SMG 1245.13

FDA Staff Manual Guides, Volume I – Organizations and Functions

Department of Health and Human Services

Food and Drug Administration

Center for Veterinary Medicine

Office of Applied Science

Division of Emerging Technologies

Effective: September 30, 2022

1. **Division of Emerging Technologies (DCGED).**
   A. Conducts research in support of the President's Food Safety Initiative.
   B. Conducts research to develop detection procedures for foodborne pathogens, including fish, in animal feeds, animal feces, manure, animal derived food, and the environment.
   C. Conducts research to determine the contribution of animal feeds to the pathogen load, including resistant pathogens, in food producing animals.
   D. Conducts research to determine the fate of pathogens in animal feeds to include the development of procedures to preclude the proliferation of pathogens in animal feeds, including antibiotic free and antibiotic containing feeds.
   E. Develops molecular/genetic methods for characterization of human pathogens, including antibiotic resistant pathogens, in animal feeds and the environment (including feces and manure).
   F. Conducts research to determine the effect of multiple drugs/multiple routes/multiple exposures on development of resistant pathogens and pathogen load.
   G. Conducts research to determine management of practices and develop intervention strategies to preclude the development of resistant pathogens in animals receiving antibiotics.
   H. Provides expert review of technical data regarding development of food borne pathogens, including resistant pathogens, submitted for antibiotics for use in food producing animals.
   I. Serves as the Center experts prescribing data requirements for new antibiotics pre- and post-approval.

2. **Computational Biology Branch (DCGEDA).**

   A. Develops and maintains operational instrumentation, software, and high-performance computing to best protect human and animal health.

   B. Transfers, processes, stores, and analyzes data sets for projects involving genomics, molecular, cellular, and high-resolution mass spectrometry of increasing size and complexity.

   C. Acquires and analyzes genomic data for programs like NARMS and Vet-LIRN.

   D. Conducts proper maintenance of existing instrumentation.

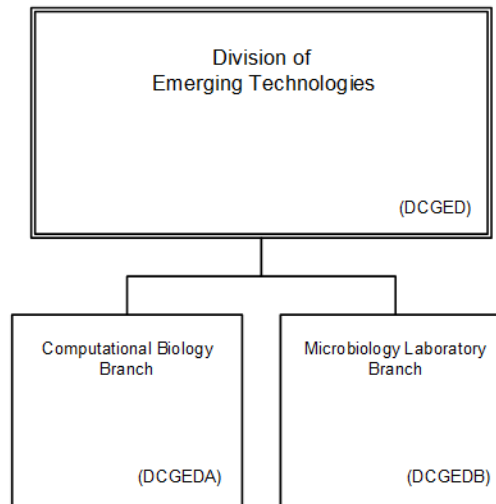   E. Updates software and hardware to meet increasing cybersecurity standards.

3. **Microbiology Laboratory Branch (DCGEDB).**

   A. Conducts research to develop detection methods for foodborne pathogens.

   B. Conducts research to determine the contribution of animal feeds to the pathogen load in food producing animals.

   C. Develops molecular/genetic methods for characterization of human pathogens, including antibiotic resistant pathogens.

   D. Conducts research to determine the effect of multiple drugs/multiple routes/multiple exposures on development of resistant pathogens and pathogen load.

   E. Conducts research to determine management of practices and develop intervention strategies to preclude the development of resistant pathogens in animals receiving antibiotics.

4. **Authority and Effective Date.**

   The functional statements for the Division of Emerging Technologies were approved by the Commissioner of Food and Drugs on August 11, 2022 and effective on September 30, 2022.

Department of Health and Human Services
Food and Drug Administration
Center for Veterinary Medicine
Office of Applied Science
Division of Emerging Technologies

```
                  ┌────────────────────────────────┐
                  │        Division of             │
                  │   Emerging Technologies        │
                  │                                │
                  │                                │
                  │                      (DCGED)   │
                  └────────────────────────────────┘
                            │
              ┌─────────────┴─────────────┐
      ┌───────────────┐           ┌───────────────┐
      │ Computational │           │ Microbiology  │
      │    Biology    │           │  Laboratory   │
      │    Branch     │           │    Branch     │
      │               │           │               │
      │     (DCGEDA)  │           │     (DCGEDB)  │
      └───────────────┘           └───────────────┘
```

Staff Manual Guide 1245.13
Organizations and Functions
Effective Date: September 30, 2022

The following is the Department of Health and Human Services, Food and Drug Administration, Center for Veterinary Medicine, Office of Applied Science, Division of Emerging Technologies organization structure depicting all the organizational structures reporting to the Division of Emerging Technologies:

Division of Emerging Technologies (DCGED)

Computational Biology Branch (DCGEDA)

Microbiology Laboratory Branch (DCGEDB)