

# Creighton UNIVERSITY

Health Sciences - Multicultural  
and Community Affairs



**ANNUAL  
REPORT  
2019-2020**



## **ABOUT HS-MACA**

### **Mission**

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The mission of Health Sciences Multicultural and Community Affairs is to promote Creighton University as a recognized leader in the training and development of a multicultural health care workforce that serves to reduce health disparities in underserved and diverse communities through research, culturally proficient education, community interaction and engagements with Ignatian values.

### **Vision**

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Health Sciences Multicultural and Community Affairs will be recognized and respected as an innovative department that pioneers and synthesizes community, education, research and the development of future healthcare professionals who are culturally aware and work toward the elimination of health disparities.



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# MESSAGE FROM THE ASSOCIATE VICE PROVOST

## Reflection



**Sade Kosoko-Lasaki, MD, MSPH, MBA**  
Associate Vice Provost Health Sciences  
Director, Post Baccalaureate/Pre-Matriculation Programs, Professor, Ophthalmology

The academic year started in June 2019 with the welcoming of 14 post baccalaureate students from different states in the country: New Mexico, Texas, California, Alabama, Arkansas and Nebraska. There were 7 pre-dental students and 7 pre-medical. The students were excited to be at Creighton University and looked forward to a fruitful academic year. In March 2020, the COVID 19 pandemic struck the United States which made it necessary to move all classes online. The e-learning mandated by Creighton university was very challenging to the students, faculty and staff. However, the students successfully completed their post baccalaureate classes and started the Prematriculation classes in May 2020. The programs concluded in July 2020.

We have had an unusual but successful academic year.

Congratulations to our graduates in all the health science professions schools. This report details our success and the adjustment we made in our programs, in response to the COVID 19 pandemic. We thank our community, families and friends for their support throughout the year.

*Always bear in mind that your own resolution to succeed is more important than any other..... Abraham Lincoln*

Be safe and God bless

Sade Kosoko-Lasaki, MD, MSPH, MBA  
Associate Vice Provost and Professor



# HS-MACA Highlights 2019-2020

## \$1.8 Million NIH Endowment

Celebrated the 15<sup>th</sup> year of COPC funding by supporting the following activities through the Community Oriented Primary Care Endowment:

Common Ground, COPC Scholarship, Student Research

## 676 Students

Middle and High School students exposed to the health sciences through the Focus on Health Professions "Pipeline" Program in 2020

## 84 Students

Since the year 2000, 84 students have successfully completed the Post-bac Pre-Dental Program. Ninety-seven percent (97%) of pre-dental students have matriculated into dental school

## 153 Students

Since the year 2000, 153 students have successfully completed the Post-bac Pre-Medical Program. Eighty-eight percent (88%) of pre-medical students have matriculated into medical school

## \$175,000

Awarded funding from LB692 Nebraska Tobacco Settlement to sustain Center for Promoting Health and Health Equity (CPHHE)

## \$3.07 Million

(2018 – 2023)

Awarded by the Health Resources and Services Administration (HRSA) for the Health Careers opportunity Program (HCOP)

## 46,000

African Americans in Omaha Impacted on chronic disease awareness through promotion of physical activities from REACH sustainability activities.

## 12,000 Students

Since 2000, HS-MACA Pipeline Programs have impacted over 12,000 students through Pipeline Programs

## \$250,000

Award from the Douglas County Health Department (DCHD) to promote education and communication on Covid-19 pandemic to the minority populations in Omaha

# HS-MACA in the Community

HS-MACA began its 2019-2020 academic year with Creighton University's spirit of service to the community, a big part of its mission. HS-MACA maintains its strong commitment to underserved communities.

On Saturday, August 3<sup>rd</sup>, 2019 HS-MACA participated in the Native Omaha Days Parade. **Native Omaha Days** is a bi-annual event in North Omaha, Nebraska celebrating the community's historical and cultural legacies. Held since 1976, over a weekend, the Native Omaha Days include picnics, family reunions, class reunions and a big parade. The event is largely attended by current and former African American residents of the city. Participating in the Native Omaha Day parade gives HS-MACA an opportunity to engage with the North Omaha community, whose demographic is 59% African American, the largest minority group in Omaha.



2019 Native Omaha Day Parade

On Saturday, June 20<sup>th</sup>, 2019 Charles Drew Health Center presented its annual Earn-A-Bike program, to the community. Students of Creighton University's Health Sciences Multicultural and Community Affairs Department were instrumental in making sure that the event was a success. Our volunteer efforts included serving food, distributing bikes, assisting with bike safety and clean up.

Charles Drew Health Center distributed over 200 new bikes, helmets and locks to children in the North Omaha community.



2019 Charles Drew Earn-A-Bike Program



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## HS-MACA in the Community

On Saturday, September 14<sup>th</sup>, 2019 Creighton University's Health Sciences Multicultural and Community Affairs Department, HS-MACA, hosted its 4th Annual Let's Move Let's REACH Physical Activity Day in the North Omaha Community. **REACH Physical Activity Day** is an annual event that occurs every September to promote wellness and the reduction of Cardiovascular Disease and its risk factors like obesity, diabetes and hypertension in the community, particularly among the African American population. Beyond creating an enjoyable day for residents to have fun and visit with friends and families, this event is a very positive way to celebrate the community spirit of Omaha and learn more about the value of physical activity and improving the quality of life.



2019 Let's Move Let's REACH Physical Activity Day

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# RECRUITMENT AND RETENTION

## *HS-MACA Recruitment Overview*

*Recruiting plays a very integral role in the success and operations of HS-MACA. Recruitment strategies are in place for but not limited to the Post-Baccalaureate Programs, Pipeline Programs, Summer Research Institute, HCOP and other programs and initiatives throughout any given academic year. The Recruitment and Retention Manager is responsible coordinating recruitment activities, disseminating information and securing applications for HS-MACA programs and Creighton University Health Sciences Schools.*

*Recruitment efforts in the year 2019 resulted in the dissemination of information to students with an interest in Creighton's Health Sciences Schools post baccalaureate programs and other HS-MACA pipeline programs for 2020-2021 academic year. Specifically, in addition to providing information about the schools of medicine, dentistry, pharmacy and health professions and the physician assistant program, information was also disseminated about HS-MACA's Post-Baccalaureate Programs, Summer Research Institute, Health Careers Opportunity Program (HCOP) and Mini Health Sciences' School/Day Camp.*



### **School of Pharmacy and Health Professions (SPAHP)**

HS-MACA participated in the SPAHP Resource Fair on August 17, 2019. The Resource Fair was held in the Skutt Center Ballroom on Creighton University' Campus. HS-MACA staff was able to interact with **30 students** from the School of Pharmacy, Occupational Therapy and Physical Therapy and provide information about HS-MACA, its mission, the Pre-Matriculation Program, and its ability to provide student and academic support services.



### **University of Nebraska at Omaha (UNO)**

Recruitment for the 2020-2021 academic year began with recruitment at UNO's Career and Internship Fair. The fair took place on October 1<sup>st</sup>, 2019. HS-MACA's Recruitment and Retention Manager met with prospective students that expressed interest in the health. **Twenty-two (22)** students expressed interest in Creighton University. Contact cards were completed for follow up requesting information about our health sciences



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programs in medicine and dentistry as well as the post-baccalaureate program, MCAT prep and clinical shadowing opportunities.

In addition to attending UNO's Career and Internship Fair, arrangements were made to continue recruiting in the Health Careers Resource Center for the 2021-2022 academic year.



### **University of Nebraska at Kearney (UNK)**

On October 1, 2019, UNK hosted a Professional Graduate Fair. HS-MACA's Recruitment and Retention Manager attended with a representative from Creighton University's School of Pharmacy and Health Professions. **Eighteen (18)** students expressed interest in several health care professions to include: Occupational and Physical Therapy, Pharmacy, Physician Assistant, dental school and medical school. The student population present were undergraduate students who were encouraged to apply into our Health Careers Opportunity Program (HCOP) and the Summer Research Institute (SRI) Programs.



### **UMKC Graduate Programs Fair**

On Wednesday, October 16, 2019 the Recruitment and Retention Manager attended the Graduate Programs Fair in Kansas City, MO. Attending this fair did not yield any interest, however, the networking was valuable. Contact was made with a representative from Ross University in order to provide our pre-med students with medical school options. The Recruitment and Retention Manager also met with post-bac pre-med alum who are currently first year medical students at UMKC and KUMC.



### **University of Northern Iowa (UNI)**

November 4th, 2019, the Recruitment and Retention Manager attended the UNI Health Sciences Networking Night together with a representative from the School of Pharmacy and Health Professions. The Recruitment and Retention Manager met with several student athletes and gave information about Creighton University health sciences programs as well presented with a panel of other healthcare professionals. Six (6) students expressed interest in Creighton University and were advised about medical school, pharmacy, OT, PT and HS-MACA's Post-Baccalaureate Programs.



### AAMC

The Association of American Medical Colleges (AAMC) held its annual conference in Phoenix, Arizona from November 7<sup>th</sup>-11<sup>th</sup>, 2019. On Saturday, November 9<sup>th</sup>, HS-MACA staff attended the Minority Student Medical Career Fair along with Creighton University School of Medicine and interacted with **Twenty-two (22)** students. Contact cards were completed for students seeking admittance into Creighton University School of Medicine while others received information regarding the Post-Baccalaureate Pre-Medical Program.



### Med-Mar

The Medical Minority Applicant Registry (Med-Mar), was created by AAMC to enhance admission opportunities for groups historically underrepresented in medicine. Med-MAR serves as a means of identifying and communicating the availability of applicants from groups who self-identify as underrepresented in medicine and/or educationally and economically disadvantaged. The program's registry distributes basic biographical information about the applicant and their MCAT exam scores to minority affairs and admission offices of AAMC-member schools and certain health-related agencies interested in increasing opportunities for students participating in the program. HS-MACA received access to the Med-Mar registry and distributed information to over **2,500** prospective students eligible for enrollment into the Post-Baccalaureate Pre-Medical Program for the 2020-2021 academic year.



### Pre-Med Star

***Pre-Med Star is a new online recruitment strategy and tool that helps medical schools and programs recruit students by making the recruitment process easier, efficient and concise. As a hub for diversity Pre-Med Star helps to increase the depth of recruitment for Creighton University health sciences programs.***

***Recruitment efforts in 2019 resulted in HS-MACA receiving 90 applications from students seeking admittance into Creighton University's Post- Baccalaureate Pre-Medical and Pre-Dental Programs for the 2020-2021 academic year.*** Application and interest into Creighton University's Health Sciences Schools and the Post-Baccalaureate Programs can be attributed to our academic success, word of mouth advertising, campus visits, and health science fairs. Recruitment activities have been essential in the development and building of institutional relationships and securing applications for our Pipeline Programs.



### **Summer Research Institute**

The Summer Research Institute supported by HS-MACA and CPHHE includes the Undergraduate Biomedical Research Program, High School Community Research Program, and Project SEED which is funded by the American Chemical Society (ACS). In order to ensure a large applicant pool for both programs information was disseminated to several schools and organizations to include: Omaha South High School, Omaha North High School, Omaha Northwest High School, Central High School, Benson High School and its Health Career Academy, Brownell Talbott, Mt. Michael Benedictine, University of Nebraska at Omaha, University of Nebraska Medical Center and Metropolitan Community College. The Creighton University community included MHSSA, SNMA, MAPS, Creighton Intercultural Center, Creighton EDGE, Student Support Services, Project CURA, TRIO/Upward Bound, Ignatian College Connection, Medical Spanish Club, African Students Association and HCOP students. Hope Center for Kids, Urban League of Nebraska, Youth For Greater Good, Partnership4Kids and 100 Black Men of Omaha were also encouraged to promote the programs to their student populations. The Summer Research Institute was advertised through The American Association of Medical Colleges (AAMC) weekly announcements and via social media outlets like Facebook. In 2019/2020 we received **seventy-two (72)** Undergraduate Biomedical Research Applications and a combined **twenty (20)** application inquiries for the High School Community Research and SEED Programs.



### **Health Careers Opportunity Program (HCOP)**

The *Pipeline to Success* Health Careers Opportunity Program (HCOP) is a federally funded grant that provides students from economically or educationally disadvantaged backgrounds an opportunity to develop the skills needed to successfully compete for, enter, and graduate from health professional schools. After receipt of the grant in August 2018, recruitment immediately began for the Fall, Spring and Summer Ambassador Programs. Information was disseminated to a number of schools in Nebraska and surrounding areas, community organizations and within Creighton University community. As a result, a total of seventy-two **(72)** students were recruited and enrolled into the 2019-2020 Ambassadors Program.

(See HCOP Distro Chart)



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## Health Careers Opportunity Program (HCOP) Distribution List

High School	Undergraduate
Blackburn	Creighton University
Omaha Public Schools -TAC	Student Support Services
Benson High School	Creighton Intercultural Center (CIC)
Omaha North	Provost Newsletter
Omaha North	CU-EDGE
Omaha Northwest	CU - Info Session
Central High School	Central Community College
Brownell Talbott	Northeast Community College
Mt. Michael	Metropolitan Community College
Ralston High School	Mid-Plains Community College
Omaha Marian	Southeast Community College
Millard North High School	Western Community College
Partnership4Kids	University of Nebraska at Omaha
Youth for Greater Good (YFGG)	HS-MACA SRI Applicants
Urban League of Nebraska	AAMC - Graduate Research Education and Training (GREAT)
Facebook	Facebook
NOAH Clinic	NOAH Clinic
Omaha Home For Boys	SNMA, MHSSA, LMSA, MAPS

### **Mini Health Sciences School**

To promote Science, Technology, Engineering, and Mathematics, (STEM) to students in grade school to high school, HS-MACA collaborates with Creighton University's Health Sciences Schools to conduct the Mini Health Sciences School and Day Camp. Activities include panel discussions with healthcare professionals, dissections, hospital tours, simulation labs, interactive hands-on experimental projects and in class learning. To successful conduct a mini day camp, it is important to enlist the support of Creighton University health sciences schools and departments as well as local schools and organizations like McMillan Magnet Center, St. Augustine Indian Mission School, Jesuit Academy, Partnership 4 Kids, NOAH Clinic and Creighton Preparatory School. There was no mini medical school program this year because of the pandemic effects of COVID 19 and the risks of face to face programming

### **Conclusion/Future Directives**

HS-MACA continues to develop relationships with students, universities, pre-health advisors, faculty/staff and administrators, and the community in order to bring awareness to our efforts to bridge the achievement gap by addressing health disparities in education, community, research, and scholarship. However, with the implementation of new programs and a shift in operating practices, we are looking

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forward to new and innovative strategies to increase awareness and participation in our programs.

HS-MACA plans to focus on innovative ways to increase recruitment efforts for the 2021-2022 academic year by: (1) continue to work in collaboration with Creighton's Health Science Schools (School of Medicine, School of Dentistry, School of Pharmacy and Health Professions, and College of Nursing), (2) participate in more professional recruitment fairs (local, virtual), (3) introduce new marketing strategies and content (4) use technology to track and identify the total number of prospective students that have applied, interviewed and accepted an offer to Creighton University, the Post-Baccalaureate /Pre-Matriculation Programs or any health sciences programs in future recruiting reports (5) expand community and Pipeline Programming in area schools and organizations within the local communities we represent and (4) enhance our relationships with other health sciences schools and minority serving institutions with a focus on diversity.

## **COVID-19**

Since COVID-19 has become a widespread health issue, colleges and universities have mandated working from home, closed campuses, cancelled events and converted to online learning dramatically disrupting the lives of faculty, staff and students. While majority of colleges and universities around the world have integrated some form of online education into their coursework, moving all aspects of business online may prove to be challenging for recruitment and retention of students.

The severity of COVID-19 directly affected the travel industry therefore hindering any recruitment that requires travel by air.

Effective recruitment often requires face-to-face contact. However, due to the spread of the virus recruiting efforts will primarily be remote and solely implemented through digital media platforms. The upside is that online recruiting is more cost effective and allows for a broader reach of students within a short period of time.



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# STUDENT ORGANIZATIONS

## Minority Association of Pre-Health Students (MAPS)



2019-2020 MAPS Leadership Team

MAPS is an undergraduate student organization that provides opportunities for students to collaborate with other organizations on campus like the Student National Medical Association (SNMA) at local, regional, and national levels very early in their college careers. For the 2019-2020 academic year, a total of 15 students were members of MAPS. Members received mentorship from SNMA and Multicultural Health Sciences Student Association (MHSSA)

members. This collaboration created a strong health professions pipeline within Creighton's student body of health sciences students. Under new leadership MAPS is looking forward to the 2020-2021 academic year.

## Student National Medical Association (SNMA)

The Student National Medical Association (SNMA), established in 1964, is the oldest and largest independent, student-run organization focused on the needs and concerns of African American medical students in the United States. It was established as a subsidiary of the National Medical Association in 1964 by medical students from Howard University and Meharry Medical College.

SNMA is committed to supporting current and future underrepresented minority medical students, addressing the needs of underserved communities and increasing the number of clinically and culturally competent physicians. In 2019-2020 with a total of 46 registered student members, SNMA participated in a number of activities on campus, in the Omaha community and abroad. SNMA Leadership was present at the





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Annual Medical Education Conference (AMEC) which took place Rush Medical College, Chicago in Philadelphia, PA. Members of SNMA were also instrumental in mentoring HS-MACA “Pipeline” health sciences students logging over 150 mentoring hours. In addition SNMA volunteered time to assist with HS-MACA outreach programs, conducting health screenings for Lutheran Family Services, organizing toilet paper drives and working with refugee families.

### **Medicine Gender and Sexuality Alliance (MedGSA)**

MedGSA members hold true to the two-prong mission: to promote and advocate for issues affecting LGBTQIA patients and healthcare workers. A safe space is provided for discussion of various topics in queer politics, socioeconomic disparities, and healthcare policies in a respectful and educational manner. During the 2018-2019 academic year, 11 students were active members of MedGSA.

### **Multicultural Health Sciences Student Association (MHSSA)**

MHSSA is an inter-professional organization that involves students in all health sciences schools at Creighton University. This includes the school of medicine, dentistry, pharmacy, occupational therapy, physical therapy and college of nursing. For the 2019-2020 academic year, 33 MHSSA members came together to plan a successful



2019 HIV/AIDS Awareness Week  
2019-2020 MHSSA Executive Leadership Board

HIV/AIDS Awareness Week for the campus and the community. Members of MHSSA also worked closely with Benson High School's Health Professions Academy where they mentored and tutored students interested in pursuing careers in healthcare. MHSSA also worked in collaboration with HS-MACA staff volunteering to help facilitate “Pipeline” Programming through our Middle School Initiative. MHSSA student members were also involved in service with the poor, the oppressed,

and the marginalized in the Omaha community. These students inspire and lead others to work with them in their efforts. Finally, the students committed to the religious and ethical dimensions and values fostered at Creighton University, whatever their own religious affiliation.

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### **Latino Multicultural Student Association (LMSA)**

LMSA is the newest professional student organization supported by HS-MACA. The mission of the Latino Multicultural Student Association (LMSA) is to promote and advance the presence of Latino professional students in the healthcare field in order to better serve underserved patient populations. The LMSA also focus on improving Latino cultural knowledge to allow for Creighton students to become more culturally competent healthcare professionals. Finally, the LMSA focuses on mentorship to cultivate the professional growth of individuals who will work towards better healthcare outcomes for underserved patient populations.



2019-2020 LMSA Leadership Team

### **Ophthalmology Interest Group (OIG)**

The purpose of OIG is to provide opportunities for current medical students to explore the field of ophthalmology as a career choice. OIG invites local ophthalmologists and faculty to host informational meetings and hands-on workshop sessions as well as facilitate opportunities for students to shadow and work one-on-one with ophthalmologists and optometrist in the community. A primary focus of the OIG is eye care prevention and community service.

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# ACADEMIC EXCELLENCE

The Job of the Assistant Director for Academic Excellence consists of advising HS-MACA students specifically the post baccalaureate students with topic related to their academics. One of the best approaches the Assistant Director uses for the success of his/her students is to have one on one in person advising sessions with each student based on the student's needs. This type of interaction allows the academic advisor to investigate through conversations in a relaxed environment to help students efficiently. Unfortunately, the recent COVID19 pandemic has brought unprecedented global changes which caused the university to close the campus from March to July 2020. Faculty and staff transitioned from working on campus to working remotely, students transitioned from in person to E-learning. HS-MACA staff worked even harder for a smooth transition with the TLC (Teaching Learning Center) assistance. All one on one meetings were now transitioned to zoom meetings. Although face-to face meetings with students were canceled, the Assistant Director for Academic Success was dedicated to ensuring that HS-MACA students were provided with the best services through E-Learning and maintained constant communication through all available portals including email, phone messages/calls and Zoom.

## **Tutoring**

HS-MACA offers a tutoring program for students who need extra assistance in the Post-Baccalaureate classes, in dental and medical schools, and in the "pipeline" programs. Other health professions students are provided individual tutoring as needed. Students are referred by HS-MACA coordinators for tutoring in subject areas of biology, chemistry, physics, or math. The following services are offered:

- Individual meeting with instructor for additional assistance
- Individual- and peer-tutoring session with classmate
- Access to academic resources such as: The Edge Department and the Library offered through Creighton university.
- Assignment of an individual tutor paid for by HS-MACA.

In the year 2019-2020, four (4) post baccalaureate students received one on one tutoring.



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## Creighton University School of Medicine (CUSOM)

HS-MACA works in collaboration with the office of student's affairs to provide tutoring activities using resources from our Community Outreach Primary Care (COPC) funds. In the 2019 – 2020 academic year, we trained thirty-one (31) students as tutors, ten (10) students as Step 1 Prep leaders, and four (4) students as SI leaders. Two hundred seventy-two (272) students attended Step 1 Prep sessions, and one hundred fifty-eight (158) students attended supplemental instruction sessions.

**GPA.** The criterion for success in the post-bac program is for students to earn at least a 3.5 GPA (on a scale of 4.0). Across the diagnostic pre-session, two academic year sessions, and pre-matriculation session, pre-medical post-bac students had an average GPA of 3.8. On the other hand, the pre-dental participants had an average GPA of 3.7 with the lowest GPA being a 3.43. Hundred percent of pre-medical participants had cumulative GPAs of 3.5 and higher. The table below displays 14 post baccalaureates students' GPAs from the summer diagnostic session to the end of the spring semester. Students receive pass/fail(P/F) for all prematric courses.

Pre-Medical GPA				
	Summer	Fall	Spring	Cumulative
Student A	3.91	3.74	3.6	3.75
Student B	3.82	3.79	3.76	3.79
Student C	3.82	3.76	3.71	3.77
Student D	3.93	3.84	3.8	3.86
Student E	4	3.87	3.87	3.91
Student F	4	3.96	3.97	3.98
Student G	3.91	3.78	3.74	3.81

Pre-Dental GPA				
	Summer	Fall	Spring	Cumulative
Student A	4	3.81	3.84	3.88
Student B	3.94	3.84	3.81	3.86
Student C	3.68	3.66	3.7	3.68
Student D	3.94	3.92	3.9	3.92
Student E	x	3.43	3.62	3.53
Student F	3.94	3.91	3.57	3.81
Student G	3.52	3.34	3.42	3.43

\*x- Student started the program in the fall semester

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## **DAT**

Program criteria for success guidelines stipulate a successful pre-dental student will score 17 or higher on the DAT in perceptual ability, scientific knowledge average, and the academic average. Overall, participants did show a statistically significant improvement on the DAT over the course of the program year in all sections. One student missed the minimum score by one point in the Total Science average and is working closely with the Assistant Director of retention with hopes to matriculate into dental school for the 2021-2022 school year. Another student's DAT exam has been rescheduled to August due to the pandemic. Table 1 provide details of each student with pre scores prior to the program and post scores after the post bac program for the 2018-2019 pre-dental post-bac class

## **MCAT**

The post-bac program description stipulates that, in addition to coursework and professional conduct, a successful pre-medical student will achieve a minimum score of 500 on the MCAT sub-tests of biological sciences, physical sciences, social sciences, and verbal sciences. The minimum score for MCAT is a 125. The pre-medical post-bac class did well on the MCAT examination(s). The aggregate beginning score of 495 improved to 504 which is also statistically significant. One student is scheduled to take the MCAT in August. Table 2 provide MCAT scores for the 2019-2020 pre-medical post-bac class.

## **Learning Lab**

HS-MACA continued the operations of the learning laboratory for the 2019-2020 academic school year as an extension of the Academic Success course and to enhance the existing tutoring program. Under the guidance of the Assistant Director of Academic Enrichment, fourteen (14) Post-Baccalaureate students received over seventy (70) hours of Learning Lab experience to improve learning strategies in course content as follows: cooperative learning, content experts to provide guidance and review of Kaplan MCAT/DAT preparation questions. Students are also required to complete weekly question banks known as "The Kosoko-Lasaki Method". This method of test preparation requires students to exhaust the qbank provided by Kaplan and other qbanks from other sources such as Khan Academy and Princeton Review. The question banks are to be completed Monday through Thursday. Premedical students complete 10 questions each for the biology, chemistry, physical science, social science sections and two passages for CARS. On the other hand, Predental students complete 10 questions in the PAT, organic chemistry, general chemistry,

math, reading and biology sections. This method takes approximately one hour to complete.

Students were able to learn different study methods during their academic lab, had the opportunity to review MCAT/DAT questions with peers including class homework which helped boost their confidence and allowed them to receive group tutoring which shows an increase on the students' GPAs as shown above. The Assistant Director of Academic Excellence strongly believes Post Baccalaureate class of 2019-2020 students are prepared and will excel as they begin their journey to Medical/Dental school.

**Table 1. Pre-Dental Post-bac Class DAT Score Overview**

	Student A		Student B		Student C		Student D		Student E		Student F		Student G	
	PRE PB	Mar-13	PRE PB	Jun-20	PRE PB	Mar-13	PRE PB	Mar-13	PRE PB	Mar-13	PRE PB	Mar-13	PRE PB	Mar-13
Perceptual Ability	18	18	19	19	17	17	19	19	15	x	17	18	19	18
Quantitative Reasoning	16	15	14	15	17	16	16	12	13	x	16	16	15	18
Reading Comprehension	19	21	14	18	19	18	18	18	16	x	17	16	15	18
Biology	19	23	12	16	16	19	15	18	15	x	16	19	14	15
General Chemistry	17	20	14	16	12	18	16	21	14	x	16	20	13	16
Organic Chemistry	15	17	17	20	13	18	17	19	16	x	16	17	17	18
Total Science Average	17	20	15	17	14	19	16	19	15	x	16	19	15	16
Academic Average	17	19	14	17	15	18	16	18	15	x	16	18	15	17
Total Average	17.25	19.13	14.88	17.25	15.38	17.88	16.63	18.00	14.88	x	16.25	17.88	15.38	15.88
Improvement		1.88		2.37		2.50		1.37		x		1.63		0.50

**Table 2. Pre-Medical Post-bac Class MCAT Score Overview**

	Student A		Student B		Student C		Student D		Student E		Student F		Student G	
	PRE	14-Mar	PRE	14-Mar	PRE	14-Mar	PRE	14-Mar	PRE	14-Mar	PRE	14-Mar	PRE	14-Mar
Chemical & Physical Foundations	125	127	123	126	122	124	126	126	123	126	126	126	124	126
Critical Analysis & Reasoning	121	121	123	121	122	123	124	128	120	122	121	123	124	126
Biological & Biochemical Foundations	124	126	124	121	123	123	127	126	121	124	125	128	125	125
Psychological, Social & Biological Foundations	122	126	124	126	122	120	128	128	120	124	123	127	126	130
	492	500	494	494	489	490	505	508	484	496	495	504	499	507
* Improvement		8		0		1		3		12		9		8

**\*x- student has not taken the exam.**



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# ACADEMIC PROGRAMS

## **Pre-Medical Post-Baccalaureate Program**

The 2019-2020 Academic year started on June 3, 2019, the HS-MACA Post-Baccalaureate program did not have a full class of 10 students. Eight (7) Pre-Medical Post-Baccalaureate Program students, out of a pool of forty-eight (48) applicants, were admitted to the fee-driven Pre-Medical program. The School year became challenging during the spring semester due to COVID-19, as student had to move to learning remotely. Lectures were recorded on BlueLine, and virtual classes by ZOOM. As a part of the Post-Baccalaureate Pre-Medical Program, students are engaged in year-round science coursework which includes: Biology, Chemistry, Physics, Physiology, Organic Chemistry. In addition, the program offers Pre-Medical College Admission Test (MCAT) preparations, health professions exposure in primary care setting, and a summer Pre-Matriculation Program.

One (1) student from the 2019-2020 class matriculated into Creighton School of Medicine in August 2020, and six (6) students will take a gap year and apply to other MD and DO schools next application cycle. 1 student from the 2017-2018 cohort will be attending St. George University School of Medicine in Grenada, and a 2018-2019 alum will be attending Saint Louis University School of Medicine in the Fall of 2020. Two Alum (2) student from the Pre-Medical Post-Baccalaureate Program graduated with an MD degree in May 2020: 1 from Creighton University's School of Medicine, the student has matched in Diagnostic Radiology at Vanderbilt University Medical Center in Nashville, TN and the other student from Des Moines University School of Osteopathic Medicine. He matched in Internal Medicine in Family Medicine at Via Christi Medical in Wichita, KS.

## **Pre-Dental Post-Baccalaureate Program**

Seven (7) Post-Baccalaureate students were admitted into the fee-driven Pre-Dental Program for the 2019-2020 academic year, out of an applicant pool of sixty-six (66) students. These students were also engaged in year-round coursework including: Perceptual Ability (PAT), Biology, Math, Chemistry, and Physiology. In addition, the program offers Pre-Dental Admission Test (DAT) preparations, health professions exposure in dental clinical settings, and a Pre-Matriculation program. Students are awarded scholarships of Ten thousand dollars (\$10,000) per year during their tenure in dental school based on their successful completion of the Post-Baccalaureate and Pre-Matric programs.

Four (4) students will matriculate into Creighton University School of Dentistry (CUSOD) in the fall of 2020. The remaining students will take a gap year, Five Alum (5) students from 2014-2015 class from the Pre-Dental Post-Baccalaureate Program graduated with a DDS degree in May

2020 from Creighton University's School of Dentistry. A student from 2013-2014 Post-bac class, who attended Howard University also received his DDS, in May 2020.

## **Pre-Matriculation Program (School of Pharmacy and Health Professions, Pre-Medical and Pre-Dental)**

In the summer of 2020, fourteen (14) students participated in the Pre-Matriculation Programs, seven (7) Pre-Medical and seven (7) Pre-Dental students. The school year was both a success as students finished strong and a challenge due to COVID-19, for the Pre-Dental, Pre-Medical, and Pre-Matriculation Programs. Five (5) students have matriculated into a health professional school. The following breakout for each professional school is as follows: Five (5) Dental, One (1) Medical.

Areas of study in the Post-Baccalaureate/Pre-Matriculation Pre-Medical Program include Anatomy, Microbiology, Neurology, Micro Cell Biology, Host Defense, Pharmacology, and Academic Excellence.

The Pre-Matriculation subjects for the Pre-Matriculation Pre-Dental program are Gross Anatomy, Academic Excellence, Histology, Biochemistry, Dental Anatomy, and Dental Materials.

<b>Pre-Medical July 2000 - June 2020</b>						
<b>Total # of Students</b>	<b>Total # in Clinical Practice</b>	<b>Total # in Residency</b>	<b>Total # in Medical School</b>	<b>Total # of Current Students</b>	<b>Primary Care Specialties</b>	<b>Other Post Graduate Programs</b>
151	34	50	26	7	36	17

\* Primary Care is defined as family practice, internal medicine, OB/GYN, pediatrics  
AK, AZ, CA, FL, IA, IL, MD, MN, NC, NE, NY, OK, SC, SD, TX, VT, WI, WA

<b>Pre-Dental July 2005 - June 2020</b>					
<b>Total # of Students</b>	<b>* Total # in Clinical Practice</b>	<b>Total # in Dental School</b>	<b>Total # of Current Students</b>	<b>Other Post Graduate Programs</b>	<b>Unknown Whereabouts</b>
84	42	25	7	6	4

### **States where students are practicing Dentistry**

CA, FL, GA, HI, IA, KS, NM, TX, PA, NY, LA,

\* General clinical practice is defined as general dentistry

# 2019-2020 HS-MACA Graduates

## Creighton University School of Medicine and other



Beau Fry, MD  
Family Medicine



Ferdinand Osayande, MD  
Psychiatry



Blessing Inyang, MD  
Family Medicine,



Hedson Desir, MD  
Family Medicine



Elizabeth England, MD  
Otolaryngology

## Creighton University School of Dentistry



Randy Wells, DDS



Kyle Debungie, DDS



Strater Crowfoot, DDS



Jeremy Williams, DDS



Carolyn HSU, DDS



Matthew Adams, DDS

## Creighton University School of Pharmacy and Health Professions



Whitney Boyd, DPT



Kateri Petto, PharmD

# HS-MACA SCHOLARSHIP RECIPIENTS

## **Dr. JOHN T. ELDER POST-BACCALAUREATE AWARD**



After Dr. John T. Elder died in November 1996, one of his former students, Thomas Collins, MD, FRCS, a surgeon in Boston, donated funds to start an endowment in Dr. Elder's name. Proceeds from the endowment have been awarded to a current medical Post-Baccalaureate alumni student. The one-time scholarship was awarded to Yitong Ma, Joshua Ulanday(M3) and Kyle Uto in 2019-2020.

## **HS-MACA POST-BACCALAUREATE ALUMNI SCHOLARSHIP**

In the 2017-2018 academic year Post-Baccalaureate Alumni Scholarship was established by HS-MACA Post-Bac alumni. Scholarships are awarded to current Post-Baccalaureate students based on their financial need. In the 2019-2020 Academic Year seven (7) Post-Bac students were awarded scholarship money. The students are (L to R): Diana Gomez-Romero, Valiece Long, Faith Cortez, Daniela Hinchman-Dominguez, Aderonke Igbekele, Mina Joseph and Jaspreet Kaur



## **SADE KOSOKO-LASAKI, M.D. AND GBOLAHAN O. LASAKI, PH.D. FAMILY ANNUAL SCHOLARSHIP FUND**

The Drs. Gbolahan and Sade Lasaki Family Award was established in 2008. This award is for \$1,000 per student for two students in the current Post-Baccalaureate students who are the most improved on the Pre and post Medical and Dental (MCAT and DAT) admission test scores. For 2019-2020, the students who received the awards are Mahogani Eaton (Pre-Dental) and Tobi Lawani (Pre-Medical.)



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# CENTER FOR PROMOTING HEALTH AND HEALTH EQUITY (CPHHE)



**Center for Promoting  
Health and Health Equity**

The goal of the Center for Promoting Health and Health Equity (CPHHE, “Center”) is to advance health equity especially of communities with disadvantage in Omaha and the region. CPHHE will continue reducing health disparities and improving the health particularly of minority populations through community-university collaborative research, education, and implementation. The latter involves translation of evidence-based interventions to the targeted communities. CDC-funded CPHHE-REACH is a premium example. CPHHE employs a triple-core approach of 1) Intervention, 2) Training and Development, and 3) Research.

## **SPECIFIC AIMS of CPHHE**

1. To enhance and sustain the core administrative infrastructure of the Center for maintaining program effectiveness.
2. To expand and sustain career development opportunities for faculty and students that will help support their interests in improving minority health, including new pilot-research funding.
3. To strengthen the Center’s intervention core through present and new programs to promote community health and reduce health disparities, considering community priorities and needs.
4. To develop and promote research that addresses health equity by targeting elimination of health disparities.
5. To grow and sustain community-academic collaboration for successful community interventions and investigations that aim to improve community health.

## **KEY HIGHLIGHTS BY CORE**

### **INTERVENTION CORE**

- The Center continued the Inspiring Change Program (ICP) that gives participants (residents, members, or personnel of the Omaha Housing Authority, Faith-Based Organizations, and other community organizations, i.e. Catholic

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Charities) skills to manage their own health through practicing healthy living habits that include decision making, nutrition, understanding diabetes and hypertension, and physical activity. Participants participate in a 4-session program with different weekly topics. In each class they engage in physical activity and receive fresh fruit and water. In 2019-2020, one program had 15 individuals served with 36 total contacts (duplicated individuals). The Inspiring Change Program is transforming into a train-the-trainer model where the Community Health Advocates (CHAs) and CPHHE-REACH Ambassadors will be trained to conduct the program at their respective churches, housing towers and work institutions to expand programming efforts. The initial training will take place on May 29, 2019. Since the initial training, 3 of the CHAs conducted trainings in their community.

- CPHHE employed social media to disseminate information regarding access to healthy food, physical activity, obesity, and tobacco. The CPHHE Facebook page, started March 2015, has reached more than 13,235 (with some duplication) individuals, promoting understanding of health disparities and health equity. CPHHE currently has 106 followers on Facebook.
- In collaboration with HS-MACA, CPHHE participated in the Health Career Exploration Program at Martin Luther King Middle School for 2 separate sessions on public health careers and opportunities. CPHHE staff provided insights and information regarding public health careers and how everyone is affected by a public health professional.
- CPHHE's Lyrics, Life & Lessons (LLL) program continues within the Omaha community. This innovative method of public health and social justice education uses hip-hop music lyrics to educate youth. Public health topics include violence, crime, healthy neighborhoods, and alcohol and drug prevention. The program was implemented at St. Luke's Afterschool Program (Burke High School), serving 16 students over the fall 2019 and spring 2020 semesters. Mr. Ejike also submitted and was accepted to participate in the inaugural Creighton University Kingfisher Institute cohort for 2019-2020.
  - Abstract Submission: Lyrics, Life & Lessons: Social Justice & Public Health Education with Hip-Hop Music to Promote Authentic Engagement with Youth
- CPHHE staff provide a program at Norris Middle School entitled "The Drill," a physical activity course that uses collegiate and professional exercises and drills to introduce physical activity at a young age. Through the 2019-2020 academic

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year, The Drill conducted 44 classes and had over 250 contacts over the year. Average class size for “The Drill” increased to 14 students per programming cycle.

- CPHHE staff, along with the direction of the CPHHE partnership, have developed a weekly digest regarding information about the COVID-19 and how our communities can continue to stay safe and up to date on current trends and issues. The weekly digest has been in existence since April 2020. This initiative will continue until the pandemic has ended.

## **TRAINING AND DEVELOPMENT**

- The 13<sup>th</sup> Annual Addressing Health Disparities Seminar has been postponed from April 25, 2020 to September 2020 due to the current COVID-19 pandemic and the closing of the university. The Seminar is a collaborative activity of the Center with HS-MACA and Health Sciences' Continuing Education Department. The 2020 Seminar topic is “Focus on Substance Use Disorder and the Opioid Crisis” and will feature our keynote speaker, Alëna A. Balasanova, M.D., FAPA, Director, Addiction Psychiatry Education | Director, Addiction Psychiatry Outpatient Clinic | Co-Director, Addiction Psychiatry Consultation-Liaison Service | Department of Psychiatry – College of Medicine. Fifteen students (15) from the Post-Baccalaureate program will attend the Health Disparities Seminar and will write reflection papers about what they learned from the presenters and discussion. General attendees will have the opportunity to provide feedback and evaluation through paper and electronic forms. CPHHE partners will review evaluation results to identify how participants will apply the information, including how they might change their professional practices.
- To encourage the pursuit of careers promoting health equity, the Center provides summer research opportunities for underrepresented high school and undergraduate students interested in health disparities and research through the Summer Research Institute (SRI). High school students participate in community-based participatory research with a community, public health organization, and undergraduate students participate in biomedical bench research with a Creighton faculty researcher. The Center, collectively with HS-MACA, continued the collaborative effort with the American Chemical Society (ACS) to provide lab research opportunities to additional need-based high school students through the Summer Educational Experience for the Disadvantaged (Project SEED) for the third year. There were eighty-four (84) total

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applicants for the 2019 Summer Research Institute Undergraduate Program and nine (9) for the High School programs. Accepted into the program were two (2) high school students for Project SEED, two (2) high school students for community research, and eight (8) undergraduate students for biomedical research. At the conclusion of the summer research program, high school and undergraduate students presented their findings at a colloquium. 5 of the 8 undergraduate students were accepted to present and compete at the 2019 Annual Biomedical Research Conference for Minority Students (ABRCMS) which was held in Anaheim, CA in November 2019. (Appendix 1: Attachment 3)

- The Health Disparities Research Training Program, a collaboration between CPHHE and the University of Alabama-Birmingham, has provided another year-long program of mentoring, career development, grant writing, and research training for one Creighton University faculty scholar. This year's scholars are Kelly K. Dineen, RN, JD, PhD from the Creighton University School of Law and Sarbinaz Bekmuratova, PhD, MS from the School of Pharmacy and Health Professions. (Appendix 1: Attachment 2)
  - Dr. Dineen Research Subject: *Provider perceptions and decision-making in caring for patients associated with opioids in light of increasing legal and regulatory scrutiny of opioid prescribing*
  - Dr. Bekmuratova Research Subject: *Minor sex trafficking among vulnerable youth in the United States*
- The Center provided an internship opportunity for Balkissa Ouattara, MD, MPH, a Doctor of Public Health candidate from the University of Nebraska Medical Center. From October 2019 through April 2020, Dr. Ouattara worked under the CPHHE co-directors to produce and submit a peer-revised article for publication. The publication will describe the issues around access to mental health services for youth in school settings and how to work with youth around mental health issues. Dr. Ouattara is scheduled to submit for publication in May 2020.
- CPHHE conducted an online mental health training for post-baccalaureate and health professional students using video conferencing due to the COVID-19 pandemic. The training was administered in collaboration with the Center for Holistic Development. There were 25 total participants in the training. The training spanned for 3 consecutive Saturdays for 3 hours each in April 2020.
- The Center continues to implement the Community Health Advocates (CHA) program, funded solely by CPHHE. In 2018, CPHHE partnered with the Excellence



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Education Department at Creighton University to create the 030 Community Health Advocate Certificate Program. The inaugural official certification provided to six (6) lay-community individuals the opportunity to gain there official Creighton certificate for participating in the 10-week training program from January 2019 – April 2019. CPHHE continues to work with the CHA's through hosting virtual trainings alongside the health ambassadors from the CPHHE-REACH grant. These trainings revolved around COVID-19 and how to continue to engage their respective communities and how to get the correct information out to their communities. These trainings reoccur bi-weekly. CPHHE has hosted 4 trainings to date with an average of 15 CHA's in attendance each training.

## RESEARCH

- The 4<sup>th</sup> Annual Dr. Frank T. Peak Health Disparities Essay Writing Competition was held, designed to encourage students at the intersection of public health, healthcare, and the social sciences to address how to promote health equity in lives of ethnic/racial minorities, and other disadvantaged populations. Three (3) manuscripts were selected from twelve (12) submissions. The first-place award recipient will present the winning essay during the Health Disparities Seminar in September 2020.
- The Health Disparities Journal Club provided seven (7) sessions, 44 sessions total since January 2015, with former and current HDRTP faculty, CPHHE partners, and HS-MACA staff. Participants review and discuss articles from peer-reviewed journals related to health disparities and health equity and consider how the information can apply to our local communities.

## Publications in 2019-2020

1. Ekúndayò O, Kosoko-Lasaki O, Smith JM, Hayashi GI, Sanders R, Issaka A, Stone JR. *Neighborhood Characteristics and Effects on Physical Activity in an Urban Minority Community – Application of Health Belief Model to findings from Creighton University Center for Promoting Health and Health Equity (CPHHE-REACH) Initiative*. International Journal of Health Promotion and Education. DOI: [10.1080/14635240.2020.1726200](https://doi.org/10.1080/14635240.2020.1726200); February 20, 2020
2. Smith JM, Sanders R, Kosoko-Lasaki O, Stone JR. *Training Community Health Ambassadors to Administer SOPARC, Creighton University, Center for Promoting Health and Health Equity (CPHHE) Racial and Ethnic Approaches to Community Health (REACH, USA)*. Journal of Health Science and Education, JHSE-1-169 Vol 3(4): 1-7. October 23, 2019
3. Kosoko-Lasaki O, Ekundayo O, Smith J, Ochuba O, Hayashi G, Sanders R, Brown R, Stone J. *Urban Minority Community Safety and its Impact on Physical Activity:*

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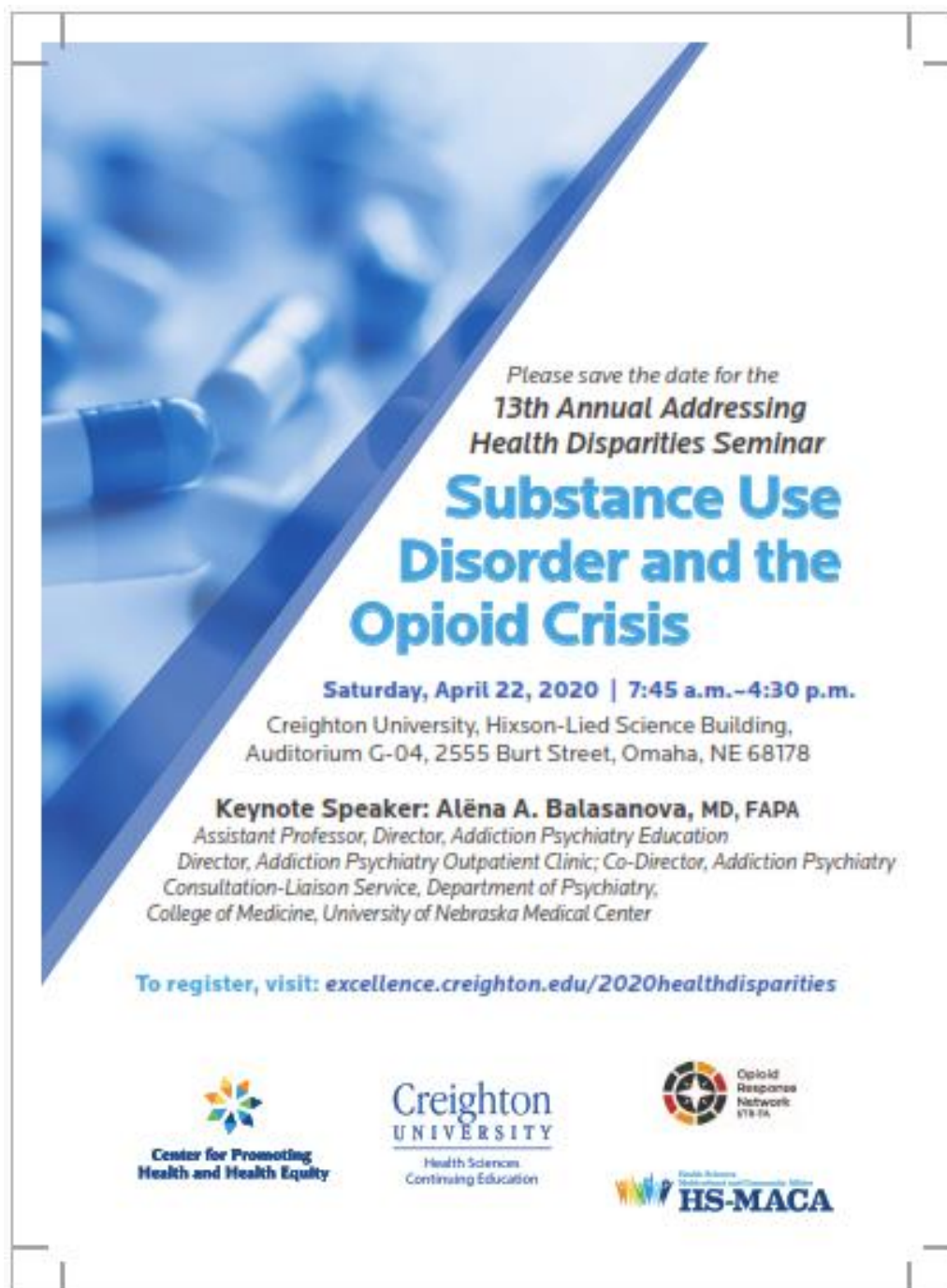
*The Center for Promoting Health and Health Equity-Racial and Ethnic Approaches to Community Health (CPHHE-REACH) Initiative. Journal of the National Medical Association, Volume 111, Issue 3, pages 334-344. June 2019*

4. Stone JR (Accepted, May 2020). Social justice, Triage, and Covid-19: Ignore life-years saved. *Medical Care*. (Editorial)
5. Stone JR (Print 2020, 21 January; Online 2019, 8 October). Deadly vasculitides and reversed racial/ethnic disparity? *Annals of Internal Medicine*. (Editorial), Print 172(2), 153-154.
6. Stone JR (2019). Does a Patient's Trauma History Ethically Justify a Discriminatory Clinical Referral?: Applying the Value of Simplicity. *AMA Journal of Ethics*, 21(6), E493-498.  
the Value of Simplicity. *AMA Journal of Ethics*, 21(6), E493-498.

# CONCLUSION

The Co-Directors of the Center are pleased to submit a report of the successful implementation of the specific aims for 2019-2020 activities of funding.

## Attachment 1 13<sup>th</sup> Annual Addressing Health Disparities Seminar




Please save the date for the  
**13th Annual Addressing  
Health Disparities Seminar**


**Substance Use  
Disorder and the  
Opioid Crisis**


**Saturday, April 22, 2020 | 7:45 a.m.–4:30 p.m.**  
Creighton University, Hixson-Lied Science Building,  
Auditorium G-04, 2555 Burt Street, Omaha, NE 68178


**Keynote Speaker: Alëna A. Balasanova, MD, FAPA**  
*Assistant Professor, Director, Addiction Psychiatry Education  
Director, Addiction Psychiatry Outpatient Clinic; Co-Director, Addiction Psychiatry  
Consultation-Liaison Service, Department of Psychiatry,  
College of Medicine, University of Nebraska Medical Center*

To register, visit: [excellence.creighton.edu/2020healthdisparities](https://excellence.creighton.edu/2020healthdisparities)

  
Center for Promoting  
Health and Health Equity

  
Creighton  
UNIVERSITY  
Health Sciences  
Continuing Education

  
Opioid  
Response  
Network  
2019-2024

  
HS-MACA

**Attachment 2**  
**Health Disparities Research Education Program - Scholars**

URM #	HDRTP Scholar Last Name	Scholar First Name	Institution	Title	Dept/ Division	Research Interest	Mentor	Year
0	<b>Dineen, RN, JD, PhD</b>	Kelly	CU	Asst. Prof, Director	School of Law	Provider perceptions and decision-making in caring for patients associated with opioids in light of increasing legal and regulatory scrutiny of opioid prescribing	John Stone, MD, PhD	<b>2019</b>
1	<b>Bekmuratova, PhD, MS</b>	Sarbinaz	CU	Asst. Prof.	School of Pharmacy and Health Professions	Minor sex trafficking among vulnerable youth in the United States	John Stone, MD, PhD	<b>2019</b>

**Attachment 3**  
**Summer Research Institute – Participants Table 2019- 2020**

*Table A - High School Community Program*

Year	Participant	Mentor	Research Title
<b>2019</b>	Marcus Vazquez	Shelby Anderson-Holt (No More Empty Pots)	Outcomes of a Healthy Prepared Meals Program
<b>2019</b>	Julio Dominguez	Ms. LaVon Stennis-Williams & Mr. Gordon Brown (Reconnect Inc.)	ACEs Contributing to the Disproportionality of Minorities in the Juvenile Justice System

*Table B – High School Project SEED*

Year	Participant	Faculty Mentor	Research Title
<b>2019</b>	Jude Kouassi	Dr. Yaping Tu	Discovery of A Small Molecule Y16 for Treating Pulmonary Hypertension
<b>2019</b>	Erlinda Ramirez	Dr. Eric Haas	Elucidating the Lipid Composition of Hemolymph from <i>Anasa tristis</i>

*Table C- Undergraduate Biomedical Program*

Year	Participant	Faculty Mentor	Research Title
<b>2019</b>	Dariush Yalzadeh	Dr. Catherine Opere	Effect of Endogenous Hydrogen Sulfide and Nitrogen Oxide Gasotransmitters on Cataract Formation in Intact Bovine Lenses, Ex vivo
<b>2019</b>	Justin Jackson	Dr. Jake Siedlik	Maintaining Peak Power in Combat Athletes During Weight Restrictive Practices



<b>2019</b>	Jocelyn Plowman	Dr. Yaping Tu	TGF- $\beta$ 1-induced microRNA 424 promotes fibroblast differentiation in idiopathic pulmonary fibrosis
<b>2019</b>	Taylor Ling	Dr. Shashank Dravid	The expression of NMDA receptor GluN2C subunit in astrocytes
<b>2019</b>	Jean-Marie Djidjoho	Dr. Chris Destache	Thermosensitive (TMS) gel: The base of “ideal” burn wound dressing
<b>2019</b>	Anhmai Vu	Dr. Laura Bruce	The Role of the Gastrin-Releasing Peptide (GRP) Gene on Fear Learning in <i>Danio rerio</i>
<b>2019</b>	Irving Delgado-Arellanes	Dr. Shashank Dravid	Analysis of cocaine behavioral sensitization and silent synapse mechanism by ablation of GluN2D subunit in NAc.
<b>2019</b>	Efren Garcia	Dr. Eric Haas	Lipid Composition of the Neural Tissue of the Insect: <i>Anasa tristis</i>



2019-2020 Summer Research Institute Student Participants

# Focus on Health Professions: Middle-School Pipeline Program



2019-2020 "Pipeline" Program

The 2019-20 academic year for the HS-MACA pipeline program was an unprecedented one. We continued to provide learning opportunities and educational empowerment for hundreds of Omaha students of underrepresented backgrounds, as the program worked with 4 area schools teaching after-school STEM lessons for most of the year before taking on an additional school late in the year. Unfortunately, the coronavirus pandemic arrived in the U.S. shortly thereafter, and in early March while students were on spring break it was decided by the Omaha Public School District that the break would be extended an additional week, before deciding to put a temporary hiatus on in-person learning. Finally, all in-person learning was cancelled for the remainder of the school year. All pipeline programming was forced into temporary suspension, as there was no access to students at home. In May 2020 the school district allowed us to resume programming for our pipeline students through the after-school programs.

This presented an unexpected challenge to the pipeline program: how to continue our outreach efforts as we had been throughout this year and years prior? In order to meet the program objective of serving our students by providing them with quality STEM educational opportunities we would need to adjust and be flexible, making plans to develop a brand new curriculum that would be appropriate for student use at home while awaiting the school district's decision to resume in-person learning or to cancel it indefinitely. We had to consider the fact that students would eventually either be emulating recorded videos or doing lessons alongside our instructor from their houses. The new STEM lessons and experiments needed to be safe for students to perform without in-person adult supervision, as well as not too confusing for students to understand because of the difficulties of understanding and following instructions at a distance. New STEM curriculum was created with adjustments to existing lesson plans. We discontinued some of the previous activities because of the mess they generated, until we're able to resume in-person activities. After providing a couple of online recorded lessons for after-school programs, formal programming was started in June 2020 with four online lessons a week. Such adaptability is the kind of work HS-MACA prides itself on, maintaining its adherence to serving and empowering the voices of underrepresented students while adjusting strategies to continue its mission, even throughout the most unprecedented of times.

## **HS-MACA and Pipeline Programs**

Since its inception in 2000, the Health Sciences Multicultural and Community Affairs Office (HS-MACA) has introduced over ten thousand young individuals to careers in the Health Sciences through pipeline programs that serve area students beginning in the 3rd grade and continuing through their middle school, high school, college and professional school years.

The program exposes young people of diverse backgrounds to career opportunities they might not otherwise consider and helps them envision a possible profession in the Health Sciences. Mentors encourage students to establish short- and long-term educational and professional goals and make educational choices that will foster an ongoing interest in science. Pipeline programs lay the groundwork that can assist students in becoming competitive applicants to professional schools of medicine, dentistry, and other health sciences.

### **Focus on Health Afterschool program**

The HS-MACA Focus on Health Program was created in 2009 as a sustainability program for the Health Career Opportunity Program (HCOP). Through a collaborative agreement we established a partnership with the City of Omaha's Middle School Learning Initiative to provide STEM (Science, Technology, Engineering, and Math) programming to their after-school and summer programs. The schools partnered with were Lewis and Clark Magnet School, Marrs Middle School, McMillian Middle School, and Monroe Middle School. In recent years King Science and Technology Magnet Middle School and Liberty Elementary School's after school programs were added as well. A STEM curriculum was developed by HS-MACA, in which educational and career presentations were given in seven-week sessions during the academic school year as well as in the summer. Additional summer STEM classes were also taught at the Hope Center for Kids to students between the ages of 5 and 18.

### **King Science Healthcare Academy**

During the 2019/20 academic school year the HS-MACA Pipeline Program again partnered with King Science Middle School (KSMS) in the second year of their Mini-Health Sciences School. For this program Focus on Health assisted in CPR first-aid training, organizing guest speakers from various health sciences fields to talk with students about their professions and personal experiences, and sponsored a mental health focused medical student group that provided programming at a middle school health class. The pipeline program was also responsible for assisting in interviewing student applicants for the Mini-Health Sciences School and providing a week-long summer program as well as a school-year activity on in the North Omaha community where students learned about local history from the Great Plains Black History Museum, as well as a lecture on cultural competency presented by Dr. Kosoko-Lasaki.



## Mini Health Sciences Camp

The Mini Health Science Camp, run as a partnership with King Science Middle School, also served as an extension of the Pipeline Program. HS-MACA provided a 5-day camp for 18 8<sup>th</sup> grade students attending King and with an interest in pursuing careers in medicine; providing a glimpse into the many facets of what is considered a part of the Health Sciences and its various professional occupations. The programs included a tour of the CHI Bergan Mercy Hospital, tour of the Creighton University School of Dentistry, the Physical Therapy school, the Exercise Science department, and the Nursing training lab. There were presentations from Occupational Therapy professors as well. To provide the students a sample of the college experience and to show what higher education campuses have to offer the students also took a tour of the Creighton Athletic Facilities. Throughout these experiences' students familiarized themselves with research and activities that various departments perform, as well as practiced their health care skills on mannequins and even participate in class with PT students.



A Day in the Life of with Mount View Elementary School

## Year-by-Year Programming Numbers

Due to the unprecedented Coronavirus pandemic that shut down area schools and thus ongoing programming, the yearly numbers from the entirety of the 2019-20 school year are a bit less than those of previous years. This is to be expected, having missed about two and a half months' worth of student programming time. However, adjustments to programming were implemented moving forward, which will reflect in next year's yearly report which will include the summer of 2020 programming, when pipeline classes moved to an online format in order to continue to provide Omaha students from underrepresented backgrounds the support and opportunities HS-MACA is known for.



Programming year	# of total student contact hours	# of individual (non-repeating) students
<b>2019-2020 academic year</b>	958	195
<b>2019 summer programming</b>	409	161
<b>2018-19 academic year</b>	1688	296
<b>2018 summer programming</b>	741	219
<b>2017-18 academic year</b>	1278	237
<b>2016-17 academic year</b>	1008	

#### Examples of Weekly Activities:

Science Activities	Engineering Activities	Mathematics Activities	Technology Activities
<b>Dry Ice Lesson</b>	Egg Drop Experiment	Candy Math	Daphnia Heart Rate Lab
<b>Sheep Eye Dissection</b>	Water Filtration		
<b>Sheep Heart Dissection</b>	Buoyancy and Surface Tension with water and milk		
<b>Blood Typing</b>			
<b>DNA Extraction Lab</b>			
<b>Glurch vs. Oobleck Slime Lab</b>			

# Creighton University *Pipeline to Success* Health Careers Opportunity Program

“A year of truly defying the odds.”

By Aminatu Issaka (Program Supervisor), Christina Jelinek (Academic Success  
Counselor) and Shikhar Shrestha (Program Coordinator)



2019-2020 HCOP Students

Creighton University's *Pipeline to Success* Health Careers Opportunity Program (HCOP) is a federally funded grant awarded by the Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services (HHS). Its mission is to provide students from economically or educationally disadvantaged backgrounds an opportunity to develop the skills needed to successfully compete for, enter, and graduate from health professional school. The overall purpose is to offer students from disadvantaged backgrounds the access, education and training

necessary to become a health professional with the goal of increasing diversity within the healthcare workforce. Ultimately, the program endeavors to provide a multitude of program activities that cultivate the union of academics and interpersonal experiences within each student that will prove to be a vital tool along the journey to success.

## **BENEFITS**

Creighton University's *Pipeline to Success* Health Careers Opportunity Program (HCOP) offers students:

- Formal and informal opportunities for counseling, mentoring, tutoring and group support.
- Academic support services, academic enrichment, and skill development.
- Reduction in cognitive or attitudinal barriers to learning through discussion of educational, personal, and/or family issues that may impact academic progress.
- Immersive educational and clinical shadowing activities.
- Training/exposure in primary care settings as well as opioid abuse, mental and behavioral health.

## COMMUNITY PARTNERSHIPS

Academic and professional success of a student results from the support and commitment of dedicated individuals and organizations. Creighton University's *Pipeline to Success* Health Careers Opportunity Program (HCOP) has established partnerships between several public and nonprofit private health and educational entities whom have promised to establish, enhance and expand educational programs that result in the academic and professional success of students who desire to pursue health professional careers. A total of six (6) community partner organizations are currently participating in the program: Creighton University's Health Sciences - Multicultural and Community Affairs Department, Metropolitan Community College, Omaha Public Schools, Heart Ministry Center, OneWorld Community Health Centers, Inc. and North Omaha Area Health (NOAH) Clinic.

## ACADEMIC SUCCESS

Creighton University's *Pipeline to Success* Health Careers Opportunity Program's (HCOP) main purpose is to ensure student success in matriculating through high school, college, and health professional school and entering the health profession of their choosing. To this end, HCOP reinforces student's chances of succeeding academically in several ways. The Academic Success Counselor manages student progress and meets with students to form an Individualized Assessment Plan (IAP).



2019-2020 HCOP Students

Study skills and other dedicated enrichment courses also allow students to receive foundational knowledge in key subjects necessary to succeed academically in the health sciences. Finally, tutoring is coordinated for students so that any gaps in learning may be filled and barriers to success lessened.

## THE IAP PROCESS

Each student who joins the Creighton University *Pipeline to Success* Health Careers Opportunity Program (HCOP), whether it be the Health Careers Ambassador Program or the Structured Summer Program, is assessed initially by the Academic Success Counselor. Then over the course of the program, counselor and student meet to discuss student goals, current academic progress, and potential barriers to success that students may be experiencing. Together, student and counselor create an Individualized Assessment Plan (IAP) based on the student's individual goals. Not only are goals set, but each student and counselor together discuss strategies for achieving

each goal and record those steps as well. Emphasis is placed on students creating SMART (Specific, Measurable, Attainable, Relevant, and Timely) goals. Within the IAP, the Academic Success Counselor also tracks things such as standardized test scores and grades, as well as student strengths and areas to grow. Altogether, the IAP follows students as they progress in school, and allows students to take charge of their success through active goal setting and strategy discussions. The IAP meeting also allows students to identify any areas they would like to grow in, which in turn allows the Academic Success Counselor to meet student needs more directly by providing additional services such as tutoring and study strategy advice.

## **ENRICHMENT COURSES**

Weekly during the Structured Summer Program, as well as during the bi-monthly sessions of the Health Careers Ambassador Program, students participate in enrichment courses and study skills workshops to improve their performance in school. During the Structured Summer Program, students are enrolled in enrichment coursework in subjects that will be foundational and crucial to their future success in the health sciences such as upper level math/science/reading/writing courses. These courses, taught by experts in the subject, are geared toward building solid foundational knowledge and providing students with the chance to interact with concepts in a new way to increase understanding. Coursework in academic success as well as test preparation is also available, so that students may spend dedicated time learning successful study strategies and improving their test-taking abilities. During the Health Careers Ambassador Program, study skills workshops are held to increase student knowledge of study skills, group study techniques, and ways to increase time management and organizational skills. Test preparation resources (ACT, MCAT, DAT, PCAT, GRE, etc.) are also made available to students who participate in the academic year and summer programs, and progress is monitored. Additionally, an ACT Preparation class is held for high school students, accompanied by an online self-paced course to maximize student learning.

## **STUDENT SUPPORT**

To help ensure all students succeed, the Creighton University *Pipeline to Success* Health Careers Opportunity Program employs different types of tutors to help reinforce student achievement in areas they may feel less confident in. During an IAP meeting a student and the Academic Success Counselor may identify an area in which a student would benefit from a tutor. The HCOP staff coordinates between students and tutors to ensure that tutoring takes place; and monitors and tracks tutoring hours spent. During the Structured Summer Program, tutoring takes place during a dedicated time weekly, in a setting where students referred for tutoring can “drop in” and have their tutoring needs met and questions answered. Additionally, a tutor is made available during high school test preparation, so that students can receive in-class help with a



subject as they complete the correction process. During the Health Careers Ambassador Program, tutoring takes place one-on-one on an as-needed basis coordinated by the HCOP staff, and “homework support” activities are also scheduled to allow students to receive help from their peers.

### **SUCCESS IN THE MIDST OF THE UNEXPECTED...**

Gearing up for yet another HCOP session is always an exciting time for not just the HCOP team but for the students as well...and who knew that this year was going to be one to remember!!

September 7, 2019 began the journey to success as the 1<sup>st</sup> day of the 2019-2020 Health Careers Ambassador Program session for seventy-three (73) students. The session which took place during the academic year (every 1<sup>st</sup> and 3<sup>rd</sup> Saturday of each month – and a few electives sessions here and there) included students currently enrolled in high school, community college, a 4-year college/university

and health professional school. Over the course of eight (8) months, students shared in a number of mentoring and homework support sessions; became Basic Life Support (BLS) certified; participated in numerous student-centered workshops that covered the importance of goal-setting, creating a five-year plan, becoming a healthcare leader, how to avoid being a workaholic, etc.; attended an opioid abuse and mental/behavioral health panel consisting of local community health professionals; took part in a stress management workshop; got trained on resume-building/personal statement development and proper interviewing skills; shadowed health professionals at Madonna Rehabilitation Hospitals, OneWorld Community Health Centers, Inc. and North Omaha Area Health (NOAH) Clinic; attended college campus tours at Metropolitan Community College (their SynDaver lab was AWESOME!) and Creighton University’s School of Dentistry; and so much more!!!



HCOP Students in Anatomy Lab

### **Here comes the cliffhanger...a global pandemic in the form of COVID-19 (Coronavirus)...**

Early Spring 2020, the world was officially hit with COVID-19, also known as Coronavirus, a pandemic respiratory disease that spreads from person-to-person that causes mild to severe illness (even death) – and posed a serious public health risk. The HCOP team



immediately began to closely monitor the latest coronavirus (COVID-19) updates as well as real-time local, state and federal recommendations. Being able to adapt (one of our better traits) to our world's current circumstances was not an option but a necessity in order to ensure to our students that their success was still and always our priority.

In keeping with the rules of Creighton University and to minimize the risk of exposure in our community, among our students and their families, all in-person HCOP sessions were cancelled which called for HCOP to take on a new form...a virtual form. The remaining 2019-2020 Health Careers Ambassador Program sessions were offered online and remained interactive, fun and educational. In an instant we transitioned to Zoom, Microsoft Teams, Go-To Meetings, phone calls, text messages, emails, lengthy e-newsletters, and 'snail-mail'. While continuing to offer programmatic activities such as cultural competency training; financial aid/literacy seminars; health professional student workshops and a Virtual Awards and Recognition Ceremony to our students in a virtual space – the HCOP team remained committed by performing periodic check-ins with students and families to reiterate that HCOP is a resource for all things success and that we are here to help. Whether it be a student need for paper/pens/pencils/study skills strategies or information on local food bank hours, the nearest outdoor Wi-Fi location, organizations offering rent and/or mortgage assistance, etc. – HCOP made sure we were available with resources, referrals and recommendations.

### **NOW LET'S LOOK AT THE NUMBERS...EVALUATION**

Diversity matters and it matters more so within the healthcare workforce which is why Creighton University's *Pipeline to Success* Health Careers Opportunity Program has adopted the "official" purpose to provide students from disadvantaged backgrounds the access, education and training necessary to become a healthcare professional with the overarching goal of increasing diversity within the healthcare workforce.

To offer a bit of a racial/ethnic breakdown of our most recent cohort of students, during the 2019-2020 Health Careers Ambassador Program, **55** female students and **18** male students were recruited which included 1 American Indian/Alaskan Native, **28** Asian or Pacific Islander, **23** Black/African-American, **12** Hispanic or Latino, **8** White/Anglo-Caucasian, and **1** Other (race not defined). Among this cohort of students, the participants represented **3** Nebraska counties and 7 states.

In addition, out of 72 students, 45 students were 19 years of age and under, 25 students were between 20-29 years of age, and 2 students were between 30-39 years of age. Based on eligibility criteria provided by our funding source, 20 students were economically disadvantaged, 15 students were educationally disadvantaged, and 38 students were both, economically and educationally disadvantaged. From an educationally disadvantaged standpoint, 26 participants were first-generation high

school students and 26 participants were first-generation college students. Obtaining annual household income is required by the stipulations listed in the grant and from that, 28 students self-reported their annual household income as below \$30,000. The average weighted GPA (grade point average) among the 2019-2020 Health Careers Ambassador Program cohort of students was 3.48.

**Up next...the first ever in Creighton University's *Pipeline to Success* Health Careers Opportunity Program (HCOP) history – the 2020 Online Structured Summer Session!!**

Due to COVID-19, its rising confirmed cases and the Creighton University mandate, the HCOP team continue to conduct its programming in a virtual space in the summer of 2020. The 2020 Online Structured Summer Session is a structured, six-week program that provides a plethora of academic enrichment opportunities where students partake in “virtual” Zoom and Blueline/Canvas classroom instruction focused on upper-level mathematics/science/reading/writing, standardized test preparation, virtual clinical shadowing, virtual field trips, etc. which began June 29, 2020 and will end August 7, 2020. The virtual classroom instruction is geared to help students strengthen their foundation in subjects (chemistry, physics, medical terminology, gross anatomy, genetics, etc.) that will be integral to them as they pursue careers in the health sciences. The courses are 1 hour and 25 minutes per day, Monday through Thursday; where Fridays are reserved for workshops, guest speakers, team-building exercises, etc. We're happy to report that seventy-four (74) high school and undergraduate students have made a commitment to continue their success journey in a structured, virtual space with eleven (11) instructors, fellow classmates and the HCOP team – looking forward to an exciting summer and sharing details in our next annual report.

“Success is a journey, not a destination.” – Arthur Ashe

#TeamHCOP

# GRANTS, PUBLICATIONS AND PRESENTATIONS

## I. Grants

### 1. Funded

- **Principal Investigator**

- o Douglas County Health Department: Racial/Ethnic Minority Community Members to assist education, communication and contact tracing regarding COVID19 in North and South Omaha (Community Health Advocates/Ambassadors/Workers-CHAs, CHWs), July1- December 31, 2020, **\$250,000**
- o Nebraska Tobacco Settlement: Center for Promoting Health and Health Equity (CPHHE) – CIP2019-2020, **\$175,395**
- o National Institute of Health Center for Minority Health Development - NCMHD/NIH Endowment Program for Increasing Research and Training in Health Profession Schools – 2005-Perpetuity, **\$1.8Million**
- o HRSA: Creighton University Pipeline to Success – Health Career Opportunity Program (HCOP), 2018-2023, **\$3,072,030**
- o Omaha Public Schools (King Science Academy) award to promote STEM education July 2019-June 2020, **\$10,000**

- **Co-Investigator**

- o National Science Foundation (NSF) – Glutamate Delta-1 Receptor and Metabotropic Glutamate Receptor Interaction, September 2015-2019, **\$726,146**

### 2. Not Funded

- National Institute of Health (NIH) – My Health Risk App Redesign; 2019-2022, **\$1,335,270**
- Science Education Partnership Award (SEPA)- National Institute of Health (NIH), Creighton University; 2019-2024, **\$1,333,095**

## II. Presentations

1. **Kosoko-Lasaki O.** "Cultural Competency for HCOP Students", Creighton University, Omaha, NE. March 21, 2020
2. **Kosoko-Lasaki O.** "Cultural and Ethnic Approaches to Health: Case Studies", CIPER Passport Interprofessional Education. Creighton University. February 7, 2020
3. **Kosoko-Lasaki O.** "HCOP Health Professional Workshop: Negotiating Salary and Reviewing Contracts", Creighton University, Omaha, NE. January 11, 2020
4. **Kosoko-Lasaki O.** "Glaucoma Screening, Diagnosis and Treatment" presented to Physician Assistant Students: Clinical Medicine HEENT/Dermatology Course. School of Medicine, Creighton University, Omaha, NE. November 6, 2019.
5. **Kosoko-Lasaki O.** "Overview of HCOP Pipeline to Success Program at Creighton University" presented at Empowerment Network's African American Leadership Conference/A Culture of Excellence at CHI Health Center Omaha, NE. October 25, 2019.
6. **Kosoko-Lasaki O.** "Cultural Competency with King Science Health Care Academy", Great Plains Black History Museum, Omaha, NE. September 16, 2019
7. **Kosoko-Lasaki O.** "Cultural Competency Cases: The REACH and Ethnic Mnemonics", Creighton University, Omaha, NE. September 14, 2019
8. **Kosoko-Lasaki O.** "Community Engagement and Impact Session/FY2020 Goal Planning", Student Life Conference Room, Creighton Hall, Creighton University, Omaha, NE. June 13, 2019
9. **Kosoko-Lasaki O**, Brown R, Issaka A. "Promoting Physical Activities in Omaha Housing Authority Towers: The Nebraska REACH Experience" presented at Health and Housing Collaborative Efforts during the NCRC NAHRO Conference, April 16-18, 2019 at Hilton, Omaha, NE. April 16, 2019
10. Victor Umoh, Anthonia Ikpeme, Emmanuel Effa, Marcus Inyama, Boniface Ago, Theresa Ekpenyong, Nicholas Maxwell, Jessica Bedi, Akaninyene Out, Nchiewe Ani, S **Kosoko-Lasaki**, Andres Ekpenyong. "100% Free Patient Care, Telemedicine, Clinical Research and Mobile Clinics at a Research Hospital in Rural Nigeria: a model for improving health equity" presented at Global Health Conference Mid-West February 15-16, 2019.

## III. Publications

1. Stone, J.R. (2020) Social justice, triage, and Covid-19: Ignore life-years saved. Medical Care. 58(7, July), 579-581. (Editorial)

2. **Kosoko-Lasaki, S.** (Copyright 2020) Diversity and Inclusion in a More Perfect University: HS-MACA 20-Year History of Success, Health Sciences-Multicultural and Community Affairs, Creighton University. ISBN: 978-1-09830-861-2. June 2020.  
<https://bit.ly/diversityninclusion>
3. Olúgbémiga Ekúndayò, **Omofolasade Kosoko-Lasaki**, Jeffrey M. Smith, Garrick I. Hayashi, Raheem Sanders, Aminatu Issaka & John R. Stone (2020) Neighborhood characteristics and effects on physical activity in an urban minority community – application of Health Belief Model to findings from Creighton University Center for Promoting Health and Health Equity (CPHHE-REACH) initiative, International Journal of Health Promotion and Education, DOI: 10.1080/14635240.2020.1726200. February 20, 2020
4. Smith JM, Sanders R. **Kosoko-Lasaki O** and Stone JR “Training Community Health Ambassadors to Administer SOPARC”, Creighton University, Center for Promoting Health and Health Equity (CPHHE) Racial and Ethnic Approaches to Community Health (REACH, USA). Journal of Health Science and Education, JHSE-1-169 Vol 3(4): 1-7. October 23, 2019
5. **Kosoko-Lasaki O**, Ekundayo O, Smith J, Ochuba O, Hayashi G, Sanders R, Brown R, Stone J. Urban Minority Community Safety and its Impact on Physical Activity: The Center for Promoting Health and Health Equity-Racial and Ethnic Approaches to Community Health (CPHHE-REACH) Initiative. Journal of the National Medical Association, Volume 111, Issue 3, pages 334-344. June 2019
6. Stone, J.R. (2020) Deadly vasculitides and reversed racial/ethnic disparity? Annals of Internal Medicine, 172(2), 153-154. (Editorial)