

Stress and Aging

An interdisciplinary workshop

Organizers

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A joint workshop by the Center for the Interdisciplinary Study of Gerontology and Vulnerability (CIGEV) and the Faculty of Psychology and Educational Sciences of the University of Geneva and the Swiss National Center of Competences in Research LIVES – Overcoming vulnerability: life course perspectives

Program Overview

Thursday, October 12, 2017

Room D1759 Centre Médical Universitaire (CMU)

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| 09:30 | Sonia Lupien: <i>Stress, Memory and Aging</i> |
| 11:00 | Coffee break |
| 11:30 | Catherine Bowen: <i>Stress and Aging: The Relevance of Images of Aging</i> |
| 13:00 | Lunch |
| 14:00 | Presentation of local projects (poster session) |
| 15:30 | Coffee break |
| 16:00 | Blair Wheaton: <i>The Role of the Stress Process in the Risk of Mortality: A Cumulative Lifetime Approach</i> |

Prof. Sonia J. Lupien

Centre for Studies on Human Stress, University of Montreal, Canada

<http://www.iusmm.ca/research/researchers/researchers/sonia-lupien.html>

Stress, Memory and Aging

In the last two decades, there have been many factors studied as potential biomarkers of cognitive impairments in later life. One of the factors that received increased attention is the secretion of stress hormones. Stress hormones are liposoluble, and they have the capacity to cross the blood-brain barrier and access the brain, where they can influence cognitive process as well as emotional processing. In this presentation, I will summarize the results of a series of studies showing that cumulative exposure to high endogenous levels of the stress hormone glucocorticoid (cortisol in humans) in an older population predicts both memory impairments and a reduction in hippocampal volume. We also have shown that aged human memory can be acutely modulated by acute stress and/or by pharmacological manipulations of glucocorticoids. Finally, we have shown that the testing environment in which we test older adults can be stressful for them and lead to spurious memory impairments that can be misdiagnosed as 'mild cognitive impairments'. Altogether, these results suggest that stress can be a potent factor modulating cognitive performance in old age.

Dr. Catherine E. Bowen

Vienna Institute of Demography, Austrian Academy of Sciences, Austria

https://www.researchgate.net/profile/Catherine_Bowen2

Stress and Aging: The Relevance of Images of Aging

When people think about old age, they may think about wisdom, finally having time to travel, enjoying time with grandchildren, and/or having less energy, being lonely, and becoming ill. There is a large and growing research field about such "images of aging" – that is, people's subjective representations of the aging process and older people. For instance, several analyses of data from large, longitudinal samples have demonstrated that how a person perceives and anticipates his or her own aging process predicts his or her health and even survival years later, even after statistically controlling for "harder" factors like smoking and other positive attitudes like optimism. In my talk, I discuss how images of aging can act as a source of stress as people start to self-identify as old, as well as affect how people react and cope with stressors as they age. I draw upon examples from my own research as well as prototypical studies from the field.

Prof. Blair Wheaton

Department of Sociology, University of Toronto, Canada

<http://sociology.utoronto.ca/people/faculty-and-staff/blair-wheaton/>

The Role of the Stress Process in the Risk of Mortality: A Cumulative Lifetime Approach

The stress process is used to study the cumulative lifetime effects of combination of stress and coping resources, but it usually applied to mental or physical health outcomes only. It has not been applied to the study of mortality risk. I use nine waves of the National Population Health Survey of Canada to specify the effect of the stress process on mortality, over a 16 year period. Data are analyzed using a survival model approach, with fixed effects for genetic and biological givens. I find that broad cumulative measures of lifetime stress have an accelerating effect on mortality in later life, but the strongest risk in later life occurs for those with less stressful lives, not more. Personal resources, such as mastery, help at most life stages. The implications of social support, however, also change in later life. I apply these effects to the explanation of gender, SES, and marital disparities in mortality risk.

Presentation of local projects (poster session)

- Nicola Ballhausen: *The Effects of Cortisol on Prospective Memory in Relation to Testing Time*
- Isabel Baumann: *Are Those Who Prolong Their Working Life Doing Better or Worse in Terms of Physical Functioning in Old Age?*
- Allan Berrocal: *Context Aware Stress Assessment and Coping*
- Anne-Claude Juillerat Van der Linden: *An Integrative Approach to Cognitive Impairment in Clinical Setting: Stress among Other Factors*
- Charikleia Lampraki: *Social Loneliness: When Group Identification and Self-Continuity Are Beneficial in Post-Divorce Phases*
- Aljoscha Landoes: *Socioeconomic Circumstances in Childhood and Trajectories of Disability in the Second Half of Life: European Longitudinal Analysis*
- Ulrike Rimmel: *Reducing the Level of the Stress Hormone Cortisol Changes Neural Memory Representations for Emotional Events in a Long-Lasting Way*
- Ieva Urbanaviciute: *Adaptability Resources, Stress, and Well-Being among Working Age Adults*
- Sarah Vilpert: *Advance Directives Awareness and Completion among Elderly People in Switzerland: A Gap to Be Reduced?*