

The creative psycho-social genome: Beyond the ENCODE project

Ernest Rossi
University of Connecticut, USA

This paper reviews current research in bioinformatics and psycho-social genomics that implies a new concept, “the psycho-social genome” to focus translational research for clinical applications. A major motivation for this generative mind-gene perspective is the recent simultaneous publication of 30 leading papers about ENCODE-The Encyclopedia of DNA Elements-in major scientific journals. Until now ENCODE research has been primarily about the molecular/biological bottoms-up approach to understanding human nature. ENCODE research does not yet explore the top-down approach of psycho-social genomics-how mind and consciousness apparently can modulate their own functional phenotypes of observable behavior. An integrated view of the humanities and sciences is proposed in our holistic model of the top-down psycho-social genome to supplement the reductive bottoms-up biological models of ENCODE. Emerging mind-gene technologies of becoming aware of here-and-now activity and experience-dependent gene expression, brain plasticity and stem cell healing are creating new meta-levels of human consciousness and self-care that transcend the limitations of traditional mind-body medicine. New technologies for measuring activity dependent and experience-dependent gene expression within the time frame of a single session of medical consulting, meditation and psychotherapy, for example, is rapidly becoming possible. Computer simulations of a second life and games imply that a virtual world of facilitating gene expression, brain plasticity and stem cell healing may actualize our millennial dreams of a personal so-called “higher meta-consciousness” that could facilitate human health, healing and happiness in a practical and realistic manner.

Biography

Ernest Rossi is a scholarship student who originally obtained his BS in pharmacy at the University of Connecticut and then received NIMH pre and postdoctoral grants to pursue a Ph.D. in Clinical Psychology at Temple University in Philadelphia and psychosomatics at Mount Sinai Hospital in Los Angeles.

Ernest@ErnestRossi.com