CSF profile seems to be more similar to MS, but the disease course and treatments seems similar to NMOSD. This disease may be underrecognized and further characterization of this disease along the spectrum of MS or NMSDO needs to be further elucidated.

## Poster 11

Peripartum-Discovered Congenital Complete Heart Block in Honduras D. A. Chávez Meléndez MD\*, P. Covas, R. Volke, M. Mercader MD, C. Tracy MD

**Background:** Congenital Complete Atrioventricular Block (CHB) is often diagnosed during childhood. However, in developing countries where pediatric screenings are limited, congenital arrhythmias should be included in a differential diagnosis of new arrhythmia because they often go undiagnosed and untreated into adulthood.

**Case:** A 20 year old female was referred to an international cardiology brigade in Honduras, after she was noted to have a pulse of 50 during her cesarean delivery a month prior. Her pregnancy was uneventful until 36 weeks when fetal ultrasound revealed gastroschisis and cesarean delivery was pursued. She otherwise had no medical problems, took no medications and denied any symptoms or family history of cardiac problems. EKG revealed CHB with junctional escape rate of 39.

**Decision-Making:** Evaluation at the brigade involved a work up for acquired causes of CHB. Electrolytes, ANA, and ESR were all normal. Chagas antibody, which is endemic in Honduras, was also negative. Given her young age it was concluded this was most likely a case of CHB missed in childhood. She ultimately received a dual chamber pacemaker.

**Conclusion:** This case demonstrates the challenges of diagnosing and managing CHB in limited resource countries. Diagnosing CHB and other arrhythmias is difficult as prices for medical equipment are prohibitive and

outreach to rural Honduran areas is limited. For many Hondurans with CHB, the largest obstacle in obtaining a pacemaker in Honduras is the cost. It is estimated that in this international brigade, more pacemakers are placed in 2 weeks for free, than the whole country in a year. This is still not sufficient as thousands are left with a need for a pacemaker without means of obtaining one.

## Poster 12

Rare Neutrophil Mediated Disease in an Elderly Latino Woman

G. Zaheer MD\*, R Rios Avendano MD

**Background:** Autoimmune Vasculitis (AV) is a rare and poorly understood disease. It typically affects Caucasian males in their early 40's or late 60's and has a tendency for European decedents. There is unclear and conflicting statistical data on the medical literature about autoimmune vasculitis. There is no recent epidemiological data about AV from Latino communities in the United States. Also, language, cultural, and social barriers further enhance an already challenging diagnosis among the Latino population. The differential diagnosis for AV is extensive and costly for patients and the healthcare system. Enhancing research of rheumatologic diseases in the Latino community may improve quality of care and treatment outcomes in this population.

**Objectives:** Discuss the clinical management of neutrophil-mediated vasculitis in an elderly Latino woman. Analyze possible differential diagnosis. Determine if the clinical management was adequate and how it can be better tailored to improve outcomes in the Latino population.

**Methods:** Observational/descriptive case report that uses retrospective analysis.

**Results:** 82 y/o F with PMH significant for chronic depression, controlled Hypertension, Alzheimer dementia, CHFwPEF, and iron deficiency anemia. Patient admitted for bilateral lower leg cellulitis and intractable leg pain for 2-3 weeks. She underwent multiple and unnecessary procedures that lead to more pain and clinical debilitation. Extensive diagnosis tools used led to an inconclusive diagnosis. Rheumatology was consulted later in the disease course and concluded with the diagnosis of "autoimmune vasculitis".

**Conclusions:** A low level of clinical suspicion, lack of structured guidelines for vasculitis, patient's inability to communicate her symptoms effectively, and reduced communication between multidisciplinary teams led to a

prolonged hospital length of stay, multiple unnecessary medical procedures, and delayed diagnosis and treatment. Further research is required on the differential diagnosis of vasculitis in the Latino population. Guidelines for management and treatment need to be established to provide quality care for our patients. Pain management should be imperative for chronically ill patients, especially in elderly population. A multidisciplinary team approach including family or caregiver communication should be used in all hospitalized elderly patients.

Systematic or Narrative Reviews

## Poster 13

Influence of language and culture in the psychiatric care of Spanish-speaking adult patients

N. González-Lepage\*, J. Cooper MD, P. Ortega MD

**Background:** The Hispanic/Latino population will grow to 30% of the total U.S. population by 2060. It is of utmost importance that patient-centered psychiatric care is available to treat this growing population. While some Latino subgroups may be subject to the "Immigrant Paradox", other subgroups have mental health illness at rates similar to their non-Latino white counterparts. However, research shows that language and cultural barriers continue to prevent Latinos from utilizing mental health services. Yet, the role that language plays in psychiatric encounters, its cultural nuances and its impact on understanding and appropriately diagnosing psychiatric illness is rarely discussed.

**Objectives:** The first objective is to assess the current state of research in relation to Spanish language concordance in psychiatric settings and how this may impact patients' notions of mental illness and openness to treatment. A second objective is to provide recommendations in regard to workforce development, training and directions for future research.

**Methods:** Electronic searches of pertinent research articles were conducted using PubMed/Medline and PsycINFO. Peer-reviewed research papers published between 2000 and 2019 that met the inclusion criteria were considered for narrative review. Articles were selected that focused on language and/or cultural concordance in the psychiatric care of the Hispanic/Latino population.

**Results:** Pending summer project outcomes

**Conclusion:** A deficiency of research on the topic of language concordance in the psychiatric care of Spanish-speaking patients is expected. In the limited research that is identified, it is hypothesized that a lack of Spanish language concordance between psychiatrists and patients contributes to poor understanding of mental illness and treatment options as well as decreased provider and patient satisfaction. Different cultural contexts and attitudes toward mental health may amplify the possibility of misunderstandings between patients and providers.

## Poster 14

A Novel Approach to Reducing Smoking Disparities in LGBT Youth and Young Adults in Chicago

E. Pérez-Luna\*, N. Fanning, S. Lopez, P. Nwanah

What is the impact of comprehensive and culturally tailored smoking prevention and control interventions for LGBT populations in Chicago? Chicago CHEC Research Fellows reviewed current relevant literature regarding health disparities faced by LGBT communities. In their findings, they found that LGBT Youth have higher smoking rates, disparity in tobacco use beginning in ages 15-18, higher risk of nicotine addiction, and tend to be targeted by tobacco advertisements. Research has offered some promising smoking prevention and cessation strategies for the general LGBT population; however no programs exist to reduce tobacco use disparity among LGBT youth. Research Fellows propose a comprehensive population-based approach through prevention, policy, cessation, and public health surveillance interventions in the context of cultural elements relevant to LGBT Youth in Chicago.

## Poster 15

An examination of the disproportionate impact of well-being for underrepresented minority medical community, does perceived institutional diversity climate play a role?

G. Fuentes\*, F. Castillo MD

**Background:** The rigors of medical school can often leave many medical students feeling fatigued and depressed. In fact, many studies have found that in comparison to people of the same age, medical students had a lower mental quality of life and were more likely to be burnt out. These symptoms that parallel medical education often tend to be disproportionately heightened in underrepresented minority (URM) medical

students.

**Objectives:** This project will consist of a literature review examining how URM medical students compare with nonminority students based on the five dimensions of physician/student well-being: burnout, fatigue, engagement, emotional health, quality of life, and professional fulfillment/satisfaction. As an extension of this literature review, I aimed to examine if institutions may mediate this disparity in burnout/well-being by disseminating a survey to the medical community. This survey aimed to assess if medical student burnout could be predicted by perceived institutional diversity climate and to guide future MOLA wellness initiatives.

**Methods:** I conducted a literature review using several databases including Academic Search Premier, PubMed, MEDLINE, and GoogleScholar. To assess burnout in the medical community the survey included questions from the Oldenburg Burnout Inventory, where higher scores indicate more burnout. To analyze perceived institutional diversity climate, questions assessing institutional climate from the AAMC Y2 survey were utilized.

**Results:** Pending summer MOLA Scholar project

**Conclusion:** The literature review highlighted the egregious disparity in well-being experienced by URM medical students and physicians. Collecting survey data from the medical community, allowed me to formulate a preliminary assessment of whether perceived institutional diversity climate plays a role in medical student well-being. The data also allowed for further examination of possible initiatives that MOLA can implement that will help circumvent and eliminate this documented disparity in well-being. Using this preliminary data, I hope to submit an application for the AAMC Year2 data to apply my hypothesis to medical schools across the country. I also hope to work with MOLA to improve their wellness initiatives within the Latinx medical community.

## Education

## Poster 16

A Study of Text Simplification on Breast Cancer Information Targeting a Low Health Literacy Population

G. Dragon\*, F. lacobelli PhD, X. Wang PhD, J. Guzman

Internet searching is a popular tool for patients to find health related

information, yet the written grade level of medical information is higher than many patients' level of literacy. Consequently, patients with low levels of literacy are less likely to understand online health information to make better informed decisions, which have a direct impact on health outcomes.

The purpose of this study is to understand what features make a text easier to understand (simple) in the domain of breast cancer and to find automatic ways to differentiate between simple and complex texts based on these features. With the understanding that most health text simplification relies on readability formulas, e.g., Flesch-Kincaid, as way to determine simplification, and that these formulas are not always reliable, we set out to study which other measures were reliable indicators of simpler text, putting more emphasis on clarification and explanation. Through this simplification, it is imperative to maintain the integrity and meaning of the text. In this research, we simplified 50 online texts about breast cancer utilizing a reliable coding scheme developed by the researchers. Next, a linguistics analysis tool, Coh-Metrix, was used to extract over 100 surface features of text, measuring comprehension, cognition, number of syllables, word synonyms, word categories, etc. Using logistic regression, we selected multiple surface features that were correlated with simpler text and trained an automatic classifier for simple and complex texts. We report on the classifier's performance and the features selected. Future work should involve testing our findings on low literacy populations to validate our research, as well as designing algorithms to automatically evaluate these surface features to create easy to use methods of determining the simplicity or complexity of online text.

## Poster 17

Anesthesia Blocks Ultrasound Library with Spanish Subtitles

G. Subieta-Benito MD\*, C. Franco MD

**Background:** Ultrasound guided anesthesia and pain blocks are being performed on daily basis by a multitude of providers including Anesthesiologists, Radiologists, Family Practitioners and Emergency Medicine physicians to mention a few, and yet there is no standardized curriculum for how these blocks should be performed or a tool to assess practioner competency and skill level.

The Department of Anesthesiology at Stroger Hospital has developed a video series in English with Spanish subtitles to give access to educational materials for 30 of the most commonly used basic blocks. The original aim of this project was to standardize the technique for block performance for

our residents with a secondary endpoint of assessing them later via written and online simulations to document their knowledge and skill level.

**Objectives:** We believe this project fulfills the requirement for an innovative strategy that is being realized in regard to the advancement of Spanish speaking physicians. We know that there is a lack of ultrasound instructional resources in this language and we hope that with this library, we can improve the skill level of practitioners using this modality in Latin countries.

**Methods:** We have a YouTube channel that is accessible to our trainees and interested parties.

**Results:** The channel went live on June 1st of this year and we will assess our success and address areas of improvement based on the comments displayed in the channel and report them during the MOLA conference.

**Conclusions:** We hope to improve the standard of care in our institution and beyond, be able to reach other medical societies and based in our success expand the library to include other procedures such as joint injections and more advanced pain techniques.

## Poster 18

Hidden Lessons in Puerto Escondido: A Method to Expand Medical Students' Cultural Humility

M. Nguyen BA\*, S. Case BA

**Background:** Northwestern University Alliance for International Development (NUAID) and Child and Family Health International (CFHI)'s program in Puerto Escondido promotes cultural competency and humility through health system immersion. Northwestern medical students spend 4 weeks in Puerto Escondido, living in homestays while shadowing in public primary care clinics. At the homestays, students share two meals per day with the host families, being immersed in Mexican home life. At the clinics, students observe Mexico's health system patient-by-patient, enabling them to learn about local disease burden. The latter half of the program focuses on maternal-child health as students participate in a local midwives training program aimed at reducing maternal mortality. Using an asset-based engagement model, the program builds on existing medical resources through community education.

**Objectives:** To evaluate the program's effectiveness and share information

about the program and its goals with other teaching institutions, and to advocate for global health programs as a model for encouraging students' cultural humility.

**Methods:** We reviewed post-trip evaluation survey data from 2013 to 2018 (n=78). Survey data was stored as free-text comments on topics of experience, knowledge gained, and how/if respondents thought such programs could improve the native population's healthcare and healthcare experience in the US.

**Results:** In addition to cultural exposure and strengthened language skills, respondents gained perspective on the challenges that immigrants may face when navigating the healthcare system. Cited observations include different antibiotic prescription protocols, expectations of the physician-patient relationship, and expectations on testing and delivery of bad news. Students reported noticing that healthcare systems respond to similar challenges differently based on the resources available and noted an expanded capacity to question how healthcare is practiced at home. Areas for program improvement include more comprehensive pre-departure preparation and on-site lectures about local healthcare models and challenges to provide a context to frame patient interactions. Across all CFHI sites, 86% of survey participants would recommend the program to a friend or colleague.

**Conclusion:** There is a need for more programs that support cultural competency and humility. The NUAID/CFHI program presents an opportunity for replication at other centers.

#### Poster 19

Why Should We Care About Cancer Registry Legislation and How Should We Advocate?

K. Peña\*, G. Luna MD, L. Iqbal

**Background:** In Illinois there is a current lack of legislation pertaining to the Illinois Comprehensive Cancer Registrar System Program (ICCRSP). It includes the acceptance of a 23-month delay in the National Cancer Registry. This delay is more prevalent among the Latinx population and therefore may contribute to the lack of information on the Latinx cancer experience which is needed for research and improvements in quality of life among Latinx cancer survivors.

Objectives: The project will conduct a literature review on the existing

legislation in several states across the United States compared to states that do not have the legislation to examine the impact of the 23-month delay on the National Cancer Registry.

**Methods:** We will conduct a literature review. Details of methods will be decided during the start of the summer project.

**Results:** Pending summer MOLA Scholar project.

**Conclusion:** This project is expected to highlight the importance of the legislation on the lack of information for cancer research among the Latinx community.

#### Poster 20

Patient-Provider Relationships in Breast Cancer Care: Implications for Latina Breast Cancer Survivors' Mental Health

K. Peña\*, P. Chebli PhD, J. Lemus BS, Y. Molina MPH, PhD

**Background:** Latinas are commonly under-treated for breast cancer and its sequelae, including for depression, which can impact their quality of life post-treatment (Maly, 2010). This study aims to characterize Latina breast cancer patients' perspectives on how patient-provider relationships can impact cancer outcomes.

**Objectives:** We want to understand the impact on Latina breast cancer survivor's mental health stemming from the relationship between health providers and breast cancer patients.

**Methods:** Staff from ALAS-Wings and the University of Illinois at Chicago used convenience-based sampling to recruit 19 Latina breast cancer survivors for 2 focus groups. Participants had to be over the age of 18, identify as Latina/Hispanic/Chicana, diagnosed with breast cancer, and have undergone a lumpectomy or mastectomy within the past 5 years. Inductive content analysis was done.

**Results:** The majority of Latinas had negative experiences with their provider due to lack of empathy (e.g. difference in authority between a patient and provider, lack of guidance) and miscommunication. Those with negative experiences reported more stress throughout diagnosis and treatment. Latinas with positive experiences demonstrated no stress related to experience with provider and were clear on next steps in their treatment process.

**Conclusion:** Our results suggest that providers' relationship with patients influences patients' mental health during treatment. Future interventions should educate health personnel on cultural sensitivity and collaborative decision-making to avoid contributing to Latinas stress during diagnosis and treatment.

## Poster 21

Language and health risk behaviors among US-based Latinas

J. Olazar\*, J. Olazar, C. Pichardo, Y. Molina MPH, PhD

**Background:** Latina women have relatively low levels of tobacco, alcohol, and illicit drug use, potentially due to health-protective cultural norms (Dillon et al., 2011; Wahl, 2008). Yet, less is known about the role of acculturation, including associations between preferred language and health risk behaviors.

**Objectives:** We will examine the feasibility of examining differences in alcohol use, substance abuse, tobacco use among Latinas who preferred Spanish, English, or Other languages.

**Methods:** We abstracted the following data from electronic medical records from a federally qualified health center, the Mile Square Health Center (MSHC) clinics: age, language, and alcohol use, substance abuse, tobacco use screenings. The sample included 1447 Latinas who sought MSQHC clinics between 2012-2017.

**Results:** Among our sample, 62% reported their preferred language to be English; 37% preferred Spanish; and, ~1% preferred Other languages (e.g., sign language; other languages). Approximately 24% of the sample reported currently using alcohol, 2% reported using illicit substances, and 11% reported using tobacco. Pending summer outcomes regard inferential statistics concerning health risk behaviors.

**Conclusion:** Similar to previous studies, our sample reported relatively low rates of abusing substances than using alcohol. However, alcohol use than tobacco use were relatively high. Our study sample offers a relatively rare opportunity to be statistically powered to examine differences between English- and Spanish-speaking Latinas. Such findings are crucial for planning linguistically appropriate interventions to reduce health risk behaviors.

## Poster 22

Cartillas de Salud: Mexico's Quest to Increase Patients' Health Literacy S. Case BA\*, M. Nguyen BA

**Background:** Mexico's health system has historically faced a two-headed problem: a paucity of resources and a population with high rates of complex, chronic illnesses such as diabetes and heart disease. In 2007, the legislature voted to increase the populace's health agency in the form of the "Cartilla de Salud." The government-stated objective of these cartillas is to: "establish coordination and linkage of the health sector to promote health self-care in the population at different stages of life." Twelve years after being enacted as law and a decade after dispersal to clinics across the nation, millions of people carry their health history in the form of these packets.

**Objectives:** To evaluate how successful the cartillas have been a decade after implementation, specifically how accurately they address the health education needs of the population living with chronic disease. We focus on diabetes as an example.

**Methods:** We used epidemiological information released by the Secretariá de Salud de Mexico to view longitudinal trends in BMI and caloric intake, as well as prevalence, incidence, and mortality related to diabetes. We then reviewed published literature addressing societal pressures causing Mexico's diabetes epidemic. Finally, we related this data to the Cartilla de Salud contents to examine whether the identified causes were addressed. Results: Incidence of diabetes in Mexico slightly decreased from 2009-2015, though prevalence continues to climb. Excessive caloric intake and irregular diabetes education have been cited as causatory for the high prevalence. Sections of the Cartilla de Salud explicitly call for dietary counseling, diabetes counseling, and glucose testing; these health parameters directly address the aforementioned drivers of increased diabetes prevalence. The cartillas also contain educational sections for heart disease and cancer, two other public health issues.

**Conclusion:** The Cartilla de Salud is well-suited to address the root causes of Mexico's chronic diseases, specifically diabetes, because they prompt patient education and medical evaluation on these topics. Diabetes was specifically examined here. Mexico's rates of mortality due to cardiovascular disease, diabetes, and cancer are among the highest in OECD countries. Other Latin American countries and American Hispanic population face comparably high rates of chronic illness. The Cartilla de Salud is one tool to empower patients, while presenting a cost-effective method for bridging health information across a disjointed health system.

## Poster 23

Bridging the Gap: Creation of The Spanish Ambassador Program (SAP) E. Becerra-Ashby\*, L. Tinoco-Garcia, E. L. Vazquez-Melendez MD, M. Mischler MD

Effective communication between providers and patients is integral to medical care. Approximately 16.4 million Spanish-speaking US residents self-report Limited English Proficiency (LEP). The use of videoconference interpreting services (VIS) for medical care is an effective measure but has limitations. In a tertiary care medical center, Spanish speaking students noted lack of understanding and frustration with medical care from Spanish speaking patients even with the use of VIS. The Spanish Ambassador Program (SAP) was devised as a consultation service comprised of medical students fluent in Spanish designed to bridge the cultural gap between Spanish speaking patients and their medical teams.

The SAP was started in 2017, with a team comprised of 3rd and 4th year students with faculty oversight. The service is accessed via consultation similarly to other consults, with the student taking the call. Services are advised to consult if they feel there is a gap in care or confusion about the care plan that the VIS is not addressing. Ambassadors cover weekday shifts with faculty backup, and patient encounters occur the day of consultation. Daily and recurring visits can be performed to provide continuity, and the consulting team is informed of the discussion. A consult note is then entered into the EHR. Patients provide feedback via survey regarding the effectiveness of the SAP and its effect on understanding their care. The SAP has completed 30 formal and multiple informal consults. Reasons for consultation include explanation of treatments and procedures, clarify discharge plans, provide general support, and ensuring understanding of medical management from patient and family. 20 patients completed the survey, with 20/20 rating the service a 10/10 for improved understanding of medical plan and overall health.

The SAP has received positive feedback from consulting services and patients since its launch. The service provides a communication bridge between patients and their team, with a focus on patient-centered communication for medical students. Further research is needed to identify the impact of the program at the patient and hospital level. We are working on expanding the service through direct collaboration with departments and assessing the impact of the SAP on quality outcomes.

## Poster 24

Obesity and obesity-related health conditions among US-based Latinas J. Olazar\*, J. Olazar, C. Pichardo MA, Y. Molina MPH, PhD

**Background:** Obesity and obesity-related conditions, such as diabetes and macrosomia, are higher among Latina women compared to White and Asian women (Ramos et al., 2005). Some research has suggested differences in obesity among Latinas regarding acculturation (Wolin et al., 2008); yet, more research is needed to replicate these findings, especially in the context of obesity-related conditions.

**Objectives:** We will examine the differences in obesity-related conditions between Latinas who prefer Spanish versus English.

**Methods:** Our sample includes 1447 Latina patients who sought care within the Mile Square Health Clinics (MSHC). We abstracted a number of obesity-related conditions, including diabetes, hypertension, hyperlipidemia, hypothyroidism, rheumatoid arthritis, osteoarthritis, osteoporosis, osteopenia, sleep apnea, glaucoma, gallstones, breast cancer status and colorectal cancer status.

**Results:** Approximately 39% of our sample identified that their primary language is Spanish, and 62% prefer to speak English. Notably, 78% of the sample were overweight/obese. With regard to obesity-related conditions, 20% of our sample were diagnosed with diabetes, 25% with hypertension, 19% with hyperlipidemia, 9% with hypothyroidism, 2% with rheumatoid arthritis, 7% with osteoarthritis, 2% with osteoporosis, 3% with osteopenia, 3% with sleep apnea, 1% with glaucoma, 4% with gallstones, 3% with breast cancer and 0.2% with colorectal cancer. Pending summer project outcomes include examination of obesity-related conditions by language status.

**Conclusion:** Overall, our study finds relatively high prevalence of obesity, diabetes, hypertension, and hyperlipidemia among MSHC Latina patients. Given high levels of obesity and obesity-related conditions it is important that future work investigates determinants of health (e.g. language preference, a proxy for acculturation) among MHSC Latina patients to inform appropriate health interventions.

## Poster 25

Development and Piloting of a Palliative Care Assessment Tool in Bolivia J. Alhalel\*, J. Judkins, J. Hauser

**Background:** Palliative care, according to WHO, is the active improvement in quality of life and relief of suffering for patients with incurable disease. Worldwide, only about 14% of people who need palliative care currently receive it and of the 40 million people each year that are in need of palliative care, 78% of them people live in low- and middle-income countries. More specifically, the Atlas of Palliative Care in Latin America in 2012 showed that Bolivia lies behind many of its peers in respect to palliative care services with zero community centers, 2nd and 3rd level centers, and few hospice in-patient, home care, day center, multilevel, and hospital services. Despite this, Bolivia has many centers and services that manage most, if not all, symptom management that were not identified years ago due to the survey's data coming from personal estimates of individual survey respondents on the state of palliative care in the country.

**Objectives:** The main goal of the study is to identify if it's true that Palliative Care has evolved and grown in Bolivia, and if so, in which directions.

**Methods:** The following sections are present in the survey. Demographic data on center and respondent. NCCNs Framework for Resource Stratification of Adult Cancer Pain and WHOs Essential Medicines in Palliative Care was then used to identify all essential treatments for the most common palliative care symptoms. Following these, services and procedures that were outlined as being critical by the NCCN and WHO were included. Questions were presented either with a list that has many options to be checked off if applicable (for instance, if Haloperidol is used for delirium), with a free response to describe something they provide, or yes or no questions.

**Results:** One provider at each center will be responding to the survey from what we expect to be greater than 12 centers. The majority, if not all, will be from the major cities with greater number of resources. These centers show that more palliative care treatment is being provided than previously thought.

**Conclusions:** We expect the results of the survey demonstrate that Bolivia is not as far behind other countries in Palliative Care.

## Poster 26

Scholarship at a Level-1 Trauma Center: Social Determinants of Gun Violence

N. Langarica\*, R. Kafensztok PhD, A. Luke, PhD

For the past several years, the high rate of gun violence in Chicago has been highlighted by the news media; in 2018 alone, 2929 shootings were reported. In light of these statistics, local communities are developing programs to reduce gun violence, including the Chicago Hospital Engagement, Action, and Leadership (HEAL) Initiative led by Senator Richard Durbin. The Loyola University Medical Center (LUMC) is the level 1 trauma center for the west side and western suburbs of Chicago and is part of the HEAL Initiative. To design community focused interventions, we sought to better understand the demographic and socioeconomic characteristics of gun violence patients, and how they inform final disposition of patients (i.e. dead or alive).

Using data from LUMC electronic health record system (EPIC) and the Emergency Department Trauma Registry (TR) we retrospectively reviewed data on gunshot wound (GSW) victims that were treated at LUMC between 2007 and 2018. Stata 14.1 was used to analyze whether sex, race/ethnicity, type of insurance, employment, and age had an effect on final disposition. Data from the TR was used exclusively to analyze the relationship between race, mechanism of injury (i.e. assault, suicide, accident), and final disposition. Bivariate analysis and multivariate logistic regression analysis were conducted on 969 records in EPIC and 637 TR records. Descriptive statistics of the EPIC database revealed 68.2% of GSW victims were non- Hispanic Black, 90% were male, the average age was 28.4 years, and the majority of victims were on Medicaid and only 10.7% were fatal. In both bivariate and logistic regression models, age groups did not have a statistically significant association with final disposition. While not statistically significant, males had a two times higher probability of mortality. Neither insurance nor employment were significantly associated with final disposition. Interestingly, non-Hispanic Blacks had a 65% lower probability of death than non-Hispanic Whites. To explore this disparity, we looked at mechanism of injury which indicated that 34.9% of non-Hispanic Whites were victims of suicide compared to 1.7% of non-Hispanic Blacks. Based on these results, it is important to increase communal suicide awareness and increase efforts in violence prevention in Black communities.

## Poster 27

Assessing Access to Organ Transplant Among Chicago's Undocumented Community: A Local Needs Assessment

J. Bellefontaine\*

**Background:** While access to organs once an individual is on the waitlist is

equitable, access to the waitlist is not. Those without health insurance are excluded from transplant evaluations due to their inability to pay. The undocumented community is also systematically excluded from the transplant list, as their documentation status prevents them from being insured. Advocacy efforts in Chicago lead to a legislative window which allowed for undocumented immigrants to be eligible for kidney transplants. While this is a progressive action for the state, there is still much to be explored regarding the current organ transplant needs and barriers among the undocumented community.

**Objectives:** To create an organ transplant needs assessment of the undocumented community in Illinois.

**Methods:** Collect qualitative data from community centers to try and see what the needs of their community members might be. Additionally, researchers will contact transplant centers to see if they are willing to share their transplant needs of their undocumented patients.

**Results:** Pending summer project

**Conclusion:** Researcher is seeking to create a organ transplant needs assessment of the undocumented community in Illinois. They would hope to use this assessment as a policy tool to build upon current legislation.

#### Poster 28

Sanctuary Hospitals: The development of policy that aims to protect and treat undocumented immigrant patients

Y. Guevara\*, J. Ruiz MEd, H. Rasgado-Flores PhD

**Background:** As federal executive orders and policy changes prioritize the deportations of all undocumented immigrants along with increasing immigration enforcement, the threat of deportation is palpable even in spaces such as hospitals and clinics that were once thought to be outside the reach of U.S. Immigration and Customs Enforcement (ICE). These changes in immigration enforcement has made it even more difficult for undocumented patients to access the U.S. healthcare system. In light of the current political environment, some hospitals across the nation are developing policies and procedures that aim to protect the rights of undocumented individuals during encounters with ICE officers in hospital settings. One of these hospitals is Rush University Medical Center in Chicago, IL that implemented a policy in July 2018 to train their hospital staff on how to interact with ICE officers. Policies such as these have the

ability to address some the anxiety and fear undocumented patients have when entering a hospital and may encourage patients to seek medical care sooner.

**Objectives:** The aim of this study was to examine the effectiveness and development of policies that train hospital staff to conduct appropriate procedures when ICE officers present a warrant or ask for more information about the patient.

**Methods:** The study will conduct in-person or over the phone interviews with key stakeholders in the development of these policies that will last approximately 1 to 2 hours and will be audio recorded on consent. The interviews will be coded based on themes chosen by the research study team that highlight the process, advantages and disadvantages of the creation of these policies.

**Results:** Results are pending. Summer work is being conducted as a MOLA Summer Internship project.

**Conclusion:** Results are expected to provide an understanding of the developmental process and the effectiveness that these hospital policies have on creating a more welcoming space for undocumented patients. The results of the project will be useful to inform other hospitals and institutions on the advantages and challenges of implementing these types of policies. The results are also expected to inspire more hospitals to take a proactive stance on addressing the concerns and safety of undocumented patients.

## Awards MOLA Latino Health Symposium 2019

#### **Oral Presentation Awards:**

1st Place: Ana Reyes, "Moving FQHCs toward value-based care: Health risk assessment of patients receiving pregnancy care at Erie Family Health Centers" (Oral 10)

2nd Place: Samuel Carbunaru, "Minorities in Living-Donor Kidney Transplantation: Where Do We Stand?" (Oral 12)

## **Poster Presentation Awards:**

1st Place: Nayelí Langarica, "Scholarship at a Level-1 Trauma Center: Social Determinants of Gun Violence" (Poster 26)

2nd Place: Erika Becerra-Ashby, "Bridging the Gap: Creation of The Spanish Ambassador Program (SAP)" (Poster 23)







#### **Author Index**

#### **Oral Presentations**

A. Cabrera*. University of Illinois at Chicago; PrimeCare Community Health	24
A. Cruz*, F. Fimmel BA, G. Fierro, L. B. Oswald PhD, S. H. Baik PhD, D. Buitrago BA, F. Iacobelli PhD, A. Perez-Tamayo MD, J. Guitelman, F. J. Penedo PhD, J. Buscemi PhD, B. Yanez PhD. Northwestern University Feinberg School of Medicine	13
A. Reyes*, C. Hoke MD, H. Rowell. Northwestern Feinberg School of Medicine; Erie Family Health Centers	15
B. Rangel-Álvarez, R. Gonzalez, G. Moreno MD, MSHS, P. Dowling MD, MPH, Y. Bribiesca, R. Castillo, E. Talamantes MD, MBA, MSc. Michigan State University College of Human Medicine, Michigan State University	22
E. Arias*, M. Pollevick, S. Carbunaru, H. Hanna, V. Reguitti, A. Reyes, S. Libfraind, V. Bishop MD, J. Moreira MD, P. Ortega MD. Northwestern Feinberg School of Medicine	9
E. García*, J. Estrada MD. University of Illinois College of Medicine	12
E. Stark*, W. A. Grobman MD, MBA, E. S. Miller MD, MPH. Northwestern Feinberg School of Medicine	20
I. López-Hinojosa*, P. Ortega MD. University of Chicago Pritzker School of Medicine	10
K. D. Guerrero MD*, R. Zuckerman MD, I. Romero MD, J. Chor MD, MPH. University of Chicago Hospitals	6
M. L. Espinosa BS*, P. A. Lio MD. University of Chicago Pritzker School of Medicine	7
M. J. Galván*, K. Clancy PhD, M. Rodrigues MD. Department of Anthropology College of Liberal Arts and Sciences, University of Illinois at Urbana-Champaign	14
M. Riad MD, S. Salazar MD*, J. A. Block MD, T. Pincus MD, I. Castrejon MD, PhD. Division of Rheumatology, Rush University Medical Center	17
N. Vázquez*, J. Moreira MD, Roosevelt University	19
R. Tyagi BS*, D. Padilla, N. Quasim BS, M. Jackson MA. University of Illinois at Chicago College of Medicine	21

S. Alvarado*, S. Kowalski, J. Saavedra, M. Rivera. Ann & Robert H. Lurie Children's Hospital of Chicago	23
S. Carbunaru*, J. Caicedo MD. Northwestern Feinberg School of Medicine	18
S. Imran*, C. Onyejiaka, E. James, A. Williams Darrow MD, M. Rodriguez MD, K. Xie DO. University of Illinois at Chicago College of Medicine	8
S. Salazar MD*, M. Riad MD, P. Ortega MD, I. Castrejon MD, PhD. Pontificia Universidad Católica del Ecuador	11
Posters	
A. Córdova*, K. Amber MD	31
D. A. Chávez Meléndez MD*, P. Covas, R. Volke, M. Mercader MD, C. Tracy MD	35
D. Morales*, A. Edelheit MD, M. Pacifique MD, J. Seidenfeld MD, R. Roxas MD, L. Rizvanolli BS, E. Christian MS, L. M. Smith MD, MBA	30
D. Velásquez, Jr.*, E. Chang MD, PhD, D. La Torre PhD, A. Sidebottom PhD, K. Harris PhD	32
E. Becerra-Ashby*, L. Tinoco-Garcia, E. L. Vazquez-Melendez MD, M. Mischler MD	46
E. Pérez-Luna*, N. Fanning, S. Lopez, P. Nwanah	38
G. Dragon*, F. lacobelli PhD, X. Wang PhD, J. Guzman	39
G. Fuentes*, F. Castillo MD	38
G. Subieta-Benito MD*, C. Franco MD	40
G. Zaheer MD*, R Rios Avendano MD	36
J. Alcántar*, R. Molokie MD, B. Allen, T. Royston PhD	33
J. Alhalel*, J. Judkins, J. Hauser	47
J. Bellefontaine*	49
J. Olazar*, J. Olazar, C. Pichardo MA, Y. Molina MPH, PhD	47
K. Peña*, G. Luna MD, L. Iqbal	42
K. Peña*, P. Chebli PhD, J. Lemus BS, Y. Molina MPH, PhD	43

M. Acevedo*, L. Godley MD, PhD	30
M. Carabaño MD*, A. Hassan, C. Joshi, R. Boyd, R. Wan, J. Liu, R. Galiano	27
M. Nguyen BA*, S. Case BA	41
M. S. del Pino*, D. Morreira MD, S. Berrios	26
N. González-Lepage*, J. Cooper MD, P. Ortega MD	37
N. Langarica*, R. Kafensztok PhD, A. Luke, PhD	48
P. Chavero MD*, C. Fuentes MD, D. Guevara MD, H. Rodriguez MD	29
S. Case BA*, M. Nguyen BA	45
V. Alvarado Jones*, W. Yang MD	28
Y. Guevara*, J. Ruiz MEd, H. Rasgado-Flores PhD	50
Z. Hernández-Peraza MD*, MS, A. Christiana MD	34



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