

SE&T Colloquium Series-Fall 2013

Speaker	Dr. Bing Yang Department of Biology
Title	<i>Nobel Prize--So Close!</i>
Abstract	<p>Plant and animal cells are eukaryotic cells. They have different compartments inside the cells. The transport between the compartments is carried out by vesicles. One of the fundamental questions in cell biology is how the vesicles carrying the protein cargos can go to the right place and deliver its cargos. James E. Rothman, Randy W. Schekman and Thomas C. Südhof worked in different systems to address the same question. In my early career of scientific research as a Ph.D. student, we were working to address the same questions. Transferrin receptor is a membrane protein synthesized in the endoplasmic reticulum and needs to be transported to Golgi body and then to cell surface. When one of the oligosaccharide chains in the protein is deleted, the protein cannot be transported outside of the endoplasmic reticulum any more. Similarly, when all the three oligosaccharide chains were deleted, the protein cannot be transported outside of the endoplasmic reticulum as well. We had great interests to find out the reason how the proteins are transported from endoplasmic reticulum to Golgi body. The Nobel prize winners had the answer.</p>
Date	Tuesday, December 3
Time	4:10-5:00pm
Place	Pioneer 240
	Refreshments will be served at 4:00pm.