

# Shinsuke Shimojo Profile

## 1. Affiliation

Professor, Division of Biology/Option Representative, Computation & Neural Systems, California Institute of Technology

Research Director, JST.ERATO Shimojo Implicit Brain Function Project

## 2. Research Areas

\* Psychophysics, Visual Science, Cognitive Neuroscience, Sensory Development

## 3. Awards / Honors

- 1991 - Japanese Society of Cognitive Science, The best presentation award in division of pattern recognition and modeling of perception (on modules and levels in visual system)
- 2000 - Suntory Prize for Publication in Social Sciences and Humanities
- 2003 - Japanese Neuroscience Society, Tokizane Memorial Award (on discovery of new perceptual phenomena related to visual contours and surfaces, as well as investigation of the underlying neural mechanisms)
- 2008 - Japanese Society of Cognitive Science, The "most creative study" award
- 2008 - Nakayama Grand Prix (for "significant contributions to science of emotion"; sponsored by Nakayama Press, Japan)

## 4. Education / Professional Experience, etc.

- March 1978 – B.A., Experimental Psychology, University of Tokyo
- March 1980 – M.A., Experimental Psychology, University of Tokyo
- May 1985 – Ph.D., Experimental Psychology, Massachusetts Institute of Technology
- March 1986 – Ph.D. program, completed. Experimental Psychology, University of Tokyo.
- Postdoctoral Fellow, Department of Ophthalmology, Nagoya University, Nagoya, Japan
- September 1986 - Postdoctoral Fellow, Smith-Kettlewell Eye Research Institute, San Francisco, CA
- April 1989 - Associate Professor, Department of Psychology / Department of Life Sciences (Psychology), Graduate School of Arts & Sciences, University of Tokyo, Tokyo, Japan
- March 1985 – Involved in the launch of CBR: (Nissan) Cambridge Basic Research CBR: Research Institute in the areas of Neural Science, Cognitive Science and Psychology by invited researchers from MIT and Harvard University. Research was conducted for 15 years and currently not in operation.
- April 1997 - Associate Professor, Biology Division – Computation & Neural Systems, California Institute of Technology, Pasadena, CA
- November 1998 until Present- Professor, Biology Division – Computation & Neural Systems, California Institute of Technology, Pasadena, CA
- April 1999 – Research Professor, NTT communication Science Laboratories
- October 2004 until Present – Research Director, JST.ERATO Shimojo Implicit Brain Function Project
- 2005 ~ 2010 – Member of research promotion in the area of Cognitive Science at the Nissan Science Foundation
- 2004 ~ 2009 – Implicit Brain Function Project is awarded by JST/ERATO (Japanese Science Technology Agency / Exploratory Research for Advanced Technology)

## 5. Exhibitions, museum activities

- Tanaka, N. and Shimojo, S. “Art & Science: Explore Reality” Exhibition, Tokyo Design Center, September 4 - November 10, 1993. (Workshop for children, during the period)

- Summer camp for handicapped children “Ganbare Kyouwa-koku”, Multi-media Exhibition for the handicapped and medicine (National Children’s Hospital), the eye interactive system “Eye Contact.” Yamanakako Lakeside Fuji Young Center, Yamanashi, August 26 - 28, 1994.
- Virtual Reality Expo’94 Exhibition, the eye interactive system “Eye Contact” Nagoya International Convention Center, October 11 -14, 1994.
- The National Museum of Science & Technology (Tokyo) 1996- Exhibition, General scientific/educational director.
- Renaissance Generation - Arts & Sciences (annual interdisciplinary event supported by Kanazawa Institute of Technology). Noriyuki Tanaka and Shinsuke Shimojo, 1997-(continued).
- The Illusion Live 2000. The National Museum of Science and Technology, Tokyo, Japan, August 19, 2000.
- The Illusion Live 2000. Kanazawa Institute of Technology, August 21, 2000.
- Asahi Shimbun (Newspaper) Essay series "Human Sciences 21" (bimonthly) June 2003 – February 2005.
- Shizuoka Children’s Science Museum “Ru-Ku-Ru”, Shizuoka, 2004-, General Science Director.
- Eye, hand and brain – Illusions and Neuroscience: Lecture and workshop for science teachers. Exploratorium/SEPA program (jointly with Caltech Biology Division), Exploratorium, San Francisco, March 11, 2006.
- Close Encounter – Illusions where science meets art: Shinsuke Shimojo's work in collaboration with National Taiwan University. March 17- April 16, 2007.

## 6. Activity in Academic Societies

More than 200 invited talks and lectures, including

- Invited Lectures / Talks at various Academic Conferences / Symposiums (e.g. ECVP, 2003, 2004; SPIE 2008)
- Invited Lectures / Talks at various conferences (e.g. Attention & Performance, 1994, 1996, 2004; Tamagawa University COE, 2004)

## 7. Outreach Activities

- Science/Education Director, “Forest Kensaku, Hakken No Mori” (Exploring Forest, Discovery of Forest), Permanent Exhibit, Science Museum, Tokyo, Japan
- Director, “Illusion No Heya” (Illusion Room), Permanent Exhibit, Science Museum, Tokyo, Japan
- Collaboration with an Artist, Noriyuki Tanaka “Art & Science” (1979), “Renaissance Generation” (1997 – Present)
- Participated in Kansas Science City (2000)
- Scientific Supervisor, Shizuoka Science Museum “Ru-Ku-Ru” (2003 – Present)
- Writes a column titled “Hito Kagaku 21” for Asahi Shimbun (2003 – 2005)
- “Illusion Exhibit”, National Taiwan University, Taipei, Taiwan (2007)
- Participated in Ars Electronica Art Festival, Linz, Austria (2009)

## 8. Academic publications

- 5 books for general audience, including award-winning, on consciousness, subconscious process, perception, and cognitive development (in Japanese).
- 130 papers published in major journals, including *Nature*, *Science*, *Nature Neuroscience*, *Proceedings of the National Academy of Science*, *Neuron*, *Journal of Neuroscience*, etc.