Category （科目区分）	Basic subjects
Course Title （授業科目名）	Advanced technology for cell culture

Instructors （担当者名）	Yoshihiro Matsumura	Academic Year （配当年次）	1,2
Required Course / Elective Course （必修/選択）	Elective Course	Credits （単位数）	1

Class Format （授業形態）	Lecture & Practice
Schedule （開講期間）	Students will be notified by email after completing the course registration.
Class Date/Period （開講曜日・時間）	Students will be notified by email after completing the course registration.

Course Outline/ Course Objectives（授業の概要・到達目標）

Aims: To learn recent advances in cell culture technology

Course Outline: Experimental practice for various cell culture and making retrovirus vector

Course Planning（授業計画）

	Course Outline/ Course Objectives（授業の概要及び到達目標） （Contents of Class）　（　（授業内容）　）	Instructor （担当教員名）	Department （講座名） Class Room〔実施場所〕
1	Basic knowledge of cell culture	Professor 　Yoshihiro Matsumura Assistant Professors 　Yukio Koizumi 　Jianbo An	Dpt. of Biochemistry and Metabolic Science Reserch Building for Basic Medicine 4th floor, Laboratory
2	Basic technique and technology of cell culture		
3	Culture of adherent cells		
4	Culture of adherent cells		
5	Culture of floating cells		
6	Culture of Plat E cells	Prof. 　Takashi Ebihara Asistant Professor 　Shunsuke Takasuga	Dpt. of Medical Biology 〔Webclass〕
7	Making retrovirus vector by Plat E cells		
8	Concentration of retrovirus vector		
9	Transfection by retrovirus vector		
10	Flow cytometry to determine transfection efficiency		

Grading Criteria　（成績評価の基準と方法）

Grades will be given based on attendance, attitude to this course, reports, and accuracy of procedures

Contact Information（問い合わせ先(氏名，メールアドレス等））

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Comment　（その他特記事項）

The dates for this course will be scheduled after taking this course to encourage attendance of adult graduate students.
Textbooks and reference papers will be suggested, if needed.
Students are expected to prepare for this course by reading the relevant protocols.