


List of courses available for graduate students (Wakayama Medical University)

	Course name (Press the name to jump to the link)	Professor name (Press the name to jump to the link)		Acceptable number of people	Research theme	Message from Professor
	Metabolism and Biochemistry	Prof. Yoshito Ihara, M.D., Ph.D.		2	<p>Our work is focused on clarifying the molecular mechanisms involved in the post-translational regulation of glycoproteins in the cell, and the roles in cell biology, physiology and pathology. We have several research topics, which concern [1] C-mannosyl tryptophan, a unique post-translational modification in cellular proteins, and [2] calreticulin, a lectin chaperone regulating quality control of glycoprotein biosynthesis in the endoplasmic reticulum.</p> <p>The research group of Dr.Kazuchika Nishitsuji focuses on finding novel diseases mechanisms that are associated with abnormal deposition of protein aggregates. Currently, approximately 50 human diseases have been found to be associated with abnormal protein aggregation and deposition. Our research goal is to unveil novel pathological mechanisms of diseases that have not been previously recognized as protein aggregation diseases. We also have several ongoing programs regarding physiological and pathological roles of sulfation modification of glycans. Some of them are in collaboration with Dr.Kenji Uchimura at UGSF, Université de Lille.</p>	<p>We are currently recruiting PhD students who are interested in our research at Wakayama Medical University School of Medicine, Japan. We do not distinguish between medical and other faculties in this recruitment for graduated faculties. Students from non-medical faculties are also welcome. For more information, please email to the address below. e-mail: y-ihara@wakayama-med.ac.jp or nishit@wakayama-med.ac.jp</p> <p>S. Minakata, S. Manabe, Y. Inai, M. Ikezaki, K. Nishitsuji, Y. Ito, Y. Ihara, Protein C-Mannosylation and C-Mannosyl Tryptophan in Chemical Biology and Medicine, <i>Molecules</i>, 26 (2021) 5258.</p> <p>M. Ikezaki, S. Minakata, K. Nishitsuji, S. Tabata, I.S. Lee Matsui, M. Takatani, J. Usukura, Y. Ito, Y. Ihara, Calreticulin protects insulin against reductive stress in vitro and in MIN6 cells, <i>Biochimie</i>, 171-172 (2020) 1-11.</p> <p>N. Iwahashi, M. Ikezaki, T. Nishikawa, N. Namba, T. Ohgita, H. Saito, Y. Ihara, T. Shimanouchi, K. Ino, K. Uchimura, K. Nishitsuji, Sulfated glycosaminoglycans mediate prion-like behavior of p53 aggregates, <i>Proc Natl Acad Sci U S A</i>, 117 (2020) 33225-33234.</p> <p>K. Nishitsuji, K. Uchimura, Contribution of Sulfated Glycosaminoglycans to the Pathology of Amyloidosis, <i>Trends in Glycoscience and Glycotechnology</i>, 33 (2021) E141-E145.</p> <p>N. Iwahashi, M. Ikezaki, Y. Komohara, Y. Fujiwara, T. Noguchi, K. Nishioka, K. Sakai, K. Nishio, M. Ueda, Y. Ihara, K. Uchimura, K. Ino, K. Nishitsuji, Cytoplasmic p53 aggregates accumulated in p53-mutated</p>