

Biomedical Service - Towards the 10th Year Anniversary

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ABSTRACT

The Biomedical Engineering Discipline at The Hong Kong Polytechnic University (PolyU) started to offer rehabilitation service to people with physical disabilities on Chinese Mainland in 1995. In 2001, with the support of the University funding for students' learning experience on Chinese Mainland, the undergraduate students with concentration in Prosthetics and Orthotics (P&O) were under the supervision of the academic staff to provide voluntary orthotic service to children with cerebral palsy in Maoming City in Guangdong Province. The students were then supported to visit hospitals, rehabilitation centres and resource centres in Guangdong Province in the following years. In 2005, the School of Engineering at the University of Pennsylvania collaborated with PolyU to set up an annual Global Biomedical Service project which aimed to facilitate students of the two Universities to participate in community service learning project on Chinese Mainland.

The participants could benefit from an international exchange of clinical, scientific and engineering ideas, in the context of a field programme that was grounded in the medical and clinical needs of a developing country. They needed to communicate with patients and their parents or caregivers. Specific clinical communication skills were required. Moreover, they needed to design which orthoses was the most effective to the patients based on their knowledge and training. During the project time, the critical and clinical thinking and communication skills of the students were assessed. Through their service and the interaction with various people, they were also expected to understand and demonstrate the role and responsibilities of both as Biomedical Engineering (P&O) professionals and as responsible citizens, and also to demonstrate empathy for people in need as a strong sense of civic responsibility.

The service project was firstly held in 2006. There were 12 students recruited from each University. Starting from the 2nd year, about 6 students from the Washington University at St. Louis joined the project yearly. For the past 9 years, the project team provided service in Guangzhou (2006), Dongguan (2007), Shunde (2008), Qingyuan (2009), Huizhou (2010), Zhaoqiang (2011), Yangjiang (2012), Meizhou and Yangjiang (2013) and Guangzhou and Shaoguan (2014). The project received PolyU Community Service Gold Medal Award in 2007, 2008 and 2011. The service in 2011 also received the Best Demonstration of Teamwork Award. Towards the ten years anniversary in 2015 the Global Biomedical Service project is now evolving from a community service project to become a Service Learning Subject at PolyU.

Key Words: Biomedical, Prosthetics, Orthotics, Chinese Mainland

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