

## 5. 研究のキーワード

### 解剖学第一講座

olfactory bulb	lamprey
cytoarchitecture	Golgi method
hagfish	

### 解剖学第二講座

Blood Vessel	Mongoloid
Bone	Muscle
Comparative anatomy	Origin of Japanese
Gross anatomy	Peripheral nerves
Human body	Physical anthropology
Human skeletal remains	Variation
Microevolution	

### 解剖学第三講座

ACTH receptor	hepatitis C virus (HCV)
apoptosis	immunohistochemistry
backscattered electron microscopy	non-radioactive in situ hybridization
basic fibroblast growth factor	male germ cell-associated kinase (mak)
digoxigenin-labeled oligodeoxynucleotide	polarizing reflected light confocal laser scanning
endocrine	microscopy
enzyme-labeled antibody method	proliferating cell nuclear antigen
estrogen receptor	(PCNA/Cyclin)
fas	thymine-thymine dimerized DNA probe
glucocorticoid receptor	type I collagen
glucocorticoid responsive element	vascular endothelial growth factor

### 生理学第一講座

Adrenal cortex	Epinephrine
Adrenal medulla	Norepinephrine
2-buten-4-olide	catecholamines
Corticosterone	body temperature

## 生理学第二講座

Basal ganglia	Epilepsy
Electrophysiology	Ionic channel

## 生化学講座

actin	molecular evolution
actomyosin	muscle contraction
amino acid sequence	myosin
calcium binding proteins	post translational modification
cardiac muscle	skeletal muscle
DNA binding protein	smooth muscle
energy transduction	protein structure
methylation	

## 薬理学第一講座

Catecholamines	Quantitative receptor autoradiography
Endothelins	Spontaneously hypertensive rat
Intracellular signal transduction	Ischemic neural degeneration
Nitric oxide	Receptors

## 薬理学第二講座

Acetylcholine	Intracellular signal transduction
$\gamma$ -Aminobutyric acid (GABA)	Ischemic neural degeneration
Catecholamines	Nitric oxide
Cardiovascular pharmacology	Peptides
Central nervous system	Quantitative receptor autoradiography
Cytokines	Receptors
Endothelins	Release
Gastrointestine	Serotonin
Glia	Spontaneously hypertensive rat
Glutamic acid	<i>Xenopus</i> oocytes

## 病理学第一講座

Aging	DNA damage
Cell differentiation	Morphogenesis
Cell proliferation	Morphology
Congenital heart disease	Neuroendocrinology

### 病理学第二講座

Cell organella	Microcarcinoma
Extracellular matrix	Mesangial cell
Diagnostic cytopathology	Neuroscience
Electron microscopy	Peptide
Glomerulonephritis	Receptor autoradiography
Growth factor	Renal pathology
IgA nephropathy	Surgical pathology

### 細菌学講座

AIDS	Islet cell antigens (ICAs)
Autoimmune disease	Milk-born infection
Chromosomal integration	Neurodegenerative disease
Creutzfeldt-Jakob disease	Oncogene
Gene targeted mouse	Prion protein
Glutamic acid decarboxylase (GAD)	Protein tyrosine kinase
Human Immunodeficiency virus type 1 (HIV-1)	Sjögren's syndrome
Human T-lymphotropic virus type 1 (HTLV-1)	Slow virus infection
Insertional mutagenesis	Virus Carrier
Insulin dependent Diabetes Mellitus (IDDM)	

### 衛生学講座

Adolescent growth	Environmental health
Cadmium	Environmental pollution
Cadmium nephropathy	Epidemiology
Cerebro-vascular diseases	Health education
Cognition of health	HTLV-1
Community health	Nutrition
Community health activity	Occupational Medicine
Communication of health related information	Renal tubular function

### 公衆衛生学講座

Health and Migration	Medicine at home
Human Ecology	Mental Health
Industrial Health	Mental Stress
International Health	Resource and Demography
Island Ecosystem	Tropical Medicine
Medical Informatics	Urban Ecosystem
Medicine and Welfare to the Aged	Vibration Disorder

## 医動物学講座

anergy	Immunogenetics
antigen presenting cell (APC)	Langerhans cell
antigen presentation	major histocompatibility complex (MHC)
antigen processing	melanocyte
apoptosis	superantigen
clinical parasitology	T cell antigen recognition
cytotoxic T lymphocyte (CTL)	tolerance
dendritic cell	Toxoplasma gondii
gamma interferon ( $\gamma$ -IFN)	toxoplasmosis
Immunoparasitology	Vogt-Koyanagi-Harada disease

## 法医学講座

Blood group	Forensic science
Cause of death	Forensic serology
DNA profiling	Human identification
Electrophoresis	Immunohistochemistry
Forensic anthropology	Immunizing
Forensic autopsy	Medico-legal expert opinion
Forensic hemogenetics	Paternity testing
Forensic immunology	Polymerase chain reaction (PCR)
Forensic pathology	Postmortem examination

## 腫瘍医学講座

cytotoxic T cell	HAM
ganglioside	HTLV- I
gene expression	metastasis
glycosyl transferase	oncogene

## 原爆後障害医療研究施設 異常代謝部門

antioxidant	Glutathione
DNA-protein interaction	Glutathione S-conjugate transporter
drug-resistance	2-Oxoglutarate dehydrogenase complex
Enzyme structure function relationship	reactive oxygen
Gene expression	Redox cycle
Gene structure	Ryruvate dehydrogenase complex
$\gamma$ -Glutamylcysteine synthetase(g-GCS)	superoxide dismutase

原爆後障害医療研究施設 放射線生物物理学部門

antigen-presenting cell	Radiation Biology
DNA repair	radiation effect
Hormesis	Radiation Physics
Hyperthermia	Radiosensitivity
Low Dose Radiation	Scid Cells
Nonspecific suppressor factor	Thermosensitivity
oncogene	tumour-suppressor gene

原爆後障害医療研究施設 病態生理学部門

Atomic bomb	PTHrP
Autonomic nervous system	Radiation-induced tumor
Chernobyl	Radiation-induced colitis
Dopamine	Spontaneously hypertensive rats
G.I. tract cancer	Ulcer
Motility	Molecular pathology

原爆後障害医療研究施設 後障害治療部門

Angioimmunoblastic lymphadenopathy (AILD)	CLL
ALL	CML
AML	Colony formation
Aplastic anemia	Cytogenetics
Apoptosis	Cytokine
ATL	DNA aneuploidy
Atomic bomb survivor	Essential thrombocythemia
BCR/ABL	Flow cytometry
Bone marrow transplantation (BMT)	G-CSF
Chemotherapy	Hematopoiesis
Hodgkin' s disease	Myelodysplastic syndrome (MDS)
HTLV-I	Non-Hodgkin' s lymphoma
Hypoplastic leukemia	PCR
IL-2	Oncogene
IL-2R	Peripheral blood stem cell transplantation (PBSCT)
IL-6	Polycythemia vera
Immunocytochemistry	Pre-ATL
ITP	Secondary leukemia
Ki-67	Surface marker
Multiple myeloma	

## 原爆後障害医療研究施設 先天異常部門

chromosome abnormality	genetic effect by radiation
chromosome microdissection	genomic imprinting
congenital anomaly syndrome	human genetics
drosophila genetics	human genome analysis
fluorescence in situ hybridization	positional cloning
gene defect	somatic mutation
gene isolation	space radiation
gene mapping	tumor suppressor gene
genetic effect by magnetic field	placenta

## 原爆後障害医療研究施設 発症予防部門

Animal experiment	Liver
Anti-oncogene	Oncogene
Bone and Chondrocyte	Parathyroid hormone-related peptide (PTHrP)
Cardiovascular Endocrine and Metabolism (CVEM)	Pituitary
Cell	Preventive Medicine
Chernobyl	Radiation
Congenital erythropoietic prophyria (CEP)	Thyroid
Gene therapy	

## 原爆被災学術資料センター 資料調査部

Ageing	Life style
Atomic Bomb Survivors	Medical examination
Biological fluctuation	Mortality
Biostatistics	Occupational exposure
Cause of death	Public health
Epidemiology	Radiation dose
Health screening	Statistical Inference
Homeostasis	

## 原爆被災学術資料センター 病理部

Ageing	Degenerative disease of central nervous system
Alzheimer's disease	Electrone microscope
Atomic Bomb Disaster	Neuropathology
Atomic disease	Pathology
Brain	Senescence Accelerated Mouse (SAM)
Brain tumors	Spinal cord

### 動物実験施設

Anatomy	Neuroanatomy
Brain	Transgenic animals
Cell biology	Viral diseases
Experimental animals	Virus
Immunohistochemistry	Zoonoses

### 内科学第一講座

Adhesion Molecule	Liver Cirrhosis (LC)
Amyloidosis	Malformation
Apoptosis	Malignant Exophthalmos
Atomic Bomb	Metabolic Bone Disease
Autoimmune Thyroid Disease	Mutation
Carcinogenesis	Myasthenia Gravis
Chernobyl	Neuroimmunology
Cytokine	Neuronal Injury
Diabetes Mellitus (DM)	Non-Insulin Dependent Diabetes Mellitus
Embryo Culture	Oncogene
Free Radical	Osteoporosis
Gene Therapy	Paraneoplastic Neurological Syndrome
Glia	Parathyroid
Glutamic Acid Decarboxylase (GAD)	Parathyroid Hormone
Growth Factor	Parathyroid Hormone-related Protein (PTH-rP)
Hepatitis B Virus	Pregnancy
Hepatitis C Virus	Radiation
Hepatocellular Carcinoma (HCC)	Rheumatoid Arthritis (RA)
Hepatic Regeneration	Schizophrenia
HTLV-I associated Myelopathy (HAM)	Signal Transduction
Human T-cell Lymphotropic Virus-I (HTLV-I)	Sjögren Syndrome
Insulin Dependent Diabetes Mellitus (IDDM)	Superantigen
Insulin Receptor	Thyroid Cancer
Insulin Resistance	Thyroid Peroxidase (TPO)
Interferon	TSH Receptor
Interferon signaling	Vitamin D
Islet Cell Antibodies (ICA)	

## 内科学第二講座

Bronchial asthma	IgA nephritis
Chronic airway disease	Immunology
Chronic nephritis	Interstitial lung disease
Colon cancer	Nephrotic syndrome
Crohn's disease	Pneumonia
Cytokine	Polymerase chain reaction
Diffuse panbronchiolitis	Rapid diagnosis
Hepatitis	Respiratory failure
Hepatocellular carcinoma	Tuberculosis

## 内科学第三講座

Arrhythmia	Hypertension
Electrophysiological Study	Nitric Oxide
Catheter Ablation	Adrenomedullin
WPW Syndrome	Aldosterone
QT Prolongation	Na-H Exchanger
Late Potential	Transesophageal Echocardiography
Pacemaker	PTCA
Power Spectrum	Stent
Antiarrhythmic Drugs	Myocardial Infarction
Romano-Ward Syndrome	MRI
Atrial Fibrillation	Restenosis
Holter ECG	Lipoprotein (a)
Body surface mapping	Aortic Dissection
Ventricular Tachycardia	Thromboembolism
Atrial Vulnerability	Myocardial Scintigram
Fragmented Atrial Activity	Renin
Hypertrophic Cardiomyopathy	Angiotensin II
Myosin Heavy Chain	Home Blood Pressure
Myocarditis	Ambulatory Blood Pressure
Dilated Cardiomyopathy	PTHrP
Stress Echocardiography	Salt Sensitive Rat
Sick Sinus Syndrome	Angina Pectoris



### 精神神経科学講座

amine transporters	homovanillic acid
antidepressants	hydroxy indole acetic acid
atomic bomb survivor	international
autism	neuroleptics
affective disorder	neuropathology
brain imaging	schizophrenia
clinical response	senile depression
drug therapy	serotonin
dementia	social psychiatry
dopamine	twin
dopamine receptor	psychopathology
epidemiology	psychopharmacology
epilepsy	vulnerability
genetics	WHO
genetic markers	

### 小児科学講座

allergy	neonatology
endocrinology	neurology
genetics	phagocyte
HTLV-I	Vitamin K
Leukemia	

### 外科学第一講座

bowel transplantation	hepatology
breast cancer	lung cancer
clinical pathology	lung transplantation
carbohydrate antigen	mediastinal tumor
colo-rectal surgery	pediatric surgery
flow cytometry	prenatal diagnosis
gastric cancer	sphincter preserving operation
gastro-enterological surgery	surgical oncology
gastrointestinal surgery	thoracic surgery
general surgery	thoracic surgery of infants and children
general thoracic surgery	tracheobronchoplasty
hepato-biliary-pancreatic surgery	

## 外科学第二講座

alanyl-glutamine	liver transplantation
bile acid	metastatic liver tumor
bile duct carcinoma	migrating motor complex (MMC)
bioartificial liver	motilin
breast neoplasms	motility
cancer line	N-nitrosobis (2-oxopropyl) amine (BOP)
cholecystokinin (CCK)	Na, K ATPase
cell line	natural antibody
cervical lymphnodes dissection	pancreatic cancer
chemosensitivity	pancreaticobiliary maljunction
colorectal cancer	pancreatitis
enterohepatic circulation	parathyroid hormone related protein
gallbladder carcinoma	point mutation
ganglioside	primary sclerosing pancreatitis
hamster	pylorus preserving gastrectomy (PPG)
hepatectomy	radiosensitivity
hepatocellular transplantation	regional targeting chemotherapy
hepatocyte	sensitivity test for cancer chemotherapy
hepatocyte culture	smg p21
hepatocyte labeling	spontaneously hypertensive rat (SHR)
hepatoma	super oxide dismutase (SOD)
ICG Bmax	T cell
intrahepatic bile duct carcinoma	thyroid neoplasms
K-ras	tolerance
K-rev 1	total bile acid
laparoscopic surgery	UW solution
liver regeneration	

### 整形外科学講座

Biomechanics	Hip surgery
Biomechanism	Knee surgery
Bone biophysiology	Limb salvage surgery
Bone circulation	Malignant bone and soft tissue tumors
Bone growth	Mapping to the anterior horn cell
Bone metabolism	Osteonecrosis of the femoral head
Bone metabolism and blood vessels	Paediatric Orthopaedics
Carpal bone	Peripheral nerve
Elbow surgery	Reconstruction after peripheral nerve injury
External fixation	Shoulder surgery
Foot surgery	Spine surgery
Gait analysis	Spontaneous hypertensive rat (S.H.R)
Hand surgery	Sports Injury

### 皮膚科学講座

actinic keratosis	human papilloma virus
adhesion molecule	immunohistopathology
antifungal drug	in situ hybridization
atopic dermatitis	Langerhans cell
CD23	mite allergy
CD40-CD40L	oncogene
cross-link	ozone
cytokine	patch test
dermatomycosis	photocarcinogenesis
dermatophytosis	(6-4) photoproduct
drug allergy	photosensitivity disease
electron microscopy	polychlorinated biphenyl (PCB)
eosinophil	porphyria
experimental porphyria	PUVA therapy
FcεRI	pyrimidine dimer
flow cytometry	skin cancer
food allergy	squamous cell carcinoma
Griseofulvin	urticaria
hexachlorobenzen	UVB
high pressure liquid chromatography (HPLC)	Yusho disease (油症)

## 泌尿器科学講座

Adrenocortical tumor	Kidney transplantation
Androgen receptor	Male infertility
Bacillus Calmette Guerin (BCG)	Nitric oxide
$\beta$ -microseminoprotein	Pheochromocytoma
Cell-cell communication	Prostatic carcinoma
Compensatory renal growth factor	Renal cell carcinoma
Graft rejection	Renal failure
Hepatocyt growth factor	Renal pelvic tumor
Immune tolerance	Ureter tumor
Intra-arterial chemotherapy	

## 眼科学講座

Adjuvant	Reactive oxygen intermediates
Aqueous formation	Retina
Calmodulin	Retinal circulation
Ciliary body	Retinal detachment
Defence mechanism	Retinal glial cell
Diabetic retinopathy	Retinal ischemia
Electron microscopy	Retinal ischemia and reperfusion
Endothelin	Retinal pigment epithelium
Endothelin-3	Retinal vasculature
Fibroblast growth factor	Rose Bengal
Histochemistry	Sanchinoside C-1
Immunohistochemistry	Silicone oil
Ocular anomaly	Superoxide dismutase
Ocular tumor	Trace element
Oxidative lipid	Vitamin
Prostaglandin	Vitreoretinal proliferation
Rat	Vitreous surgery

## 耳鼻咽喉科学講座

Electrocochleography	Nasal allergy
Equilibrium	Neck-ocular reflex
Facial nerve	Neurovascular compression
Inner ear pathophysiology	Otitis media with effusion
Low tone hearing loss	Sex hormones
Meniere's disease	

### 放射線医学講座

Angiography	Ischemic heart disease
Aortic aneurysm	Lung cancer
Aortic dissection	Musculoskeletal radiology
Atelectasis	Magnetic resonance imaging
Bone marrow disorders	Nuclear medicine
Bone mineral density	Osteoporosis
Bone tumors	Quantitative computed tomography
Bone architecture	Percutaneous angioplasty
Cardiovascular disorders	Radiological-pathological correlation
Computed tomography	Rheumatoid arthritis
Contrast media	Radiation therapy
Conventional radiography	Radiosurgery
Dual X-ray absorptiometry	Takayasu artetitis
Hepatocellular carcinoma	Transcatheter embolization
Interventional radiology	Ultrasonography

### 産科婦人科学講座

Gynecologic oncology	Climacteric disturbance
Gynecologic pathology	Male infertility
Uterine cancer	Sperm survival test
Ovarian cancer	Reproductive immunology
Vulval cancer	Recurrent abortion
Fertility and sterility	Perinatology
Reproductive endocrinology	Perinatal ultrasonography
Reproductive surgery	Fetal diagnosis and therapy
Endometriosis	Fetal malformation
Ectopic pregnancy	Perinatal endocrinology
IVF-ET	Diabetic pregnancy
Gn-RH analogue and uterine myoma	Perinatal genetics
Osteoporosis	

## 麻酔学講座

Arrhythmia	Hepatic veins
Anesthesia	Intensive care
Anesthetics	Ischemia
Cardiovascular system	Liver ischemia-reperfusion
Catecholamines	Magnesium
Causalgia	Myocardial blood flow
Cerebral blood flow	Myocardial ischemia
Cerebral cortex	Neutrophils
Circulation	Pain clinic
Coagulofibrinolysis	Phosphatidylinositol turnover
Critical illness	Phospholipase A <sub>2</sub>
Cytokines	Prostacycline
Heart	Prostaglandin E <sub>2</sub>
Heparin	Superoxide

## 脳神経学外科講座

Applied Neurophysiology	Glioma Cell Culture
Blood-Brain Barrier (BBB)	Glutathione
Brain Tumor	Intracranial Pressure
Cerebral Blood Flow	Liposome
Cerebral Ischemia	Monitoring System
Cerebral Metabolism	Neurotrauma
Cerebral Vascular Disease	Radiosurgery
Endothelin-1 mRNA	Skull Base Surgery
Free Radical	Thrombolytic Therapy
Gene Therapy	

### 形成外科学講座

Allograft	Microcirculation
Bone substitute	Microsurgery
Burn	Orthognatic surgery
Cartilage graft	Photogrammetry
Cleft lip and palate	Skin flap
Congenital malformation	Skin graft
Cranio-maxillo-facial surgery	Skull base surgery
Developmental jaw surgery	Tissue expansion
Free tissue transplantation	Tumor of the skin
Growth factor	Ulcer of the skin
Hand surgery	Wound healing
Hypertrophic scar and Keloid	Zenograft
Membranous bone grafting	

### 臨床検査医学講座

Antimicrobial chemotherapy	Microbial Pathogenesis
Cardiovascular pathology	Neoplasia and Tumor-like lesion
Clinical Microbiology	Nephropathology
Cytopathology	Pediatric pathology
Electron microscopy	Pulmonary pathology
Hospital Infection	Soft tissue pathology
Immunopathology	Surgical Pathology
Infectious Diseases	

### 心臓血管外科学講座

acute aortic dissection	myocardial protection
acute arterial occlusion	myoglobinemia
autologous blood transfusion	myonephropathic-metabolic syndrome
cardiac transplantation	posttransfusion hepatitis
cardiopulmonary bypass	profound hypothermia
coronary artery surgery	reperfusion injury
extra-anatomical bypass	retrograde coronary perfusion
homograft aortic valve prosthesis	selective cerebral perfusion
low density lipoprotein apheresis	vascular anastomosis
low output syndrome	working heart preparation

## 手術部

Anesthesia	Pain clinic
Catecholamines	Phosphatidylinositol turnover
Myocardial ischemia	

## 救急部講座

Acute medicine	ICG Bmax
Cardio-Pulmonary Resuscitation	Ruptured hepatoma
Hepatectomy	

## 放射線部

Angiography	Ischemic heart disease
Aortic aneurysm	Lung cancer
Aortic dissection	Musculoskeletal radiology
Atelectasis	Magnetic resonance imaging
Bone marrow disorders	Nuclear medicine
Bone mineral density	Osteoporosis
Bone tumors	Quantitative computed tomography
Bone architecture	Percutaneous angioplasty
Cardiovascular disorders	Radiological-pathological correlation
Computed tomography	Rheumatoid arthritis
Contrast media	Radiation therapy
Conventional radiography	Radiosurgery
Dual X-ray absorptiometry	Takayasu arteritis
Hepatocellular carcinoma	Transcatheter embolization
Interventional radiology	Ultrasonography

## 輸血部

ATL	Phenotype
HTLV-1	Blood Transfusion
Blood-borne virus	stem cells

## 集中治療部

Blood purification	Magnesium
Coagulofibrinolysis	Nitric oxide
Cytokines	Nutrition
Intensive care	Renal function



**理学療法部**

Cartilage tissue	Shoulder joint
Chondrocyte	Spine
Rheumatoid arthritis	

**腎疾患治療部**

Acute renal failure	Chronic renal failure
Apheresis	Hemodialysis
Blood purification	Renal transplantation

**薬剤部**

carcinoma	microdialysis
drug delivery system	mutagenicity
drug interaction	nitric oxide
eye	nitrofurans
high performance liquid chromatography (HPLC)	pharmacokinetics
intraarterial chemotherapy	polymer absorption
intravenous hyperalimentation	therapeutic drug monitoring (TDM)
ischemic neural degeneration	