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## **PRESS RELEASE**

September 21, 2010

# USC's Neuroscience Pioneer Antonio Damasio to Receive Honda Prize 2010 for His Contributions to the Neurobiology of the Mind

The Honda Foundation, co-founded by Soichiro Honda and his younger brother Benjiro Honda and currently headed by Hiromori Kawashima, is pleased to announce that the Honda Prize\*1 for the year 2010 will be awarded to Dr. Antonio Damasio, David Dornsife Professor of Neuroscience and Director of the Brain and Creativity Institute at the University of Southern California, U.S.A., for his pioneering efforts and remarkable contributions in the world of neuroscience. Dr. Damasio will be the 31st laureate of the Honda Prize.

It can be said that the human brain is an ultimate example of ecotechnology\*2. It can instantly make decisions with a very small amount of energy, which would otherwise require several interlinked, high-powered supercomputers. Brain research has advanced through a multitude of hypotheses and tests but even with the edge of modern neuroscience, it is not yet possible to fully elucidate the relationships between mind, brain, and body. There are still many missing or untested pieces in the puzzle.

Since the early years of his career Dr. Damasio has been contributing to those missing pieces. He focused his interest on the roles of emotions and feelings in human behavior, including consciousness and decision-making. In his most influential Somatic Marker Hypothesis, he proposed that emotions and feelings play a central role in decision-making via a mechanism he termed "somatic markers". Somatic markers tag the images involved in the reasoning process with emotions related to past experiences, thus conferring differential values upon those images. In other words, in its ultrafast and partly unconscious computations, our brain uses somatic/emotional signals to make "intelligent" decisions that conform to previously acquired knowledge.

Dr. Damasio first obtained the basis for this theory from his case studies of neurological patients with damage in brain regions related to emotion, such as the prefrontal cortex and the amygdala. He found that the patients had defects of judgment and inappropriate social behavior which were caused by their inability to respond emotionally to the content of their thoughts. These early findings were later investigated with the tools of cognitive neuroscience, including experimental functional brain imaging.

Dr. Damasio's other work on the neural basis of the emotions led him to propose that the brain's insula was the cortical platform for the processing of emotional feelings, a hypothesis that has been widely confirmed.

In turn, his work on feelings has been applied to the problem of how the self and the conscious mind are

constructed.

As the main route of inquiry into the human mind shifts from philosophy to science, Dr. Damasio's

research stands at the forefront. It has inspired one neuroscientist after another, and created a new trend of

cross-disciplinary projects with scholars from philosophy, neuropsychology, cognitive science, psychiatry,

biology, economics, education and the arts. These collaborative efforts are expected to have an impact in

the management of brain diseases such as depression and psychopathy, and in the elucidation of social

behaviors.

Dr. Damasio is married to his longtime collaborator, Dr. Hanna Damasio, who is a renowned specialist in

brain imaging.

Thanks to Dr. Damasio's intellectual bravery and truly original thinking, we can now think of emotions

along the same lines with which we understand vision or audition, and thus reach a much deeper

understanding of the brain basis for mind and consciousness. Without a doubt such understanding is one of

the vital steps toward a knowledge society. We believe Dr. Damasio's achievements measure up to the

ideals of ecotechnology, and deserve the Honda Prize.

The 31<sup>st</sup> award ceremony for the Honda Prize will be held at the Imperial Hotel in Tokyo on November 17<sup>th</sup>

2010. In addition to the prize diploma and medal, 10 million yen will be awarded to the laureate.

\*1 Honda Prize: The Honda Prize was established in 1980 as the first international scientific award in Japan.

Since then, the Prize has been counted as one of the most important international awards by the

International Congress of Distinguished Awards. The Prize has been awarded to some of the most

distinguished scholars at work in the fields of biology and technology.

\*2 Ecotechnology: The concept of Ecotechnology has been the Honda Foundation's guiding principle since

1979. The word was coined from the terms ecology and technology, where ecology connotes an entire global system which includes human civilization. The concept of ecotechnology calls for the harmonious

development and use of technology with human beings and their environment.

For more details: Please visit <a href="http://www.hondafoundation.jp">http://www.hondafoundation.jp</a> or call:

Honda Foundation at +81-3-3274-5125

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## Curriculum Vitae for Dr. Antonio Damasio

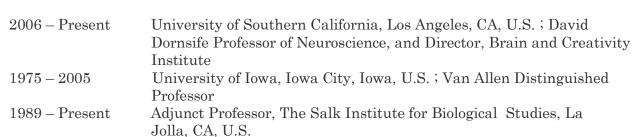
David Dornsife Professor of Neuroscience Director, Brain and Creativity Institute University of Southern California

**BORN** in Lisbon, Portugal; U.S. citizen

#### **DEGREES**

1969, MD, University of Lisbon Medical School, Portugal 1974, PhD, University of Lisbon, Portugal

### **APPOINTMENTS**



### **PUBLICATIONS**

Damasio is the author of over 350 scientific publications and of seven books, among them *Descartes' Error, The Feeling of What Happens*, and *Looking for Spinoza*. His most recent book is *Self Comes to Mind*, which will be published this fall.

### SELECTED HONORS

<u>Academies</u> 2009, Elected Fellow of the Association for Psychological Science; 2006, Elected to the Academy of Sciences, Lisbon; 2002, Elected to Bavarian Academy of Sciences; 1998, Elected to the Association of American Physicians; 1998, Elected to Permanent Membership, Belgium's Royal Society of Medicine; 1997, Elected to the American Academy of Arts and Sciences; 1995, Elected to the Institute of Medicine of the National Academy of Sciences; 1993, Elected to the European Academy of Arts and Sciences

<u>Honorary Degrees</u> 2010, Doctor Honoris Causa (D. Phil. H.C.), University of Leiden; 2009, Doctor Honoris Causa (D. Merc. H.C.), University of Copenhagen (Copenhagen Business School); 2003, Doctor Honoris Causa (D. Phil. H.C.), University of Aveiro; 2002, Doctor Honoris Causa (D. Phil. H.C.), University of Aachen

## Awards

2009, Richard Wollheim Prize, London; 2005, Prince of Asturias Award for Scientific and Technical Research; 2004, Signoret Prize in Cognitive Neuroscience (shared with Hanna Damasio); 2003, Nonino Prize; 2002, Named "Highly Cited Researcher" in Neuroscience by the Institute for Scientific Information; 2000, The Reenpää Prize, Finland; 1997, Prix Plasticité Neuronale, Ipsen Foundation; 1995, Golden Brain Award (Berkeley); 1995, Order of Santiago da Espada (Grand Oficial), Portugal; 1992, Pessoa Prize (shared with Hanna Damasio)

