

## **MODEL EYE IMAGING BY CLOSED-LOOP ACCUMULATION OF SINGLE SCATTERING (CLASS) MICROSCOPY**

Yookyung Jung, Center for Molecular Spectroscopy and Dynamics, Institute for Basic Science (IBS), Korea;  
Center for Systems Biology and Wellman Center for Photomedicine, Massachusetts General Hospital and  
Harvard Medical School, USA  
omeletjung@korea.ac.kr

Pilsung Kang, Center for Molecular Spectroscopy and Dynamics, Institute for Basic Science (IBS); Department  
of Physics, Korea University, Korea

Yongwoo Kwon, Center for Molecular Spectroscopy and Dynamics, Institute for Basic Science (IBS);  
Department of Physics, Korea University, Korea

Jin Hee Hong, Center for Molecular Spectroscopy and Dynamics, Institute for Basic Science (IBS); Department  
of Physics, Korea University, Korea

Wonshik Choi, Center for Molecular Spectroscopy and Dynamics, Institute for Basic Science (IBS); Department  
of Physics, Korea University, Korea

'Closed-loop accumulation of single scattering (CLASS)' microscopy provides novel solutions to the problems of light scattering and aberration in optical imaging, providing increased imaging depth while maintaining diffraction limited resolution. This method has a great potential to increase imaging depth and resolution of current eye imaging. In this presentation, the strength and weakness of the CLASS microscopy over the current adaptive optical microscopy will be discussed. Important factors to apply CLASS microscopy to eye imaging and the possibility to imaging retina in turbid condition will be discussed by using model eye.