

## The review of the Italian association of psycho-neuro-endocrine-immunology

Edited by Francesco Bottaccioli

# PNEI NEWS

The new knowledge of science and health



Norman Cousins: a PNEI pioneer

## FROM GENETICS TO PSYCHIATRIC EPIGENETICS

The rise of a radical change in the vision of genetic origin of serious psychiatric disorders such as autism and schizophrenia.

## EDITORIAL

### **Norman Cousins in the Epigenetics laboratory.**

Francesco Bottaccioli – Master Director of “PNEI and Science of Integrative Care”, University of Aquila

Many of our readers already know Norman Cousins for his apparently incredible story, the story of a self-healing that he first described on the *New England Journal of Medicine* and later on a successful book. Cousins was an outstanding American intellectual during the '50s-60s. He was a well renowned journalist campaigning against the Cold War and the threat of a nuclear conflict between USA and USSR.

His travels to Russia were quite frequent as he was at the head of pacifist missions and chaired cultural committees. After a stressful work trip to Moscow, he fell ill. He was diagnosed with ankylosing spondylitis: a serious autoimmune disease with no possibility of cure. This happened in 1964, but he decided to make his story public only in 1976. He reported having been admitted to the hospital where he quickly developed the conviction that it was an unsuitable place to heal from serious diseases. There he was subjected to a huge amount of pharmacological treatments. Considering them as highly toxic and scarcely effective, he signed himself out of the hospital, moved to a hotel room and, with the supervision and assistance of his own physician, he decided to set up his tailored therapy by reducing and discontinuing the intake of drugs and replacing them with natural substances. Keeping up his spirits with humor by watching Marx Brothers films was also a part of the treatment. Having read the work of Hans Selye<sup>1</sup>, he was aware of the harmful effects of stress as well as of the possibility to reverse them with positive emotions. Within a month he had clearly improved. At that point, with the support of his wife and a group of close friends, he moved to the seaside where he completed his recovery process. After one year since the occurrence of the disease he had largely recovered his mobility and could go back to work. After the clamor provoked by the publication of his article and book, in 1978 he was invited at the University of California, at UCLA as Professor of Medical Humanities where he advocated the research in PNEI and together with doctors and psychologists he established a first PNEI research center: the Cousins Center for Psychoneuroimmunology which is still nowadays one of the most important international centers for promoting our discipline.

25 years after Cousins passed away, the research has confirmed some of the sharp observations of the American intellectual: first of all the power of the placebo effect that his critics wanted to reproach him to invalidate his story. To which Cousins replied:

Is it possible that placebos have a key role in this process? Shouldn't this entire area be worth serious and sustained attention?

Today the bidirectional communication between psyche and biological processes has been ascertained<sup>2</sup> and furthermore it has been also documented the modulation of cell genome including neurons via epigenetics. We dedicate the cover and the close up of this issue to this new development of medical science.

I imagine that today Norman, with his PNEI approach<sup>3</sup>, would be enthusiastic to be in an epigenetic laboratory.

1 Selye H (1956) *The Stress of Life*, McGraw-Hill, New York

2 For more information, see the long and recent review by the director of the Cousins Center, Michael

Translation by Patrizia Rustichelli-Stirgwolt

Irwin: Slavich GM and Irwin MR (2014) From Stress to Inflammation and Major Depressive Disorder: A Social Signal Transduction Theory of Depression, *Psychol Bull.* 140(3): 774–815

3 Bottaccioli F (2014) *Epigenetica e Psiconeuroendocrinoimmunologia. Le due facce della rivoluzione in corso nelle scienze della vita*, Edra, Milano

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### **Editorial**

#### **Page 3. Norman Cousins in the Epigenetics Laboratory**

Francesco Bottaccioli

### **Dossier: Cancer**

#### **Interview with Lorenzo Cohen.**

#### **Page 4. Cancer Integrative Treatment**

Since more than a decade Lorenzo Cohen is Professor and Director of the Integrative Medicine Program in one of the most important American Cancer Centers where they provide an evidence-based complementary therapy treatment tailored to the needs of the individual. Among the therapies proposed there are acupuncture and meditation which he learnt from his maternal grandmother, Vanda Scaravelli, a yoga pioneer in Italy.

Paola Emilia Cicerone

#### **Page 7. Campania: Ecocide in the “Land of Fires”.**

Whereas the last twenty years national data report a decline in cancer and cancer mortality rates, the regional data show instead an increasing trend especially for breast, bladder, lung and colorectal cancer. The Cancer Registry has been finally set up. It is now urgent to establish an adequate oncological network.

Gennaro Esposito

#### **Page 10. A model for stress evaluation and management in oncology.**

Individuals use subjective modalities to read and live their own disease. These modalities are strictly connected to the stress levels (which depend largely on the individual assessment of the current situation) and lead to the processes of self-regulation, namely those factors supporting the individuals as a system to regulate their own behavior.

David Lazzari

#### **Page 13. Biobehavioral Factors and Cancer Progression: Physiological Pathways and Mechanisms**

The most recent meta-analysis linked depression, stressful events in life and social isolation to a scarce survival in cancer patients. Although not all data are consistent, there is predominant epidemiologic evidence correlating psychosocial factors to cancer progression.

S.K. Lutgendorf – A.K. Sood

#### **Page 20. Abolishing Mammography Screening Programs?**

We report excerpts from the article published on the *New England Journal of Medicine*. This article is socially and medically valuable that the scope of readers should be extended outside of the standard readers of the American Journal.

Nikola Biller-Adorno – Peter Jüni

### **CLOSE UP**

#### **From Genetics to Psychiatric Epigenetics**

**Page 23. The decline of Genetic and the rise of Epigenetic in Psychiatry**

Universities still teach that serious psychiatric disorders or behaviors, skills and intelligence depend largely on genetics. Given the new findings from epigenetic studies, this approach is no longer tenable.

Francesco Bottaccioli

**SPECIAL: History of Psychoneuroendocrineimmunology**

**Page 32. Anatomy of an illness (as perceived by the patient)**

In 2015 it will be the 100<sup>th</sup> anniversary of Norman Cousins' birth and 25 years since he passed away. The American intellectual gave a significant contribution to spread the PNEI culture and research in Universities.

Norman Cousins