

YEAR 1 BENCHMARKS

Throughout Year 1, CaRE² has been working diligently to meet its benchmarks across all three institutions. One of these benchmarks include training more underrepresented research minorities (URM).

To the right, URM trainees are pictured with REC Core Leaders at the 2019 ABRCMS Conference.

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CONFERENCES/OUTREACH

CaRE² has carefully planned and attended various local and national conferences to learn more about cancer disparities while taking advantages of different opportunities to disseminate research breakthroughs.

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PUBLICATIONS

Over the span of Year 1, CaRE² PIs and members reported a total of four completed publications with many more in the works.

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PRESENTATIONS

Across the span of Year 1, CaRE² PIs have conducted 51 presentations already surpassing our benchmark goal of 45 presentations.

To the right, Dr. John Carpten, USC PI, is pictured giving a TEDx Talk in LeDroit Park about health in minority communities.

READ ON PAGE 8-10



WELCOME

Welcome to the Summer issue of the Florida-California Cancer Research Education & Engagement (CaRE²) Health Equity Center Newsletter! The CaRE² Health Equity Center partnership between Florida A&M University, University of Florida, and University of Southern California is concluding the first year of our U54 grant sponsored by the National Cancer Institute. Continue reading to learn about our progress thus far.

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Benchmarks

Throughout Year 1, CaRE2 has made significant progress towards meeting our benchmark goals before year 5!

Center Outcomes	Benchmark	Progress
Research projects focusing on cancer disparities in Blacks and Latinos	12	3
URM scientists conducting research in cancer disparities	125	42
Scientific publications	40	4
Scientific presentations	45	51
Grant submissions	40	5
Grant awards	20	4
Community reports	10	1
Scientific recognitions/honors/awards	7	9

A job well done to our URM scientists!

In May 2019, CaRE2's Research Education Core collaboratively launched its summer Research Programs at FAMU, UF, and USC for undergraduate, post-bac, and graduate trainees. This summer program was successfully concluded with a two day symposium. On July 29th, trainees from FAMU traveled to the UF for a tour of their research labs and to engage in a Research Education seminar presented by Dr. Debra Lyon on "Integrating the Multiple Aspects of Cancer Health Disparities to Promote Health in Blacks and Hispanics." On July 30th, the trainees came back to FAMU to present their own individual research that they worked on throughout the summer with their mentors. They were scored based on their overall knowledge of their research, presentation skills, visual quality of their posters, and scientific content. The trainees ended their research showcase with a final seminar presented by Dr. John Luque on "The Importance of Mentoring and Networking in Academia". Five undergraduate trainees from Florida A&M University were selected to represent CaRE2 at the 2019 Annual Biomedical Research Conference for Minority Students Conference in Anaheim, California. These students were sponsored with travel awards from the conference and FAMU's U54 grant. The trainees were given an opportunity to network, learn, and present research that they developed during the summer with the Research Education and Engagement Core.



Trainees are pictured with their research posters during their closing presentations in Summer 2019 (right) and at the ABRCMS Conference (left).

Publications

One way we advance our cause to address and reduce cancer health disparities among Black and Latino populations is to contribute to the body of knowledge around the issue. Collaborations within the CaRE² Health Equity Partnership have resulted in the following contribution to literature this quarter:

- ✚ Scarton L, Yoon S, Oh S, Agyare E, Trevino J, Han B, Lee E, Setiawan VW, Permuth JB, Schmittgen TD, Odedina FG, Wilkie DJ. Pancreatic Cancer Related Health Disparities: A Commentary. *Cancers*. 2018 July 18;10(7). PubMed PMID: 30021952; PubMed Central PMCID: PMC6070801; DOI: 10.3390/cancers10070235.
- ✚ Scarton L, Yoon S, Oh S, Agyare E, Trevino J, Han B, Lee E, Setiawan VW, Permuth JB, Schmittgen TD, Odedina FG, Wilkie DJ. Pancreatic Cancer Related Health Disparities: A Commentary. *Cancers*. 2018 July 18;10(7). PubMed PMID: 30021952; PubMed Central PMCID: PMC6070801; DOI: 10.3390/cancers10070235.
- ✚ Xiao J, Cohen P, Stern MC, Odedina F, Carpten J, Reams R. Mitochondrial biology and prostate cancer ethnic disparity. *Carcinogenesis*. 2018 December 13;39(11):1311-1319. PubMed PMID: 30304372; PubMed Central PMCID: PMC6292412; DOI: 10.1093/carcin/bgy133.
- ✚ Miller B, Arpawong TE, Jiao H, Kim SJ, Yen K, Mehta HH, Wan J, Carpten JC, Cohen P. Comparing the Utility of Mitochondrial and Nuclear DNA to Adjust for Genetic Ancestry in Association Studies. *Cells*. 2019 April 3;8(4). PubMed PMID: 30987182; PubMed Central PMCID: PMC6523867; DOI: 10.3390/cells8040306.

“
Although cancer incidence
and mortality overall are
declining in all racial/ethnic
groups in the United States,
certain groups continue to
be at increased risk of
developing or dying from
particular cancers.
”

-National Cancer Institute



Pictured are members of the CaRE2 Health Equity Triad along with NCI Sponsors and Program Steering Committee.

AACR Health Disparities

Together, we make a difference.

The 12th annual AACR Conference on “The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved” began on September 20th and concluded on September 23rd in San Francisco, California. AACR-HD is a conference associated with the AACR Minorities in Cancer Research Council. This conference allows the opportunity for researchers, students, professionals, and the community to come together to advance the understanding of health disparities in our country with the hopes of eliminating these disparities. The goal of this conference, and other conferences similar to it is to foster an environment where the community can exchange novel ideas, discuss research ideas, and disseminate new discoveries related to health disparities.

Members of the CaRE² program were able to meet together internally before the conference began to discuss progress of the individual cores and projects. CaRE² was well represented at the conference. Overall, CaRE² had 32 abstracts that were submitted and accepted for the conference’s poster session. The abstracts covered a variety of topics from scientific research to overviews of core programs within the Center.



Cancer in the Community Conference

The first Community Cancer Conference on Innovative Research and Precision Oncology Treatments was held at the USC Norris Comprehensive Cancer Center in Los Angeles on November 9th, 2019. The conference was organized by a collaboration among the Tower Cancer Foundation (Lippin Family), the Lazarex Cancer Foundation, the USC Norris offices of Community Outreach and Engagement and Training and Education and the Florida-California Cancer Research, Education & Engagement (CaRE²) Health Equity Center. A series of community partners supported the effort. These included Celebrate Life, the Men's Cancer Network, the USC Office of Civic Engagement, and the Neighborhood Academic Initiative (NAI), Clinica Monsenor Oscar Romero, among others. The conference was live streamed simultaneously to our patients and community advocates in Florida (UF and FAMU) Universities and was the first of this kind to include simultaneous Spanish/English interpretation. Drs. Baezconde-Garbanati and DeClerk opened the conference, acknowledging partners and sponsors, and dedicating the conference to two advisory committee members who passed this year, and setting the stage on precision medicine and value of immuno-therapies. Dr. Caryn Lerman, Director of the USC NCCC made a welcome focusing on precision medicine, followed by panels and presentations from prominent professionals and cancer survivors. These included representation from Children's Hospital Los Angeles (CHLA), USC Norris Cancer Center who spoke on HPV and Immunology, Immunotherapies, checkpoint inhibitors, CAR T-cell therapies, the future of immuno therapies, and cancer disparities related to precision medicine. Speakers included Drs. Martin Kast, Ann Mohrbacher, Afsaneth Barzi, and Mariana Stern. Dr. Jorge Nieva had a plenary session on the impact of clinical trials on quality of life and Engineering technology and clinical trials. An emotional survivors' panel moderated by Dr. James Hu and composed of Pastor Rhonda Holbert, Stephen Heaviside, Stori Nagel, and Amelia Tena spoke about their experiences with cancer. The Tower Cancer Foundation and Lippin Family received a Partnership Award for their exceptional support in patient navigation at LAC+USC Medical Center and USC Norris Cancer Hospital. Over 85 individuals participated. Community health advocates, patients, researchers, health care workers, promotores de salud, and caregivers from even far reaches of our catchment area of Los Angeles County were present. Educational materials were distributed in Spanish and English on related topics and clinical trials. A group of community volunteers and promotores de salud contributed to the success of the conference. For additional information please contact at the USC NCCC COE office, Dr. Carolina Aristizabal at caristi@usc.edu and/or Ghecemy Lopez at ghecemyg@usc.edu.



Prostate Cancer Advocacy

Training

The first bilingual and bicoastal community advocates training on Prostate cancer disparities (PCa) was held at the Norris Comprehensive Cancer Center on August 8th, 2019. The training was organized by The Florida-California Cancer Research, Education & Engagement (CaRE²) Health Equity Center's Community Outreach Core (Drs. Lourdes Baezconde-Garbanati, Sandra Suther, and Angela Adams), with participation of Center PIs Drs. John Carpten, Mariana Stern, Rene Reams, Folakemi Odedina, and Diana Wilkie. Speakers were scheduled at different sites on each coast, and simultaneously live streaming between USC in Los Angeles, and in Tallahassee, at Florida Agricultural and Mechanical University (FAMU), with participation from University of Florida. The training engaged promotores de salud (community health workers), patient and community advocates, patients and their families, from the African American and Hispanic/Latino communities in each coast. Blacks suffer a disproportionate burden of PCa compared to other racial/ethnic groups. US Hispanic/Latinos suffer disparities across the PCa cancer care continuum (i.e., type of treatment selected), with limited studies characterizing this population, taking into account its vast heterogeneity. Educational materials were distributed in Spanish and English on prostate cancer and on clinical trials. The training was cosponsored by the Lazarex Cancer Foundation, the Tower Cancer Foundation, the Lippin Family, and the Men's Cancer Network, among other.



For more information please contact Dr. Carolina Aristizabal at caristiz@usc.edu.



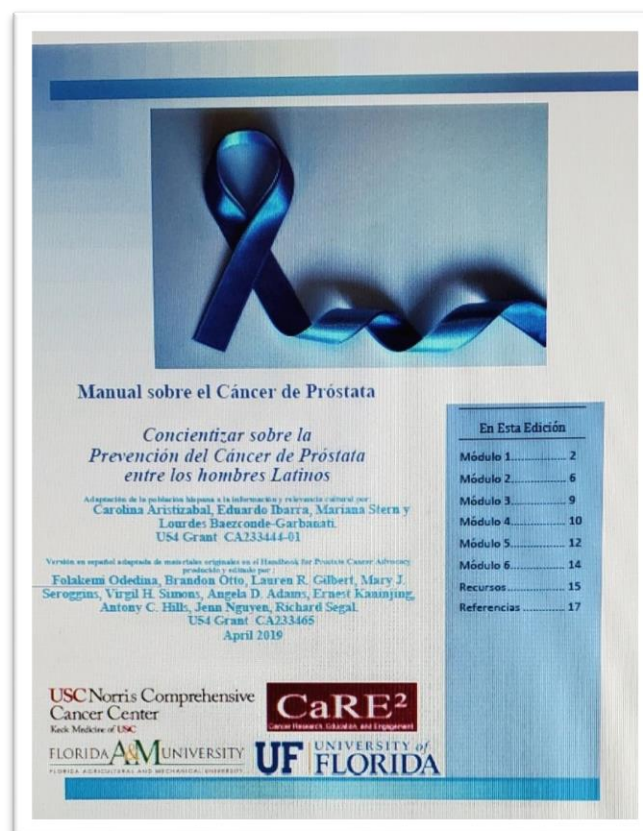
Dr. John Carpten (center), USC PI, speaking to attendees regarding prostate awareness at the training.

Prostate Cancer Advocacy

Toolkit

A Prostate Cancer Advocacy Toolkit was translated and culturally adapted by the Florida-California Cancer Research, Education & Engagement (CaRE²) Health Equity Center's Community Outreach Core by Drs. Carolina Aristizabal, Mariana Stern, Lourdes Baezconde-Garbanati, and Eduardo Ibarra. This was an adaptation of the Handbook for Prostate Cancer Advocacy and the Prostate Cancer Care and Survivorship (CaPCaS) study by Dr. Folakemi Odedina and others at UF. We culturally tailored and adapted the toolkit into lay language low-literacy Spanish for the Hispanic/Latino population. The Prostate cancer toolkit in Spanish has 6 modules encompassing what is the prostate and where it is anatomically located, how common is this disease among Blacks and Hispanic/Latinos, the epidemiology and demographics, its risk factors, as well as types of screening, diagnosis, treatments, and prevention. The toolkit also has a list of resources providing links from CDC and other organizations locally in Florida as well as in California, to seek more information on Prostate cancer as needed and a list of references.

For more information or to obtain a copy of the toolkit, please contact Dr. Carolina Aristizabal at caristiz@usc.edu.



The Spanish version of CaRE2's Prostate Advocacy Toolkit that contains modules to educate the Hispanic/Latino population about the prostate anatomy and prostate cancer awareness.

CaRE² Center Presentations

- ✚ **Kinfe Redda & Dr. Agyare** presents “Enhancing Creativity and Scholarship Productivity in Journalism and Public Relations” with Florida A&M University’s School of Journalism and Graphic Arts to stimulate the expansion of research activities and grant writing.
- ✚ **Renee Reams** presents at “Center for Health Disparities Research (CHDR) Round Table Meet and Greet” to promote the CaRE² program.
- ✚ **Renee Reams** presents at Tuskegee University’s Pathology Research Training Workshop to promote the CaRE² program and enhance research skills beneficial to the grant’s research projects.
- ✚ **Renee Reams** presents at the “7th Annual African Caribbean Cancer Consortia (AC3),” a conference that is recognized and supported by the NCI Epidemiology and Genomics Research Program.
- ✚ **Syreeta Tilghman**, former Internal Advisory Chair at Florida A&M University, was a guest speaker at “Fight Like Frances: A Breast Cancer Awareness Event” and used this platform to market the CaRE² program and to recruit new members.
- ✚ **Odedina FT** (Speaker), 2019. International Collaborations in Cancer Research. Invited oral presentation, Florida Academic Cancer Center Alliance (FACCA) Annual Meeting, Miami, FL, June 13-14, 2019.
- ✚ **Odedina FT** (Speaker and Session Chair). Use of Prospective Approaches to Characterize Cancer Registry Data. American Association for Cancer Research (AACR) Annual Meeting. Georgia World Congress Center, Atlanta, GA, USA. Mar 29, 2019 - Apr 3, 2019.
- ✚ **Odedina FT** (Session Chair). The Science of Global Community Outreach. American Association for Cancer Research (AACR) Annual Meeting. Georgia World Congress Center, Atlanta, GA, USA. Mar 29, 2019 - Apr 3, 2019.
- ✚ **Odedina FT** (Session Chair). Challenges and Opportunities of International Consortia: Introduction. American Association for Cancer Research (AACR) Annual Meeting. Georgia World Congress Center, Atlanta, GA, USA. Mar 29, 2019 - Apr 3, 2019.
- ✚ **Odedina FT**. Conference Co-Chair. Tenth AACR Conference: The Science of Cancer Health Disparities in Ethnic Minorities and the Medically Underserved. New Orleans, Louisiana, USA. Nov 2, 2018 - Nov 5, 2018.
- ✚ **Odedina FT**. Addressing Advocacy at the Bench: Global Advocacy Manpower. Tenth AACR Conference: The Science of Cancer Health Disparities in Ethnic Minorities and the Medically Underserved. New Orleans, Louisiana, USA. Nov 2, 2018 - Nov 5, 2018.

- ✚ **Odedina FT.** Addressing Prostate Cancer Disparities through Precision Community Health. Tenth AACR Conference: The Science of Cancer Health Disparities in Ethnic Minorities and the Medically Underserved. New Orleans, Louisiana, USA. Nov 2, 2018 - Nov 5, 2018.
- ✚ **John Carpten**, “Omics Studies in Cancer Disparities”, Session Chair, The Science of Cancer Health Disparities in Ethnic Minorities and the Medically Underserved. New Orleans, Louisiana, USA. Nov 2, 2018 - Nov 5, 2018.
- ✚ **John Carpten**, Conference Chairperson, AACR Annual Meeting, Annual Meeting. Georgia World Congress Center, Atlanta, GA, USA. Mar 29, 2019 - Apr 3, 2019.
- ✚ **John Carpten**, Invited session Chair and Speaker, “Opening Plenary: Achieving Equitable Patient Care through Precision and Convergent Cancer Science”, AACR Annual Meeting, Annual Meeting. Georgia World Congress Center, Atlanta, GA, USA. Mar 29, 2019 - Apr 3, 2019.
- ✚ **John Carpten**, Invited Speaker, "Fourteenth Annual AACR Undergraduate Student Caucus and Poster Competition ", AACR Annual Meeting, Annual Meeting. Georgia World Congress Center, Atlanta, GA, USA. Mar 29, 2019 - Apr 3, 2019.
- ✚ **John Carpten**, Invited Speaker, "Basic Cancer Science and Translational Research", AACR Annual Meeting, Annual Meeting. Georgia World Congress Center, Atlanta, GA, USA. Mar 29, 2019 - Apr 3, 2019.
- ✚ **John Carpten**, Invited Speaker, AACR The Science of Cancer Health Disparities conference, San Francisco, CA, September 20-23, 2019
- ✚ **John Carpten** gives a TEDx talk on the pitfalls of healthcare in minority communities and how we can change the narrative. (View at <https://www.youtube.com/watch?v=OJhh4exELcE>)
- ✚ **John Carpten** is honored as a plenary speaker at the 2019 ABRCMS conference educating attendees on “*The Impact of Heterogeneity in Cancer Genome Science*”.
- ✚ **Mariana Stern**, “Recent Discoveries and Hot Topics in Cancer Health Disparities”, Session Chair, The Science of Cancer Health Disparities in Ethnic Minorities and the Medically Underserved. New Orleans, Louisiana, USA. Nov 2, 2018 - Nov 5, 2018.
- ✚ **Dr. Mariana Stern** represented CaRE² and USC’s Comprehensive Cancer Center at the 12th Annual AACR-HD as the conference co-chair.
- ✚ **Mariana Stern**, “Professional Advancement Session”, Session Chair, The Science of Cancer Health Disparities in Ethnic Minorities and the Medically Underserved. New Orleans, Louisiana, USA. Nov 2, 2018 - Nov 5, 2018.
- ✚ **Mariana Stern**, Invited session Chair, "Exposures and Genetics in Cancer Risk", AACR Annual Meeting, Annual Meeting. Georgia World Congress Center, Atlanta, GA, USA. Mar 29, 2019 - Apr 3, 2019.



- ✚ **Mariana Stern**, Invited Roundtable Mentor, " Workforce Development: Professional Enhancement and Career Advancement ", AACR Annual Meeting, Annual Meeting. Georgia World Congress Center, Atlanta, GA, USA. Mar 29, 2019 - Apr 3, 2019.
- ✚ **Fredenburg KM**, Jiang J, **Schmittgen TD**. "Differential Expression of noncoding RNAs in Black compared with White laryngeal cancers" Poster Presentation, American Association for Cancer Research April 2, 2019. Atlanta, GA.
- ✚ Bray JK, Elgamal O, Da Silva L, Sutaria D, Liu X, **Fredenburg K**, **Schmittgen TD**. "Repression of neuronal genes protects the pancreas from certain injuries and aberrant plasticity." Poster presentation at the American Association for Cancer Research, April 4, 2019, Atlanta, GA.
- ✚ Silver N, Garg R, **Fredenburg K**, Mendez-Gomez H, Mitchell D, Sayour E. "RNA-nanoparticle of immunotherapy resistant head and neck squamous cell carcinoma" Poster presentation at the American Association for Cancer Research: Tumor Immunology and Immunotherapy, November 2018, Miami Beach, FL.
- ✚ **Velazquez Villarreal, E.I.** "Deep Cancer Health Disparities in Hispanic Populations." Invited oral presentation at the Illumina and USC Keck Genomic Platform Symposium, May 29, 2019, USC Aresty Auditorium Los Angeles CA.
- ✚ **Velazquez Villarreal, E.I.** "Training in Bioinformatics, Artificial Intelligence and Machine Learning in the 21st century." Invited oral presentation at the AACR Cancer Health Disparities Think Tank Group, October 19, 2018, Washington DC.
- ✚ **Velazquez Villarreal, E.I.** "Benefit from using big data to enhance genomic and cancer health disparities research." Invited oral presentation at the NIH NCI Cancer Health Disparities Professional Development Workshop, June 03, 2019, Bethesda MD. 26
- ✚ **Velazquez Villarreal, E.I.** "Understanding cancer heterogeneity in relation to minor sub-clones at single cell profiling level in renal cell carcinoma". Scientific poster presented at AACR19, April 1, 2019, Atlanta GA.
- ✚ **Velazquez Villarreal, E.I.** "Studying cancer Heterogeneity using single-cell copy number analysis and clonotype detection." Scientific poster presentation at Advances in the Genome Biology and Technology (AGBT) Precision Health meeting 2018, Sep 6-8, 2018. San Diego CA, USA.
- ✚ Joseph, S., Ibe, I., **Wilkie, D.J.**, Hong, Y.R., Salloum, R.G., & Huo, J.H. Examining cost variation across palliative care delivery models for cancer patients: A systematic review. The 11th AACR Conference on The Science of Cancer Health Disparities. Nov. 2-5, 2018, New Orleans, Louisiana.
- ✚ **Wilkie DJ (Speaker)**, **Odedina FT**, Krieger J, Johnson-Mallard V, & Yao Y. (2019). Community Outreach and Engagement to Reduce Cancer Disparities. Invited oral presentation, 2019 Florida Academic Cancer Center Alliance Annual Meeting, Miami, FL, June 14, 2019.

Save the Date!

Look out for opportunities to learn more about CaRE2

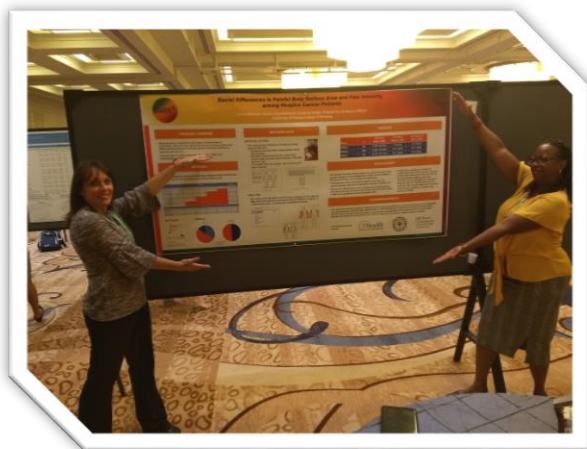
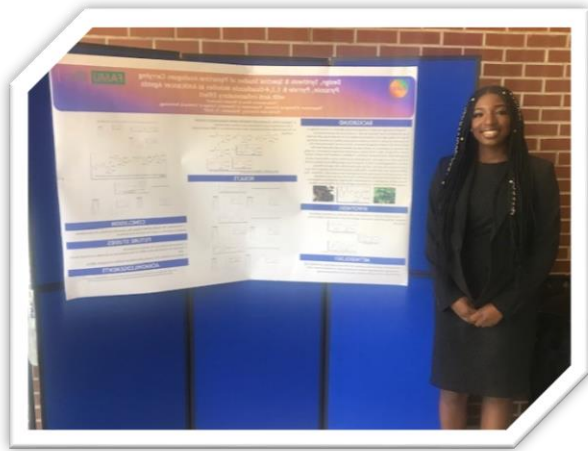
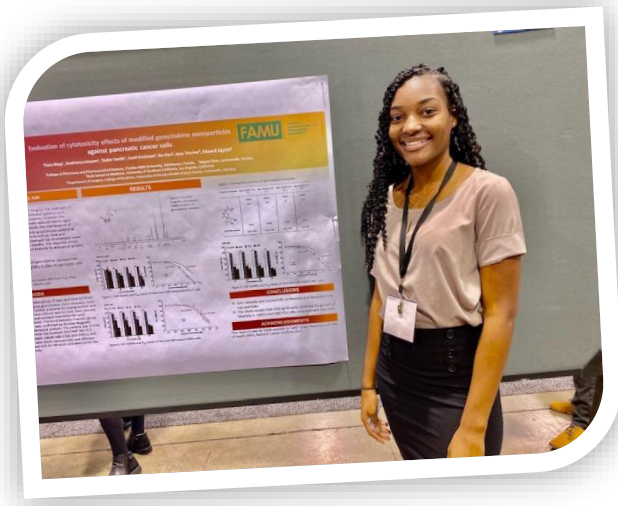
1. **April 22nd – 24th** | 2020 Program Steering Committee Meeting
Los Angeles, CA | University of Southern California
2. **April 24th – 29th** | 2020 Annual AACR meeting
San Diego, CA | Visit: aacr.org/Meetings/Pages/Default.aspx
3. **June 6th – 10th** | Scientist Mentoring & Diversity Program (SMDP)
San Diego, CA | Graduate students and post-doctoral researchers with industry mentors who work at biotech and consumer healthcare companies are encouraged to visit: www.icpdprogram.org
4. **October 3rd – 7th** | SMDP MedTech
Toronto | Undergraduate and graduate students with mentors who work at medical device and consumer healthcare companies are encouraged to visit: www.icpdprogram.org

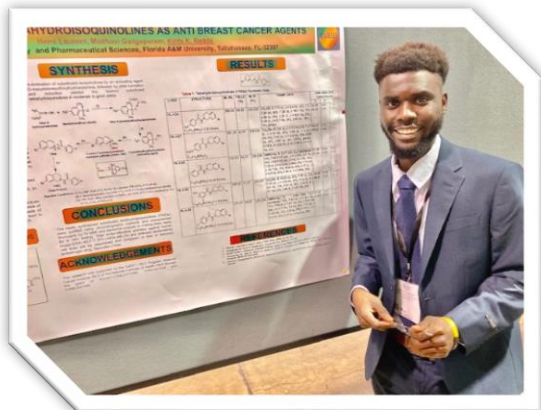
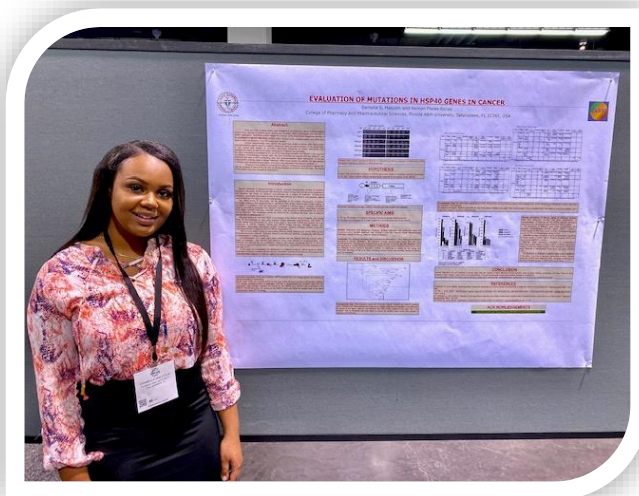
Webinars

-  **August 29th** | Tissue Archives and Bio-Repository in Nigeria
Presented by Paul Jibrin, MBChB
-  **October 25th** | The Role of the CaRE2 Planning and Evaluation Core
Presented by Linda Behar-Horenstein, PhD
CaRE² PEC Principle Investigator, University of Florida

If you are interested in hosting a CaRE² webinar or have someone in mind for a nomination, please contact Nissa Askins, University of Florida Coordinator, at nissa.asksins@cop.ufl.edu.

CaRE² Gallery





Stay Connected

Visit our websites at <http://care2usc.org> and <https://care2.cancer.ufl.edu>, follow us on social media @care2usc and @care2famU, and for the most up to date info, become a member to receive updates directly to your inbox at <http://bit.ly/2zQN3kS>

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