

Research project and supervisory team

Supervisory Team	Dr. Bencan Tang Dr. Jianfeng Ren (TBD) Professor Jonathan Hirst (TBD) Amin Farjudian (TBD)
Short introduction & description of research project	<p>The development of anticancer drugs involves drug-like molecule design and synthesis, lead identification and optimization, as well as later development in clinical trials, and then finally marketing. Computer aided drug development can greatly reduce the research and development (R & D) cycle and R &D costs. Within this, artificial intelligence is currently actively adopted for drug screening, design and synthesis. As a powerful data analysis and data mining tool, machine learning, as an important branch of artificial intelligence, is expected to play an important role in virtual screening.</p> <p>This project aims to set up an artificial intelligence based anti-cancer drug discovery platform with the ability to virtually screen potential anti-cancer candidates. The screening of inhibitors for high-risk tumor related targets such as BRCA, EGFR, LSD1, PARP, DNMT1 will be carried out as case studies for this platform. Meanwhile the obtained potential inhibitors for these targets will be synthesized for biological tests and further development.</p> <p>We are seeking TWO PhD students in this project. Candidate 1 is expected to carry out synthesis who should have strong experience in medicinal chemistry and organic synthesis. Candidate 2 is expected to have strong experience in applying machine learning in drug screening, who ideally should have experience in computer programing.</p> <p>You are welcomed to contact us (via email bencan.tang@nottingham.edu.cn) to discuss these opportunities further.</p>
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