

Foreword

The National Institute of Child Health and Human Development—*nomen est omen*—is broadly concerned with normal and abnormal human development. Probably nothing is more challenging within our mission than to understand the development of the nervous system in all of its extraordinary complexity. The significance of fuller understanding of the cellular and molecular mechanisms that first induce and then guide neuroepithelial cells through their development into the adult human brain is evident if we consider just a few of the disorders in which the developmental process is suspected to be faulty. Neuropsychiatric disorders of many kinds—including neurodegenerative diseases, schizophrenia, and autism—have been postulated as the consequences of abnormal neurodevelopment. Moreover, the especially high frequency of premature birth in the great urban centers of the United States challenges neurobiologists and neonatologists to determine optimum environmental conditions for infants that are born at 22–26 weeks of gestation, when

the brain is very much “in the making,” in the hope that mental retardation can be avoided. This list of diseases and disorders will certainly grow as we learn more about the finer details of the enigmatic process of neurodevelopment through the combination of basic and clinical research.

As part of our effort to foster this understanding, the National Institute of Child Health and Human Development has sponsored the first International Corsica Workshop, entitled “The Neuronal Phenotype: Molecular Biology, Cell Specification, and Therapeutic Frontiers.” Our hope in sponsoring such a workshop was to provide a fertile and robust intellectual environment for “brainstorming”—a forum that would summarize our current knowledge and spur new ideas that will help to set the directions in the field of developmental neurobiology for the next several years. Both at the Workshop, and even more as I read the formal proceedings, my conviction is that we indeed succeeded in realizing our aim.

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