

# Distinctive Researchers

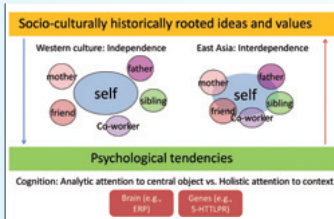


## ISHII Keiko

Associate Professor  
Graduate School of Humanities  
Social Psychology, Cultural Psychology

### A Psychological Study on Culture and Cognition

I have conducted intensive work regarding culture and cognition. A series of my studies showed that Japanese and Filipinos, who are familiar with high-context communication practices, are more likely to pay attention to contextual information (e.g., vocal tone) in comprehension of emotional utterances, whereas Americans, who are familiar with low-context communication practices, are more likely to pay attention to verbal meaning. I have recently extended my findings on the relative emphasis on contextual information among Japanese people using a specific stimulus-locked component of the electroencephalogram, and found that the perceiver's social orientation modulates the brain's response to incongruity between verbal meaning and the associated vocal tone. Moreover, I have recently demonstrated that Japanese people, reflecting their intense need to adjust to others' expectations, are more anxious than Americans in interpersonal contexts and more vigilant for signs of disapproval, such as the disappearance of a smile from another person's face. Furthermore, my recent work has examined the relationship between a gene in the serotonin-transporter-linked polymorphic region (5-HTTLPR) and cultural differences in sensitivity to the disappearance of positive and negative facial expressions. This work builds on a framework of gene-culture interactions in which culture moderates the association between genes and behavioral or psychological tendencies.

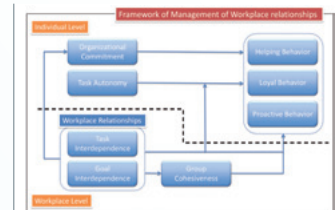


## SUZUKI Ryuta

Professor  
Graduate School of  
Business Administration  
Organizational Behavior

### Management of Workplace Relationship

The international business environment is changing rapidly. Under these circumstances, it is important for you to contribute to your organization beyond your defined role. More concretely, it is necessary to support your colleagues, avoid doing harm to others, and make the best use of innovation in your workplace. We believe that workplace management plays a central role in encouraging members of the organization to take such actions, because the management should act as an intermediary between the organization and individuals, analogous to the role of communities in society. We focus on workplace relationships; in particular, we study and analyze the relationships between specific actions and various factors in the workplace. Moreover, we are studying how management and offices should be handled in order to build optimal relationships in the workplace.





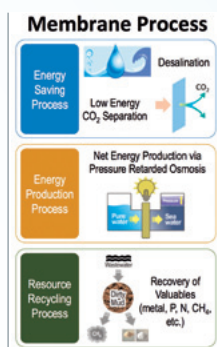
## MATSUYAMA Hideto

Professor  
Graduate School of Engineering  
Director of Center for Membrane  
and Film Technology

[http://www2.kobe-u.ac.jp/~matuyama/cx14HP/index\\_e.html](http://www2.kobe-u.ac.jp/~matuyama/cx14HP/index_e.html)

### Development of Innovative Membranes for Water Treatment and CO<sub>2</sub> Separation

With the aim of tackling the global issues such as water shortage and global warming caused by CO<sub>2</sub>, my research focuses on water treatment and CO<sub>2</sub> separation using membranes. The research has five main aspects: 1) membrane for water reuse and desalination with very low energy consumption; 2) strong anti-fouling membranes based on new materials; 3) CO<sub>2</sub> separation membrane with high performance under a large variety of conditions; 4) energy production by membrane process, 5) innovative separation systems using our newly developed membranes. In order to further advance this research, we have established the Center for Membrane and Film Technology (MAFTech Center) in 2007, the first and only university-driven membrane research center in Japan. Currently we are collaborating with more than 60 industrial companies, as well as partnering with seven academic membrane research centers overseas. In 2015, the integrated membrane research building (6000m<sup>2</sup>) finished its construction and commenced operations. It is a highly diverse research unit that integrates all aspects of basic and applied research. Intensive and synergistic research based on many different backgrounds is carried out in this facility. Our goal is to contribute to the achievement of a sustainable future society using membranes and innovations in membrane processes.



## KANAMORI Akiyasu

Lecturer  
Graduate School of Medicine  
Ophthalmology

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### Visualization of Axonal Degeneration

Glaucoma and other optic nerve diseases cause irreversible visual function disorders due to an irreversible optic nerve disorder called axonal degeneration. Glaucoma, which progresses chronically, is the leading cause of acquired blindness in Japan. Currently, lowering intraocular pressure is the only method of treatment for glaucoma. Clinically speaking, glaucoma is completely different from other optic nerve diseases, but the final structure changes (namely, the death of retinal ganglion cells and axonal degeneration), are the same. Focusing on the differences between glaucoma and other optic nerve diseases, we are conducting quantitative morphological analyses of the retinal nerve fiber layer and the inner retina structure using optical coherence tomography. We have published numerous study reports on glaucoma and optic nerve diseases. To visualize axonal degeneration, we have been conducting research on *in vivo* imaging using animal models, and have been trying to shed light on axonal degeneration caused by optic nerve diseases including glaucoma, sometimes using molecular-biological methods. Thanks to our past achievements, we won the Asia-Pacific Glaucoma Society Young Investigator Award for academic year 2014.

