Data analysis to establish a research hub for interdisciplinary fusion



This device worn around the arm reads fluctuations in the wearer's heartbeats. Data from the device can visualize the wearer's emotional changes. In other words, it is possible to find out which activity causes what level of stress to the wearer, and hence identify highly stressful tasks at the workplace, for example.

he starting point of my current research is the realization that many societal challenges cannot be overcome if they are undertaken from the standpoint of a single domain. When I was an undergraduate student, I traveled as a backpacker around the world, visiting dozens of countries and regions. After graduation, I visited four continents by boat as part of my youth work for the Cabinet Office and spent more than a year each in Thailand, Canada, and Australia (I lived in Australia for four-and-a-half years). I have many friends outside Japan, and the total number of nationalities of the friends with whom I have lived together for over a year is well over 130. Getting to know all those friends, learning about so many different life experiences, and thinking about them as best as I could, I have come to believe that it is unrealistic to try to find solutions to problems that confront people in society from the viewpoint of a single field of specialization, such as economics, medicine, or engineering. I made the decision to be a researcher in my mid-20s. When I was an intern in an NPO that assisted farmers in the United States, I saw a group of local researchers helping farmers with



marketing using statistical techniques. I knew then that I wanted to do something like that. It was hard to obtain a full scholarship, which I needed since I had no money, but I decided to get a doctorate outside Japan and become a researcher. I chose Health Economics as my area of specialization because of the importance of designing policy measures to operate healthcare and nursing systems fairly and efficiently in Japan, where population aging was already advancing.

However, that is not the only subject of my research. I am hoping to establish an interdisciplinary research hub where I can propose concrete solutions to society's problems through the fusion of medicine, engineering, and various other domains, taking advantage of the data analysis ability that I developed as an economist.



At the laboratory, the researchers' analysis can lead to policy proposals.

I have always worked on several research projects at the same time. These research projects, including the ones I am currently conducting, are as follows: 1) A study of emotional status and labor productivity using biometric devices procured from a corporate partner; 2) a study of drivers' emotional status and driving safety with cooperation mainly from a taxi company; 3) a study of the mechanism causing uneven distribution of beneficiaries of an economic policy measure involving premium shopping coupon, jointly conducted with the Hiroshima prefectural government and Hiroshima Bank; 4) a joint research in which findings from the research on tactile impression by Prof. KURITA Yuichi (Graduate School of Advanced Science and Engineering) are applied to marketing; 5) a joint research estimating the economic ripple effects of the prevention of urinary incontinence in



Professor School of Economics Graduate School of Humanities and Social Sciences KADOYA Yoshihiko

Research interests

Healthcare economics, social security, financial literacy

middle-aged and elderly person, with Dr. MAEDA Noriaki (Graduate School of Biomedical and Health Sciences) and others; 6) a joint research with medical scientists and psychologists of other universities on countermeasures against financial frauds; 7) a study of isolation and solitude due to COVID-19; 8) analysis of behavioral change in resistance to anti-COVID 19 vaccinations; and many other exciting interdisciplinary research projects that I cannot describe due to limited space.

I think Hiroshima University is characterized by a generally supportive attitude toward young people who are doing their best. I myself have been afforded many opportunities to translate my research results into concrete policy proposals through international joint research consortia, the Science Council of Japan, and so forth. I intend to continue to carry out research projects that I myself find exciting and that are beneficial to society at the same time. In doing so, I am looking forward to working with like-minded students and researchers from Japan and abroad who specialize in various domains, as well as corporate partners and governmental agencies.



The Hiroshima Institute of Health Economics Research (HiHER), where Prof. Kadoya serves as director and leader, is one of the few Centers of Excellence and cutting-edge international research projects at HU.

supporting world-class research

In his backpacker days, Prof. Kadoya visited many countries and regions

around the world.

- Institute of Sport
- HiSIM* Research Center
- The Center for Contemporary India Studies at Hiroshima University
- Research Center for Diversity and Inclusion
- Amphibian Research Center
- Translational Research Center
- Resilience Research Center
- Center for Brain, Mind and KANSEI Sciences Research
- Hiroshima University Genome Editing Innovation Center
- Hiroshima University Digital Monozukuri
- (Manufacturing) Education and Research Center Education and Research Center for Artificial
- Intelligence and Data Innovation

*HISIM (Hiroshima-University STARC IGFET Model) is a transistor model used in circuit design that has been developed by Hiroshima University in collaboration with the Semiconductor Technology Academic Research Center (STARC).

National Joint Usage Facilities

Hiroshima Synchrotron Radiation Center

Synchrotron radiation is generated when an electron traveling at the speed of light is forced to change direction by a magnetic field. Synchrotron radiation is called "dream light" because it is not only powerful but also includes light of various wavelengths. The center promotes advanced materials science and emerging interdisciplinary fields using synchrotron radiation.

