# Cleveland O. Lane Jr., PhD.

## **EDUCATION**

Texas A&M University, (College Station, TX) (8/2010)

Doctorate of Philosophy - Science Education

Prairie View A&M University, (Prairie View, TX) (8/1996)

Masters of Science - Biology

Prairie View A&M University, (Prairie View, TX) (5/1994)
Bachelor of Science – Biology/Chemistry

#### TEACHING EXPERIENCE

- 2013-Present BIOL 1054 Anatomy/Physiology I; BIOL 1064 Anatomy/Physiology II, BIOL 3064 Histology, BIOL 3054 Gross Anatomy, BIOL 5053 Air Pollution, BIOL 4043 Biology for Teachers, 5003 Independent Studies; Community College: BIOL 2404 Anatomy/Physiology, BIOL 2401 Anatomy and Physiology I
- 2008-2013 BIOL 1034 Botany/LAB; BIOL 1054 Anatomy/Physiology I/LAB; BIOL 1064 Anatomy/Physiology II/LAB; Anatomy and Physiology I/LAB, Biology 3064 Histology/LAB; BIOL 5053 Air Pollution/LAB, BIOL 4043 Biology for Teachers/LAB; 5003 Independent Studies, Lone Star College: BIOL 2404 Anatomy/Physiology/LAB; BIOL 2401
- 1999-2007 BIOL 1015 General Biology Labs; BIOL 1025 General Biology Labs; BIOL 1113 College Biology; BIOL 1111 College Biology Laboratories
- 1996-1997 BIOL 1113 College Biology; BIOL 1111 College Biology Laboratory
- 1994-1996 BIOL 1015 General Biology Labs; BIOL 1025 General Biology Labs; BIOL 1111 College Biology Laboratory

#### PROFESSIONAL INTERESTS

- Integration of STEM Technology into Middle School, High School and Undergraduate Instruction
- Collaboration between Education and STEM Disciplines
- STEM Teacher and Professional Development
- Virtual and Simulation Learning Environments
- STEM K-16 Student and Teacher Outreach

# PROFESSIONAL EXPERIENCE

# RESEARCH / INTERNSHIPS

- Differential Effects of Manipulation of Endoplasmic Reticulum Data sets using Image J Analysis Software for Conceptual Understanding in General Biology course *Thesis*
- Pathogenesis of Sickle Cell Disease on the Retina UMDNJ Newark, NJ Summer Research
- Mycotoxin Production and Oil Degradation Prairie View A&M University Research Assistant
- Information Technology in Science Science Education Specialist Program Texas A&M University Graduate Student
- Information Technology in Science Science Education Specialist Program Texas A&M University

#### **Publications/Citations**

Lane, C. & Freeman, P. (2018) *Increasing STEM diversity*. Abstract submitted to American Educational Research Association. (Pending)

Lane, C., Mndeme, S., Freeman, P. & Freeman, L. (2018) *Students and Teachers Enhancing Performance in Science (STEPS)*. Paper presented Hawaii University International Conferences on STEM/ STEAM, Honolulu, Hawaii, ISSN 2333-4908

Moore, Q., Olorunyomi, E., Dubose, M. & Lane, C. (2017) Assessment of Keratitis Damage in an Age Dependent Mouse Model Using Analytical Software. Pursue Journal (1)1.

Lane, C. (2016) *Pilot Study: Integration of 3-D Dissection Table into Undergraduate Gross Anatomy Course*. The FASEB Journal. Volume 30, Issue 1 Supplement.

#### **Presentation**

Lane, C. (2018) Students and Teachers Enhancing Performance in science (STEPS), Hawaii University Proceedings for International Conferences on STEM/ STEAM, Honolulu, Hawaii (Speaker)

Lane, C. (2018) McGraw-Hill sponsored Integrating Anatomy and Physiology Revealed in your Anatomy and Physiology Courses, Human Anatomy and Physiology Conference, Columbus, Ohio (Speaker)

Lane, C. (2017) Application of Anatomy teaching with Innovative Technology, China Medical University, Taichung, Taiwan (Invited Keynote Speaker)

Lane, C. (2017) Best practices of undergraduate instructional technology, PVAMU S.M.A.R.T. Technology Conference, Prairie View, Texas (Keynote Speaker)

Lane, C. (2017) Pre-Health Advisory, Empower 2, Preparing a Competitive HBCU applicant pool for Health Science Career, Nashville, TN (Invited Speaker)

Lane, C. (2016) Integration of 3-D dissection table into Gross Anatomy Course, TAMU Teaching with Technology Conference, College Station, Texas (Speaker)

Lane, C. (2016) McGraw-Hill sponsored Innovative Teaching Summit, Houston Community College, Houston, Texas (Speaker)

Lane, C. (2016) Best practices for using a Virtual dissection table in an Undergraduate course, Anatomage User group. San Jose, CA (Invited Speaker)

Lane, C. (2014) Using apps in Biology Undergraduate Instruction, TAMU Teaching with Technology Conference, College Station, Texas (Speaker)

# **Research Mentorships**

# **Doctoral Dissertation Committees**

The Principal as A Change Agent in A Turnaround School A Single Site Phenomenological Case Study -Tony Hancock 12-1-14

An Exploratory Study of African American Developmental Students' Learning Styles and Other Academic Factors At A Historically Black College In The South Central Region Of Texas - Lisa A. Waldrup-Johnson 12-13-14

An Investigation of African American Students Achievement in Mathematics Enrolled in High and Low Achieving Elementary Schools - Gene Simmons 12-13-14

The Impact Of A Turnaround Program On Drop Out And Graduation Rates Of African American And Hispanic Students Attending An Urban School District In Texas - Classie Terry-Williams 8-8-15

Factors That Impact Academic Success and Persistence of First-Time Freshmen Students in A Living-Learning Community at A Historically Black College and University in Texas: A Quantitative Causal Predictive Study-Machara Delaney 12-10-16

Research On Reading Interventions for Instructional Leaders of African American Kindergarten Students in Texas -Danyelle Simone Reece 12-10-16

Young Elected Official's Emotional Intelligence, Transformational Leadership, And Priorities of Educational Policies: An Exploratory Study- Brian E. Rowland 05-13-17

#### **Masters**

An Analysis of Particulate Air Pollution from a Houston Residential Neighborhood – **Charles McFails** 

# Undergraduate

IRise-Up 3<sup>rd</sup> Place Poster Presentation (2016) – Prairie View A&M University

Robert Ponton

STEP- Summer Internship- Prairie View A&M University (2015)

Mentor for Emmanual Olorunyami

L-SAMP Louis Stokes Alliances for Minority Participation (LSAMP) (2014)-Prairie View A&M University

Mentor for DeMarcus Briers

Biology Research Symposium (2013- Present) Judge

# **Student Organization, Activities and Awards**

- Pre-Dental Club (Advisor)
  - o Early Acceptance program Texas A&M College of Dentistry
  - o Early Acceptance program University of Texas San Antonio
  - o Early Acceptance program University of Texas Houston
  - Middle school Density day
- Peer Pre-Natal Educators (Advisor)
  - o Hosted State Pre-Natal Training (2013, 2018)

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- Minority Association of Pre-Health Students (Advisor)
  - o Annual Health Profession Conference (Since 2000)
  - Outstanding Student Organization (2011)
  - o Presidents Cup Award (2011)
  - Outstanding Service Award (2011)

## **COMMITTEES**

• PVAMU 2020 SACS Faculty Development committee (2018)

- Academic Governance
- Faculty Development
- Baylor College of Medicine Center of Excellence in Health Equity's Inaugural Research Summit (2018) Judge
- Baylor College of Medicine: Center Of Excellence Advisory Council (2017-Present)
- Faculty Senate (Member at large, 2017; Vice Speaker, 2018)
- Texas Association of Advisors for Health Professions (Executive Board: Member at Large, 2016-2018)
- Department of Biology Self Study Co-Chairperson (2017)
- Curriculum Advising and Program Planning (CAPP) Trainer, University, 2013-2016
- Academic Affairs Technology Council, Member, 2016, 2017, 2018
- DegreeWorks Advisory Committee, Member, 2016, 2017
- Business of the University Conference Committee, Member, 2016, 2017, 2018
- Prairie View A&M University Retention Committee-Member
- Human Anatomy and Physiology Committee-Member
  - Curriculum and Instruction Committee
- Nursing School Retention Committee-Anatomy and Physiology Representative
  - Evaluate Setup a preparatory module for pre-nursing students and
- Anatomy and Physiology Instructional Committee- Chairperson
  - Amended curriculum, added additional BIOPACS, case studies, oral and written presentation, and statistical component
- Biology Curriculum Assessment & Learning Outcomes-Member
  - Acquired necessary martials to pass to accreditation periods
- Biology Recruitment and Retention Committee-Chairperson
  - Each year the department has maintained a steady growth and Largest Department in the Life Sciences and Second Largest in the College of Arts and Sciences
- Environmental Health and Safety Advisory Committee-Member
  - Set University Environmental Health and Safety policy
- National Council for Accreditation of Teacher Education (NCATE) Member
  - Prepared the Life Science component for NCATE accreditation
- Biology Instructional Technology and Laboratory Development –Chairperson
  - Introduction of Biomedical equipment, iPads, SmartBoards, Built-out Bioinformatics laboratory, Animal facilities and Teaching Laboratories

#### PROFESSIONAL DEVELOPMENT AND PROGRAMS

- Prairie View A&M University Grant Writing (2013,2017)
- National Center for Case Study Teaching in Science-Scholar recipient and participant (2011)
- P.H.I.L.S. software for McGraw-Hill-Software Reviewer (2010)
- iCLICK Conference-Reviewer (2011)
- McGraw-Hill Anatomy Symposium-Reviewer (2010)
- National Cancer Institute Contract Workshop
- ITS-Science Education Specialist Certificate Program
- Presenting Data and Information Edward Tufte
- Professional Grant Development Workshop
- Health Careers Opportunity Program Assistant Director (6 Years)
- ITS-Science Education Specialist Certificate Program CRP (2 Years)
- NASA-Pre-Service Science Institute Science Educator (3 Years)
- Introducing Technology in Classroom for K-12 Science Technology Educator (1 Year)
- Training for Faculty in Instructional Technology (Monthly)

#### FUNDED PROJECTS AND PROGRAMS

- (2017) Curriculum Developer- Bee Busy DREAMS project ( 5 year project)- Curriculum Developer
- (2017) PVAMU-Mini Grant: Exploring Biology Through Inquiry (\$20,000)
- Increasing Critical Thinking in Biology Laboratories, \$125,000per year / 5 years, Assistant Director
- Technology Supported Inquiry Learning in Laboratories, \$125,000 per year / 5 years, Assistant Director
- Reform of Undergraduate and Graduate Curriculum, \$125,000 per year / 5 years, Assistant Director
- Lecturer Series Partnership between Prairie View A&M University and Kashmere High School, \$2,000, Director
- Prairie View A&M University and Kashmere High School Science Camp, \$2,000, Director
- Health Careers Opportunity Program- Pre-Medical Concepts Institute, \$250,000/6 years, Assistant Director
- Health Careers Opportunity Program- Middle Science Concepts Institute, \$50,000/6 years, Assistant Director

#### HONORS AND AWARDS

- Chancellor's Academy of Teacher Educators (2018)
- Colligate 100 Service Award (2017)
- PVAMU Leadership (2016)
- Brailsford College of Arts and Sciences Faculty of the Year (2013)
- Prairie View A&M University Biology Department Faculty of the Year (2013)
- Prairie View A&M University Advisor of the Year (2011)
- Prairie View A&M University Student Organization of the Year (2011)
- Prairie View A&M University Presidents Award of the Year (2011)
- Texas A&M University System Teacher Excellence Award (2010)
- Minority Association Pre-Health Students Leadership Award (2008)
- Prairie View A&M University Service Award (2003)

## **Professional MEMBERSHIPS**

- Texas Association of Advisors for Health Professions (Executive Board: Member at Large, 2016-2018)
- Human Anatomy and Physiology Society (Committee: Curriculum and Instruction)
- American Association of Anatomist
- American Association for the Advancement of Science
- National Association of Research in Science Teaching
- National Science Teachers Association
- Texas Association of Black Professional in Higher Education
- Omega Psi Phi Fraternity, Incorporated.