

**The Centre for
Medical History,
Exeter University**

**The History of
Medicine Division,
National Library
of Medicine**

**Office of History,
National Institutes
of Health**



9 – 10 November 2010

**Conference Room D
Natcher Building (Bldg 45)
National Institutes
of Health**

**Organizers
David Cantor &
Edmund Ramsden**

STRESS, TRAUMA, AND ADAPTATION IN THE 20TH CENTURY

Introduction

Forty years ago, American sociologist Alvin Toffler predicted that the rate of change in modern civilization would accelerate to such a degree that it would be impossible for individuals to adapt. Toffler would famously call this anxiety *Future Shock*: shattering stress and disorientation leading to social, psychological, even physiological breakdown.

Toffler based his predictions on scientific studies, most notably the work of the physiologist, Hans Selye. As the architect of the modern concept of "stress," Selye argued that adaptations such as adrenalin could be maladaptive when the body was under constant distress. He described a "general adaptation syndrome" comprising of three stages: an initial alarm or shock phase; a stage of adaptation in which physiological resistance allowed normal function; and a final stage of exhaustion, collapse, even death, when adaptive mechanisms failed. Having originally focused on non-specific physiological responses to harmful agents, Selye quickly widened his perspective, looking at the relationship between a huge variety of environmental stressors and the evolution of a range of chronic organic diseases - hypertension, gastric ulcers, arthritis, allergies, and cancer.

This conference explores the scientific, intellectual, and social influences underlying the emergence of the stress concept and its ever changing definitions; its uses in making novel linkages between disciplines such as ecology, physiology, psychology, psychiatry, public health, urban planning, architecture, and a range of social sciences; its application in a variety of sites such as the battlefield, workplace, clinic, hospital, and home; and the emergence of techniques of stress management in a variety of different socio-cultural and scientific locations. In short, this meeting aims to explore what happened when stress enters the discourse around modernity.

Cover Image: *Measuring the physiological response to heat stress in a climatic chamber*
(reproduced courtesy WHO)

Workshop Information

1. How the sessions will work

- Each author has 10 minutes to provide an overview of his or her pre-circulated paper
- Each commentator has 20 minutes for his or her commentary
- General discussion and responses will take up the remainder of the session.

Each session will begin with the author overviews. The commentary will follow, after which the chair will open discussion to the floor. Authors may respond to the commentary at this point. Questions will not be allowed before the general discussion – excepting minor points of clarification, at the discretion of the chair.

Papers will be **pre-circulated** to attendees only. Please contact Ba Ba Chang (contact details below) if you plan to attend.

2. Locations

Workshop sessions will be held in Conference Room D, Building 45 on the main NIH Campus. Building 45 is also known as the Natcher Building.

The reception will be held at the National Library of Medicine, Building 38

3. Visiting NIH (security, directions, maps, etc)

<http://www.nih.gov/about/visitor/index.htm>

4. Acknowledgments

This workshop is sponsored by the National Library of Medicine, the Office of History at the National Institutes of Health, and the Centre for Medical History at Exeter University. Exeter's involvement is made possible by the support of the Wellcome Trust. The organizers express their thanks to all these organizations.

5. Further information

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Individuals who need Sign Language Interpreters and/or reasonable accommodation should also contact Ba Ba Chang.

PROGRAM

Day 1

9th November 2010

8:15-9:10 Coffee

Introductions

9:10-9:30 Donald A. B. Lindberg
Director, National Library of Medicine
Jeffrey Reznick
Deputy Chief, History of Medicine Division, National Library of Medicine
Robert Martensen
Director, Office of History, National Institutes of Health
Mark Jackson/Joseph Melling
Centre for Medical History at the University of Exeter

Conference Aims

9:30-10:00 **Speakers:**

David Cantor & Edmund Ramsden, National Institutes of Health and University of Exeter
Introduction: The history of stress.

10:00-10:15 Coffee

10:15-12:15 **Session 1:**

Chair: Robert Martensen, National Institutes of Health

Speakers:

Mark Jackson, University of Exeter
`The new pool of Bethesda': the origins and reception of Hans Selye's general adaptation syndrome

Susan E. Lederer, University of Wisconsin-Madison
Experimentalizing stress: Laboratory responses to disaster in the 1950s

Commentator: Edward Shorter, University of Toronto

12.15-1.15 Lunch

Day 1

9th November 2010

Session 2

1:15-3:15 **Chair:** Jeff Reznick, National Library of Medicine

Speakers:

Otniel E. Dror, Hebrew University of Jerusalem
From primitive fear to civilized stress: "Sudden Unexpected Death"

Allan Young, McGill University
How stress became a trauma disorder

Commentator: Ruth Leys, Johns Hopkins University

3:15-3:45 Coffee

Session 3

3:45-5:45 **Chair:** Sejal Patel, National Institutes of Health

Speakers:

Theodore M. Brown, University of Rochester
"Stress" in U.S. wartime psychiatry: World War II and the immediate aftermath

Tulley Long, Johns Hopkins University
Stress research in the U.S. military during the Cold War

Commentator: Mark S. Micale, University of Illinois at Urbana-Champaign

6:00-8:00 **Reception**
National Library of Medicine

Day 2

10th November 2010

8:00-8:30 Coffee

Session 4

8:30-10:30 **Chair:** Robert Martensen, National Institutes of Health

Speakers:

Joseph Melling, University of Exeter
Discovering the stressful workplace: from commonsense experience to scientific and secular models of stress in the UK, 1890s-1940s

Junko Kitanaka, Keio University, Tokyo
Too depressed to work: The emerging science of the psychopathology of work stress in Japan

Commentator: Christopher Sellers, State University of New York, Stony Brook

10:30-11:00 Coffee

Session 5

11:00-1:00 **Chair:** Paul Theerman, National Library of Medicine

Speakers:

Robert Kirk, University of Manchester
Materializing welfare: Stress in the laboratory and farm animal, 1947-1980.

Edmund Ramsden, University of Exeter
Stress in the city: architectural psychology and the problem of the crowd

Commentator: Rebecca Lemov, Harvard University

1.00-2.00 Lunch

Day 2

10th November 2010

Session 6

2:00-4:00 **Chair:** Sejal Patel, National Institutes of Health

Speakers:

Rhodri Hayward, Queen Mary, University of London
Measuring stress and remodeling personality in post-war clinical psychology

David Cantor, National Institutes of Health
Cancer and stress in the twentieth century

Kristin Ruggiero, University of Wisconsin-Milwaukee
Criminality, stress and modernity in Argentina

Commentator: Peter N. Stearns, George Mason University

4:00-4:30 Coffee

Session 7

4:30-6:30 **Chair:** Michael Sappol, National Library of Medicine

Speakers

Elizabeth Watkins, University of California, San Francisco
Stress and the American vernacular: Popular perceptions of disease causality

Steve Brown, University of Leicester
Stress and the public

Commentator: Nancy Tomes, State University of New York, Stony Brook

6:30 Close