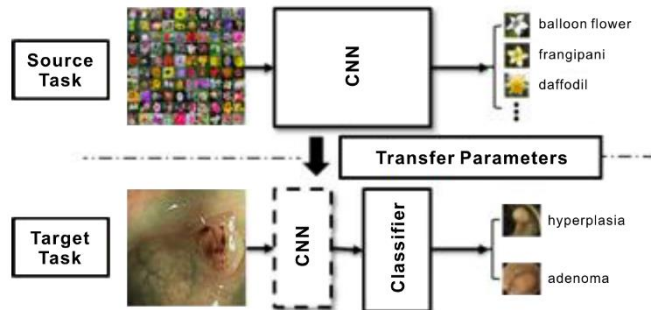


Projects for Postgraduate Students

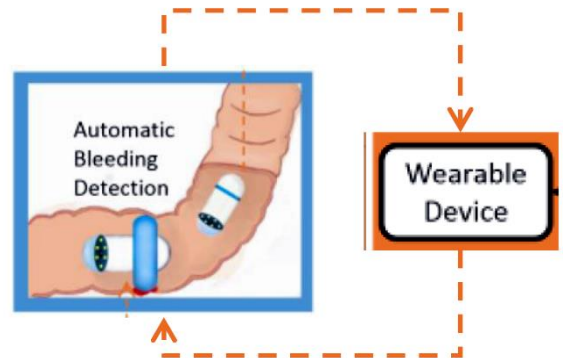
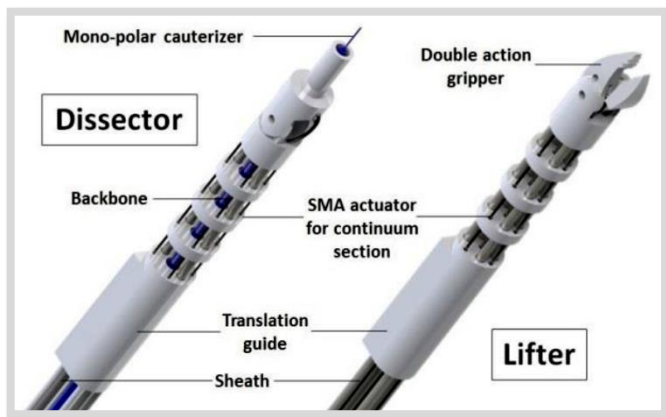
Cancer biomarker identification from large-scale heterogeneous datasets

To use deep convolution networks and other machine learning techniques to search for cancer biomarkers from large-scale heterogeneous datasets or to support fast clinical decision.



Smart instruments for endoscopic surgery and therapeutic procedures

To develop energy harvesting, sensing and wireless communication technologies for intelligent medical devices



Interested candidates please send your CV and a brief research interest statement to postgrad@surgery.cuhk.edu.hk for consideration. Applications are open year round.

Publications:

1. J Andreu-Perez ⁽⁺⁾, **CCY Poon** ⁽⁺⁾, RD Merrifield, STC Wong, GZ Yang, "Big Data for Health," *Biomedical and Health Informatics, IEEE Journal of*, 19 (4), 1193-1208, 2015
2. KC Lau, YY Leung, PWY Chiu, Y Yam, JYW Lau, and **CCY Poon** ^(*), "A Flexible Surgical Robotic System for Removal of Early-Stage Gastrointestinal Cancers by Endoscopic Submucosal Dissection," submitted to *Industrial Informatics, IEEE Transactions on* (minor revision), 2016
3. RK Zhang, YL Zheng, TWC Mak, RX Yu, JYW Lau, and **CCY Poon** ^(*), "Automatic Classification of Hyperplastic and Adenomatous Colorectal Polyps based on Transfer Learning," submitted to *Biomedical and Health Informatics, IEEE Journal of*, 2016
4. BHK Leung, **CCY Poon** ^(*), RK Zhang, YL Zheng, CKW Chan, PWY Chiu, JYW Lau, and JJY Sung, "A Therapeutic Wireless Capsule for Treatment of Gastrointestinal Haemorrhage by Balloon Tamponade Effect," submitted to *Biomedical Engineering, IEEE Transactions on*, 2016