

Essential Laboratory Skills: Aseptic Techniques

Skills and Training Laboratories Training Course
Sycamore House
Cell and Gene Therapy Catapult

Essential Laboratory Skills: Aseptic Techniques

This two-day course, delivered by Cell and Gene Therapy Catapult trainers, provides foundational aseptic production skills for employees in biotherapeutics and advanced therapies. It is designed for those new to the field or seeking to strengthen their capabilities in production and research facilities supporting biotherapeutic and advanced therapy manufacturing.

Learning objectives:

- Understand the need for stringent aseptic GMP standards in the manufacture of different cell and gene therapies
- Define the responsibilities of all stakeholders, including compliance and process design specialists in bio-production processes – does “aseptic” mean “sterile”?
- Describe the GxP / cGMP considerations and expectations throughout the bioprocessed product lifecycle
- Identify potential “risk areas” in a product’s lifecycle
- Review the compliance of key clean room operational procedures (workflow, gowning, cleaning, environmental monitoring etc)
- Interpret aseptic protocols, for example media fill or tube welding operations
- Explain the regulatory requirements for documentation processes
- Master aseptic behaviours including MSC cabinet etiquette, consumables handling, equipment flow, environmental monitoring and the use of PPE
- Develop cell culture skills including media preparation, cell counting (manual and automatic), sub-culturing, cold chain operations, use of water or waterless baths and incubators



Essential Laboratory Skills: Aseptic Techniques

Course title	Essential Skills: Aseptic Techniques
Course level	Introductory
Course fee (per delegate)	£1250 plus VAT
Course date	Available on request
Venue	CGT Catapult Skills Training Lab, Sycamore House, Stevenage

Who should attend

Essential for anyone in biopharmaceutical manufacturing or environments requiring sterility. Suitable for upstream/downstream operators, support and maintenance technicians, process engineers, R&D staff, and professionals in quality control, environmental monitoring, and microbiology.

Pre-course expectations and recommendations

- There is no expectation of prior knowledge for this course although delegates may benefit from attending our *Introduction to Biomanufacturing and Advanced Therapies* course.
- If you are unsure if this course is suitable for you, please contact our Skills team via skillstraininglabs@ct.catapult.org.uk and we will be happy to advise.
- **Important** - once enrolled, delegates will be asked to complete a pre-course questionnaire. Your comments will enable our trainers to gauge the experience and expectations of the attendees, and where appropriate tailor the content to the audience.

Assessment

Assessment is through integrated discussions and trainer observations, plus at the end of the course, delegates will be asked to submit an observational work-place based assessment within 2 – 3 weeks of completing the course showing how and where they have applied their new knowledge in their workplace.

Address:

Sycamore House
Leyden Road
Stevenage
SG1 2BP

How to find us

Driving – to park in our carpark use the vehicle security gate on Leyden Road

What3words ///slip.cakes.owners

By taxi or on foot - use the pedestrian security gate on Gunnells Wood Road

What3words ///parent.risk.lines

Once on site proceed to the main reception located on the south-west side of the building

No smoking

Please be aware that Stevenage Science Park is a no smoking site.

Contact us

We want you to enjoy this training course, but if you have any concerns, please do not hesitate to contact us at skillstraininglabs@ct.catapult.org.uk.

Sycamore House is located just outside Stevenage town centre.

Sycamore House is close to the A1(M) via junction 7, the connectivity of the campus by car is considered good. Stevenage is well connected to major hubs. Cambridge is only 40 kilometres away and reachable within 40 minutes by train, and it takes only a 21-minute train journey to reach King's Cross in London. In addition, Luton and Stansted international airports are reachable within 40 minutes and Heathrow within 1 hour.

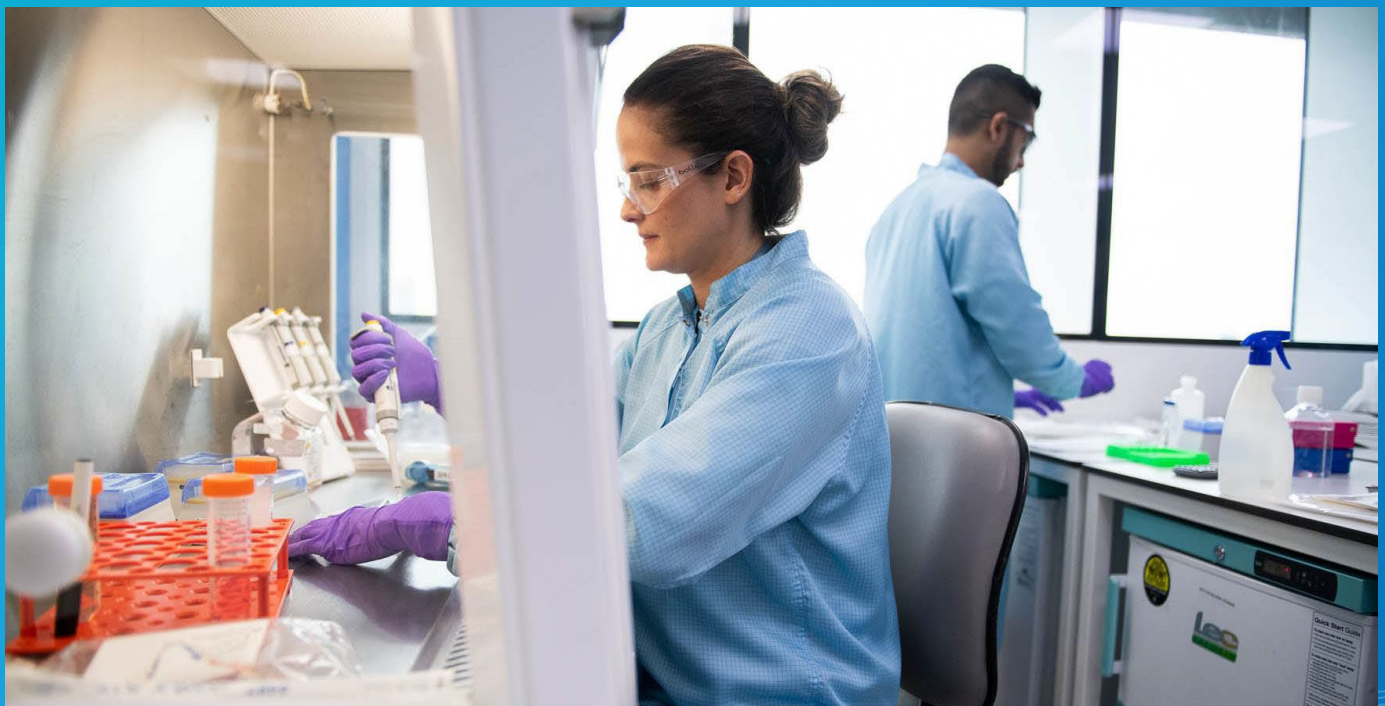
Parking

There are designated car parking spaces available to CGT Catapult staff and visitors to Sycamore House including one electric charging parking space. Car parking is available on a first-come, first-served basis. Our parking spots are marked with the Catapult logo/sign. There are additional parking spots for visitors that is shared among the other tenants in the building. These spots can be booked via building reception in advance.

Additional parking at Stevenage Football Club is available for nine cars for Catapult employees and visitors – see map below.

Agenda

Day I - Time	Session Title and Description
9.30 - 10.00	Welcome and introductions. Health & safety briefing. Course overview and ice breaker activity.
10.00 - 11.15	GxP - cGMP overview. Potential risks in the ATMP product lifecycle – does “aseptic” mean “sterile”?
11.15 - 11.30	Break
11.30 - 13.00	Safety production practices for sterile work – Sterile/aseptic processes in bioprocessing. <i>Case Study 1: Aseptic protocols</i>
13.00 - 14.00	Lunch
14.00 - 15.15	Environmental monitoring & risk management in bio-processing. <i>Case Study 2: Environmental monitoring</i>
15.15 - 15.30	Break
15.30 - 17.00	Practical activity 1: Hand washing best practice Practical activity 2: Aseptic cabinet behaviours, aseptic closures and protocols
17.00 - 17.30	Day I - Review and feedback

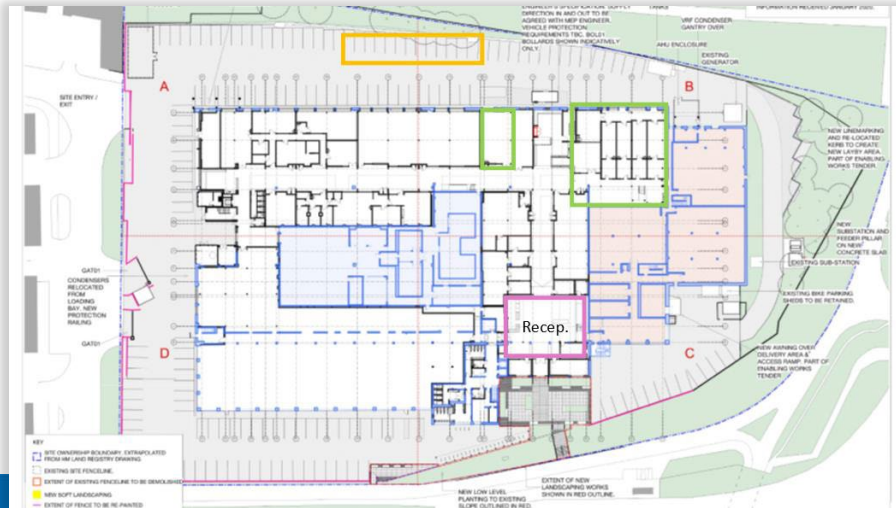


Agenda

Day 2 - Time	Session Title and Description
9.30 - 10.00	Welcome and reflection on the previous day - discussion
10.00 - 11.15	Basics of aseptic cell culture - adherent vs suspension, thawing, seeding, passage, freezing, viability tests and contamination.
11.15 - 11.30	Break
11.30 - 12.30	Practical activity 3: Working in a safety cabinet (MSC): Pipetting techniques. Practical activity 4: Working in a safety cabinet (MSC): Preparing cells for further storage and cell counting.
12.30 - 13.00	Lunch
13.00 - 16.00	Practical activity 5: Centrifugation and microscopy: Skills and techniques for manual and automated cell counting.
16.00 - 16.15	Break
16.15 - 17.00	Review, questions and feedback. Complete post-course questionnaire.
17.00	End of course

Final agenda subject to change.





Area marked in orange is car parking allocated to CGT Catapult employees on a first-come, first-served basis.

The building entrance / reception is marked with purple, and the CGTC ground floor areas, including our Skills and Training Laboratories are marked in Green.

Walking and cycling

Although the walk from the town centre and station takes approximately 25 minutes, there are continuous footpaths and cycleways, and safe crossings all the way to our entrance.

There are 33 cycle spaces for general use. There is a bike store located at the front of the building entrance accessed via Gunnells Wood Road. The spaces for the bikes are available on a first-come, first-served basis.



Car Parking at Stevenage Football Ground

Map showing the additional parking available at the East and West areas of Stevenage football ground.

