## 2014-15 REPORT ON ICLA RESEARCH COMMITTEE ON LITERATURE AND NEUROSCIENCE, Chair, Suzanne Nalbantian, June 3, 2015.

Submitted by Suzanne Nalbantian for the ICLA Executive Council Meeting, June 28-July 2, 2015, Lisbon, Portugal.

COMMITTEE MEMBERS (additional members are invited annually according to changing topics):

## From Comparative Literature:

Donald Wehrs, Auburn University, Alabama; Peter Schneck, Osnabrück University, Germany; John Burt Foster, George Mason U, Washington D.C.; Suzanne Nalbantian, Long Island U, New York.

## From Neuroscience:

Jean-Pierre Changeux, Kavli Institute (USCD) and Pasteur Institute (Paris); Paul M. Matthews, Imperial College, London; Robert Stickgold, Harvard U MA; James L. McClelland, Stanford University, CA.

The ICLA Research Committee on Literature and Neuroscience has continued its collaborative study of higher brain functions, moving from the study of memory and consciousness to this year's topic of creativity. Under the auspices of this committee, Suzanne Nalbantian organized and directed yet another interdisciplinary, international conference at Cold Spring Harbor Laboratory on Long Island, October 21-24, 2014. This group of comparatists and neuroscientists engaged in cross-disciplinary exchange as they probed mental processes associated with creativity in the arts and sciences. Among the fifteen speakers, six permanent members of the committee gave papers, including Peter Schneck, Donald Wehrs, S. Nalbantian, Jean-Pierre Changeux, Robert Stickgold and Paul Matthews. Schneck's paper treated the creative process of Henry James and the "nuggets" of his imagination. Wehrs' paper focused on literary innovation in chivalric romance and the Renaissance creativity of Cervantes and Shakespeare. At this CSHL conference, Suzette Henke, who had participated in group sessions of the research committee for the 2013 Paris Congress, concentrated on pathological states in connection with literary creativity. Nalbantian identified aspects of the creative process of modernist writers in acts of mental transformation. So discussions also ranged from pathological minds to genius minds in the study of creative functioning.

As for the neuroscientists, they discussed mechanisms and components of creativity. Changeux presented his neuronal hypothesis of creativity in visual art, which overlapped with his keynote lecture "A Neurobiological Theory of Aesthetic Experience and Creativity" that he gave for the 2013 Paris Congress and is contributing to the *Proceedings* of the Congress. Stickgold probed the creativity in REM sleep/dreaming and off-line brain processing, and Paul Matthews, with his expertise in brain pathology, gave insights into creativity from diseases of the brain. Other interesting talks were given, including Rex Jung's presentation of a neuroanatomy of creativity through findings in brain imaging, and Mark Beeman's discussion of eureka, "aha" moments, which brought the comparison of creativity in the arts and sciences to a sharp debate. Beeman's book (with coauthor John Kounios) *The Eureka Factor* has just been published and is stirring widespread interest.

The results of this stimulating conference, precisely because of its demonstration of unique interdisciplinary methodologies that the field of comparative literature fosters, is now leading to a forthcoming edited volume of original essays. In May 2015, Oxford University Press accepted Nalbantian and Matthews' proposal for a book of twenty essays to be entitled *The Secrets of* 

Creativity: What Neuroscience, the Arts, and Our Minds Reveal. This volume will be the first to bring together diverse voices from both the arts and sciences in order to distill a cohesive account of creativity and to mark future pathways for its study. Nalbantian selected key speakers from the Cold Spring Harbor Lab conference and also added experts in the field of creativity studies from literature, art and neuroscience to contribute chapters. The work on this volume will continue to produce significant exchange between comparatists and neuroscientists, as cross-disciplinary reference will be encouraged between the various contributors, and sustained by the editors' "hands on" engagement with each individual contributor. When necessary, in her work as editor, Nalbantian will put contributors in touch with each other, as they compose their chapters, so that the various issues will be treated in a collaborative manner. Many of these authors are or will be connected to the ongoing agenda of this ICLA research committee.

In addition to the continued work and exchange on the topic of creativity in conjunction with this Oxford volume, a new topic for the research committee is now under consideration. One strong possibility is to pursue the discussion of the theme of fear drawn from the forthcoming 2015 Lisbon seminar, put in the context of the neuroliterary and neurobiology of emotion which could be offered by the research committee in group sessions at the 2016 ICLA Congress in Vienna. There are already several researchers on the committee, including Donald Wehrs, Peter Schneck and Mark Hussey who are engaged in research and publication on cognition and emotion in literary texts and in works of visual art. For this topic, the research committee will be seeking more comparatists to offer papers and will invite a group of neuroscientist specialists in the field of emotion, already identified, to participate in the interdisciplinary exchange. A second possibility for next year's agenda is to continue the research committee's earlier work on the study of memory, in conjunction with the UNESCO workshop on "Memory of the World" that is already planned for the Vienna Congress. These group sessions would add a necessary literary/scientific side to the cultural issues brought up by THE UNESCO group. If this second topic is chosen, appropriate comparatists and neuroscientists particularly in epigenetic memory studies would be invited to probe the field of cultural memory, offering papers at the research committee's group sessions at the ICLA Vienna Congress. The committee is open to the Executive Council's choice between these two possibilities, either one of which can be a fruitful venue for the forthcoming ICLA 2016 Congress and for the work of this committee.