UTokyo
Policy Alternatives Research Institute

- Established in 2008 as an Interdepartmental Institute
- The roles and activities of PARI

  - Communicating policy alternatives utilizing research results at Utokeyo
  - Detecting problems by constructing networks covering a wide range of fields
  - Activating policy research by interacting with internal and external organizations
Methodology of Policy Research and Recommendations

- Policy recommendations based on research results are published under the name of the policy research unit or the research demonstration.

- A policy research Unit: conducts policy research
- A research demonstration project: conducts concrete social demonstration researches

Organization

- University-wide Center
- PARI was established as an organization directly supervised by the Office of the President in 2008 in order to achieve participation by all faculties and graduate schools of The University of Tokyo. It was transformed into a university-wide center in April 2013.
Structure of Policy Alternatives Research Institute

Policy Research Units

1. University and Society
2. Future Society and the Universities
3. Intellectual Property Rights
4. Complex Risk Governance
5. Technology Governance
   - Space Policy and Cyber Security Studies
6. Public Policy Consensus Building Practice and Research
7. Northeast Asian Security
   - Security Studies Unit
8. Aviation
9. Medical Devices Innovation and Development
10. Health and Productivity Management (HPM)

Research Demonstration Projects

1. Technology Assessment
   - ERIA Energy Research in East Asia
2. Social Inclusion through Guardianship and Trust
3. Policy Thinknet
Five Key Research Areas

1. Universities and Social Systems
2. Innovation Systems
3. Technology and Risk Governance
4. Security Studies
5. Institutions for an Aging Society and Medical Innovations
PARI Policy Recommendations

1. Final Report - Resilient Governance Study by PARI & COCN (March 2014)
2. University Reform from the Viewpoint of Innovation System: Evaluation of a National University 10 years after its Incorporation by University and Society Policy Research Unit (December 2013)
3. Interim Report - Resilient Governance Study by PARI & COCN (November 2013)
4. Recommendations for the Review of the Basic Plan on Ocean Policy by UT Ocean Alliance & PARI (September 2012)
5. Final Report - The Silver New Deal for our Active Aging Society by PARI & COCN (March 2012)
6. Options for Institutionalizing Technology Assessment in Japan by Technology Governance Unit (December 2010)
8. The Silver New Deal for our Active Aging Society by PARI & COCN (February 2010)
9. 7 Messages to "the Trilateral Heads Meet the IP Users Symposium" from Academia by Intellectual Property Rights Unit (November 2009)
10. Energy and Environmental Policies for our Society by Technology Governance Unit (July 2009)
11. 15 Messages for the Patent System to Innovate our Future by Intellectual Property Rights Unit (June 2009)
12. Direction of Policy Recommendations for Comfortable and Active Aging by PARI (March 2009)
University and Society Research Unit

Toshiya Watanabe (Project Professor)

March 1, 2014
Overview

- Currently, university is expected to play an important role to contribute to foster innovation and solves social problems and build up new social system through international cooperation. Closer cooperation between university and society is inevitable to strengthen its knowledge and improve its education and research activity. In this research unit, we study how to improve and strengthen ties between university and society. By interdisciplinary research approach, and also based on study of national innovation system, we will clarify what kinds of network including university and industry is necessary to build up desirable innovation system from comparative study among US, EP and Asian countries.
Members

**Director**
- Toshiya Watanabe (Professor, Policy Alternatives Research Institute / Research Center for Advanced Science and Technology, The University of Tokyo)
- Ichiro Sakata (Professor, Policy Alternatives Research Institute)

**Members**
- Maho Furuya (Project Researcher, Policy Alternatives Research Institute)
- Shigeo Kagami (Professor)
- Kazuyuki Motohashi (Professor)
- Junjiro Shintaku (Professor)
- Koichi Ogawa (Visiting Researcher, Policy Alternatives Research Institute)
- Toshifumi Futamata (Professor)
Recent research topics

- Study on university technology transfer and university industry cooperation: the effect of IP management of university on joint research.
- Empirical study on university startups: Effect of network structure of startups' ties on their performance
- Empirical study on university research administrator (URA): Organizational structure of URA on their performance
Intellectual Asset Management (IAM) Research Project

- IAM research project supported by the New Energy and Industrial Technology Development Organization (NEDO) is a part of university and society research unit which focus on organizational strategic intellectual asset management. “Open and close innovation strategy”, “Design driven innovation strategy”, “Reverse innovation strategy” and “Advanced university industry cooperation” are resent topics of our research. Final goal of this project is to propose human resource development program to foster organizational innovation strategy by cooperation between university and industry.
Overview

The effect of the Intellectual Property Rights (IPR) system on innovation today is becoming more and more complicated. Recent progress in innovation strategies, such as open innovation, rapid increases in the number of IPR applications, enhancement of linkages between science and industry, and economic growth in emerging countries are all influencing the effect and leading to roadblocks in the innovation landscape. “How should the IPR system be to promote innovation?” is a key question we are facing. In order to clarify the effect of IPR on innovation strategy by nations and organizations and to propose next generation IPR systems to enhance innovation, we study the IPR system we presently have. Our research focus is IPR system as a part of national innovation system. We emphasize empirical study and we make IPR policy proposals based on our research results.
Research

World intellectual property rights systems are in a phase of structural change. We show options for systematic reform of the current IPR system on the basis of empirical study on the effects of IPR on innovation systems, especially on open innovation strategies. Our study includes examination of the balance between the protection and the use of rights, ideal systematic reforms and international cooperation to improve patent quality, and the way patent management should be in increasingly complicated cases such as in international university-corporate collaboration or in universities. IPR and innovation in China, virtual reality and IPR systems, design protection and standard and patent systems are also our recent research topics. Adding to these researches, we make proposals on the operating infrastructure of intellectual property rights systems, such as seamless search systems that cover both patents and academic information.
Members

- **Director**
  - Toshiya Watanabe (Professor, Policy Alternatives Research Institute / Research Center for Advanced Science and Technology, The University of Tokyo)
  - Ichiro Sakata (Professor, Policy Alternatives Research Institute)

- **Members**
  - Kazunari Sugimitsu (Professor, Kanazawa Institute of Technology / Visiting Researcher, Policy Alternatives Research Institute)
  - Kotaro Yamano (Visiting Researcher, Policy Alternatives Research Institute)
  - Naoko Ono (Visiting Researcher, Policy Alternatives Research Institute / Visiting Researcher, Columbia Law School, Columbia University)
  - Kaori Minami (Visiting Researcher, Policy Alternatives Research Institute / Visiting Researcher, London University)
Current Research Topics

- Design Protection: Study on comprehensive legal protection system of design innovation.
- IPR Judicial System: Efficient and improved judicial system of IPR litigation are studied by comparable and empirical study of IPR litigation decided by IPR high court between US and Japan.
- IPR system of China, India and ASEAN countries: Study on IPR system of emerging countries from innovation policy perspective.
- Trade Secret: Study on Trade Secret system to protect technology knowhow by empirical study on inventors transferring from Japan to emerging countries.
- Effect of IPR system on FDI to ASEAN countries: Project to encourage financial direct investment to ASEAN countries from IPR perspective organized by Economic Research Institute for ASEAN and East Asia (ERIA).
- Study on interaction between inbound open innovation and outbound open innovation.
Complex Risk Governance and Public Policy

H. Shiroyama, T. Taniguchi, K. Mikuniya, A. Kishimoto, M. Matsuo, K. Ohta
Overview: Complex Risk Governance and Public Policy Unit (2012-14)

- **Background**
  - Increasing complexity, uncertainty and ambiguity (climate change, pandemic, worldwide financial crisis, Fukushima disaster...)
  - Risk versus risk issues among various risks (safety, economic, social, ethical...)
  - The risk governance perspective is the key to overcoming this challenge
  - The need for full risk mapping and analysis based on that: OECD reports and IRGC framework

- **Aims**
  - To identify the key factors in achieving a resilient society in the face of complex risks
  - To explore a set of policy options and measures to enhance the capacity to govern complex risks
  - To coordinate dialogue and collaboration among experts from academia and practitioners with divergent disciplines and set a platform for societal discussions towards better risk governance
Overview: Complex Risk Governance and Public Policy Unit (2012-14)

- Areas of Research Interests
  - The risk governance mechanism and cross-cutting issues in the fields of nuclear energy, natural disaster, HSE risks, financial risk, etc.
  - Mapping and visualization of the risk relationships: Development of a holistic framework and indicators
  - Identification of the challenges against risk governance
  - Recommendations for social decision-making and management directed towards complex risk governance
  - Possible forecast of Japan’s risk landscape

- Members
  - Prof. H. Shiroyama (GraSPP/GraSLP/PARI), Prof. K. Mikuniya (PARI), Prof. T. Taniguchi (PARI), Project Prof. Kishimoto (GraSPP), M. Matsuo (GraSPP/PARI), K. Ohta (PARI)
MEXT/JSPS Scientific Investigation Research on the East Japan Mega-disaster (2012-14)

- **Purposes**
  - To record and verify the damage to and impact on social systems caused by the East Japan Mega-disaster and the recovery process from the viewpoint of the humanities and social sciences.
  - To leave data, information and academic findings related to the East Japan Mega-disaster for not only future development of the humanities and social sciences but also global society through publishing, workshops and symposiums.

- **Research subjects/Teams**
  - Politics and Policies
  - Administration and Local Governments
  - **Science & Technology and Politics & Administration**
  - Macro-economics
  - Environmental Economics and Disasters
  - Local Communities and Ties/Solidarity
  - International Relations
  - Press and Media
Science & Technology and Politics & Administration

- **Research subjects**

  - Historical analysis of nuclear power technologies and safety assurance
    - Inter-organizational relations in the Japanese nuclear fraternity in the course of introducing and deploying nuclear power technologies
    - Deficits of risk governance for ensuring safety before, during and after the Fukushima accident
    - Nuclear safety agreements between local governments and power utilities
    - Nuclear emergency preparedness
  
  - Field survey of risk communication activities on health risks due to radiation exposure and nuclear safety
    - Before, during and after the Fukushima nuclear disaster
  
  - Analysis of impacts and interactions of science, technology and society
    - Financial system (temporary measures and some exceptions for victims, maintenance of the settlement system, function of the financial market, and security assurance of financial institutions)
    - Food safety governance (focusing on governance issues such as regulatory standards for radioactivity in foods, risk tradeoff of food safety and other socio-economic risks)
    - Medical services in crisis situations and the recovery process
    - Transportation and ICT
Survey of overseas views on utilization of nuclear energy technology after Fukushima nuclear disaster

Moderator: Taketoshi Taniguchi (Professor, Univ. of Tokyo)
Panelists:
- Jungmin Kang (Visiting Professor, KAIST)
- ShaoFeng Chen (Associate Professor, Peking Univ.)
- T.S. Gopi Rethinaraj (Assistant Professor, NUS)
- Hideaki Shirayama (Professor, Univ. of Tokyo)
- Muneo Morokuzu (Project Professor, Univ. of Tokyo)
- Tatsujiro Suzuki (Commissioner, AECJ)

- What kinds of risks or events have rippled or cascaded over the world, in particular Asian countries, when Fukushima nuclear accident occurred?
  - e.g., social unrest, social resistance and refusal against nuclear technology, revisiting energy policy, institutional reform, economic damages etc.

- How we should recognize implications of the cascading events and consequences?

- How we could deal with these emerging risks?
JSPS Grants-in-Aid for Scientific Research Complex Risk Governance (2013-14)
Subject: Risk Landscape of Japan

- **Purposes**
  - To better understand strategic risks to our country’s vital interests and sustainability
    - Broader societal safety and security beyond classic national security
  - To provide administrative and political impetus for enhancement of cross-governmental risk management and resilience
  - To help the public foster risk awareness through dissemination of the research outcomes

- **Scopes**
  - Risk category: geopolitical, economic, environmental, social, and technological risks
  - Impacts/consequences category: human welfare (loss of human life, human illness or injury, homelessness, physical disruption to people’s daily lives), environment, economy and assets, territory, and socio-psycho-culture (social unrest, community disruption, etc.)
  - Time horizon: short term (within the next 5 years) and medium term (in 5 to 10 years)
  - Hazards and threats: malicious, non-malicious, and cross-border
    - Natural disasters, manmade disasters (cyber attacks, terrorism, etc.), and industrial accidents

- **Approach**
  - In-house task force (mainly hearing from experts of UTokyo)
  - Web questionnaire survey on risk awareness (decision-makers in the public and private sectors)
  - Workshops as a place of inter-agency and cross-sectoral collaboration
JST-RISTEX Grants

- How to manage and reduce social vulnerabilities from coupled critical infrastructures against all hazards and threats
  - How to socially implement triage of critical infrastructures in affected areas
  - What the legislative issues are in dealing with emergencies
  - How to organize collaborative actions across sectors and leverage private-sector resources
  - Roles and responsibilities of government as risk bearer of last resort

Infrastructures around Tokyo
Overview of the Research Project

Threat Scenario Generation

Modeling and Simulation
- Vulnerability analysis
- Interdependencies
- Cascading analysis

Comprehensive Assessment
- Assessment criteria
- Recovery planning
- Scenario library

Institutional Design
- Prioritization
- Investment scheme
- Institutional design

Department of Systems Innovation
Resilience Engineering Research Center

Propositions for Policy-Makers

Policy Alternatives Research Institute
Institutional Designs and Policy Alternatives for Ensuring the Safety and Security of Civil Society

- Legislative issues for dealing with emergencies
  - Legal preparedness for regulatory and jurisdictional actions before, during and after emergency situations

- Institutional design for ensuring national crisis/emergency management capability
  - Review of the National Response Framework & National Incident Management System
  - Institutionalization of future-oriented thinking across ministries and agencies such as horizon scanning/strategic foresight capability
  - Organization of collaborative actions across sectors and leveraging private-sector resources

- Policy and institutional design for critical infrastructure protection
  - Cooperation scheme (government-private, central-local sector)
  - Prioritization of critical infrastructures and resilience planning
  - Investment scheme and incentive offering for enhancing resilience
  - R&D for critical infrastructure protection

Nearly three years have passed since a major earthquake of unprecedented magnitude struck the eastern part of Japan. To what extent has the Japanese crisis management system evolved since then in addressing the nation’s vulnerability revealed as the outcome of its immediate response to seismic disaster and nuclear accident?

A growing concern contingent to the rapid development of globalization is that the impact of an incident occurring remotely at the far end of the planet can now immediately ripple and may lead to a devastating situation worldwide.

By reviewing and redefining the global risks, we will not only be able to prepare better to mitigate the damages and losses, should such risk becomes a reality, but will also be able to leverage the efforts to prevent such risks in corporate activities to create new opportunities for innovation and business growth.
International Symposium on Risk Governance of Science and Technology, December 15-17, 2013 @ UTokyo

Objectives:
• To understand deeply commonalities and differences across different technologies and regions, and to identify specific and cross-cutting issues and explore best practices for better governance of emerging risks
• To provide an opportunity for networking among young scholars and practitioners with divergent disciplines around the globe

Workshop (Closed)
Session 1: Governing Food-related Risks
   Organized by M. Matsuo
Session 2: Governing Nuclear Accident Risks
   Organized by K. Juraku
Session 3: Governing Risks of Climate Geoengineering
   Organized by M. Sugiyama
Closing Interdisciplinary Challenges and
Session : International Collaboration for Better Governance of Science and Technology
   Organized by A. Kishimoto

Symposium (Open to all)
The Challenges of Risk Governance of Science and Technology
   Keynote Lectures by Prof. Ortwin Renn and Prof. Lan Xue
   Panel Discussions moderated by Prof. T. Taniguchi
International Symposium in conjunction with the 50th Anniversary of the Codex Alimentarius Commission, September 24, 2013 @Koshiba Hall, UTokyo

Objectives:
- To explore the achievements of and the challenges facing the Codex Alimentarius Commission, an international food-standards-setting body jointly established by FAO and WHO, and the evolving roles of global food standards.
- To analyze the changing landscape surrounding the food safety environment, identify key issues (existing, emerging and potential) and endeavor to strategically analyze the appropriate policy response.

Chaired by Makiko Matsuo (UTokyo)

Keynote Speeches
- Dr. Stuart Slorach (Former chairman of CAC)
- Dr. Kazuaki Miyagishima (WHO)

Presentation
- Mr. Kenji Asakura (MAFF)

Panel Discussions
- Moderated by Prof. Hajime Toyofuku (Yamaguchi Univ.)
- Panelists: Dr. Stuart Slorach, Dr. Kazuaki Miyagishima, Mr. Kenji Asakura, Dr. Hiroshi Yoshikura, Mr. Kazuo Onitake, Mr. Hiroshi Kadoma

http://pari.u-tokyo.ac.jp/eng/event/smp130924_rep.html
Public Policy Consensus Building Practice and Research Unit

Prof. Masahiro Matsuura

Tomoko Tsuchiya (Project Researcher)

March 1, 2014
Overview

Background:

- Consensus building and other kinds of coordination through multi-stakeholder negotiation and nation-wide deliberation are essential in a wide range of policy-making processes. On the other hand, society is in transition and stakeholders are more diverse and intertwined than before.

- As policy options are formulated on evidence which may be more or less sound or adequate, and as the nature of social problems has become increasingly complicated, policy-making necessarily involves high levels of uncertainty, and demands exceptional expertise.

- On top of these challenges, public policies are expected to meet the expectations of the public, as well as to achieve a fair distribution of wealth.

Our goals

- We will provide an arena for interdisciplinary research on consensus building processes.

- We will work with and provide professional support for stakeholders and decision-makers in the various fields of public policy, which face being overwhelmed by consensus building difficulties.
Target areas

- Research
  - We address a wide range of issues, including planning techniques, process design, policy processes, institutional design, as well as political philosophy.
  - We aim for producing practice-oriented policy recommendations.
  - We critically examine the pedagogy of negotiation and consensus building.

- Practice:
  - We will provide support for a wide range of decision-makers and stakeholders on consensus building processes, offering non-partisan assistance, as a part of our initiatives for research and education through action research.
  - We will serve as a liaison between fields of practice and the scientific expertise available at the University of Tokyo by adopting the Joint Fact-Finding approach.
Pilot Project on Experts and the Public’s Deliberation regarding the Seismic/Tsunami Risks of Nuclear Power Plants and the Health Risks of Radiation (public grant from MEXT)

- **Background**
  - After the Fukushima incident, several experts described or published their opinions on the probability of severe accidents at Nuclear Power Plants (NPPs) caused by earthquakes and of health damage caused by radiation from the accident.
  - The opinions, even of those from the same field, have all been different, which has left the public feeling confused. The experts have not been able to frankly and calmly discuss scientific matters among themselves.

- **Research Objectives**
  - To set up expert forums to deliberate on scientific facts and expert opinions
  - To inform the public about why and how the experts’ opinions differ, so that they can think privately about the risk arising from scientific uncertainty

- **Activities and Findings**
  - Tree Expert Forums were conducted by people with different areas of expertise in dealing with the seismic risk of NPP
    - Each expert made clear the extent of their lack of knowledge in their areas, something that had formerly been done only in formal meetings
    - Audience members who were non-experts were shocked at the lack of collaboration among members of different areas of expertise
    - Participants will carry on a discussion of the role experts should take with regard to risks and uncertainties

- **Plan in FY2014**
  - Implement expert forums on the health risks of radiation
Space Policy and Cyber Security Studies

Collaboration with Mitsubishi Research Institute, Inc.
Sponsored by Ministry of Foreign Affairs of Japan

Project Member
Prof. Hideaki Shiroyama
Motoko Uchitomi (Visiting Lecturer)
Yuichiro Nagai (Project Researcher)

As of March 2014
Space Policy and Cyber Security Studies Project

Sponsored by Ministry of Foreign Affairs of Japan, the University of Tokyo Policy Alternatives Research Institute (PARI) and Mitsubishi Research Institute Inc. (MRI) started a joint research project concerning space policy and cyber security issues from the perspective of foreign policy and national security in 2013.

Background
• Increasing importance of outer space and cyberspace as global arenas for Japan’s diplomacy and national security
• Growing need to enhance bilateral and multilateral cooperation in order to assure stable and sustainable use of global commons

Goals
• To establish a think tank for space policy and cyber security issues, focusing on diplomacy and national security
• To further enhance the necessary capability for conducting research on space policy and cyber security issues
Main Activities

Research and Analysis:
- Collecting basic information concerning space policy and cyber security issues
- Researching on multilateralism as framework to assure sustainability and peaceful use of outer space
- Promoting Japan’s space diplomacy and international cooperation in the Asia Pacific region
- Promoting US-Japan space cooperation for national and international security purposes
- Studying cyber security issues

Networking and Communicating:
- Developing communication and collaboration with think tanks, universities, and research institutes in foreign countries to carry out research and analysis on space policy & cyber security issues
- Establishing networks with researchers, experts, and opinion leaders in Japan and abroad to share knowledge on space policy and cyber security studies

Outreach Events:
- Holding open workshops or symposia in Japan and abroad
Platform for Space Policy and Cyber Security Studies

MOFA

MRI

PARI

Study Group

WG on Collecting and Analyzing information

WG on Space Diplomacy

WG on Space and National Security

WG on Cyber Security

Working together with foreign research institutes

Working together with other research institutes and/or universities in Japan

Cooperating internationally

Disseminating information globally

Public understanding

Collecting and Analyzing information

Platform for research
The Aims and Activities of the Unit

Overview

The SSU aims at improving our understanding of security threats, while looking for a better system formation in Northeast Asia, where the power balance is constantly changing. These concepts form the core project of the joint research teams of The University of Tokyo and Princeton University, and of the joint research scheme of the Five University Network.

2013 Research Activities

- Five University Network: 2013 Workshop “Urgency of Re-Establishing a Degree of Mutual Trust in the North-East Asia Region”
- Hiroshima Process: Roundtable “Hiroshima for Global Peace”
- Maritime Security & Multinational Cooperation, Workshops:
  - “Power Transition and Maritime Security”
  - “Peace and Stability in the East China Sea, with a Special Focus on Fishery Agreements”
- The East Asian International Politics Project (MOFA /The Japan Foundation Project) SSU Forums and Workshops:
  - “Managing International Conflicts in East Asia”
The Aims and Activities of the Unit

2010-2012 Projects & Workshops

- Five University network / Joint Research on Future Conflicts in Northeast Asia
  - 2011 Workshop “The Future of Security and Governance in East Asia”
    (Supported by the Japan Foundation and I-House)
- MacArthur Foundation, Asia Security Initiative Project, Workshops and Roadshows
- Workshop “Building a Region or Resuming Rivalries?: Northeast Asia at the Crossroads” as a part of IARU (International Alliance of Research Universities) New threat and New Security Study
- “Hiroshima Process: Towards a Multilateral Process for Nuclear Arms Reduction”

Future Projects

- The East Asian International Politics Project (April 2013-March 2015, Funded by MOFA)
Members

Director

- Kiichi Fujiwara (Professor, Graduate Schools for Law and Politics)

Members

- Akio Takahara (Professor, Graduate Schools for Law and Politics)
- Keisuke Iida (Professor, Graduate Schools for Law and Politics)
- Lully Miura (Postdoctoral Research Fellow, JSPS)
- Wakana Mukai (Project Researcher, PARI)
- Yuichiro Nagai (Project Researcher, PARI)
- Roberto Orsi (Project Associate Professor, PARI)
Past Research 1

- **The MacArthur Project**
  - Building Academic Network in Asia Pacific
    - Member Institutions: The University of Tokyo, University of California, Yonsei University
  - Research (2009-2011)
  - Workshops (July 2009, August 2010)

- **Five University Network**
  - Building Academic Network in Asia Pacific
    - Member Institutions: The University of Tokyo, Woodrow Wilson School of Public and International Affairs of the Princeton University, Peking University, Korea University, Lee Kuan Yew School of Public Policy of the National University of Singapore
  - Tackling Urgent Security Issues in Northeast Asia
    - Power Transition and the Future of Alliances
    - North Korea’s Aggression & Nuclear Question
    - Maritime Security and Multilateral Security Cooperation
  - Annual Workshop
Past Research 2

- **Maritime Security & Multinational Cooperation**
  - Research in collaboration with UT Ocean Alliance
  - Recommendations for the Review of Basic Plan on Ocean Policy UT Ocean Alliance & PARI (September 2012)
  - Workshop “Power Transition and Maritime Security” (February 2013)
  - Workshop “Peace and Stability in the East China Sea, with a Special Focus on Fishery Agreements“ (August 2013)

- **Hiroshima Process**
  - Hosted by Governor of Hiroshima Prefecture, Mr. Hidehiko Yuzaki
  - Focus on East Asia
    - Expanding nuclear arms reduction to relations other than US-Russia negotiations
    - East Asia as neglected region in the global security architecture
  - Hiroshima Process Initiative
    - A multilateral process (round-based) for the reduction of nuclear arms
    - Arms Control as a tension reduction process
  - Workshop “Hiroshima for Global Peace” (July 2013)
Current Research

- The East Asian International Politics Project
  (Supported by MOFA /The Japan Foundation)

  - SSU Forum: “State Control and the Effects of Foreign Relations on Bilateral Trade” (2013 June)
  - Workshop: “Managing International Conflicts in East Asia” (January 2014)
  - SSU Forum: “The US Rebalance Towards Asia: Implications for Japan-China Relations” (March 2014)
Future Projects

PARI led Project
The International & Domestic Nexus
Fujiwara-Leheny

Contribution, Cooperation

The Economic & Security Nexus
Iida- Davis

Japan- China Relations: Dynamics and Structure
Takahara- Christensen

Multidimensional Study of Future Japan-US Relation in the Age of Transition

Conflict Management through Arms Control & Hiroshima Process
Fujiwara- Ikenberry

Todai-Princeton Graduate Student Exchange Program

Foreign Policy Experts, Journalists, etc.

Scholars in various related fields
Aviation Policy Research Unit

Professor Shinji SUZUKI (School of Engineering, Aeronautics and Astronautics)
Prof. Ichiro SAKATA (School of Engineering, Technology Management for Innovation)
Project Prof. Taizo HAYASHI (Graduate School of Public Policy)
Project Associate Professor Akinari IIZUKA
Project Researcher Hiroko NAKAMURA
Overview

- Aviation is highly complex and closely relates to national strategy. In spite of progressive liberalization and deregulation, civil aviation is still under heavy governmental influence due to its special needs, such as route rights, airport slots, safety requirements, technological development and so on.

- While the aviation industry has a high priority in national growth strategies in Europe and America, Japan has been lacking a comprehensive aviation policy, partly because it has been so long since the nation has had a civilian aircraft in production.

- The YS-11, a Japanese-designed 64-seat passenger turboprop, ceased production in 1973. While attempts have been made to revive the industry in the 40 years since the demise of the YS-11, there has recently been a concerted upsurge of interest, which has led the industry to start development of a 70-90 passenger regional jetliner.
Activities

Regional Airlines and Airports—its Potential and Prospects

Aviation Environment Workshop

Publication of book covers the whole Aviation Industry and Systems

International Seminar on Aviation and Climate Change

Forum, Symposium etc.
Seminar
Workshop
Report etc.

2009 | 2010 | 2011 | 2012 | 2013 | 2014

2009:
- Day 1
- Day 2
- Day 3
- Day 4

2010:
- Day 1
- Day 2
- Day 3
- Day 4

2011:
- Day 1
- Day 2
- Day 3
- Day 4

2012:
- Day 1
- Day 2
- Day 3
- Day 4

2013:
- Day 1
- Day 2
- Day 3
- Day 4

2014:
- Day 1
- Day 2
- Day 3
- Day 4
Recent research and educational interests

- Japanese Supply Chain Roadmap for Next Generation Aviation Jet Fuel
- Education of global minded and system thinking students
The Research Unit on Medical Devices for Innovation and Development

Prof. Ryozo Hayashi
Chiaki Sato (Ph.D./LL.M., Project Assistant Professor)
Akio Kurokawa (MPP, Project Academic Support Staff)
Mission

For Better Healthcare and National Economic Growth

- Japan has much technological potential for providing better healthcare via medical device innovations
- However, even after launching the National strategy for 5 years on pharmaceuticals and medical devices in 2007, some outcome have not come to us in medical device sectors
- One of the reasons was few academic interest in laws and policies for the medical device industry
- In light of improvement healthcare and realizing economic growth via medical device innovations/developments through institutional innovation, this unit was established in 2009
Project (1) New Regulatory Schemes

Providing a fundamental concept for new legislation for medical device regulations in 2013

- Writing a concept paper for recommendations based on regulatory development in the U.S. and EU
- Reasonable regulations for new medical products and technologies (related with regenerated medicine and stem cell)
Project (2) Payment and Reimbursement Reforms for Physicians and Medical Devices

Reforms for balancing approach among access, cost, quality via sustainable innovation

- Changes in fee schedules/reimbursement levels for 2013-14 include one of our recommendations-linkage between quality of clinical evidences and add on payment levels
- Preliminary discussions for possible collaborative research for accountable care payments with Engelberg Center for Healthcare Reform, at the Brookings Institution (ACO, DRG, physician payment issues)
- Discussing possible business models and insurance mechanism for more advanced personalized medicine
- Presentations: (1) “Creating a Sustainable Healthcare System Through Innovation”, AMCHAM Healthcare Innovation Seminar 2013, June 28, 2013 (2) How to Harmonize Regulatory Approval & HTA-Korea Experience A Perspective from Japan, HTAi Korea on June 17, 2013
Project (3) Data Use for More Effective Healthcare Delivery

Reforms for efficient healthcare delivery via meaningful use of health information with reasonable privacy protection

- Providing basic structures for MHLW in health information legislation of 2013 (including anonymization and liability issues)
- Discussion paper with Professor Kazuyuki Nakayasu, a MHLW staff about promoting telemedicine as a tool for effective healthcare
- Discussing possible data use approach in personalized medicine with Professor Nikolaus Forgo, Institut für Rechtsinformatik Juristische Fakultät, the Leibniz Universität Hannover
- Activities as a member for the OECD Advisory Panel of Experts in Health Information Infrastructure, 2013-14
Health and Productivity Management (HPM) Policy Research Unit

Project Professor: Hiroya Ogata,
Yuji Furui (Project Assistant Professor)
Yoko Tsuno (Project Assistant Professor)
Mission

- Establishing and disseminating a theoretical and practical framework for health and productivity management (HPM).
- Clarifying the health risk structure of organizations based on a “health risk appraisal” and promoting effective intervention.
- Estimating the total cost of employee health and corroborating that the promotion of HPM will contribute to a total cost reduction.
- Establishing HPM in Japan by developing systems to visualize the investment effect on health.
Background

- With the unprecedented falling birthrate and aging population, structural problems such as shrinkage of the working population and increase in lifestyle-related diseases have been emerging. Both maintaining productivity and enabling sustainable management of public health insurance schemes are urgent policy issues for society as a whole.

- According to a study in the United States, medical expenses account for only 24% of the total costs associated with the health of employees. In another study, job impairment (e.g., presenteeism) represents about 60% of the total health related costs. When indirect costs such as absenteeism (sick days), workers’ compensation, short- and long-term disability, and presenteeism are factored into the total cost equation, the share of productivity-related costs will jump to three-quarters of the total costs. Productivity loss attributed to poor health and/or lifestyle-related risk factors becomes an important consideration in providing employee health management services including health promotion.

- Health and productivity management (HPM) can be defined as efforts aimed at reducing the overall health related costs by managing both the health and productivity of employees.

✓ **Presenteeism**: the loss in productivity that occurs when employees come to work but function at less than full capacity because of ill-health.
Health and productivity management scheme

- **To estimate the total cost of employee health**
  - In Japan, health promotion of employees has been carried out by employers and control of medical expenses has been carried out by health insurers from their own perspectives. A new approach of health and productivity management aims at achieving the overall optimum by integrating them.

- **Health Risk Appraisal**
  - Recent studies have shown a certain correlation exists between the cost of employee health and health risk items (e.g., lifestyle habits and blood data). The cost of employee health also becomes high when the health risk level becomes high. It is a method for classifying the health risks of an organization into three levels: low, medium and high-risk, according to the number of pertinent health risk items. This approach visualizes the risk structure of the organization. The Health Risk Appraisal allows the making of effective intervention such as worksite health promotion programs by health risk levels.
The Conceptual Framework of “Health and Productivity Management”

① Health-related costs
   - Present
   - Medical & Pharmacy
   - Long-term disability
   - Short-term disability
   - Absenteeism

② Health risk appraisal
   - High Risk
   - Moderate Risk
   - Low Risk

Correlation

Interventions

Health and Productivity Management

Effect measurement and monitoring

Work environment

Benchmark
ERIA Energy Research in East Asia - Technology Assessment Research Demonstration Project

Prof. Ichiro Sakata
Prof. Hisashi Yoshikawa,
Hajime Sasaki (Project Researcher)
Nobuo Hashimoto (Visiting Researcher)
Kensuke Yamaguchi (Visiting Researcher, Energy Research Institute, Chulalongkorn University)
The Aims and Activities of the Unit

Overview

- In response to an agreement toward an Energy Efficiency Roadmap for East Asia concluded at the Fourth EAS Energy Ministers Meeting held in July 2010, we have created scenarios and policy recommendations on energy policy for individual East Asian countries in order to formulate an energy efficiency roadmap for that country, in collaboration with the Economic Research Institute for ASEAN and East Asia (ERIA).

Research

- For East Asian countries, we draw up scenarios of economic and social development to create an energy roadmap including in the field of energy efficiency based on each scenario. In line with the roadmap, we provide an economic and social assessment of energy technology and policies. For the first year, we focused on Lao PDR. To validate our data collection and scenarios, we proceeded to roadmap formulation 1) by conducting interviews with people in charge in concerned government ministries, with Electricité du Laos (EDL), local administrative organs, NGOs, and counterparts in neighboring countries and international organizations, 2) by conducting fieldwork in agricultural areas and isolated locations and 3) by holding stakeholder’s meetings with persons and organizations involved. This roadmap of Lao PDR aimed to achieve energy efficiency, in particular by reducing energy loss during electricity transmission and distribution. Then, we continued to conduct survey analysis. In response to a request by the Laotian government, we also worked on the roadmap from the demand side perspective.

- Based on the above experience in Laos, in 2013 we have started to conduct survey analysis in Myanmar with a view to formulating an integrated energy policy with improved energy access, particularly in the rural areas that aims to improve the electrification rate in the country. The final report is expected to be available next year.
Myanmar’s Opportunity

- Geographical uniqueness
  - Bordering India, China, and Thailand, etc.
  - Opportunity: robust economic growth in the neighboring countries.

- Energy potentials
  - 25% of total export income is from natural gas.
  - Potential in hydro power
  - Surrounded by strong demand in Asia.

- Rich rural areas
  - Around 40% of GDP is from agriculture, rice, timber, etc.

Many opportunities!
Energy situation in ASEAN and GMS

- ASEAN Economic Community (AEC) in 2015 in a changing international environment
- Mekong river connects the GMS region
- Uneven economic development in the region, equally promising

- Deepening energy market integration
- Improving grid connectivity
- Regional energy security
- Need for further energy efficiency

- Growing environmental concerns and increasing public awareness
- Sustainable resource use
- Need to share best practices internationally
Reality in Myanmar: Rich resources, poor energy

Source: BP Statistics, IEA, Energy Development Index
Major Visible Challenges of Myanmar in the Energy/Electricity Field

- For today:
  - Stable supply of electricity
  - Electricity tariff structure

- For tomorrow:
  - Energy access/Electrification, particularly in rural area
  - Investment
  - Energy policy integration
  - HRD
What we have achieved

- Contributed to MCDV of ERIA (June 2013)
- **Inter-ministry discussion forum**
  - Formed Stakeholders’ Meeting in March and June 2013 inviting policy makers from line ministries of energy as a basic forum to communicate with the UT and discuss across the boundaries of the ministries.
- **Integration of academic resources** on energy of Myanmar
  - Started cross disciplinary discussions inviting scholars and experts from leading universities in Asia and international organizations to integrate the analytical expertise and wisdom on the energy of Myanmar.
- **Discussion with the energy demand sectors**
  - Another Stakeholders' Meeting was organized in March 2014 together with UMFCCI, MIA and MES.
- Contributed to the [special report of WEO/IEA on ASEAN](#).
- **HR development/Capacity building**
  - Began Energy policy training program in February 2013 followed by the next one that is more in depth and comprehensive scheduled in 2014.
  - Enhanced training courses for municipal government officials early 2014.
- Preliminary 1st phase fieldwork in 2013 and started full scaled FW in 2014
  - Implemented 7 on-site preliminary fieldworks.
- **Joint research project** with Energy Research Institute of Chulalongkorn University of Thailand in 2013
The project aims to provide scenarios and prepare policy recommendations that will lead to an **integrated longer-term energy strategy of Myanmar**.

**UT's Project on Rural Electricity Access Improvement**

**Electricity Master Plan**

- **<On-Grid>**
  - Electricity Demand Forecast
  - Fieldwork: Possible power generation options, cost analysis, etc.

- **<Near the NG area>**
  - by expanding the National Grid
  - Possible decentralized micro-grid development options

- **<Off-Grid area>**
  - by making best use of local resources and enhancing connectivity
  - Possible small scaled renewable power capacity development options, cost analysis, etc.

- **<Border area>**
  - by building up connectivity with neighboring countries through power trade and FPI.
  - Myanmar’s interest for power trade and FDI from Thailand, cost analysis, etc.

**Case Study**

- **Connectivity Development Simulation in off-grid area**
  - Possible decentralized micro-grid development options

- **Neighboring Perspective**
  - Thai actors’ analysis
  - Objective view and potential Thai investors and power traders’ analysis

**Inputs from Stakeholders**

**HRD/Capacity Building**

- Bottom-up approach for research 2013-2014
Future Direction

- Bottom up approach based on the reality
  - Need to supplement lack of objective data and statistics
  - Start from the actual needs
  - Stimulate discussion

- Comprehensive, comparative and international views and knowledge is necessary
  - Learn from international best practices

- HRD and capacity building in both public and private sectors and both in the capital and provinces
Policy Thinknet Research Demonstration Project: Collaboration with Other Research Universities

Project Director: Prof. Hideaki Shiroyama

May, 2014
Overview

- With the increasing pace and dynamism of social change today, pressing social issues must be analyzed and policy alternatives must be proposed based on academic evidence. The Policy Thinknet Project establishes and supports policy research projects in collaboration with other research universities and enhances dialogue with policymaking stakeholders by investigating and developing policy options to address social issues.
Research

- First, we analytically visualize pressing social issues and then develop a collaborative inter-university research network to tackle them. We also design support mechanisms for this. Second, we create a new type of media to serve as a forum for dialogue with diverse stakeholders and experts. By gathering together academic research evidence, practical policy discussions are stimulated among a wide range of players in society. Third, the Policy Thinknet Project also has an advisory board with representatives from business, academia, and government who read our policy proposals. Each policy research project is done as a collaboration bringing together researchers from different faculties, different universities, and different countries.

- Current policy research projects
  - University reforms
  - Risk and security
  - Health and social security
Members

- **Director**
  - Hideaki Shiroyama (Professor, Policy Alternatives Research Institute / Dean and Professor, Graduate School of Public Policy / Professor, Graduate Schools for Law and Politics, the University of Tokyo)

- **Members**
  - Ichiro Sakata (Director and Professor, Policy Alternatives Research Institute / Professor, Graduate School of Engineering, the University of Tokyo)
  - Taketoshi Taniguchi (Professor, Policy Alternatives Research Institute)
  - Toshiya Watanabe (Professor, Policy Alternative Research Institute)
  - Hiroshi Suzuki (Professor, Graduate School of Public Policy, the University of Tokyo)
  - Chiaki Sato (Project Assistant Professor, Policy Alternatives Research Institute)
  - Makiko Matsuo (Project Researcher, Policy Alternatives Research Institute)
  - Masayoshi Fujita (Project Researcher, Policy Alternative Research Institute)
  - Kyoko Ohta (Project Researcher, Policy Alternative Research Institute)