

A Master Course	Class Style	Lecture	FB : Elective 2 credits AM : Free elective 2 credits GM : Elective 2 credits	Fiscal year	2020
Course Title	Regenerative and Advanced Medicine		Numbering code	FB : GMDMFB1012 AM : GMDMAM1014 Gm : GMDMGM1011	
Objectives	Learn about regenerative medicine, advanced medical care, transplant medical care.				
Semester	The second half of the 1st Grade. The 6th Period, Wednesday (18:00 - 19:30)				
Location	Real-time delivery (Zoom)				
Couse Director	Ken-Ichiro Kosai (Department of Gene Therapy and Regenerative Medicine)				
G I O	Understand regenerative medicine and advanced medicine including medical transplantation. Learn comprehensive knowledge and research method from research and development to clinical application.				
S B O	The goals of this course are to: 1) be able to understand and explain stem cells and regenerative medicine. 2) be able to understand and explain advanced medicine including gene therapy. 3) be able to explain the present conditions and problems of the medical transplantation.				
Outline (90 minutes x 15 lectures)				Instructor	
	<ol style="list-style-type: none"> 1. Introduction and comprehension of advanced medical development. 2. Biotechniques and advanced medicine 3. Advanced electronic microscope for resolution of microstructure analysis. 4. Development and stem cells 5. Application of stem cells to regenerative medicine. 6. Somatic stem cells and regenerative medicine. 7. Contact point between cancer and stem cells 8. Innovative medical technology in orthopedic surgery 9. Cutting-edge of gene therapy 10. Medical transplantation (provisional) 11. Current medical transplantation I~liver transplantation 12. Current medical transplantation II~kidney transplantation 13. Current medical transplantation III~hematopoietic stem cells transplantation 14. Heterologous graft 15. Review: think about next-generation medical based on the lessons. 			Ken-ichiro Kosai Nobuhiro Ijichi Nobuhiro Ijichi Kaoru Mitsui Kaoru Mitsui Masahiro Nishimura Sonshin Takao Satoshi Nagano Ken-ichiro Kosai Hisashi Sahara Sonshin Takao Yasutoshi Yamada Takuro Nishikawa Hisashi Sahara Ken-ichiro Kosai	
Teaching Materials					
Grading Methods	Class attendance: 70%, Attitude in class: 20%, Reports: 10% A)80-100, B)70-79, C)60-69, D)59 and below				
Contact	Office hours	10:00 – 17:00 (An appointment is desirable.)			
	E-mail	kosai@m2.kufm.kagoshima-u.ac.jp kaorum@m3.kufm.kagoshima-u.ac.jp			
		Consultation and the question support after class.			
Others	Class materials will be posted on manaba.				