



Cell Culture Technician

Novel therapeutic strategies against HBV and HDV infection



Starting date: June 2025



City: Lyon, France



Education: Bac+2

Laboratory

Department: Hepatitis Viruses and Liver Pathogenesis (HeLiP).
Unit: UCBL, INSERM UMR-1350 - Pathobiology and Therapy of Liver Diseases (PaThLiv).
Institute: The Lyon Hepatology Institute, IHU EVEREST.

About the team: The HeLiP team provides an environment of scientific excellence, training, and innovation at the center of the newly formed Lyon Hepatology Institute. Our main objective is to gain a better understanding of the molecular mechanisms involved in the establishment and maintenance of chronic infection by the hepatitis B virus (HBV) and hepatitis delta virus (HDV). This knowledge is fundamental for the development of new direct-acting antivirals, immuno-modulatory agents and their combinations in order to eradicate infection and prevent associated pathologies (cirrhosis and hepatocellular carcinoma).

Address: 151 Cours Albert Thomas, 69424 Lyon Cedex 03.

Directors: Dr. Barbara Testoni and Prof. Fabien Zoulim

Job description

Main mission: We are looking for one talented and motivated technician who will be responsible of the routine cell culture activities of the team. The main role of the technician will be the isolation of primary human hepatocytes (PHH) from liver resections. The technician will work with a binome and will be in charge of the planification, organisation, cell plating and distribution. Moreover, the person will have a central role in thawing cells and maintaining them in culture for our team, as well as working with HBV and HDV viruses (virus production – infection). Finally, the person recruited will be responsible for optimizing and validating protocols.

- Main tasks:**
- Perform primary liver cell isolation and culture activities.
 - Work in confined areas (BSL2 for isolation of primary hepatocytes and BSL3 for virus production).
 - Improve and implement new protocols, including the freezing of freshly isolated PHH.
 - Manage a bank of frozen PHH (already set up). Characterization of the different batches of frozen PHH (morphology, cell viability and infection by HBV). Thawing these cells for lab members according to their requirement and monitoring of stocks.
 - Prepare and maintain culture media, cell lines (HepaRG, HepG2 and HepG2-2215) and associated equipment.
 - Perform quality control tests on cell cultures (viability, growth, contamination, mycoplasma test).
 - Ensure the production of cell banks and the supply of cultured cells, while strictly respecting quality and traceability requirements.



- Manage and contribute to the administration of associated databases (cells, electronic laboratory notebooks).
- Participate in the management and maintenance of laboratory equipment.
- Participation in the production of HBV/HDV virus stocks and perform infections with cell/tissue culture models.
- Perform molecular analyses of human liver cell/tissue culture models.
- Validate, interpret and guarantee the follow-up and quality of results obtained, as well as presenting them in the form of technical reports.
- Participation in the cleaning of BSL2/3 laboratories (cleaning, stocks).
- Performing autoclaving in BSL3.

Specific requirements:

- Experience in BSL2/3 confined environments required.
- Variable working hours possible.
- HBV vaccination.

Scientific background:

- Knowledge of health and safety regulations.
- Experience in virology desirable.

Scientific techniques:

- Mastery of cell culture techniques (media preparation, cell line maintenance, viability tests).
- Molecular biology techniques: RNA/DNA extraction, RT-PCR, ELISA, protein extraction, western blot.
- Knowledge of analytical tools such as ELISA, flow cytometry or microscopy.

Personal skills:

- Organization, rigor and critical thinking.
- Interpersonal and teamwork skills.
- Capacity of basic communication in English language is required.

Study level:

- Bac+2 in the field of cellular biology (DUT, BTS or equivalent).
- Desired field of training: cell biology.

Working hours:

- Full time.
- Possibility to work on weekends (occasionally).

How to apply

Available positions:

- One technician in cellular biology techniques is available in our team, **with a duration of 2 years**

Application deadline:

- Please send your CV (including education, work experience, and academic references) before **March 15th, 2025**.

Contact:

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- Catherine Oudin (catherine.oudin@chu-lyon.fr).