

## International Honors Program 2019 Biomedical Engineering Frontiers in Health Care (10-21 June)

### Week 1: 10–14 June 2019

Time	Monday 6/10 (TMU Da An Campus)	Tuesday 6/11 (TMU 6 <sup>th</sup> floor) GIBOM day	Wednesday 6/12 (Daan B205) GINME day	Thursday 6/13 (TMU 6 <sup>th</sup> floor) GIBMTE day	Friday 6/14 (TMU R8006)
9:00-12:00	<b>8:40, OGE</b> <b>Assembly at Formosa 101</b>  9:00-11:00, OGE & 3 subgroups <b>Program Overview</b> TMU Da An Campus B202  11:00 Departing for the restaurant	8:45 meeting point at main entrance in TMU main campus  9:00-9 :15, Prof. Huang Haw-Ming <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 Break  10:20-12:00, Prof. Tzu-Sen Yang <b>Lab Practice: Single cell manipulation using optical tweezers</b>	8:45 meeting point at main entrance in Daan  9:00-9:50, Prof. Si-Han Wu <b>Constructing Silica Nanohybrids for Clinically Translatable Nanomedicine</b>  09:50-10 :00 Break  10:00-10:50, Prof. Yi-Ping Chen <b>Exploitation of mesoporous silica nanoparticles as therapeutics for biomedical application</b>  10 :50-11 :00 Break  11:00-11:50, Prof. Chih-Yu Chang <b>Flexible and Wearable Bioelectronics Based on Nanomaterials</b>	8:45 meeting point at main entrance in TMU main campus  9:00-10:00 Prof. Tseng Ching-Li <b>Biomedical materials and tissue engineering in health technologies</b>  10:00-10:20 Break  10:20-12:00 Prof. Tseng Ching-Li <b>Lab. Practice on fabrication of Nano carriers for tissue engineering</b>	8:45 meeting point at main entrance in TMU main campus  9:00-10:00, Prof. Chien-Chung Yang <b>3D-Machining and Manufacture of implants for clinical use</b>  10:00-10:20 Break  10:20-12:00 Prof. Chien-Chung Yang <b>Lab Practice on 3D printing</b>
12:00-13:30	<b>11:30 – 13:00</b> Welcome lunch	Lunch, Daan B204	Lunch, Daan B204	Lunch, Daan B205	<b>12:10</b> Departing for pastry museum
13:30-15:30	<b>13:30 – 15:30</b> * Discovery Center of Taipei OGE	Chinese Language Course B204	Chinese Language Course (B204)	Chinese Language Course (B205)	<b>13:00</b> Kuo Yuan Ye Pastry Museum & Pineapple Cake Making Experience
15:30-17:00		<b>Group discussion(B201)</b> Prof. Tzu-Sen Yang	<b>Group discussion(B201)</b> Yi-Ping Chen	<b>Group discussion(B204)</b> Prof. Tseng Ching-Li	OGE & Mandarin teacher

**Week 2: 17–21 June 2019**

Time/Period	Monday 6/17 (TMU 6 <sup>th</sup> floor)	Tuesday 6/18 (TMU 6 <sup>th</sup> floor)	Wednesday 6/19 (TMU Hospital)	Thursday 6/20 (TMU 6 <sup>th</sup> floor)	Friday 6/21 (TMU 6 <sup>th</sup> floor)
9:00-12:00	8:45 meeting point at main entrance in TMU main campus 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 <b>Break</b>  10:00-12:00, Prof. Tsung-Rong Kuo <b>Preparation of Au, Ag, and Cu Nanoparticles (Lab Practice)</b>	8:45 meeting point at main entrance in TMU main campus 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 <b>Break</b>  11:10-12:00, Prof. Tsung-Rong Kuo  <b>Preparation and Characterization of Nanoparticles (Individual Reports)</b>	8:45 meeting point at main entrance in TMU main campus 9:00-10:00, Prof. Long-Sheng Lu <b>Oncology Radiation Center in real hospital operations</b>  10:00-10:40 <b>Break</b>  10:40-12:00, Prof. Long-Sheng Lu	8:45 meeting point at main entrance in TMU main campus 9:00-10:00, Prof. Chien-Chung Chen <b>Application of Membranes in Biomedical engineering</b>  10:00-10:20 <b>Break</b> 10:20-12:00, Prof. Chien-Chung Chen  <b>Lab Practice: Electrospinning in action (Individual Reports)</b>  <b>11:50 Departing for Daan campus by TMU shuttle bus</b>	8:45 meeting point at main entrance in TMU main campus 9:00-10:00, Prof. Wei-Chen Huang <b>Developing Biomaterials Applied for Implantable Ultracompliant Bioelectronics : Neural Implants</b> <b>10:00-10:20 Break</b> 10:20-12:00, Prof. Wei-Chen Huang <b>Lab Practice: Transfer Printing Technology for Developing Hydrogel-based Electronic Devices</b>
12:00-13:30	<b>Lunch (Daan B202)</b>	<b>Lunch (Back Building 15<sup>th</sup> floor Boardroom)</b> With Dean, Vice Dean, Directors	<b>Lunch (Daan B204)</b>	<b>Lunch (Daan B205)</b>	<b>Lunch (Daan B205)</b>
13:30-15:30	<b>Chinese Language Course (B202)</b>	<b>Chinese Language Course (B203)</b>	<b>Chinese Language Course (B204)</b>	<b>Taipei zoo</b> OGE & Mandarin teacher	<b>Final group presentation &amp; Closing ceremony</b> 16F, Comprehensive Building (Back Building), TMU Main Campus
15:30-17:00	<b>Group discussion(B202)</b> Prof. Jen-Chang Yang	<b>Group discussion(B202)</b> Prof. Tsung-Rong Kuo	<b>Group discussion(B202)</b> Prof. Long-Sheng Lu		