

FDA Center Scientific Priority Areas Review

Charge to FDA Science Board: The charge to the Science Board is to conduct a critical review of the projects identified as scientific priority areas by each FDA Center to assess the quality of the proposal and its relevance to the regulatory mission of the Agency. In particular, the Science Board is requested to review the following priority areas identified by the Agency:

- **Rapid Detection:** Development and implementation of rapid, sensitive, high throughput methodologies to detect and identify microbial or other contamination in humans, animals and regulated products and their manufacturing and production sites;
- **Adverse Event Detection and Analysis:** Development, implementation and qualification of improved methods for detection and analysis of adverse events associated with marketed products;
- **Biomarkers:** Development and implementation of new or improved biomarkers, models and methods to predict safety and efficacy of regulated products including drugs, biologics, devices and foods;
- **Clinical Trial Design and Analysis:** Clinical trial design and analysis methodologies to more rapidly and efficiently evaluate safety and efficacy of FDA regulated products;
- **Microbial Ecology and Contamination Mitigation Strategies:** Develop and implement programs to significantly reduce or eliminate the contamination of products by microbial pathogens based on a characterization of routes of contamination and transmission and an understanding of microbial ecology;
- **Manufacturing Science:** Development and implementation of innovative, novel technologies in manufacturing science to enhance manufacturing efficiency and product safety, quality and traceability; and
- **Personalized Medicine and Nutrition:** Individualized approaches to therapeutics and nutrition, such as toxicogenomics, pharmacoselection, and complex prognostic and predictive devices.