AIM 2 – Education & Training
Kick-Off Meeting, Galveston National Laboratory, June 20-21, 2017

Goal: Long-term education & training for the next generation of public health entomologists and related disciplines.

Counterparts:
Texas A&M University, Pete Teel and Craig Coates
University of Texas Medical Branch, Saravanan Thangamani
University of Texas Rio Grande Valley, Christopher Vitek
AIM 2 – Academic Programs in Vector Biology

- Relevant Disciplinary Degrees (B.S., M.S., Ph.D.)
- Undergraduate Certificate in Public Health Entomology – since 2013
- Online delivery modules (4 topics – new)
- Graduate Certificate in Vector Biology (new)
- Certification in arthropod containment (ACL-2 & ACL-3) and pathogen transmission (new)
- Exchanges for Institutional Cross Training (new)
- Student Internships (public & private sector links)
- Student Research in Vector Biology
AIM 2 – Four New Online Modules

• **Topics**
  – *Vector Biology and Ecology*
  – *Vector Colony Establishment & Maintenance*
  – *Vector Surveillance Methods*
  – *Vector-borne Disease Outbreak Response & Mgmt*

• **Design**
  – Texas A&M AgriLife Communications
  – Instructional design team, Dr. Holly Whitaker, Coordinator

• **Structure**
  – 15 hours per module, asynchronous/self-paced
  – Automated assessment
  – Associated automated analytics of users

• **Delivery**
  – Pilot Spring 2018, Launch Summer 2018
  – Twice yearly updates
AIM 2 - Integration of Education and Outreach

CDC Western Gulf Center of Excellence in Vector-borne Diseases

- Short & long-term training

Public Health Practitioners

Government Officials (Municipal, County, State)

Private Sector Companies

Future Professionals (Undergraduate/Graduate Students/Post-docs)

In-Service Training
Face-to-Face/Online
5 Topic Areas w/Certification
Master Vector-Borne Disease Management Certification

New Online Courses
- Vector Biology & Ecology
- Vector Colony Establishment & Maintenance
- Vector Surveillance Methods
- Vector-Borne Disease Outbreak Response & Mgmt

Institutional Programs with Concentration
- Disciplinary Degrees
- Undergraduate Certificate in Public Health Entomology
- Graduate Certificate in Vector Biology
- Student Exchanges for Institutional Cross Training
- Certification in arthropod containment (ACL-2 and ACL-3)
- Student Internships (public and private)
- Student Research in Vector Biology

Internships/Employment
AIM 2 – Academic Certificate in Vector Biology

• Subject matter concentration
• Graduate Level
• 13 University Credits
• Transcript verification
• 2017-18 Institutional Approvals
• Launch Fall 2018

Course menu in 3 categories:
1. Medical Entomology (4 credits)
2. 2 courses (6 credits) from supporting topics e.g., epidemiology, public health, ecology, wildlife, genomics, public policy, toxicology (6 credits)
3. Capstone Course – 3 modules plus outbreak project (3 credits)
AIM 2 – Certification in Arthropod Containment and Pathogen Transmission (ACL-2 and ACL-3)

• 2-Week Intensive – Theory & Practice
• Launch – Spring 2018
• Galveston National Laboratory, UTMB
  1. Biosafety (BSL-2 and BSL-3)
  2. Arthropod Containment (ACL-2 and ACL-3)
  3. Practicum in mosquito-borne arboviruses
  4. Practicum in tick-borne arboviruses
  5. Practicum in tick-borne rickettsia
  6. Assessment of core competencies
AIM 2 - Exchanges for Institutional Cross Training

• Designed for graduate students and post-docs at participating institutions

• Fall 2017 – Data Collection
  – **Experience:** e.g. Insect Rearing, Micro-injection, In situ Hybridization, Cell Culture, Bioinformatics, Surveillance
  – **Capacity:** # Slots, Length, Frequency, Seasonal Timing
  – **Cost:** Transport, Housing, Meals, Laboratory Supplies
  – **Training Requirements:** Biosafety, ACL 2/3, Health Monitoring/Vaccination

• Spring 2018 – Advertising, Application, Assessment, Reporting
AIM 2 – Undergraduate Internships

• Fall 2017 – Data Collection
  – *Position Descriptions*: Experience, Paid/Unpaid, etc.
  – *Capacity*: # Slots, Length, Frequency, Seasonal Timing

• Spring 2018 – Advertising, Applications, Reporting from Student and Supervisor

• Accept Applications from any Undergraduate Students within Western Gulf Center Coverage Area
AIM 2 – Student Research in Vector Biology

- **Spring 2017 onwards** – reporting of undergraduate research students in participating laboratories + collection of research project titles, single slide summary for website presentation

- **TAMU Entomology**
  - Spring ’17: Slotman (2)
  - Summer ’17: Myles (2), Slotman (1)