ID No.	K1002	
Project Title	Chimera formation assay with cynomolgus monkey embryos <i>in vitro</i>	
Principal	Joydeep Bhadury	
Investigator	(Postdoctral Fellow, Stanford Univ.)	
Project Members		
IMSUT Host	Hiromitsu Nakauchi	(Project Prof., IMSUT)
Researcher Members	Toshiya Nishimura Fabian Suchy Carsten Charlesworth	(Postdoctral Fellow, Stanford Univ.) (PhD Student, Stanford Univ.) (PhD Student, Stanford Univ.)
Report		

In this year, we finally performed cynomolgus monkey allogeneic chimera assay in vivo for two times. Unfortunately, chimeric embryos transferred recipient monkeys did not maintain pregnancy. Instead of *in vivo* chimera assays, we defined pluripotent stem cell coculture condition, which is suitable for various species PSCs. Cocultured chimp or cynomolgus monkey PSCs mixed well with human PSCs, whereas mouse or pig PSCs segregated with human PSCs. It indicates that engrafted human progenies could contribute to chimp or cynomolgus monkey embryos, which result in interspecies chimera formation. Due to the COVID19-pandemic, we could not perform convincing number of trials, but we could set up quite important basis of cynomolgus monkey chimera formation assay. We deeply appreciate for the support from IMSUT.