# **IPDRE Research Project Reseachers List**

#### Abbreviations:

IPDRE - International Platfrom for Dryland Research and Education / ALRC - Arid Land Research Center / UGSAS - United Graduate School of Agricultural Science / Core - Platform for Community-based Research and Education / ORIP - Organization for Research Initiative and Promotion

### 1. Environmental Degradation and Restoration Project (Project Leader: Prof. Norikazu Yamanaka)

#### 1 Salinization Research Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	ALRC	Professor	Norikazu YAMANAKA	General management, analysis of halophytes community
Deputy Group Leader	ALRC	Associate Professor	Takeshi TANIGUCHI	Analysis of symbiotic microorganisms
	Faculty of Agriculture	Lecturer	Fumiko IWANAGA	Physiological ecology analysis of halophytes
	Faculty of Agriculture	Professor	Sadahiro Yamamoto	Salinized soil analysis
Co-Investigator	Faculty of Agriculture	Professor	Tsuneyoshi ENDO	Salinized soil analysis
CO-IIIVEStigatoi	Faculty of Agriculture	Professor	Satoshi YAMADA	Nutritional analysis of halophytes
	IPDRE	Specially Appointed Professor	Kristina N TODERICH	Utilization of halophytes
	ALRC	Assistant Professor (Tenure track)	Munemasa TERAMOTO	Analysis of physical cycle

### 2 Aeolian Dust Research Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	ALRC	Professor	Yasunori KUROSAKI	General management , communication with IMHE, Mongolia, survey data application to the numerical models
Deputy Group Leader	Faculty of Agriculture	Professor	Eiji NISHIHARA	Crusting and gravel effect analysis and vegetation survey
	Faculty of Engineering	Associate Professor	Kouichi NAKAMURA	Elucidation of the mechanisms of crusting and gravel effect
Co-Investigator	ALRC	Associate Professor	Reiii KIMI IRA	Mapping of wind erosivity utilising the satelite inforamtion and upscale applicaton of Tottori Sand Dunes survey data of wind erosivity
	Faculty of Agriculture	Assistant Professor	Toshihiko KINUGASA	Elucidation of human effects on vegetation
	IPDRE	Specially Appointed Assitant Professor	Takehiko ITO	Elucidation of livestock and wild animal's effects on soil condition and vegetation distribution

#### 3 Soil Erosion Research Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	IPDRE	Specially Appointed Professor	Nigussie Haregeweyn AYEHU	General management and coordination with counterpart in Ethiopia
Deputy Group Leader	ALRC	Professor	Atsushi TSUNEKAWA	Assistance of GL and management of research activities in Japan
	ALRC	Professor	Haruyuki FUJIMAKI	Land erosion
	Faculty of Agriculture	Assistant Professor	Asres E BAYSA	Rural sociology
	ALRC	Professor	Mitsuru TSUBO	Agrometeorological
Co-Investigator	ALRC	Specially Appointed Assistant Professor	Zerihun Nigussie GEBRESILASIE	Fluvial process and geomorphology
	ALRC	Specially Appointed Assistant Professor	Ayele Almaw FENTA	Socio economics
	ALRC	Specially Appointed Assistant Professor	Takayuki KAWAI	Hydrological modeling
	ALRC	Specially Appointed Assistant Professor	Toru HAMAMOTO	Research on soil nutrition in Teff crop model

# 2. Agriculture and Rural Development Project (Project Leader: Prof. Hisashi Tsujimoto)

### 1 Drought-Tolerant Crop Breeding Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	ALRC	Professor	Hisashi TSUJIMOTO	General management, stress-tolerant wheat development utilising wilf verieties
Deputy Group Leader	Faculty of Agriculture	Professor	Kinya AKASHI	Elucidation of molecular mechanism of drought-tolerant plants and its application to breeding
	UGSAS	Professor	Motoichirou KODAMA	Study of plant diseases common in arid land plants
	Faculty of Agriculture	Professor	Atsushi ISHIHARA	Analysis of useful secondery metabolites produced by arid land plants
	Faculty of Agriculture	Associate Professor	Mariko OKA	Elucidatio of low nutrition stress response and development of low-nutrition-tolerant plants
Co-Investigator	Faculty of Agriculture	Associate Professor	Hiroyuki TANAKA	Development of high quality and drought-heat-tolerent wheat
	Faculty of Agriculture	Assistant Professor	Shun SAKUMA	Domestication of wild plants native to arid land
	ALRC	Lecturer	Takayoshi ISHII	Development of new heat-tolerant crop genetic resources
	ALRC	Specially Appointed Associate Professor	Yasir Sereg Alnor GORAFI	Study of abiotic stress tolerance of sorghum

#### 2 Cultivation Technology and Plant Resource Development Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Agriculture	Professor	Tsuneyoshi ENDO	Establishment of technology to restore the land of arid areas utilizing circulative resources
Deputy Group Leader	Faculty of Agriculture	Professor	Eiji NISHIHARA	Establishment of cultivation method of madicinal plants
	Faculty of Agriculture	Associate Professor	Wataru TSUJI	Establishment of cultivation technology of food/forage crops
	ALRC	Associate Professor	Ping AN	Sarch of caltivers suitable for dry and salinized areas and their ecophysiological analysis
Co-Investigator	Faculty of Agriculture	Lecturer	Yoshihiro TAKEMURA	Establishment of selection method of suitable crops for drylands
	Faculty of Agriculture	Lecturer	Kensuke KONDO	Establishment of protected caltivation methods in dryland
	ALRC	Specially Appointed Assistant Professor	Toru HAMAMOTO	Study on greenhouse gas effecets in Uganda

# 3 Irrigation and Water Resources Management Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Agriculture	Professor	Koji INOSAKO	General management, development of water-efficient irrigation
Deputy Group Leader	Faculty of Agriculture	Associate Professor	Tadaomi SAITO	Current status analysis of various issues faced in irrigated farms in drylands
Co-Investigator	ALRC	Professor	Haruyuki FUJIMAKI	Field experiment on irrigation and water usage and development of analysis method
Co-mvestigator	Faculty of Agriculture	Professor	Katsuyuki SHIMIZU	Current situation analysis of various issues in irrgated farms in drylands

# 4 Veterinary and Animal Science Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Agriculture	Professor	Mitsugu HISHINUMA	General management, survey and research (theriogenology)
Deputy Group Leader	Faculty of Agriculture	Professor	Tsuyoshi YAMAGUCHI	Survey and research (veterinary public health), management
	Faculty of Agriculture	Professor	Toshihiro ITO	Survey and research(veterinary public health and infectious disease)
Co-Investigator	Faculty of Agriculture	Professor	Toshiyuki MURASE	Survey and research (veterinary microbiology)
Co-investigator	Faculty of Agriculture	Professor	Takehito MORITA	Survey and research (veterinary pathology)
	ALRC	Associate Professor	Nobuyuki KOBAYASHI	Survey and research (international cooperation and realations)

### (5) Rural Development Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Agriculture	Professor	Kumi YASUNOBU	General management, Agricultural economics survey and research
Deputy Group Leader	Faculty of Agriculture	Professor	Ichizen MATSUMURA	Agricultural economics survey and research
	Faculty of Agriculture	Assistant Professor	Asres E BAYSA	Agricultural economics survey and research
Co-Investigator	Faculty of Agriculture	Professor	Toshinobu MATSUDA	Agricultural economics survey and research
CO-IIIVESTIGATOI	Faculty of Agriculture	Professor	Makoto NOHMI	Agricultural economics survey and research
	Faculty of Agriculture	Lecturer	Nahoko KIHARA	Survey and analysis of community market and distribution

### 3. Regional and Industrial Development Project (Project Leader: Prof. Satoshi Tsuchiya)

### 1 Water Resources and Energy Management Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Engineering	Associate Professor	Satoshi TSUCHIYA	General management, examination of appropreate placing related to resource energy
Deputy Group Leader	Faculty of Engineering	Associate Professor	Yuki KAJIKAWA	Development of water-cycle model
	Faculty of Engineering	Assistant Professor	Sooyoul KIM	Development of microclimate
Co-Investigator	Faculty of Engineering	Associate Professor	Takanori MASUDA	Resource energy evaluation utilising GIS
CO-IIIVEStigatoi	Faculty of Engineering	Assistant Professor	Yugo TAKABE	Development of water treatment and resoure energy technology
	Technical Department	Technical Staff	Chikara IWATA	Supports on analysis and evaluation utilizing GIS

#### 2 Industrial Development and Promotion Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	CoRE	Professor	Katsuhiko SHIMIZU	General management, facilitation of regional-industrial-academic cooperation
Deputy Group Leader	ORIP	Professor	Mieko INAOKA	Facilitation of regional-industrial-academic cooperation
Co-Investigator	Graduate School of Engineering	Professor	Keishi TANIMOTO	Facilitation of regional-industrial-academic cooperation
Co-investigator	Faculty of Agriculture	Professor	Jirou ARIMA	Utilization of dryland and regional recources
Deputy Group Leader	CoRE	Assistant Professor	Masashi MIURA	Management of practical manufacture education project
	CoRE	Associate Professor	Hitoshi NARIKIYO	Implimentation of PBL education
	Technical Department	Technical Staff	Masahiko AKIYAMA	Manufacture and production and technical advise to students
Co-Investigator	Technical Department	Specialist	Nobutaka ISHIBUCHI	Manufacture and production and technical advise to students
	Technical Department	Specialist	Masahiro NONAMI	Manufacture and production and technical advise to students
	Technical Department	Specialist	Naoki KAWAMURA	Manufacture and production and technical advise to students

#### 3 Societal and Economic Fluctuation Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Regioanl Sciences	Professor	Hiroki VAMASHITA	General management of humanities and social science research, development of stakeholder network, and survey of sustainability in urban central regions
Deputy Group Leader	Faculty of Regioanl Sciences	Professor	Tatsuya ONO	Evaluation of Mongolian policies related to "Sustainable Develeopment Vision
	Faculty of Regioanl Sciences	Specially Appointed Professor	Shigeru YANAKA	Study on various challenges facing nomadic communities
	Faculty of Regioanl Sciences	Professor	Yuichi MARU	Study on challenges of the relationship between social customs and laws
	Faculty of Regioanl Sciences	Associate Professor	Kaori BANBA	Study on issues related to inbound tourism and tourism-related industries in Mongolia
	Faculty of Regioanl Sciences	Professor	Kazunobu TSUTSUI	Study and advise on local stakeholder network expansion of overseas researches
Co-Investigator	Faculty of Regioanl Sciences	Associate Professor	Reiko OMOTO	Study of value improvement of Mongolia's local resources
	Faculty of Regioanl Sciences	Associate Professor	Hideki INAZU	Study on multicultural conviviality and minority issues
	Faculty of Regioanl Sciences	Associate Professor	Kiyoshi TAKEUCHI	Study on current staus and isses of cultural policies and promotion
	Faculty of Regioanl Sciences	Lecturer	Naoshi IZUMI	Study on current status and problems of environmental education in Mongolia
	Faculty of Regioanl Sciences	Lecturer	Hidetoshi SHIROISHI	Survey on Mongolian needs of environemntal improvement, and GIS data analysis

### 4 Cultivation-Environmental Instrumentation and Measurement Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Engineering	Professor	Kotoku OMI	General management and development of light quality modulation film
Deputy Group Leader	Faculty of Engineering	Professor	Kunio ICHINO	Support of goup leader and analysis of cultivation environment
	Faculty of Engineering	Professor	Sang-Seok LEE	Developmet of cultivation environment measurement
	Faculty of Engineering	Associate Professor	Tadao MATSUNAGA	Development of cultivation environment measurement elements
Co-Investigator	Faculty of Engineering	Associate Professor	Tomoki ABE	Simulation of greenhouse environment
	ALRC	Professor	Mitsuru TSUBO	Analysis of growth factors
	Faculty of Agriculture	Professor	Eiji NISHIHARA	Vegetable cultivation trial

# 4. Human Development (society, education, and health) Project (Project Leader: Prof. Yoichi Kurozawa)

# 1 Climate Change and Human Health Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	IPDRE	Associate Professor	Shinji OTANI	General management
Deputy Group Leader	Faculty of Medicine	Professor	Yoichi KUROZAWA	Research management, data evaluation
	Faculty of Agriculture	Professor	Takehito MORITA	Evaluation of impacts on livestock and anmals
Co-Investigator	Faculty of Medicine	Lecturer	Kazuoki INOUE	Community-based lifestyle disease prevention
	Faculty of Medicine	Assitant Professor	Toshio MASUMOTO	Survey apparatus preparation, data collection and analysis

### 2 Infection Control and Prevention Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Medicine	Professor	Seiji KAGEYAMA	General management, development of interantional regulatory methods of virus illnesses such as AIDS
Deputy Group Leader	Faculty of Medicine	Professor	Jun FUJII	Development of Enterohemorrhagic E. coli vaccine
	Faculty of Medicine	Lecturer	Hitoshi OTSUKI	Vaccine development based on the diversity of malaria I parasite
	Faculty of Medicine (Hospital)	Professor	Hiroki CHIKUMI	International comparison of pathogenic microorganisms causing nosocomial infection
	Faculty of Medicine	Associate Professor	Takashi MATSUBA	Contermeasures to tuberculosis bacillus in Asian coutries
	Faculty of Medicine	Lecturer	Kyosuke KANAI	Analysis of inhibitory factors in inter- and intra- cellular virus replication
Calmunationtan	Faculty of Medicine	Assistant Professor	Akeno TOKUNAGA	Investigation of influenza virus transmission routes to Japan
Co-Investigator	Faculty of Medicine	Assistant Professor	Ryo OZURU	Survey of Leptospira infection in Philippines and its countermeasure
	Faculty of Medicine	Assistant Professor	Daisuke ITO	Supression of Plasmodium in Thailand and expolaration of its diagnostic methods
	Faculty of Medicine	Assistant Professor	Yoko KONDO	Supression of Plasmodium in Thailand and expolaration of its medication
	Faculty of Medicine (Hospital)	Assistant Professor	Tsuyoshi KITAURA	Development of healthcare-associated infection database of Indonesia
	Faculty of Medicine (Hospital)	Assistant Professor	Kensaku OKADA	Evaluation of healthcare-associated infection database of Indonesia

# 3 Education for Human Development Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	ALRC	Associate Professor	Nobuyuki KOBAYASHI	General management , planning and management
Deputy Group Leader	Faculty of Medicine	Professor	Seiji KAGEYAMA	Advise
	Faculty of Medicine	Professor	Chika TANIMURA	Management
	Faculty of Medicine	Professor	Mika FUKADA	Advise
	IPDRE	Associate Professor	Shinji OTANI	Advise
Co-Investigator	Faculty of Medicine	Lecturer	Tsuyoshi OKURA	Advise on diabetis education
	Faculty of Medicine	Assistant Professor	Kazuoki INOUE	Advise on diabetis education
	Faculty of Medicine	Professor	Keiichi HANAKI	Advisor of diabetic patients' education and activities
	Faculty of Medicine	Assitant Professor	Yasuko TOKUSHIMA	Health guidance

### 5. Sand Dune Conservation and Management Project (Project Leader: Prof. Dai Nagamatsu)

# ① Conservation and Wise Use Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Agriculture	Professor	Dai NAGAMATSU	General management, resaerch on unique plants and ecosystems of Tottori Sand Dunes
Deputy Group Leader	Faculty of Regional Sciences	Associate Professor	Kenichi TAKATA	General management, direction of excavation research , management of archaelogical analysis
Deputy Group Leader	Faculty of Agriculture	Professor	Yoshinori KODAMA	Public communication of geomorphological phenomena and sand movements in Tottori Sand Dunes
	Faculty of Agriculture	Professor	Yoshiyuki HIOKI	Artificial modification of coastal sand dunes and its conservation strategies
	Faculty of Agriculture	Associate Professor	Tadaomi SAITO	Monitorning of sand dunes surface environment
Co-Investigator	Faculty of Regional Sciences	Associate Professor	Kei NAKAHARA	Excavation resaerch, paleoenvironmental analysis (plants)
	Faculty of Regional Sciences	Associate Professor	So Yeon LEE	Survey on presearvation condition of ruins and stratum, development of preservatives
	IPDRE	Specially Appointed Assistant Professor	Takehiko ITO	Elucidation of sand dune use by mid to large size mammals

# 2 Energy Utilization Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	Faculty of Agriculture	Associate Professor	Kotaro TAGAWA	General management , and development of the selection method of suitable site and istallment method
Deputy Group Leader	Faculty of Engineering	Professor	Yutaka HARA	Development of small wind power generator and its application to dryland environment
Co-Investigator	Faculty of Engineering	Associate Professor	RVO NISHIMITRA	Development of electrodialysis method desalination system and application of electronic engineering to dryland agriculture

# "Future Dryland" (Project Leader: Prof. Atsushi Tsunekawa)

# 1 Nature and Society System Group

Role	Affiliation	Title	Name	Roles in research project
Group Leader	ALRC	Professor	Norikazu YAMANAKA	General management and promotion of transdisciplinary research in Mongolia
Co-project Leader	IPDRE	Specially Appointed Associate Professor	Shaoxiu MA	Promotion of bilateral research activity with Mongolian counterparts
	ALRC	Professor	Yasunori KUROSAKI	Interdisciplinary research on effects of climate and societal changes on grassland ecosystem
	Faculty of Agriculture	Asscoiate Professor	Toshihiko KINUGASA	Interdisciplinary research on effects of climate and societal changes on grassland ecosystem
	ALRC	Professor	Atsushi TSUNEKAWA	Promotion of bilateral research activity with Mongolian counterparts
Co-Investigator	Faculty of Agriculture	Professor	Takehito MORITA	Development of tools of veterinarian and medical specialists
	Graduate School of Engineering	Associate Professor	Satoshi TSUCHIYA	Promotion of bilateral research activity with Mongolian counterparts
	IPDRE	Associate Professor	Shinji OTANI	Development of tools of veterinarian and medical specialists
	Faculty of Agriculture	Professor	Dai NAGAMATSU	Interdisciplinary research on effects of climate and societal changes on grassland ecosystem