# Cari Roark Sloma, PhD, D(ABMM)

#### **EDUCATION**

Post-doctoral fellowship in Medical Microbiology	2005 -2007
Mayo Clinic School of Graduate Medical Education	
PhD in Immunology	2005
Mayo Clinic College of Medicine	
B.S. in Biology	1999
McMurry University	

#### **CREDENTIALS**

Diplomat, American Board of Medical Microbiology

Highest credential available to practicing medical laboratory microbiologists.

Under the Clinical Laboratory Improvement Act of 1988 (CLIA '88), board certification qualifies MD and PhD level clinical microbiologists to serve as laboratory directors.

#### **EMPLOYMENT HISTORY AND ACCOMPLISHMENTS**

FEB 2020 - PRESENT

Laboratory Director, Wyoming Pubic Health Laboratory, Cheyenne, WY

- Oversee all activities of the Chemical Testing Program, Microbiology Program, and Preparedness Laboratory Program
- Direct and guide activities to support existing, new, and changing state and federal public health initiatives
- Oversee and manage the laboratory's multi-million dollar budget supported by state funds, federal funds, and revenue
- Liaise and collaborate with local, state, and federal partners to establish goals and deliverables
- Lead process improvements to promote efficiency and technological advances
- Direct and lead the quality assurance program of the laboratory according to CLIA regulations, including:
  - Development, review, and updating of standard operating procedures and policies,
  - Ensuring staff have the appropriate education, training, and documentation of training and competency
  - Review of proficiency testing results
  - o Oversight of all corrective and preventative actions
  - o Review and develop performance measures
  - Leading quality improvements
- Oversee the activities over 25 staff
- Leadership the state laboratory's SARS-CoV-2 response which included
  - o Implementation and expansion of 3 new testing workflows
  - o Implementation of an electronic ordering and test resulting system
  - o Procurement and implementation of over 50 new instruments
  - Coordination with laboratories across the state to ensure state-wide access to specimen collection supplies and federally-allocated testing supplies

o Ensuring long-term care facilities had access to high quality testing and specimen collection supplies

FEB 2018 - FEB 2020

## Manager, Serological Analysis Group, Texas Department of State Health Services Laboratory, Austin, TX

- Directed the operations and activities of the serology laboratory
- Liaised and collaborated with laboratory leadership, public health programs, clinical partners, federal agencies, and other customers and partners
- Consulted with customers to determine their needs and resolve customer concerns and complaints
- Evaluated the fiscal needs of the laboratory, formulated budgets and personnel needs for grant and legislative proposals
- Direct the quality assurance program of the laboratory according to CLIA and CAP regulations
- Supervise group personnel through monitoring, coaching and evaluating
- Lead hiring efforts
- Established goals for the group and assisted with goal setting activities for the branch
- Collaborated across departments to make strategic decisions for state-wide tuberculosis testing
- Led efforts to complete 3 Biosafety risk assessments to improve workflow and safety in the serology laboratory
- Designed and implemented verification and validation studies for new tests and testing methodologies
- Improved team communications and morale
- Initiated personal development plans for each direct report. Designed a leadership structure for the group that allowed staff more autonomy, opportunities for training, and opportunities to grow and distinguish themselves.
- Lead cross-functional teams to facilitate major technology and organizational changes

DEC 2015 - APR 2018

# State Laboratory Training and Continuity of Operations Coordinator, Texas Department of State Health Services Laboratory, Austin, Texas

- Developed, implemented, tracked, and critiqued Texas LRN member training for LRN sentinel and Biosafety Level III facilities.
- Maintained, reviewed and revised, exercised, and improved the DSHS Laboratory Business Continuity Plan used to restore and sustain mission critical operations during an emergency response event.
- Provided other guidance, consulting, and project management for laboratory projects and initiatives.
- Planned and coordinated special laboratory-wide National Preparedness Month activities
- Designed and created laboratory preparedness training materials for state-wide use
- Key team member in the laboratory-wide strategic planning and business capability modeling initiatives
- Assisted with laboratory safety projects, and assisted with the development of the laboratory's **Emergency Action Plan**
- Authored a laboratory leadership training policy and participated in a lab-wide leadership training workgroup and grant applications.

AUG 2013 - DEC 2015

National Instructor and Content Development Consultant, Becker Professional Education, Nationwide

- Delivered efficient and engaging review lectures to medical students preparing for their United States Medical Licensing Examination (USMLE).
- Provided helpful, constructive, and informative feedback to students. Develop insightful curriculum of appropriate depth and breadth.
- Constructed rigorous and thoughtful practice questions in microbiology and immunology
- Improved curriculum to make it more logical and understandable.
- Authored over 100 practice questions that are described as "thoughtful" and "challenging".
- Described by students as an "enthusiastic" and "knowledgeable" educator

#### AUG 2009 - AUG 2013

## Assistant Professor, Department of Microbiology and Immunology, Ross University Medical School, Commonwealth of Dominica, West Indies

- Prepared and presented lectures covering medical microbiology and immunology.
- Provided supporting materials for lectures and examination questions.
- Facilitated large and small-group learning sessions.
- Successfully sparked collaboration across departments.
- Improved student learning and exam performance by re-designing curriculum.
- Designed and developed tools that allowed for tracking student performance on exams, improving departmental efficiency.
- Served as the Semester 3 Progressive Academic Education coordinator
  - o Scheduled, coordinated and facilitated Team Based Learning quiz and case sessions
  - Coordinated the development of integrated cases
- Served as Semester 3 Heme Lymph Module Director
  - o Participated in the development and implementation of a systems-based curriculum
  - o Facilitated discussions towards integration of basic science material from different disciplines
- Designed, developed and facilitated interdepartmental cases
- Provided academic support to individual students
- Authored and reviewed exam questions
- Served on the university Environment Committee and Institutional Review Board (IRB) Committee
- Increased the rigor and consistency of IRB Committee activities by improving policies, processes, and accountability measures.
- Participated and lead medical education journal clubs
- Participated on the Institutional Review Board and
- Served as the faculty sponsor for 2 student social organizations
- Consistently received high student ratings for quality of lectures, materials

#### Feedback from students:

- "Hard to say how she could improve because she did a superb job."
- "Caring, interested in teaching, helpful."
- "One of the better lecturers here, and probably the best for microbiology..."

#### JAN 2008 - DEC 2008 VIRACOR-IBT LABORATORIES

## Assistant Laboratory Director, ViraCor – IBT Laboratories, Lee's Summit, MO

- Oversaw daily operations of a clinical laboratory performing tests over a variety of testing platforms and workflows.
- Participated in the planning, implementation, coordination, monitoring and evaluation of the resources and activities of the clinical laboratory.

- Supervised the performance of serological, immunological, and molecular techniques for the diagnosis of infectious disease.
- Ensured that all test systems were properly operating and that all test results are accurate, robust, and clinically meaningful.
- Oversaw laboratory quality control safety.
- Ensured standard protocols and proper quality controls were established, and verified quality control and preventive maintenance procedures were followed and documented.
- Ensured technical staff were trained to a level of competence required for their position and competency was maintained according to regulatory standards.
- Collaborated with the research and development team to facilitate the in development and implementation of new analytical and testing techniques and methods.
- Managed the improvement of the Laboratory Information Management System.
- Supervised personnel through monitoring, coaching and evaluating.
- Lead a collaborative initiative that boosted efficiency in the development, evaluation, review and revision of policies, processes and procedures
- Boosted the laboratory's safety policies and procedures
- Improved the efficiency of quality control processes and documentation
- Increased laboratory efficiency and team satisfaction through re-structuring and improving the laboratory management team
- Increased the accuracy and informational value of laboratory reports to physicians
- Collaborated across departments to streamline the assay implementation process

## **Continuing Education and Fellowships**

2010 Essential Skills in Medical Education Certificate in Medical Education

2018 – 2019 APHL Emerging Leader Fellowship

2017 – 2018 CDC E-learning Fellowship

2017 FEMA Master Continuity Planner

#### **Memberships and Committee Service**

Member, Association of Public Health Laboratories (APHL) - Current

Member, APHL Public Health Preparedness and Response Committee - Current

Member, APHL Viral Hepatitis and HIV Subcommittee - Current

#### **Publications and presentations**

#### **Presentations at National Meetings (2021)**

"Maintaining Laboratory Preparedness during Disasters and Pandemics" at National Association of County Health Officials Annual Meeting, April 13, 2021.

"(A Game of) Whack-A-Mole: How Do We Change the Game Post-pandemic?" at Association of Public Health Laboratories Annual Meeting. May 14, 2021

"A Race to Detect SARS-CoV-2 Variants and Mutations" at Association of Public Health Laboratories Annual Meeting, May 19, 2021

#### **Publications:**

Charlton, C, Hull, NC, Sloma, CR, Bonifas, M, Johnson, M, Strain, A, Wolford, T, Staley, S, Perkins, C, Razzaque, R, Courtney, C, and Bind E. in press. How to Prepare for the Unexpected: A Public Health Laboratory Response. J Clin Microbiol.

Coombs, M, Dutelle, DM, Sloma, CR. Specificity and Workflow of the Bioplex HIV Ag-Ab Assay in Routine HIV Screening at a Public Health Laboratory. Abstr 2019 HIV Diagnostics Conference.

Drummelsmith, J, Sloma CR. Hand hygiene practices and perception of handwashing effectiveness training among 2<sup>nd</sup> year medical students. Abstr 13<sup>th</sup> Annual Microbiology and Immunology Educational Strategies Workshop.

Sloma, CR, Germer, JJ, Gerads, TM, Mandrekar, JN, Mitchell, PS, Yao, JDC. 2009. Comparison of the Abbott RealTime Human Immunodeficiency Virus Type 1 (HIV-1) Assay to the Cobas AmpliPrep/Cobas TagMan HIV-1 Test: Workflow, Reliability, and Direct Costs. J. Clin. Microbiol. 47:889-895

Sloma, CR, Grys TE, and Razonable, R. 2008. Cytomegolovirus. p.69-89. In Hayden, RT, Caroll, KC, Tang, Y.-T., Wolk, D.M. (ed), Diagnostic Microbiology of the Immunocompromised Host. 2<sup>nd</sup> ed. ASM Press. Herndon, VA.

Sloma, CR, Hansen MJ, MacDougall, AA, Van Keulen VP, Jenkins, RP, Pease, LR. 2005. A class I transgene reveals regulatory events on chromosome 1 marking peripheral T cell differenctiation and memory. J Immuol. 174:7564-7572

Johnson, AJ, Mendez-Fernandez, YV, Moyer, AM, Sloma, CR, Priko, I, Block, MS, Pease, LR. 2005. Antigen-specific CD8+ T cells mediate a peptide-induced fatal syndrome. J Immunol. 174:6854-6862