## Florida-California Cancer Research Education & Engagement (CaRE<sup>2</sup>)

## 12-Week Research Education Core (REC) Training at Florida A&M University



Online-Summer Undergraduate (CaRE<sup>2</sup>) Program, REC Schedule (May 11 – July 24, 2020).

DATE	8:00 AM - 1:00 PM	2:00 PM – 5:00 PM
Week 1	Mentor-Guided Independent Study	Mentor-Guided Independent Study
May 11-15	Administrative Paperwork (Ms. Christina Lavender) Laboratory Safety Training (FAMU Blackboard based training) Animated Introduction to Cancer Biology (Full Documentary) (erQuest- Emory University: An animation/video teaching the basics of how cancer forms and spreads. Topics: mutation, tumor suppressors, oncogenes, angiogenesis, apoptosis, metastasis and drug resistance.)	Mentor-Trainee Matching (Bereket Mochona & Kinfe Redda REC @FAMU) Mentor Orientation (overview of online mentoring) (Kinfe Redda & Bereket Mochona) Research Design & Literature Search (Mentor-Guided) Cancer Biology and Cancer Medicine: (Presentation by Nobel laureate Harold Varmus for the Stanford School of Medicine
Week 2		
May 18	Mentor-Guided Virtual Research Plan Consultations	<ul> <li>Opening Ceremony:</li> <li>a) Welcome Remark, Introduction of Trainees &amp; Mentors: Bereket Mochona (REC @ FAMU)</li> <li>b) Florida-California CaRE<sup>2</sup> Overview: Renee Reams (CaRE<sup>2</sup> @ FAMU)</li> <li>c) Program Overview &amp; Expectations: Kinfe Redda (REC @ FAMU)</li> <li>d) Invited Speaker: Dean Richard Alo (College of Science &amp; Technology)</li> <li>e) CaRE2-REC - Bridge into Professional Programs: Ite Offringa (REC @ USC)</li> <li>f) Pre- &amp; Post Training Program Evaluation (Ukamaka Dike Smith, CaRE<sup>2</sup> PEC @FAMU</li> </ul>
May 19 May 20	Mentor-Guided Virtual Research Plan Consultations Mentor-Guided Virtual Research Plan	Cancer Disparity-Seminar Series-1 Topic: "Race and the Molecular Biology of Breast Cancer: A Pathologist's View from the Bench to the Bedside." Speaker: Kevin L. Gardner, M.D., Ph.D., Department of Pathology and Cell Biology, Columbia University Medical Center Group Interactions & Discussions about CaRE <sup>2</sup> - REC
iviay 20	Consultations	Training Activities and Lessons Learned

May 21	Mentor-Guided Virtual Research Plan Consultations	Group Discussion - Taking a 4-week long online Harvard University course: Course Name: Lessons from Ebola: Preventing the next Pandemic Course Description: Understanding the context for the Ebola outbreak: What went right, what went wrong, and what we all can do better; 4 weeks long; 3-5 hours per week; self- paced; verified certificate after completion. <i>Pursue a Verified</i> <i>Certificate to highlight the knowledge and skills you gain</i> (\$49 USD)
May 22	Mentor-Guided Virtual Research Plan Consultations	Independent study and review of mentor assigned tasks and course studies, including any writing assignments
Week 3		
May 25	****MEMORIAL DAY HOLIDAY****	****MEMORIAL DAY HOLIDAY****
May 26	Mentor-Guided Virtual Research Activities	<ul> <li>Community Outreach: Moderated by Dr. Sandra Suther, Ph.D. CaRE<sup>2</sup> - COC @FAMU</li> <li>Topic: "A community approach to breast cancer prevention: addressing health disparities" (NIH- training videocast)</li> <li>Speaker: Lucile Adams-Campbell, Ph.D., Associate Director, Minority Health and Health Disparities Research, Senior Associate Dean, Community Outreach and Engagement, Professor of Oncology, Lombardi Comprehensive Cancer Center, Georgetown University Medical Center</li> </ul>
May 27	Mentor-Guided Virtual Research Activities	Group Interactions & Discussions about CaRE <sup>2</sup> - REC Training Activities and Lessons Learned
May 28	Mentor-Guided Virtual Research Activities	<ul> <li>Professional Development - Seminar Series</li> <li>Topic: "Research Ethics in Biomedical Sciences."</li> <li>Speaker: Kinfe Ken Redda, Ph.D., Professor Emeritus, College of Pharmacy &amp; Pharmaceutical Sciences. REC @ FAMU Co-Leader, Former FAMU Vice-president for Research.</li> </ul>
May 29	Mentor-Guided Virtual Research Activities	Independent study and review of mentor assigned tasks and course studies, including any writing assignments
Week 4		
June 1	Mentor-Guided Virtual Research Activities	Professional Development Sereies-2 Topic: Writing a Personal Statement Speaker: Elena Hernandez-Ramon, MD, PhD, Director, Pre- medical Program, OITE, NIH

	Mentor-Guided Virtual Research	BSMC Core Lecture Series
June 2	Activities	Topic: "Biostatistics – Data Collection & Analysis"
		Topic. Diostatistics – Data Conection & Analysis
		Speaker: Gebre-Egziabher Kiros, Ph.D. Professor,
		Epidemiology & Biostatistics, FAMU FAMU-CaRE <sup>2</sup> - BSMC Core Leader
June 3	Mentor-Guided Virtual Research	Group Interactions & Discussions about CaRE <sup>2</sup> - REC
Julie 5	Activities	Training Activities and Lessons Learned
		Drug Discovery Seminar Series
June 4		Topic: Molecular Modeling in Anticancer Cancer Drug
	Mentor-Guided Virtual Research Activities	Discovery & Development.
		Speaker: Suresh Eyunni, Ph.D. (FAMU)
		Director of Molecular Modeling Laboratory, <b>FAMU RCMI</b> , Drug Discovery Core, Department of Chemistry, FAMU
June 5	Mentor-Guided Virtual Research Activities	Independent study and review of mentor assigned tasks and course studies, including any writing assignments
Week 5		
	Mentor-Guided Virtual Research Activities	NIH-Seminar Series in Oncology
June 8		Topic: Immune checkpoint blockade in cancer therapy:
		historical perspective, new opportunities, and prospects for cures (NIH videocast)
		<b>Speaker:</b> James P. Allison, Ph.D., Nobel Prize in Physiology or Medicine (2018), MD Anderson Cancer Center, University of Texas
hun e O	Mentor-Guided Virtual Research	Professional Development Series
June 9	Activities	Topic: NIH Graduate & Professional School Fair
		<b>Speaker:</b> Dr. William J. Higgins, OITE Pre-Professional Advisor
June 10	Mentor-Guided Virtual Research Activities	Group Interactions & Discussions about CaRE <sup>2</sup> - REC Training Activities and Lessons Learned
June 11		NIH - Lecture Series
	Mentor-Guided Virtual Research	Topic: We are what we get putrition games as mitter 2
	Activities	<b>Topic</b> : We are what we eat: nutrition, genes, cognition & deep learning in age-related macular degeneration
		Speaker: Emily Chew, M.D., National Eye Institute, NIH
June 12	Mentor-Guided Virtual Research Activities	Independent study and review of mentor assigned tasks and course studies, including any writing assignments

Week 6		
June 15	Mentor-Guided Virtual Research Activities	<b>Group Discussion:</b> Progress Report about the Course "Lessons from Ebola: Preventing the next Pandemic"
		Professional Development Series
June 16	Mentor-Guided Virtual Research Activities	Topic: Advice from Trenches: Getting to Professional School
		Panelists: Luisa A. DePietro, DDS, PhD, Milford M. Foxwell, MD, Gabriel Garcia, MD.
		Moderator: Lori Conlan, PhD
June 17	Mentor-Guided Virtual Research Activities	Group Interactions & Discussions about CaRE <sup>2</sup> - REC Training Activities and Lessons Learned
		Drug Discovery Lecture Series
June 18	Mentor-Guided Virtual Research Activities	<b>Topic</b> : Taxol: Discovery, Mechanism and Cancer Treatment (NIH Videocast)
		<b>Speaker:</b> Susan Band Horwitz, PhD, Albert Einstein College of Medicine and Jung-Min Lee, MD, Center for Cancer Research, NCI, NIH
June 19	Mentor-Guided Virtual Research Activities	Independent study and review of mentor assigned tasks and course studies, including any writing assignments
Week 7		
		NIH-Lecture Series
June 22	Mentor-Guided Virtual Research Activities	<b>Topic:</b> Genomics & Health Disparities: Towards Understanding the Role of Population Diversity in Cancer Genome Science
		<b>Speaker:</b> John Carpten, PhD, Professor, CaRE <sup>2</sup> MPI, University of Southern California
		Study of a Journal Article for Discussion:
June 23	Mentor-Guided Virtual Research Activities	<u>Cancer.</u> 2010 Nov 1;116(21):4926-32. doi: 10.1002/cncr.25276.
		African ancestry and higher prevalence of triple-negative breast cancer: findings from an international study.
		<u>Stark A<sup>1</sup>, Kleer CG, Martin I, Awuah B, Nsiah-Asare A, Takyi V, Braman M, Quayson SE, Zarbo R, Wicha M, Newman L</u> .
		Abstract
		BACKGROUND: The study of breast cancer in women with African ancestry offers the promise of identifying markers for risk assessment and treatment of triple-negative disease.
June 24		Group Interactions & Discussions about CaRE <sup>2</sup> - REC

		Cancer Disparity Lecture Series
June 25	Mentor-Guided Virtual Research Activities	<b>Topic:</b> A Multilevel Strategy for Understanding and Addressing Health Disparities
		Panelists: Ravi A. Madan, M.D., NCI, NIH and Lekha Mikkilineni, M.D., NCI, NIH
June 26	Mentor-Guided Virtual Research Activities	Independent study and review of mentor assigned tasks and course studies, including any writing assignments
Week 8		
		NIH- Cancer Disparity Lecture Series
June 29	Mentor-Guided Virtual Research	Topic: Understanding Health Disparities in America
	Activities	<b>Speaker:</b> Professor Sir Michael Marmot, Department of Epidemiology and Public Health, University College London
June 30	Mentor-Guided Virtual Research Activities	Professional Development Series
		Topic: Preparing for Your Interview for Professional School
		Speaker: Dr. William Higgins, OITE Pre-Professional Advisor
July 1	Mentor-Guided Virtual Research Activities	Group Interactions & Discussions about the assigned journal article, "African ancestry and higher prevalence of triple-negative breast cancer: findings from an international study".
July 2	Mentor-Guided Virtual Research Activities – Data Analysis	Professional Development Series Presentation of Trainee Initial Research Results (5-10 minutes) - Power point Presentation
July 3	***INDEPENDENCE DAY OBSERVED***	***INDEPENDENCE DAY OBSERVED***
WEEK 9		
July 6		Professional Development Series
July 0	Mentor-Guided Virtual Research Activities – Data Analysis	<b>Topic:</b> Nursing Research: Changing Practice, Changing Lives
		By the National Institute of Nursing Research Team
		Professional Development Series
July 7	Mentor-Guided Virtual Research Activities - Data Analysis	Topic: GRE, MCAT Preparation, Academic Advising
		<b>Speaker:</b> Richard Warnecke, Ph.D., University of Illinois at Chicago
July 8	Mentor-Guided Virtual Research Activities - Data Analysis, Preparation for Final Presentation	Professional Development Series Presentation of Trainee Initial Research Results (5-10 minutes) - Power point Presentation

		Final Required Reading, Journal Article:
		ACS Communication
July 9	Mentor-Guided Virtual Research Activities - Data Analysis, Preparation for Final Presentation	Free Access: Charting the future of cancer health disparities research: A position statement from the American Association for Cancer Research, the American Cancer Society, the American Society of Clinical Oncology, and the National Cancer Institute <u>Blase N. Polite MD, MPP, Lucile L. Adams-Campbell PhD</u> <u>Otis W. Brawley MD</u> First published: 24 July 2017
		https://doi.org/10.3322/caac.21404 Citations: 14
		This article is jointly published in <i>Cancer Research, CA: A Cancer Journal for Clinicians, Journal of Clinical Oncology,</i> and <b>cancer.gov</b> by the American Association for Cancer Research, the American Cancer Society, the American Society of Clinical Oncology, and the National Cancer Institute, respectively. The 4 organizations publishing this article have agreed that this work shall be in the public domain in the United States. <b>Published 2017.</b>
July 10	Mentor-Guided Virtual Research Activities - Data Analysis, Preparation for Final Presentation	Mentor-Guided Virtual Research Activities - Data Analysis, Preparation for Final Presentation
Week 11		
July 13	Final Steps: Mentor-Guided Virtual	Final Steps: Mentor-Guided Virtual Research Activities-
	Research Activities - Data Analysis, Preparation for Final Presentation	Data Analysis, Preparation for Final Presentation
July 14		Data Analysis, Preparation for Final Presentation         Professional development         Topic: Research Design, Scientific Writing & Graduate         Programs in Biomedical Sciences         Speaker: Ite A. Offringa, Ph.D., Associate Dean for         Graduate Affairs and Director of Programs in Biomedical &         Biological Sciences, University of Southern California, Los         Angeles, CA
July 14 July 15	Preparation for Final Presentation Final Steps: Mentor-Guided Virtual Research Activities - Data Analysis,	Professional development         Topic: Research Design, Scientific Writing & Graduate         Programs in Biomedical Sciences         Speaker: Ite A. Offringa, Ph.D., Associate Dean for         Graduate Affairs and Director of Programs in Biomedical &         Biological Sciences, University of Southern California, Los
	Preparation for Final Presentation Final Steps: Mentor-Guided Virtual Research Activities - Data Analysis, Preparation for Final Presentation Final Steps: Mentor-Guided Virtual Research Activities - Data Analysis, Preparation for Final Presentation,	Professional development         Topic: Research Design, Scientific Writing & Graduate         Programs in Biomedical Sciences         Speaker: Ite A. Offringa, Ph.D., Associate Dean for         Graduate Affairs and Director of Programs in Biomedical &         Biological Sciences, University of Southern California, Los         Angeles, CA         Group Interactions & Discussions about the assigned         journal article, "ACS Communication: Charting the future of
July 15	Preparation for Final Presentation         Final Steps: Mentor-Guided Virtual         Research Activities - Data Analysis,         Preparation for Final Presentation         Final Steps: Mentor-Guided Virtual         Research Activities - Data Analysis,         Preparation for Final Presentation,         Poster Design         Final Steps: Mentor-Guided Virtual         Research Activities - Data Analysis,         Preparation for Final Presentation,         Poster Design         Final Steps: Mentor-Guided Virtual         Research Activities - Data Analysis,         Preparation for Final Presentation,	<ul> <li>Professional development</li> <li>Topic: Research Design, Scientific Writing &amp; Graduate Programs in Biomedical Sciences</li> <li>Speaker: Ite A. Offringa, Ph.D., Associate Dean for Graduate Affairs and Director of Programs in Biomedical &amp; Biological Sciences, University of Southern California, Los Angeles, CA</li> <li>Group Interactions &amp; Discussions about the assigned journal article, "ACS Communication: Charting the future of cancer health disparities research".</li> <li>Final Steps: Mentor-Guided Virtual Research Activities - Data Analysis, Preparation for Final Presentation, Poster</li> </ul>

Week 12		
July 20 -22	Oral Poster Presentation Practice (10	Oral Poster Presentation Practice (10 minutes each with REC
	minutes each with research mentor)	Administrators)
July 23	Closing Ceremony: Final Oral Poster	Closing Ceremony: Final Oral Poster Presentations
	Presentations	
July 24	Final Administrative Close-outs	Final Administrative Close-outs