



**The life and creativity
of
Hans Selye**

Árpád Somogyi

Berlin - Brussels - Budapest





The biology of excitement

Hans Selye and the aspects of the stress concept

Semmelweis Museum of the History of Medicine

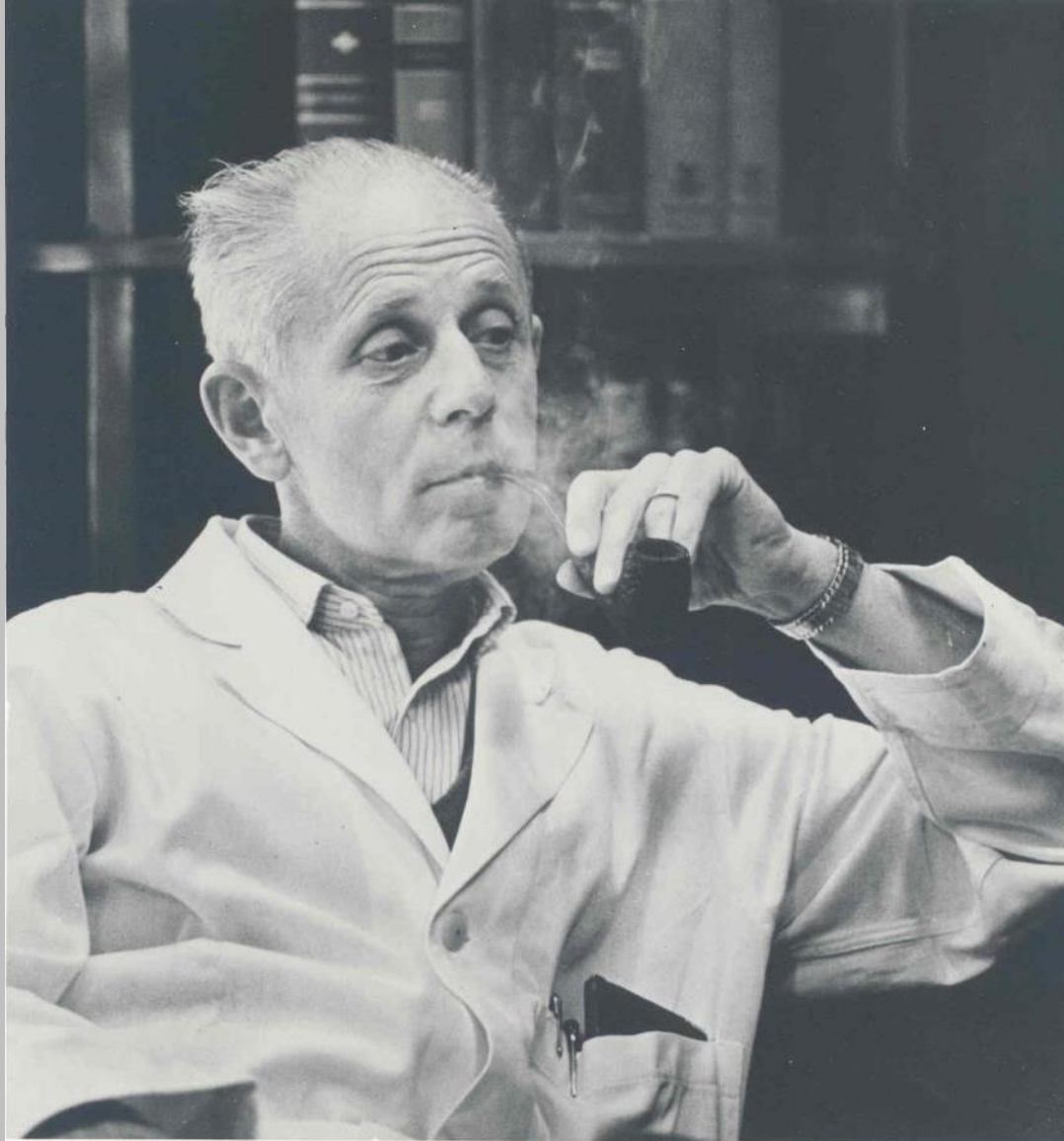
Budapest, H – 1013, 1- 3 Apród utca

Opened on May 7, 2015 (it is still open until May 8, 2016)









Somogyi Árpád-nak
baráti köszönettel
Harm Selye

Montreal
1970



INSTITUT DE MÉDECINE
ET DE CHIRURGIE EXPÉRIMENTALES

INSTITUTE OF EXPERIMENTAL
MEDICINE AND SURGERY



UNIVERSITÉ DE MONTRÉAL



Creativity the quality of being creative;
the ability to create

To create to bring into existence;
to produce through imaginative skill

Merriam-Webster's Collegiate Dictionary (1998)



“Dr. Selye speaks many languages but the most important one he knows is the language of life, and it is in this language that he teaches us the pleasure and excitement of being out in the unknown with no footprints to guide us.”

Albert Szent-Györgyi in the Foreword of
Hans Selye's **IN VIVO**
The case of Supramolecular Biology
Liveright Publishing Corporation, New York, 1967.



Néhány, SELYE tudományos pályafutásának jellemző adata

1. Selye, H.: Über zwei bemerkenswerte Fälle von Karzinosarkom. *Med. Klin.*, 24, 1197 (1928)

16. Selye, H.: Die Sklerodermie und ihre Entstehungsweise. *Virchows Arch. pathol. Anat.*, 286, 91 (1932)

79. Selye, H.: A syndrome produced by diverse noxious agents. *Nature (Lond.)*, 138, 32 (1936)

Mai szemléletünk szerint *sztrezsznek* tekinthető irodami említés >100 000 (H. Selye: Gesundheit und Streß-Konzept. In: Fülgraff. G. (ed) Bewertung von Risiken für die Gesundheit, p. 7-12, Gustav Fischer Verlag Stuttgart-New York, 1976)



Countries of origin of established scientists and postgraduate (MSc/PhD) students of the Institute

Argentina, Austria, Belgium, Brasilia, Canada, Chile, Czechoslovakia, Egypt, France, Germany, Greece, Haiti, Hungary India, Indonesia, Ireland, Italy Japan, Korea, Mexico, Peru, Poland Portugal, Spain, Sweden, Switzerland, Soviet Union, Turkey, UK, Uruguay, USA, Yugoslavia







RESEARCH TOPICS DEVELOPED AT THE INSTITUTE

I. STRESS

1. The General Adaptation Syndrome (G.A.S.) as the response to stress:
 1. Development of the concept of the diseases of adaptation as maladies in which derailment of the G.A.S. play a decisive role;
 1. Hormonal conditioning: the influence of hormones upon stress reactivity;
 1. Local and systemic nonspecific cross-resistance: the induction of topical or general tolerance to an agent by pretreatment with stressors,
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RESEARCH TOPICS DEVELOPED AT THE INSTITUTE (cont'd)

II. PLURICAUSAL DISEASES

1. Electrolyt-Steroid Cardiopathies (ESC).
 - a) ESC characterized by hyalinosis (ESCH).
 - b) ESC characterized by necrosis (ESCN) and its prevention by chemical means.
 - c) ESC characterized by calcification (ESCC).
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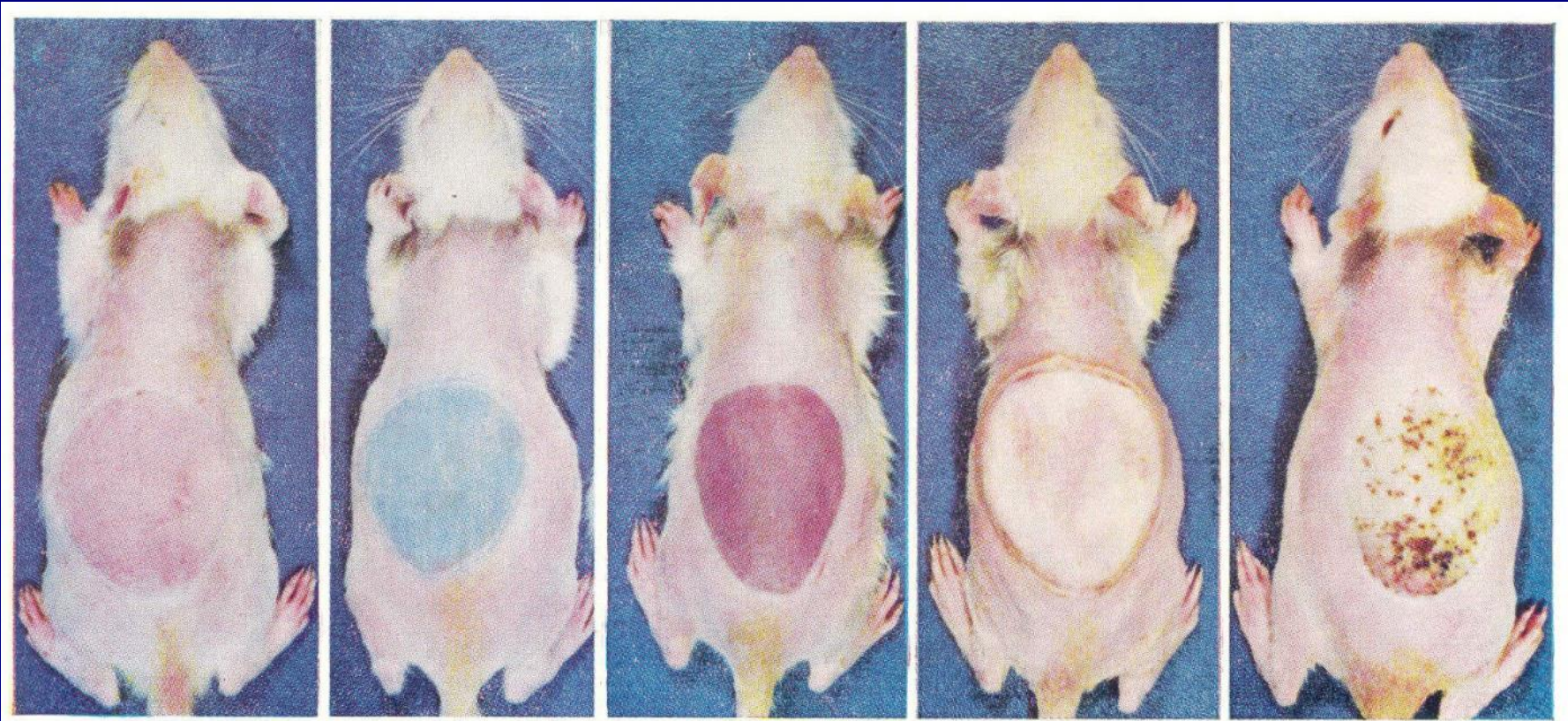
Selye, H. et al., *American Journal of Cardiology*, **23**, 719-722 (1969)



RESEARCH TOPICS DEVELOPED AT THE INSTITUTE

II. PLURICAUSAL DISEASES (cont'd)

2. Experimental Soft-Tissue Calcification.
 - a) Calciphylaxis.
 - b) Calcergy.
 - c) The progeria-Like syndrome; aging.
 3. Thrombohemorrhagic Phenomenon (THP).
 4. Acute Conditioned Necrosis (ACN).
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Selye, H. et al., *Biochemical Pharmacology*, Suppl. 107-122 (1968)



RESEARCH TOPICS DEVELOPED AT THE INSTITUTE (cont'd)

III. Other Topics

1. Studies on Inflammation.
 - a) Anaphylactoid edema (AE).
 - b) Formalin poditis.
 - c) Granuloma-pouch technique.
 2. Steroid Anesthesia.
 3. Neuro-Hormonal Effects of Lactation (“Suckling-Reflex” and Pseudo-pregnancy).
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RESEARCH TOPICS DEVELOPED AT THE INSTITUTE (cont'd)

III. Other Topics (cont'd)

4. Parathyroid Cyst Formation.
 5. Mechanical “Tissue-Scaffoldings” for the Topical Induction of Growth, Metaplasia and Malignancy.
 6. Lathyrism.
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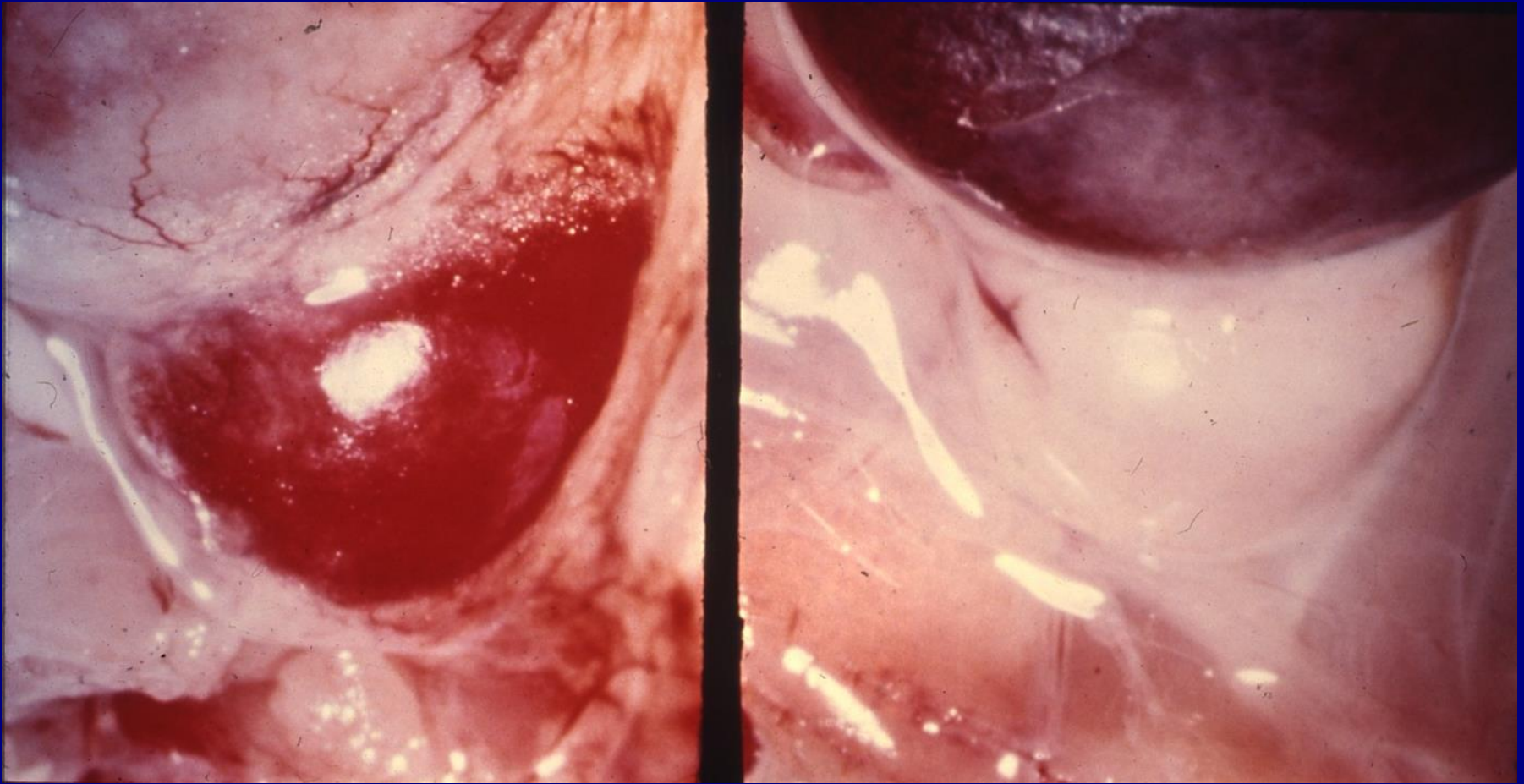


RESEARCH TOPICS DEVELOPED AT THE INSTITUTE (cont'd)

III. Other Topics (cont'd)

7. Development and Improvement of Experimental Surgical Techniques.
 - a) Hypophysectomy,
 - b) New techniques of cardiac surgery not requiring artificial respiration such as ligation of the coronary vessels, and of one part of the cardiac muscle in rats.
 - c) “Endocrine-kidney” technique.

 8. The Prophylactic Action of Catatoxic Steroids.
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Somogyi A. et al., Zbl. Bakt. Hyg., I.Abt. Orig. B **163**, 153-172 (1976)