

## International Honors Program 2018

### Schedule for Biomedical Engineering Frontiers in Health Care (4-15 June)

#### Week 1: 04 – 08 June 2018

Time	Monday 6/4 (Class location)	Tuesday 6/5 (TMU 6 <sup>th</sup> floor) GIBOM day	Wednesday 6/6 (TMU 6 <sup>th</sup> floor) GINME day	Thursday 6/7 (TMU 6 <sup>th</sup> floor) GIBMTE day	Friday 6/8 (Daan 13 <sup>th</sup> floor)
9:00-12:00	8:30, OGE <b>Assembly at Formosa 101</b>  9:00-10:00, OGE <b>Program Overview @ TMU Conference Hall</b>  10:00- 11:30 <b>Campus Tour &amp; Core Facility Center @ TMU Main Campus</b>	9:00-9:15, Prof. Haw-Ming Huang <b>Introduction to Medical Bio-optomechatronics</b>  9.15-10:00, Prof. Tzu-Sen Yang <b>All you need to know about optical tweezers technology and biomedical engineering!</b>  10:00-10:20 <b>Break</b>  10:20-12:00, Prof. Tzu-Sen Yang <b>Lab Practice: Single cell manipulation using optical tweezers</b>	9:00-9:20, Prof. Si-Han Wu, Yi-Ping Chen & Chih-Yu Chang <b>Welcome and General introduction; lab tour and meet with professors</b>  9:20-10:00, Prof. Si-Han Wu <b>Constructing Silica Nanohybrids for Clinically Translatable Nanomedicine</b>  10:20-11:00, Prof. Yi-Ping Chen <b>Exploitation of mesoporous silica nanoparticles as therapeutics for biomedical application</b>  11:20-12:00, Prof. Chih-Yu Chang <b>Flexible and Wearable Bioelectronics Based on Nanomaterials</b>	9:00-10:00 Prof. Ching-Li Tseng <b>Biomedical materials and tissue engineering in health technologies</b>  10:00-10:20 <b>Break</b>  10:20-12:00 Prof. Ching-Li Tseng <b>Lab. Practice on fabrication of nanocarriers for tissue engineering</b>	9:00-10:00, Prof. Chien-Chung Yang <b>3D-Machining and Manufacture of implants for clinical use</b>  10:00-10:20 <b>Break</b>  10:20-12:00 Prof. Chien-Chung Yang <b>Lab Practice on 3D printing</b>
12:00-13:30	<b>12:00 – 14:00</b> <b>Welcome lunch</b>	<b>Lunch</b> (Da-An campus, B201)	<b>Lunch</b> (Da-An campus, B201)	<b>Lunch</b> (Da-An campus, B204)	<b>Lunch</b> (Da-An campus, B205)
13:30-15:30	<b>Visit to Wan Fang Hospital (TBC)</b>	<b>Chinese Language Course (B201)</b>	<b>Chinese Language Course (B201)</b>	<b>Chinese Language Course (B204)</b>	<b>* Discovery Center of Taipei</b> OGE & Mandarin teacher
15:30-17:00		<b>Group discussion (B201)</b>	<b>Group discussion (B201)</b>	<b>Group discussion (B204)</b>	

**Week 2: 11 – 15 June 2018**

Time/Period	Monday 6/11 (TMU 6 <sup>th</sup> floor)	Tuesday 6/12 (TMU 6 <sup>th</sup> floor)	Wednesday 6/13 (TMU Hospital)	Thursday 6/14 (TMU 6 <sup>th</sup> floor)	Friday 6/15 (Class location)
9:00-12:00	9:00-9:30, Prof. Tsung-Rong Kuo and Prof. Jen-Chang Yang <b>Introduction of the world of Nanoparticles and their clinical applications in treatment and imaging technologies</b>  9:30-10:00 Break  10:00-12:00, Prof. Tsung-Rong Kuo <b>Preparation of Au, Ag, and Cu Nanoparticles (Lab Practice )</b>	9:00-11:00, Profs. Tsung-Rong Kuo & Jen-Chang Yang <b>Characterization and Au, Ag, Cu Nanoparticles (Lab Practice)</b>  11:00-11:10 Break  11:10-12:00, Prof. Tsung-Rong Kuo <b>Preparation and Characterization of Nanoparticles (Individual Reports)</b>	9:00-10:00, Prof. Long-Sheng Lu <b>Oncology Radiation Center in real hospital operations</b>  10:00-10:40 Break  10:40-12:00, Prof. Hua-Shan Liu <b>The use of MRI for patients evaluation and treatment follow-up in an hospital setting</b>	9:00-10:00, Prof. Chien-Chung Chen <b>Application of Membranes in Biomedical engineering</b>  10:00-10:20 Break  10:20-12:00, <b>Lab Practice: Electrospinning in action (Individual Reports)</b>	9:00-10:00, Prof. Chien-Chung Chen <b>Application of Membranes in Biomedical engineering</b>  10:00-10:20 Break  10:20-12:00, <b>Lab Practice: scanning electron microscopic observation of electrospun membranes</b>
12:00-13:30	Lunch (Da-An campus, B202)			Bound for Pastry Museum	Lunch (B204)
13:30-15:30	Chinese Language Course (B202)			13:00 Kuo Yuan Ye Pastry Museum & Pineapple Cake Making Experience & Meal Box	Final group presentation & Closing ceremony OGE staff, Mandarin teacher, Profs. Thierry Burnouf, Huang Haw-Ming, Yang Jen-Chang, Tseng Ching-Li
15:30-17:00	Group discussion (B202)			OGE & Mandarin teacher	