

**KHADIJAH A. MITCHELL, PHD, MS**  
**CANCER HEATH DISPARITIES RESEARCHER · INCLUSIVE PROFESSOR · SERVICE LEADER**  
**SITES.LAFAYETTE.EDU/MITCHEKA · DRDIJ.COM**

Lafayette College  
Biology Department · 520 Rockwell Integrated Sciences Center  
Easton, PA · 18042 · (610) 330-5946  
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**EDUCATION**

- 2014      **Johns Hopkins University School of Medicine**, Baltimore, MD  
PhD, Human Genetics and Molecular Biology
- 2006      **Duquesne University**, Pittsburgh, PA  
MS, Biology
- 2003      **University of Pittsburgh**, Pittsburgh, PA  
BS, Biology
- 2001      **Ometepe Biological Field Station**, San Ramon, Ometepe Island, Nicaragua  
Primate Behavior and Biology Lecture and Field Research Course

**CERTIFICATES**

- 2015      **NIH Office of Intramural Training and Education**, Bethesda, MD  
Postdoctoral Certificate, Scientists Teaching Science
- 2014      **Johns Hopkins University Graduate School of Public Health**, Baltimore, MD  
Graduate Certificate, Health Disparities & Health Inequality  
Graduate Certificate, Teaching
- 2003      **University of Pittsburgh**, Pittsburgh, PA  
Undergraduate Certificate, Conceptual Foundations of Medicine

**PROFESSIONAL APPOINTMENTS**

- 7/2018-  
Present      **Lafayette College**, Easton, PA  
Peter C.S. d'Aubermont, M.D. Scholar of Health and Life Sciences  
Assistant Professor of Biology  
Principal Investigator: Integrative & Translational Laboratory for Applied Biology (IT LAB)  
Research Area: Biological & environmental determinants of lung and kidney cancer health disparities  
Teaching Area: Precision Medicine & Molecular Genetics
- 2017-  
2018      **Lafayette College**, Easton, PA  
CFD Postdoctoral Fellow  
Research Area: Biological & environmental determinants of lung cancer health disparities  
Teaching Area: Precision Medicine
- 2014-  
2017      **National Cancer Institute**, Bethesda, MD  
CRTA Postdoctoral Fellow  
Research Area: Biological & geographic determinants of lung cancer health disparities

**HONORS AND AWARDS**

- 2019 Icahn School of Medicine at Mount Sinai ASIBS Short Course Scholarship
- 2019 Peter C.S. d'Aubermont, M.D. Scholar of Health and Life Sciences Endowment
- 2019 Lafayette College James P. Crawford Research Mentorship Award
- 2018 NCI GMaP Cancer Disparities Research Network Travel Award
- 2018 American Association for Cancer Research Minority & MSI Faculty Scholar in Cancer Research Award
- 2017 Gordon Research Seminar First Place Research Poster Award
- 2017 NIH Summer Research Mentor Award
- 2017 NIH Fellows Award for Research Excellence
- 2016 Carl Alden Scholar Award for Cancer Research Excellence
- 2015 American Association for Cancer Research Susan G. Komen Postdoctoral Oncology Scholar-in-Training Award
- 2015 Johns Hopkins School of Medicine David E. Rogers Award for Professionalism, Medical Ethics, and Community Leadership
- 2014 American Association for Cancer Research Bristol-Myers Squibb Pre-doctoral Oncology Scholar-in-Training Award
- 2012 Biomedical Scholars Association Outstanding Biomedical Scholar Award
- 2012 Johns Hopkins Martin Luther King, Jr. Award for Community Service
- 2011 Johns Hopkins SOURCE Community Service Award
- 2009-2011 John Hopkins Institutions Diversity Leadership Council Appointment

**RESEARCH GRANTS AND FELLOWSHIPS**

**Research Grants (Extramural)**

- 2019-2020 **Department of Defense Kidney Cancer Research Program Concept Award**  
Project: Profiling Clinically Actionable Somatic Copy Number Variations in Kidney Cancers from African Americans, \$75,000

**Research Grants (Intramural)**

- 2019-2020 **Lafayette College Faculty Research Grant**  
Project: mRNA-Seq based alterations induced by traditional and electronic menthol cigarettes in a lung cancer health disparities context, \$4,000
- 2015-2016 **NCI Center for Cancer Research Intramural Resource Request**  
Project: Transcriptome profiling of lung cancer in African Americans using high-throughput RNA sequencing, Role: Co-investigator, \$75,000

**Fellowships**

- 2017-2018 Consortium for Faculty Diversity Postdoctoral Fellowship
- 2016 Aspen Cancer Conference Fellowship
- 2014-2017 NCI Intramural Cancer Research Training Award
- 2014-2015 NCI Sallie Rosen Kaplan Postdoctoral Fellowship for Women Scientists in Cancer Research
- 2011-2012 Baltimore Albert Schweitzer Fellowship
- 2006-2007 NHGRI Technical Intramural Research Training Award
- 2004-2006 Duquesne University Graduate Teaching Fellowship
- 2002 Howard Hughes Medical Institute Summer Fellowship

**RESEARCH EXPERIENCE**

- 2007-2014 **Johns Hopkins University School of Medicine**, Baltimore, MD  
PhD Student  
Area: The role of DNA methyltransferases on transcriptional mechanisms in cancer  
Advisor: Stephen B. Baylin, MD (National Academy of Science Member)
- 2006-2007 **National Human Genome Research Institute**, Bethesda, MD  
Technical Research Fellow  
Area: Modeling human diseases in zebrafish using an RNA aptamer system  
Advisor: Benjamin Feldman, PhD
- 2004-2006 **Duquesne University**, Pittsburgh, PA  
MS Student (Thesis Option)  
Area: Quantitative analysis of microbial gene expression during the cold shock response  
Advisor: Nancy J. Trun, PhD
- 2004 **University of Pittsburgh Cancer Institute**, Pittsburgh, PA  
Research Laboratory Volunteer  
Area: Chromosome breakage analysis in squamous cell carcinoma of the head and neck  
Advisor: Susanne Gollin, PhD
- 2001 **Ometepe Biological Field Station**, San Ramon, Ometepe Island  
Field Researcher  
Area: Resource utilization of mantled howling monkeys living in a Nicaraguan tropical rain forest  
Advisor: Linda Winkler, PhD

**CANCER HEALTH DISPARITIES EXPERIENCE**

- 2017-  
Present **Pennsylvania Department of Health**, Harrisburg, PA  
Pennsylvania Cancer Coalition Cancer Genetics/Genomics Workgroup Member
- 2017-  
Present **Fox Chase Cancer Center**, Philadelphia, PA  
GMAP Region 4/Cancer Disparities Research Network Member
- 2017-  
2019 **Mid-Atlantic Regional Health Equity Council**, Rockville, MD  
RHEC III Cultural Competency Committee Member
- 2013-2014 **Johns Hopkins Center to Reduce Cancer Disparities**, Baltimore, MD  
GMAP Region 1 Trainee and CRCHD Speaker's Bureau Member
- 2011-2014 **Maryland Department of Health and Mental Hygiene**, Baltimore, MD  
Maryland Cancer Collaborative Cancer Disparities Committee Member
- 2011 **Maryland Department of Health and Mental Hygiene**, Baltimore, MD  
Office of Minority Health and Health Disparities Intern

**PUBLICATIONS****Peer-reviewed Manuscripts**

1. 2020 Sinha S.\*, **Mitchell K.A.\***, Zingone A., Bowman E., Sinha N., Schäffer A.A., Lee J.S., Ruppin E., Ryan B.M.  
**\*Authors contributed equally**  
Higher prevalence of homologous recombination deficiency in tumors from African Americans versus European Americans, *Nature Cancer*, doi: 10.1038/s43018-019-0009-7
2. 2019 **Mitchell K.A.\***, Nichols N.\*, Tang W., Walling J., Stevenson H., Pineda M., Stefanescu R., Edelman D.C., Girvin A.T., Zingone A., Sinha S., Bowman E., Rossi E., Arauz R.F., Zhu Y.J., Lack J., Weingartner E., Waterfall J., Pine S., Simmons J., Meltzer P., Ryan B.M.  
**\*Authors contributed equally**  
Recurrent PTPRT/JAK2 Mutations in Lung Adenocarcinoma among African Americans, *Nature Communications*, doi: 10.1038/s41467-020-14448-0, PMID: 31844068
3. 2019 **Mitchell K.A.**, Shah E. , Bowman E., Zingone A., Nichols N., Pine S.R., Kittles R., Ryan B.M.  
Relationship between West African Ancestry and Lung Cancer Risk Survival in African Americans, *Cancer Causes Control*, doi: 10.1007/s10552-019-01212-z, PMID: 31468279
4. 2019 **Mitchell K.A.**, Williams H.  
Emerging genomic biomarkers for improving kidney, prostate, and bladder cancer health disparities outcomes, *Urologic Oncology: Seminars and Original Investigations*, doi: 10.1016/j.urolonc.2019.04.024, PMID: 31239186
5. 2019 Meaney C.\*/**Mitchell K.A.\***, Zingone A., Brown D., Yu Y., Wenzlaff A.S., Pine S., Cao L., Schwartz A.G., Ryan B.M. **\*Authors contributed equally**  
Circulating Inflammation Proteins Associated With Lung Cancer in African Americans, *Journal of Thoracic Oncology*, doi: 10.1016/j.jtho.2019.03.014, PMID: 30953795
6. 2018 Erickson P., Gardner L.D., Loffredo C.A., St. George DM, Bowman E.D., Deepak J, **Mitchell K.A.**, Meaney C.L., Langenberg P., Bernat D., Am S., Ryan B.M.  
Racial and Ethnic Differences in the Relationship Between Aspirin Use and Non-Small Cell Lung Cancer Risk and Survival, *Cancer Epidemiology, Biomarkers & Prevention*, doi: 10.1158/1055-9965.EPI-18-0366, PMID: 30171037
7. 2018 Nichols N., **Mitchell K.A.**, Zingone A., Meaney C., Bowman E.D., Ryan B.M.  
Relationship between the TP53 SNP rs1800371 and Lung Cancer in African Americans, *Cancer Health Disparities*, doi:10.9777/chd.2018.10016
8. 2018 Houston K.A., **Mitchell K.A.**, King J., White A., Ryan B.M.  
Histologic Lung Cancer Incidence Rates and Trends Vary by Race/Ethnicity and Residential County, *Journal of Thoracic Oncology*, doi: 10.1016/j.jtho.2017.12.010, PMID: 29360512
9. 2017 **Mitchell K.A.**, Zingone A., Toulabi L., Boeckelman J., Ryan B.M.  
Comparative Transcriptome Profiling Reveals Clinically Relevant Coding and Non-Coding RNA Differences in NSCLC from African Americans and European Americans, *Clinical Cancer Research*, doi: 10.1158/1078-0432.CCR-17-0527, PMID: 29196495

### **Government Reports**

1. 2019 "Public Health Approach to Cancer Genetics/Genomics in Pennsylvania" for the Pennsylvania Comprehensive Cancer Control Plan, 2019-2024 edition, (Pennsylvania Department of Health), Harrisburg
2. 2011 "Chapter 3: Cancer Disparities-Social Determinants of Health" for the Maryland Comprehensive Cancer Control Plan, 2011-2015 edition, (Maryland Department of Health and Mental Hygiene), Baltimore

### **Book Chapters**

1. 2019 Addy T., Dube D., **Mitchell K.A.**  
"Chapter 14: Measuring the Impact of Pedagogical Efforts for Equity & Inclusion" for *Designing Student-Centered Classrooms for Equity and Inclusion Across Disciplines*, Rita Kumar and Brenda Rafael (University of Cincinnati Press), Cincinnati
2. 2016 Jeffries P.R., **Mitchell K.A.**, Clayton A., Jones E., Foronda C.  
"Chapter 17: MOOCs and Virtual Learning Spaces-A Withering of the Traditional Classroom" for *Professional Issues in Nursing*, 4th edition, Carol Huston *et al.* (Wolters Kluwer Health-Lippincott, Williams, & Wilkins), Philadelphia

### **ORAL PRESENTATIONS**

#### **Invited**

1. 2020 Kidney Cancer Research Summit 2020, Philadelphia, PA, 10/2020.  
"Clinically-Relevant genomic biomarkers for improving kidney cancer health disparities."
2. 2020 AACR Annual Meeting 2020, Pan-Cancer Distinctions in Tumor Biology Across Ethnicity and Genetic Ancestry Session, San Diego, CA, 4/2020. (Conference Cancelled: Rescheduled for Spring 2021)  
"Emerging genomic biomarkers for improving lung and kidney cancer health disparities in African Americans."
3. 2019 National Cancer Institute Fellows and Young Investigators Colloquium Academic Panel  
Rockville, MD, 3/1/2019.
4. 2018 Duquesne University Department of Biology Seminar Series, 10/5/2018.  
"The biology of public health: Studying biological and environmental determinants of lung cancer health disparities in African Americans."
5. 2018 NCI Sallie Rosen Kaplan Postdoctoral Fellowship for Women Scientists Alumni Panel  
Rockville, MD, 7/16/2018.
6. 2018 NCI Geographic Management of Cancer Health Disparities Program (GMap) Region 1 North  
CURE Webinar, 5/2018.
7. 2016 Morgan State University Annual Science-Mathematics-Engineering Fair Awards Ceremony  
Baltimore, MD, 3/19/2016.  
"Be a Transformer: From Student to Scientist."

**National (Peer-Reviewed Abstracts)**

8. 2014 Geographical Management of Cancer Health Disparities Program Conference  
Bethesda, MD, 6/2014.  
"DNMT3B (a *de novo* DNA methyltransferase) epigenetically regulates gene expression, independent of its DNA methyltransferase activity."
9. 2014 American Association for Cancer Research 105th Annual Meeting, San Diego, CA, 4/2014.  
"DNMT3B (a *de novo* DNA methyltransferase) epigenetically regulates gene expression, independent of its DNA methyltransferase activity."

**Campus**

10. 2020 Tri Beta Biology Honor Society Spring Biology Research Seminar, Easton, PA, 3/11/2020.  
"Emerging genomic biomarkers for improving lung and kidney cancer health disparities in African Americans."
11. 2018 TEDx Lafayette College, Easton, PA, 4/19/2018.  
"Science is super sketchy: Representation of Women and Scholars of Color in STEM."
12. 2018 Lafayette College Interdisciplinary Seminars in the Life Sciences, Easton, PA, 1/29/2018.  
"Predicting drug response, radon exposure, and lung cancer: What's race got to do with it?"
13. 2017 Lafayette College Biology Department Seminar, Easton, PA, 12/2017.  
"The biology of public health: Studying epigenetic and environmental determinants of lung cancer health disparities."
14. 2017 CCR Oncogenic Signaling Interest Group, Bethesda, MD, 4/2017.  
"Characterizing the CNV landscape in lung cancers from African Americans."
15. 2017 NCI Laboratory for Human Carcinogenesis Workshop, Bethesda, MD, 3/2017.  
"Characterizing the CNV landscape in lung cancers from African Americans."
16. 2016 Lafayette College Biology Department Seminar, Easton, PA, 12/2016.  
"The biology of lung cancer health disparities."
17. 2016 NCI Laboratory for Human Carcinogenesis Seminar, Bethesda, MD, 5/2016.  
"Geographical and biological determinants of lung cancer disparities."
18. 2016 NCI Laboratory for Human Carcinogenesis Workshop, Bethesda, MD, 3/2016.  
"The causes and consequences of lung cancer disparities."
19. 2015 CCR Oncogenic Signaling Interest Group, Bethesda, MD, 12/2015.  
"The causes and consequences of lung cancer disparities."
20. 2015 NCI Laboratory for Human Carcinogenesis Workshop, Bethesda, MD, 3/2015.  
"A comprehensive molecular characterization of lung cancer disparities."
21. 2015 SRK Fellows Symposium, Bethesda, MD, 2/2015.  
"A comprehensive molecular characterization of lung cancer disparities."

22. 2011 Johns Hopkins Institute of Genetic Medicine Seminar, Baltimore, MD, 10/2011.  
"Determining the relationship between the cancer-associated metabolite 2-hydroxyglutarate (2HG), TET proteins, and the CIMP phenotype in colorectal and breast cancer."

### **POSTER PRESENTATIONS**

#### **International (Peer-Reviewed Abstracts)**

1. 2018 McHayle A.\*, Boles A.\*, Diarra L.\*, **Mitchell K.A.**  
"Race and Immunotherapy Response Predictions: A Comparison of Non-small Cell Lung Cancers from African Americans and European Americans." Fifth AACR-IASLC International Joint Conference, San Diego, CA, 1/9/2018. **\*Lafayette College students**
2. 2017 **Mitchell K.A.**, Zingone A., Bowman E., Gustashaw K., Mellott S., Wu X., Ryan B.  
"Characterizing genome-wide copy number variation in lung cancers from African Americans." Gordon Research Seminar and Gordon Research Conference on Human Genetics and Genomics, Stowe, VT, 7/11/2017.

#### **National (Peer-Reviewed Abstracts)**

3. 2019 Cobb J.\*, Williams H., **Mitchell K.A.**  
"Predicting African American and European American patient response to kidney cancer immunotherapy by stage using the tumor microenvironment." Twelfth AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved, San Francisco, CA, 9/23/2019 **\*Lafayette College student**
4. 2018 Williams H., **Mitchell K.A.**  
"Integrative epigenomic and transcriptomic analyses of kidney cancers from African Americans and European Americans." Eleventh AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved, New Orleans, LA, 11/2/2018.
5. 2018 McHayle A.\*, Boles A.\*, Diarra L.\*, **Mitchell K.A.**  
"Epigenetics, regulation of cancer immunotherapy response genes, and race: A comparison of DNA methylation in non-small cell lung cancers from African Americans and European Americans." American Association for Cancer Research 109th Annual Meeting, Chicago, IL, 4/17/2018. **\*Lafayette College students**
6. 2017 Meaney C./**Mitchell K.A.**\*, Zingone A., Brown D., Tang W., Yu Y., Cao L., Wenzlaff A.S., Schwartz A. G., Ryan B. "Inflammatory based diagnostic markers of lung cancer in African Americans." American Association for Cancer Research 108th Annual Meeting, Washington, DC, 4/4/2017. **\*Authors contributed equally**
7. 2017 Ryan B., Loher P., **Mitchell K.A.**, Zingone A., Zhao Y., Shetty J., Tran B., Rigoutsos I.  
"Deep sequencing of lung cancer samples using different library preparation methods produces discordant short non-coding RNA profiles." American Association for Cancer Research 108th Annual Meeting, Washington, DC, 4/4/2017.

8. 2016 Meaney C./**Mitchell K.A.**, Zingone A., Brown D., Tang W., Yu Y., Cao L., Ryan B. "Inflammatory-based diagnostic markers of lung cancer in African Americans." Ninth AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved, Fort Lauderdale, FL, 9/26/ 2016. **\*Authors contributed equally**
9. 2016 **Mitchell K.A.**, Zingone A., Ryan B. "Unraveling the lung cancer transcriptome." 31st Aspen Cancer Conference, Aspen, CO, 7/18/2016.
10. 2015 **Mitchell K.A.**, Zingone A., Ryan B. "Lung cancer in African Americans is characterized by histone modifying enzyme gene signatures." Eighth AACR Conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved, Atlanta, GA, 11/14/ 2015.
11. 2015 Leikin J., Zingone A., Brown D., **Mitchell K.A.**, Khan M., Vidal O., and Ryan B. "Analysis of miR-21 isomiRs in lung cancer." AACR 106th Annual Meeting, Philadelphia, PA, 4/2015.
12. 2002 **Mitchell K.A.**, Floyd J., Winkler L. "Adaptive strategies and resource utilization of the mantled howling monkey (*Alouatta palliata*) in a small forest fragment in Nicaragua." American Association for Physical Anthropology 71<sup>st</sup> Annual Meeting, Buffalo, NY, 4/13/2002.
13. 2005 **Mitchell K.A.**, Johnston D., Trun N. "An Investigation of the mRNA Abundance and Expression Patterns for the Nine *csp* Genes in *E. coli* K-12." American Society for Microbiology Allegheny Branch Fall Meeting, Clearfield, PA, 11/2005.
14. 2005 **Mitchell K.A.**, Johnston D., Trun N. "An Investigation of the mRNA Abundance and Expression Patterns for the Nine *csp* Genes in *E. coli* K-12." University of Pittsburgh Science 2005: The New Research Ecology, Pittsburgh, PA, 10/2005.

**Campus (Peer-Reviewed Abstracts)**

15. 2016 **Mitchell K.A.**, Zingone A., Ryan B. "Unraveling the lung cancer transcriptome." NCI Symposium on Cancer Health Disparities, Bethesda, MD, 10/18/2016.
16. 2016 Meaney C./**Mitchell K.A.**, Zingone A., Brown D., Tang W., Yu Y., Cao L., Ryan B. "Inflammatory-based diagnostic markers of lung cancer in African Americans." NCI Symposium on Cancer Health Disparities, Bethesda, MD, 10/18/2016. **\*Authors contributed equally to this work**
17. 2016 Senkevitch E., **Mitchell K.A.**, Xia L., CCR-FYI Steering Committee, Roberts E., Mendoza K., Wiest J. "CCR Fellows and Young Investigators Association: Providing a Voice and Support for NCI Fellows" NCI Intramural Scientific Investigators Retreat, Washington, DC, 1/2016.
18. 2015 **Mitchell K.A.**, Zingone A., Ryan B. "Lung cancer in African Americans is characterized by a histone modifying enzyme gene signature." NIH Research Festival, Bethesda, MD, 9/2015.

19. 2015 Boeckelman J, Zingone A, **Mitchell K.A.**, Vidal O., and Ryan B. "Analysis of IsomiR-21 in lung cancer." NIH Summer Research Program Poster Day, Bethesda, MD, 8/6/2015.
20. 2015 Leikin J, Zingone A, Brown D., **Mitchell K.A.**, Khan M., Vidal O., and Ryan B. "Analysis of miR-21 isomiRs in lung cancer." NIH Symposium: RNA Biology 2015, Bethesda, MD, 3/12/2015.
21. 2015 **Mitchell K.A.**, Zingone A., Ryan B. "A Histone Modifying Enzyme Gene Signature in Lung Tumors from African Americans." NCI Symposium on Chromosome Biology: Chromatin, ncRNA, Methylation & Disease Symposium, Bethesda, MD, 4/16/2015.
22. 2015 **Mitchell K.A.**, Zingone A., Ryan B. "A Comprehensive Molecular Characterization of Lung Cancer Disparities." 15th Annual CCR Fellows and Young Investigator Colloquium, Rockville, MD, 3/23/2015.
23. 2014 **Mitchell K.A.**, Noon M., Easwaran H., Baylin S."DNMT3B (a *de novo* DNA methyltransferase) epigenetically regulates gene expression, independent of its DNA methyltransferase activity." National Human Genome Research Institute Advances in Genomics Research Summer Program, Bethesda, MD, 8/5/2014.
24. 2014 **Mitchell K.A.**, Noon M., Easwaran H., Baylin S."DNMT3B (a *de novo* DNA methyltransferase) epigenetically regulates gene expression, independent of its DNA methyltransferase activity." BWF MD GEM Genetics Research Day, Baltimore, MD, 2/28/2014.
25. 2006 **Mitchell K.A.**, Brown J., Pei W., Feldman B. "Visualizing RNA expression in early zebrafish embryos: a pilot study." National Human Genome Research Institute Annual Scientific Retreat, Gettysburg, PA, 11/2006.

## **TEACHING EXPERIENCE**

### **College and University Teaching**

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|-----------|---|
| 2017-     | <b>Lafayette College</b> , Easton, PA   |
| Present   | Molecular Genetics (Fall 2018-2020), Precision Medicine (Spring 2018-2020, Fall 2017)<br>Faculty  |
| 2015-2017 | <b>FAES Graduate School at the NIH</b> , Bethesda, MD<br>Precision Medicine (Spring 2017, Spring 2016), Personalized Medicine (Spring 2015)<br>Faculty  |
| 2010      | <b>Notre Dame University of Maryland</b> , Baltimore, MD<br>Genetics Lab (Spring 2010)<br>Associate Faculty   |
| 2004-2006 | <b>Duquesne University</b> , Pittsburgh, PA<br>General Biology Lab I (Fall 2004, Fall 2005) and General Biology Lab II (Spring 2005)<br>Microbiology Lab for Nursing & Physician Assistant Majors (Spring 2006)<br>Teaching Assistant |

**MOOC Teaching**

2016-2017 **George Washington University**, Washington, DC  
Health Care Safety (Summer 2016-Summer 2017)  
Coursera Teaching Staff

2014-2015 **Johns Hopkins University**, Baltimore, MD  
University Teaching 101 (Spring 2014, Spring 2015)  
Coursera Teaching Staff

**RESEARCH MENTORING EXPERIENCE**

2017- Present Integrative and Translational Laboratory for Applied Biology (IT LAB) at Lafayette College, Easton, PA (Mentee demographics: 18 females, 1 male; 3 Black, 1 Latina, 2 Asian, 13 White)

**Total IT LAB Research Successes: 29 Talks, 40 Posters, 1 Grant over 3 years**

**LAFAYETTE COLLEGE IT LAB RESEARCH STUDENTS**

Semester/Year	Student	Project	Presentation/Publication/Grant
<b>CURRENT</b>			
<b>Fall 2019-Present</b>	Maryum Cheema	Comparing Copy Number Profiles in African American and European Americans With Papillary Cell Renal Cell Carcinoma	2 Posters (1 campus, 1 national)
<b>Fall 2019-Present</b>	Erica Beatson	Comparing Copy Number Profiles in African American and European Americans With Clear Cell Renal Cell Carcinoma	2 Posters (1 campus, 1 national)
<b>Fall 2019-Present</b>	Hannah Green	The Long <i>HDAC7</i> Isoform Drives Sex Disparities in Female and Male Lung Cancer Patients	1 Talk (national) 1 Poster (campus)
<b>Fall 2019-Present</b>	Katie Hill	MicroRNA Regulation of <i>HDAC</i> Gene Expression in Females and Males with Lung Cancer	2 Posters (1 campus, 1 national)
<b>Summer 2019-Present</b>	Adina Shrestha	Exploring the Impact of Menthol Exposure on <i>UGT</i> and <i>CYP</i> mRNA isoform Expression in Lung Cancers from African Americans and European Americans	2 Talks (2 campus) 2 Posters (1 campus, 1 national)
<b>Summer 2019-Present</b>	Savanna Toure	African American-Enriched MicroRNA Isoform Expression Signatures Are Associated with Down-Regulation of Menthol Metabolizing Genes in Lung Cancer Patients	2 Talks (2 campus) 2 Posters (1 campus, 1 national)
<b>Fall 2018-Present</b>	Michaela Kufner	Exploring the relationship between menthol cigarette smoking, microRNA regulation, and racial disparities in lung cancer	1 Talk (state-wide) 2 Posters (1 campus, 1 regional)
<b>Fall 2018-Present</b>	Joelle Rabin-Court	Exploring Epigenomic and microRNA Expression Differences in Lung Cancer Sex-Disparities	1 Talk (state-wide) 3 Posters (1 campus, 1 regional, 1 national) 1 Grant
<b>Fall 2018-Present</b>	Grace Gibbons	Exploring Epigenomic and mRNA Expression Differences in Lung Cancer Sex-Disparities	2 Talks (1 campus, 1 national) 1 Poster (campus)
<b>PAST</b>			
<b>Fall 2018-Spring 2019</b>	Jacquelyn Cobb <i>Current: US Fulbright Fellow in India</i>	Predicting immunotherapy response in kidney cancer subtypes based on gene expression	2 Talks (1 state-wide, 1 national) 2 Posters (1 campus, 1 regional)

<b>Summer 2018- Spring 2019</b>	Andrew Hudak (Honors Thesis Student) <i>Current: MIT post-baccalaureate researcher</i>	Identifying a combined clinical classifier for kidney cancer subtypes based on immunotherapy protein expression  Differential expression of cancer immunotherapy target genes and protein abundance by race in non-small cell lung cancer patients	6 Talks (5 campus, 1 state-wide) 3 Posters (2 campus, 1 regional)
<b>Summer 2018</b>	Cameron Costello <i>Current: MPH student at Boston University</i>	Exploring the relationship between menthol cigarette smoking, gene regulation, and racial disparities in lung cancer	1 Poster (campus)
<b>Spring 2018- Spring 2019</b>	Chloe Triolo (Honors Thesis Student) <i>Current: Applying to medical school</i>	Race and immunotherapy response predictions: A comparison of non-small cell lung cancers from African Americans and European Americans  The evolution and ecology of lung cancer: Exploiting E&E principles to better understand response to natural products from medicinal plants	7 Talks (6 campus, 1 state-wide) 4 Posters (3 campus, 1 regional)
<b>Spring 2018- Spring 2019</b>	Jasmin Vargas <i>Current: Global Health Fellow at the National Cancer Institute</i>	Population differences in lung tumor immune cells and predicted drug response	2 Talks (1 state-wide, 1 national) 3 Posters (2 campus, 1 regional)
<b>Spring 2018</b>	Tina Yerdon <i>Current: Temple University School of Podiatric Medicine</i>	A review of molecular characterizations in parosteal osteosarcoma patients: Making the case for precision medicine in low-grade bone tumors	1 External Summer Research Grant (Applied, but not awarded)
<b>Fall 2017- Spring 2018</b>	Allison McHayle <i>Current: Medical student at Warren Alpert Medical School of Brown University</i>	Profiling the genetic basis of DNA methylation in lung squamous cell carcinoma from African American and European American patients	1 Talk (national) 3 Posters (1 campus, 1 national, 1 international)
<b>Fall 2017- Spring 2018</b>	Amy Boles <i>Current: MPH student and Research Technician at Thomas Jefferson University Department of Medical Oncology</i>	Comparative profiling of DNA methylation in normal lung tissues from African Americans and European Americans with lung cancer to identify disease risk loci	1 Peer-reviewed proceeding 1 Talk (national) 3 Posters (1 campus, 1 national, 1 international)
<b>Fall 2017- Spring 2018</b>	Lysa Diarra <i>Current: Scientist at Booz Allen Hamilton</i>	Profiling the genetic basis of DNA methylation in lung adenocarcinoma from African American and European American patients	1 Talk (national) 3 Posters (1 campus, 1 national, 1 international)
<b>Fall 2017</b>	Lauren Tarapata <i>Current: Senior</i>	Profiling the genetic basis of DNA methylation and lung cancer risk in healthy African Americans and European Americans	1 Poster (campus)

2014-  
2017

NCI CCR FYI Postbac Committee Advisor, Bethesda, MD  
 Programs: Clinical Collaboration (health professions focused), IDP IQ (research careers focused) (Mentee demographics: 4 females, 2 males; 3 Black, 0 Latino, 1 Asian, 2 White)

2008-2014 Junior Research Scholars, Inc., Baltimore, MD  
Founder (Mentee demographics: 9 females, 9 males; 17 Black, 0 Latino, 0 Asian, 1 White)  
A rigorous, high quality STEM education, college and graduate school preparation, and career mentorship program for disadvantaged young people.

**Teaching and research mentorship portfolios available upon request.**

### **SERVICE LEADERSHIP**

#### **Service to Profession**

2020 **Pennsylvania Department of Health Office of Health Equity**  
Co-Lead of the Racial and Ethnic Minorities Task Force for the COVID-19 Health Equity Response Team

2020 **Molecular Carcinogenesis**  
Peer Reviewer

2019 **US Department of Education Office of Postsecondary Education**  
STEM Peer Grant Reviewer for the Minority Science and Engineering Improvement Program (MSEIP)

2017- Present **Pennsylvania Department of Health**  
Division of Cancer Prevention and Control and Bureau of Health Planning

2017 **American Association for Cancer Research**  
Annual Conference Undergraduate Student Caucus, Mentor, Reviewer, and Poster Judge

2016 **Annual Biomedical Research Conference for Minority Students**  
Poster Judge

2012-2014 **Morgan State University Math-Science-Engineering Fair**  
Steering Committee Member

2012-2014 **U.S. Department of Health and Human Services**  
Health Resources and Services Administration Federal Field Grant Reviewer

2013 **Maryland Governor's Office on Service and Volunteerism**  
AmeriCorps Grant Reviewer

2009-2010 **American Society of Human Genetics**  
Genetics Education Curriculum and State Science Standards Committee Reviewer

#### **Service to Institution**

##### **Lafayette College**

2019- Present **Faculty Academic Policy Committee Member**  
Charged to work with, and render advice to, the President and the Provost on all significant matters of concern to the Faculty that affect the academic life of the College.

2018- Present **Lafayette LEADERS Program**  
Coordinator for the Leadership and Enrichment Academy for Diverse Emerging Researchers and Scientists Program for natural science majors.

2018- Present **Tri Beta Biology Honor Society Faculty Advisor**  
Assist and advise members and officers in carrying out programs, and aid in developing new policies and programs that contribute to chapter effectiveness.

2018- Present **Lafayette College First Generation Mentoring Program**  
Meet monthly with mentee to help navigate personal and professional challenges.

**NIH/NCI**

- 2016 **NIH Office of Intramural Training and Education**  
Postbac Poster Day Judge
- 2016 **NCI Center to Reduce Cancer Health Disparities**  
CURE Workshop Poster Judge
- 2014-2017 **NCI CCR Fellows and Young Investigators Association**  
Postbac Committee Advisor (2015-2017)  
Co-Chair (2015-2016)  
Federal Jobs Workshop Chair (2014-2015)

**JHU**

- 2011-2012 **Johns Hopkins Medicine Collaborative Planning Team**  
Invited Member
- 2009-2011 **Johns Hopkins Institutions Diversity Leadership Council**  
Selected Member
- 2008- 2011 **Johns Hopkins Biomedical Scholars Association**  
Community Service Chair (2010-2011)  
President (2009-2010)  
Programming Vice-President (2008-2009)

**PROFESSIONAL MEMBERSHIPS**

American Association for Cancer Research