

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	Massege from Professor
	Forensic Medicine and Science	Prof. Toshikazu Kondo, M.D., Ph. D. mail kondot@wakayama-med.ac.jp		<p>1. The deveopment of microscopic wound examination systems</p> <p>2. Forensic study on wound age determination</p> <p>3. Pathophysiological study on cytokines in skin wound healing</p> <p>4. Pathophysiological study on cytokines in drug-induced organ injury</p> <p>5. Cell biological study on shock</p> <p>6. Molecular pathological study on heart failure</p> <p>7. Molecular pathological study on the development of aortic aneurysm and dissection</p> <p>8. Molecular pathological study on pulmonary fibrosis</p>	<p>Our department is only one forensic institution in Wakayama prefecture, performing 250 forensic autopsies in a year. In our laboratory, there are two main research topics such as forensic and molecular pathology. In the former, we are exploring useful markers for the determination of wound age and vitality or for the diagnosis of sudden cardiac death. In the latter topic, we are focusing on the pathophysiological roles of cytokines and chemokines and trying to clarify the molecular mechanism of wound healing, pulmonary fibrosis, drug-induced liver injury, heart failure and aneurysm formation. We are welcoming any persons having interest in forensic pathology or molecular pathology.</p>
<p>Recent Publications</p> <ol style="list-style-type: none"> Ishigami A, Iwahashi Y, Ishida Y, Nosaka M, Kuninaka Y, Yamamoto H, Hashizume Y, Kondo T. Fatal injury by high-pressure water jet unit – A case report. <i>J Forensic Leg Med.</i> 2021; 84:102270. doi: 10.1016/j.jflm.2021.102270. PMID: 34742124. Kuninaka Y, Ishida Y, Nosaka M, Ishigami A, Taruya A, Shimada E, Kimura A, Yamamoto H, Ozaki M, Furukawa F, Kondo T. Forensic significance of intracardiac heme oxygenase-1 expression in acute myocardial ischemia. <i>Sci Rep.</i> 11(1):21828. 2021. doi: 10.1038/s41598-021-01102-y. PMID: 34750390. Ishigami A, Kashiwagi M, Ishida Y, Hara K, Nosaka M, Matsusue A, Yamamoto H, Waters B, Kondo T, Kubo SI. A comparative study of pleural effusion in water area, water temperature and postmortem interval in forensic autopsy cases of drowning. <i>Sci Rep.</i> 11(1):21528. 2021. doi: 10.1038/s41598-021-01047-2. PMID: 34728742. Nosaka M, Ishida Y, Kuninaka Y, Ishigami A, Taruya A, Shimada E, Hashizume Y, Yamamoto H, Kimura A, Furukawa F, Kondo T. Intrathrombotic appearances of AQP-1 and AQP-3 in relation to thrombus age in murine deep vein thrombosis model. <i>Int J Legal Med.</i> 135(2):547-553. 2021 doi: 10.1007/s00414-020-02482-y. PMID: 33410924 Ishigami A, Hata S, Ishida Y, Nosaka M, Kuninaka Y, Yamamoto H, Shimada E, Hashizume Y, Takayasu T, Kimura A, Furukawa F, Kondo T. Complete decapitation by a self-constructed guillotine in a burned body – complete suicide or postmortem burning? <i>Int J Legal Med.</i> 135(1):301-305. 2020 doi: 10.1007/s00414-020-02323-y. PMID: 32474665 Ishida Y, Kuninaka Y, Nosaka N, Kimura A, Taruya A, Furuta M, Mukaida N, Kondo T. Prevention of CaCl₂-induced aortic inflammation and subsequent aneurysm formation by the CCL3–CCR5 axis. <i>Nat Commun.</i> 11(1):5994. 2020. doi: 10.1038/s41467-020-19763-0. PMID: 33239616 Ishida Y, Kuninaka Y, Yamamoto Y, Nosaka M, Kimura A, Furukawa F, Mukaida N, Kondo T. Pivotal involvement of the CX3CL1-CX3CR1 axis for the recruitment of M2 tumor-associated macrophages in skin carcinogenesis. <i>J Invest Dermatol.</i> 140(10):1951-1961. e6. 2020 doi: 10.1016/j.jid.2020.02.023. PMID: 32179066 Nosaka M, Ishida Y, Kimura A, Kuninaka Y, Taruya A, Ozaki M, Tanaka A, Mukaida N, Kondo T. Crucial Involvement of IL-6 in Thrombus Resolution in Mice via Macrophage Recruitment and the Induction of Proteolytic Enzymes. <i>Front Immunol.</i> 10:3150. 2020 doi: 10.3389/fimmu.2019.03150. PMID: 32117207 Ishida Y, Kuninaka Y, Nosaka M, Furuta M, Kimura A, Taruya A, Yamamoto H, Shimada E, Akiyama M, Mukaida N, Kondo T. CCL2-mediated reversal of impaired skin wound healing in diabetic mice by normalization of neovascularization and collagen accumulation. <i>J Invest Dermatol.</i> 139(12):2517-2527.e5. 2019 doi: 10.1016/j.jid.2019.05.022. PMID: 31247201 Nosaka M, Ishida Y, Kimura A, Kuninaka Y, Taruya A, Furuta M, Mukaida N, Kondo T. Contribution of the TNF-α (Tumor Necrosis Factor-α)-TNF-Rp55 (Tumor Necrosis Factor Receptor p55) Axis in the Resolution of Venous Thrombus. <i>Arterioscler Thromb Vasc Biol.</i> 38(11):2638-2650. 2018 doi: 10.1161/ATVBAHA.118.311194 Kimura A, Ishida Y, Furuta M, Nosaka M, Kuninaka Y, Taruya A, Mukaida N and Kondo T. Protective Roles of Interferon-γ in Cardiac Hypertrophy Induced by Sustained Pressure Overload. <i>J Am Heart Assoc.</i> 7(6): pii: e008145. 2018 doi: 10.1161/JAHA.117.008145 Ishida Y, Kimura A, Nosaka M, Kuninaka Y, Hemmi H, Sasaki I, Kaisho T, Mukaida N, Kondo T. Essential involvement of the CX3CL1-CX3CR1 axis in bleomycin-induced pulmonary fibrosis via regulation of fibrocyte and M2 macrophage migration. <i>Sci Rep.</i> 7(1):16833. 2017 doi: 10.1038/s41598-017-17007-8 Zhao J, Nishimura Y, Kimura A, Ozawa K, Kondo T, Tanaka T, Yoshizumi M. Chemokines protect vascular smooth muscle cells from cell death induced by cyclic mechanical stretch. <i>Sci Rep.</i> 7(1):16128. 2017 doi: 10.1038/s41598-017-15867-8 					