Neuroarcheology: the search of presymptomatic signatures of neurological disorders

During brain development, cells divide, differentiate and migrate to their assigned targets to form synapses and active cell assemblies. Genetic programs and environmental factors converge to control and influence all of these steps, and thus there are many points in the system at which mutations or environmental insults could exert a deleterious influence. Growing evidence suggests that as a result of early insults, misconnected circuits can arise with a "pre-symptomatic neuronal signature" that perturbs the construction of functional entities. I propose here that early and late-onset neurological disorders as diverse as infantile epilepsies, mental retardation, dyslexia or even Huntington and Alzheimer disease may be in part "born in utero" via these mechanisms. The confirmation of this hypothesis using imaging techniques in humans will profoundly alter our understanding of neurological disorders.

E. Бен-Ари
BEN-ARI
Yehezkel

Профессор,
dиректор
Средиземноморского
нейробиологического
института
INMED (Institut de Neurobiologie de la Méditerranée)

1971 Doctorat èssciences, Université de Paris VI (France)
1999- present Founder and Director of the INMED, Marseille, France

Научные интересы: пластичность мозга, нарушения работы нервной системы и их возникновение.