Cell Therapy Biology, Bioprocessing and Clinical Transition (BENG0039)

**Description**

The course expands on core cell biology knowledge acquired from previous courses to gain understanding of the scientific, clinical and commercial interactions required to translate basic science into a routinely deployed advanced therapy.

In particular, the course examines the requirements for cutting edge platform technologies that offer a paradigm shift in medical care and intervention of diseases that are becoming more problematic as the global population ages.

The underlying requirement is to produce quality therapies that are safe, clinically effective and cost effective.

Throughout the course, all the material is based on real world examples and data.

Major themes are stem cells, tissue engineering, gene therapy.

Subthemes include basic science research underpinning candidate cell therapy interventions, research and development process, clinical trials, regulation, bioprocessing, reimbursement, translation cycle, law and ethics.

Students will work in small groups (~5), to create reports and presentations focused on clinical trials of advanced therapies for final assessment.

**Key information**

- **Year**: 2018/19
- **Credit value**: 15 (150 study hours)
- **Delivery**: PGT L7, Campus-based
- **Reading List**: [View on UCL website](#)
- **Tutor**: Dr Yuhong Zhou
- **Term**: Term 1
- **Timetable**: [View on UCL website](#)

**Assessment**

- Written examination (main exam period): 70%
- Coursework: 30%

**Find out more**

For more information about the department, programmes, relevant open days and to browse other modules, visit [ucl.ac.uk](http://ucl.ac.uk)
Cell Therapy Biology, Bioprocessing and Clinical Transition (BENG0039)

**Description**

The course expands on core cell biology knowledge acquired from previous courses to gain understanding of the scientific, clinical and commercial interactions required to translate basic science into a routinely deployed advanced therapy.

In particular, the course examines the requirements for cutting edge platform technologies that offer a paradigm shift in medical care and intervention of diseases that are becoming more problematic as the global population ages.

The underlying requirement is to produce quality therapies that are safe, clinically effective and cost effective.

Throughout the course, all the material is based on real world examples and data.

Major themes are stem cells, tissue engineering, gene therapy.

Subthemes include basic science research underpinning candidate cell therapy interventions, research and development process, clinical trials, regulation, bioprocessing, reimbursement, translation cycle, law and ethics.

Students will work in small groups (≤5), to create reports and presentations focused on clinical trials of advanced therapies for final assessment.

**Key information**

- **Year**: 2018/19
- **Credit value**: 15 (150 study hours)
- **Delivery**: UGM L7, Campus-based
- **Reading List**: [View on UCL website](#)
- **Tutor**: Dr Yuhong Zhou
- **Term**: Term 1
- **Timetable**: [View on UCL website](#)

**Assessment**

- Coursework: 30%
- Written examination (main exam period): 70%

**Find out more**

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk

**Disclaimer**: All information correct as of December 2018. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.