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Hidden Plasticity Potential in the Brain; 3. Neurogenic Cell vs. Neural Stem Cell; 4. Does the Role of Neural Stem Cells Change from the Developing Age to the Adult?

5. The Disconnect Between Neurogenesis and the Presence of Neural Stem Cells

6. Fetal vs. Adult Neural Stem Cells; 7. Signal Transduction of Stem Cell Regulation; 8. Beyond the Nervous System; 9. Conclusions; 3: FETAL GROWTH; A. ENDOCRINE AND METABOLIC CONTROL OF FETAL GROWTH; B. THE ROLE OF THE PLACENTA; C. DEVELOPMENTAL ORIGINS OF HEALTH AND ADULT DISEASE (DOHAD); D. IMPRINTED GENES AND INTRAUTERINE GROWTH; E. NOTE BY ALAN TEMPLETON ON THE EVOLUTIONARY CONNECTION BETWEEN SENESCENCE AND CHILDHOOD GROWTH AND DEVELOPMENT; 1. An Evolutionary Theory of Aging 2. Thrifty Genotypes and Antagonistic Pleiotropy 3. Thrifty Genotypes and Heart Disease; 4. Why We Grow Old: The Answer; 4: INFANCY; A. THE REPRODUCTIVE DILEMMA; B. THE OBSTETRICAL DILEMMA; C. GROWTH OF THE INFANT; D. ENDOCRINE ASPECTS OF INFANTILE GROWTH; E. INFANCY-CHILDHOOD TRANSITION: DETERMINATION OF ADULT STATURE; F. WEANING FROM BREAST-FEEDING; 5: CHILDHOOD; A. THE WEANLING'S DILEMMA; B. THE GRANDMOTHER THEORY; C. GROWTH OF THE CHILD; D. ENDOCRINE ASPECTS OF CHILDHOOD GROWTH; 6: JUVENILITY; A. THE SOCIAL/COGNITIVE DEFINITION OF JUVENILITY B. PALEOANTHROPOLOGICAL JUVENILITY AND TEETH ERUPTION C. ADRENARCHE; D. JUVENILE BODY COMPOSITION; E. GROWTH OF THE JUVENILE; F. TRADE-OFFS FOR THE TIMING OF TRANSITION TO JUVENILITY; G. PRECOCIOUS JUVENILITY; H. THE PYGMY PARADIGM FOR PRECOCIOUS JUVENILITY; I. EVOLUTIONARY PERSPECTIVE IN PRECOCIOUS JUVENILITY; 7: ADOLESCENCE; A. HUMAN EVOLUTION OF ADOLESCENCE; B. TRANSITION FROM JUVENILITY TO ADOLESCENCE; C. PUBERTAL GROWTH; 8: YOUTH; 9: EVOLUTIONARY STRATEGIES FOR BODY SIZE; A. THE LITTLE PEOPLE OF FLORES; B. LESSONS FROM THE GREAT APES; C. THE HANDICAP THEORY; D. SEXUAL DIMORPHISM E. THE ROLE OF SEX STEROIDS

Sommario/riassunto

Working with principles from the fields of evolutionary and developmental biology (evo-devo), this fascinating work offers a new approach to analyzing child growth and development, examining each stage and transition in detail, from fetal development to preadulthood. Based on the author's in-depth review of the current literature and his own observations as a pediatric endocrinologist, the book demonstrates how the transitions between human life history phases represent unique periods of evolutionary adaptive response to the environment. In addition, the author explains why an understanding