

Developing an Interdisciplinary Research Agenda for Genetics of Birth Defects

Wednesday, January 22, 2014
Washington Dulles Airport Marriott, Sterling, VA

Summary

This conference was born from the need to develop an interdisciplinary research agenda geared towards the genetic underpinnings of structural birth defects and the effective prevention strategies that follow such discoveries. As such, the conference was comprised of scientists from manifold disciplines including teratology, genetics, epidemiology, pediatrics, obstetrics, and molecular biology in order to facilitate movement forward as a transdisciplinary field rather than individual researchers. Attendees numbered approximately 50 and came from both academe and government.

The day began with introductory remarks from the perspective of Dr. Alan Guttmacher, Director of the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development. Following this the conference was broken into four sections. Each section opened with remarks from a member of the steering committee, followed first by a point and then by a counter-point speaker, ultimately ending in open discussion led by another expert discussant. The sections were focused on the topics of, in order of occurrence, experimental model systems for understanding human birth defect etiologies, the preferred methods of genetic etiology discovery, epigenomics in regards to understanding etiologies, and the suitability of epidemiologic approaches. The conference wrapped up with an open discussion including all attendees about all topics covered during the day as well as the priorities and infrastructure needed to enhance an interdisciplinary agenda for the genetics of human birth defects.

A universal theme raised throughout the day was the need for a stronger branding strategy for birth defects research. To properly move forward with the core philosophy of this conference – transdisciplinary efforts to discover the causes of birth defects – a newer, more modern branding strategy needs to be developed for the field. This is necessary not only in the fiscal sense of funding opportunities but also for public perception and the mentalities of each individual researcher involved – the notion of a unified group systematically approaching and elucidating the causes of a critical problem in the United States, let alone the world.

Moving forward we hope to generate a white paper from the discussions heard at the conference. From this we will evaluate how best to proceed.