


**School of Rehabilitation Sciences
Department of Physical therapy**

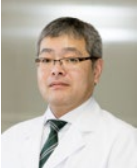
Name	Professor Hideki Suzuki, RPT, PhD
Research field	Community Based Rehabilitation
Key words	Community-dwelling elderly, Fall down

Name	Professor Satoru Kojima, RPT, PhD
Research field	Biomechanical analysis of human movement
Key words	Biomechanics, Motion analysis, Posture, Gait
Overview of Current Research	<ol style="list-style-type: none"> 1) Postural control to unexpected slips during walking 2) Effects of foot orthoses and gait retraining for reducing knee joint load in knee osteoarthritis patients 3) Coupling motion between ankle-foot, knee and hip joints during weight-bearing activities

Name	Professor Susumu Yoshida, RPT, PhD	
Research field	neurorehabilitation, motor control	
Key words	EMG, EEG, TMS, tDCS	

Name	Professor Mitsuhiro Aoki, MD, PhD
Research field	Electro-physiology, Clinical Biomechanics, Motion Analysis
Key words	EMG, Motion Analysis, Biomechanics, Posture Analysis, Ultrasonography
Overview of Current Research	<p>Graduate school students for PhD or MS are studying the following topics. Electrical analysis of the deep truncal muscles by intramuscular fine wire electrodes during straight leg raising, arm elevations, clutch exercises, abdominal hollowing, abdominal braising, voluntary coughing, intense expiration and standing against external disturbances are major topics of our current research. Observation of calf muscles by elastogram produced by ultrasonography during long time sitting is another topic. Analysis of center of pressure during quite standing of Japanese Archery performance is the third topic. Measurement of the subscapularis muscle thickness is the fourth topic of our study simultaneously evaluating rotational torque of the shoulders. Chain response in fascia tissue of the tensor fascia latae by passive motion of the distal joints measured by ultrasonography is the fifth topic.</p>

Name	Professor Akihiko Yamaguchi, PhD
Research field	Exercise Physiology
Key words	Muscle hypertrophy, Muscle atrophy, Running performance
Overview of Current Research	<p>Yamaguchi A., K. Sakuma, T. Fujikawa, I. Morita: Expression of specific IGFBPs are associated with those of the proliferating and differentiating markers in regenerating rat plantaris muscle. <i>J Physiol Sci</i> 63: 71-77, 2013.</p> <p>Sakuma K, M.Kinoshita, Y. Ito, M. Aizawa, W. Aoi, A. Yamaguchi: p62/SQSTM1 but not LC3 is accumulated in sarcopenic muscle of mice. <i>J Cachexia Sarcopenia Muscle</i> 7: 204-212, 2016.</p> <p>Sakuma K, W. Aoi, A. Yamaguchi: Molecular mechanism of sarcopenia and cachexia: recent research advances. <i>Pflügers Arch</i> 469: 573-591, 2017.</p> <p>Sakuma K, A. Yamaguchi: Recent advances in pharmacological, hormonal, and nutritional intervention for Sarcopenia. <i>Pflügers Arch</i> 470: 449-460, 2018.</p> <p>Hotta K., B.J. Behnke, K. Masamoto, R. Shimotsu, N. Onodera, <u>A. Yamaguchi</u>, D.C. Poole, Y. Kano: Microvascular permability of skeletal muscle after eccentric contraction-induced muscle injury: in vivo imaging using two-photon laser scanning microscopy. <i>J Appl Physiol</i> 125: 369-380, 2018.</p>

Name	Senior assistant professor Yuji Sasaki, RPT, MS	
Research field	Manual therapy Musculoskeletal physical therapy (especially Spine disorder) Physical agents	
Key words	Low back pain, Cervical pain, Spinal cord injury, Manual therapy	

Name	Senior assistant professor Atsushi Sawada, RPT, MS
Research field	Nutrition, Cancer Rehabilitation, Metabolic disorders
Key words	Rehabilitation Nutrition, NST, Sarcopenia,

Name	Senior assistant professor Yusuke Osuda, RPT, PhD
Research field	Pediatric physical therapy
Key words	Cerebral palsy, Scoliosis, Deformity

Name	Senior assistant professor Shinya Suzuki, RPT, PhD
Research field	Neurophysiology
Key words	reaching; posture; locomotion; spinal cord; motor cortex
Overview of Current Research	<p>The central focus of Dr. Suzuki's research is to elucidate how the central nervous system (CNS) controls posture and movements in daily life in humans. In particular, he investigates the roles of spinal and motor cortical circuits in posture, locomotion and reaching. His research also focuses on neuroplasticity in relation to various environmental conditions, physical training and neural damage. He is developing novel neuromodulation protocols to reactivate the motor circuits and promote neuroplasticity after brain and spinal cord injuries. He uses methodologies including transcranial magnetic stimulation, galvanic vestibular stimulation, electromyography, electroencephalography and three-dimensional motion capture.</p> <p>Researchmap: https://researchmap.jp/shinya_suzuki</p> <p>ResearchGate: https://www.researchgate.net/profile/Shinya_Suzuki7</p>

Name	Senior assistant professor Koshiro Inoue, PhD
Research field	Sports Sciences
Key words	condition of exercise, hippocampus, cognition, rodents
Overview of Current Research	Exercise is a potential strategy for improving the hippocampal-related functions, such as learning and memory, mood regulation. We are investigating the relation between the functions and exercise condition in rodents.

Name	Assistant professor Takuo Nakamura, RPT, MS
Research field	Functional Anatomy
Key words	Functional Anatomy, Clinical Anatomy

Name	Assistant professor Yuji Yamane, RPT, MS
Research field	Sports Physical Therapy
Key words	Spondylolysis, Lumbar, Thoracic, Homologous model, kinematics

Name	Assistant professore Kazunari Sato, RPT, MS
Research field	Clinical pedagogy
Key words	Clinical education, OSCE,

Name	Assistant professor Tatsuya Iwabe, RPT, PhD
Research field	Neuroscience, Rehabilitation science
Key words	Neurophysiology, Neuromuscular disease, respiratory

Name	Assistant professor Kikuyo Tada, RPT, MS
Research field	Rehabilitation for Visceral Impairment
Key words	Respiratory Care and Rehabilitation Sarcopenia and Frailty Exercise behavior Renal Rehabilitation