

Corning Cell Culture Connection

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Image provided by Ludwig Institute for Cancer Research, San Diego Branch using the Corning low base COC microplate on Yokogawa CV7000

Preparing for an FBS Shortage: 4 Ways to Safeguard Your Supply

In the spring of 2024, experts began warning that the United States is experiencing a decline in the beef supply that could lead to shortages and as a result increasing prices. In addition to impacts on the food industry, lower beef production is impacting the availability of byproducts from beef production, including fetal bovine serum (FBS), which is widely used in the life sciences industry. However, there are steps research labs and bioproduction companies can take now to safeguard their access to sera to manage the current FBS decline and an expected future shortage.

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“Biological products like FBS have a degree of variability and cyclic behavior from a supply perspective – it’s the nature of the product. That is why it is so important to work with a supplier who has secure supply chains and high quality standards,” says James Carver, Business Director, Media and Serum. “Corning has a long-term supply assurance for FBS with key government approved abattoirs in the U.S., as well as a vertically integrated supply chain and stringent quality testing procedures.”



James Carver
Business Director,
Media and Serum

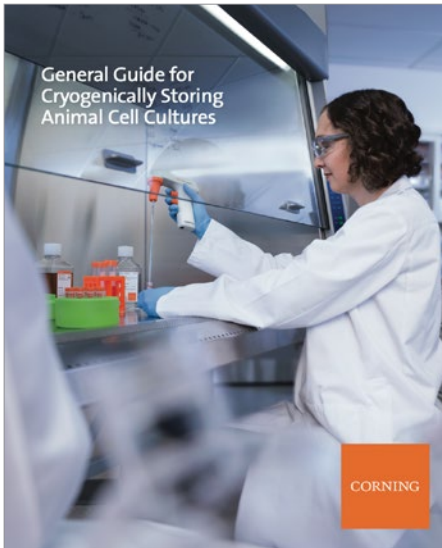
Lab Essentials

The choice is yours.



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Resource Download



General Guide for Cryogenically Storing Animal Cell Cultures

Your cells are precious. You have enough variables to manage without having to worry about whether you're maintaining proper temperature at every stage of the cell culture process.

This guide will give you practical advice on:

- Advantages of freezing cell cultures
- General events during cell freezing
- Practical aspects of cell freezing including cell harvesting, cryoprotection, and thawing and recovery

[Download Here](#)



Request a Free Sample of Corning 2 mL Cryogenic Vials

While it was once common practice for researchers to freeze cells by placing them in a basic storage box and leaving them in a -80°C freezer overnight, more sophisticated freezing containers are now available that provide controlled rate freezing. These include the Corning® CoolCell® container, an alcohol-free system which has been shown to improve post-thaw recovery and viability for a variety of cell types.

Cryogenic vials have also been improved with external threads for reduced risk of contamination, self-standing bottoms to help prevent accidental spills, and more advanced O-rings and washers for better seal security.

[Discover the Perfect Cryogenic Vial for Your Research Needs >](#)



Corning CoolCell

Alcohol-free
No hazardous waste
Less energy

*Cooling up to 16 hours,
freezing up to 8 hours.*

3D Cell Culture: Get Real with Corning 3D Models

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Corning® Transwell® Migration Assays Ultimate Guide: From Setup to Analysis

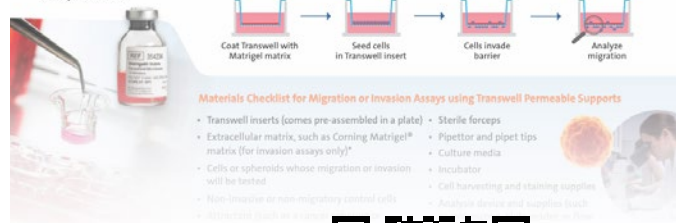
Cell migration and invasion play key roles in many normal biological processes as well as in cancer and other diseases. Corning Transwell permeable support migration assays are an essential research tool for understanding and manipulating these processes.

In a Transwell permeable support migration assay, a membrane separates upper and lower chambers, and researchers can test cells' ability to migrate toward an attractant by passing through pores in the membrane (migration assay) or by digesting a barrier that's used to coat the membrane (invasion assay).

Mastering Corning® Transwell® Migration Assays

Setting Up Corning Transwell Permeable Supports for Migration or Invasion Assays

1. Transwell inserts come pre-assembled in a companion plate. For invasion assays, use a sterile syringe or pipet to apply extracellular matrix to inserts, following manufacturer's instructions to form a barrier.
2. Seed cells or spheroids into the upper chamber at the desired density and volume.
3. Place desired attractant in the lower chamber in the appropriate media.
4. Incubate for the desired time for migration and/or invasion to occur.
5. Collect or fix, stain, and image cells to quantify migration or invasion.



Materials Checklist for Migration or Invasion Assays using Transwell Permeable Supports

- Transwell inserts (comes pre-assembled in a plate)
- Extracellular matrix, such as Corning Matrigel® matrix (for invasion assays only)*
- Cells or spheroids whose migration or invasion will be tested
- Sterile forceps
- Pipettor and pipet tips
- Culture media
- Incubator
- Cell harvesting and staining supplies
- Image device and supplies (such as microscope)

Infographic Download >



Try a free sample to see if our permeable supports are right for your application.



Request a Sample >



Sustainable Innovations

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Recent innovations in new products are making it easier to cut down on plastic material waste for pipets and tips. At Corning Life Sciences, sustainability experts are incorporating strategies like material reduction, the use of regrind plastic in manufacturing, and design for recyclability.

Learn how Corning's sustainable pipets and tips can help you reduce waste >



Oxygen® HybridRack™ Pipet Tip System

70% less plastic vs. traditional plastic pipet tip racks

Order a Free Sample >



Learn Eco-friendly Strategies for Building a Sustainable Lab

Boost lab sustainability by cutting energy use, minimizing waste, and switching to smart lab processes. Move towards a greener lab with Corning.

Download the Ebook >



Corning EcoChoice™ Products Supply Your Lab. Sustainably.

Corning Life Sciences' EcoChoice products are designed with a focus on reducing environmental impact throughout their lifecycle. Corning EcoChoice products meet one or more of the following criteria:

- Recycled content (pre-consumer or post-consumer)
- Source reduction
- Manufactured using environmental attribute certificates (EACs)
- Intensification: products designed to enable greater cell production in a smaller footprint, resulting in less plastic per unit of output



Look for the green leaf.
Shop Corning EcoChoice online.



Celebrating YOU!

Meet some of the nominees of the 50th Anniversary of Corning Cell Culture!



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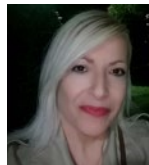
It has been 50 years since Corning introduced the first disposable laboratory products to the life sciences market, enabling researchers to simplify complex tasks, streamline lab productivity, and keep vital experiments on track. To celebrate, we wanted to honor the bench scientists and lab managers involved in bringing game-changing innovations to life.



Mahloro Hope Serepa-Dlamini

Associate Professor and Head of Department
University of Johannesburg

Professor Serepa-Dlamini established and leads a Bacterial Genomics and Biotechnology Research Group with a particular emphasis on bacterial endophytes, while also exploring a wide array of omics and biotechnological applications coupled with product development for industries such as pharmaceuticals, chemicals, and food. She recently described a novel bacterial species, *Bacillus dicomae* sp. nov., the first novel *Bacillus cereus* group species isolated and described from the African continent, making it the 20th member of the *Bacillus cereus* group.



Dr. Vasiliki E. Kalodimou

Assistance Professor and Acting Chair,
School of Medicine
EUC Medical University, Frankfurt

Dr. Kalodimou has studied and worked with stem cells in everyday practice and their applications in regenerative medicine and flow cytometry. She has many patents, the most recent around stem cells being used to treat patients with severe COVID-19 symptoms in collaboration with the Medical City Hospital in the Philippines.



Andrew Pickering

Graduate Research Assistant
*Koch Institute at Massachusetts
Institute of Technology*

Andrew Pickering is a Chemical Engineering Ph.D. student at MIT in Boston, MA. He was recently published in the high impact journal *ACS Nano* on nanoparticles for drug delivery to brain tumors. Glioblastoma has a 5-year survival rate of only 5%. Drugs rapidly diffuse away from the tumor and cause harsh side effects. He invented nanoparticles that are targeted at glioblastoma cells and remain at the tumor site for an extended period.



Preethi Chandrasekaran

Research Associate
*University of Texas at Southwestern
Medical Center*

Dr. Chandrasekaran is an expert in the field of lipid metabolism and specifically in the regulation of Cholesterol and its interactions with SCAP and G-protein coupled receptors – an area of national and international significance. She has published numerous manuscripts on these critical topics and serves on the editorial board for multiple journals. She independently developed several transgenic diabetic mouse models to enlighten hepatic steatosis and drug targets for hepatic fat accumulation.

**Here's to the next 50 years of
supporting scientists.**



Learn From Our Experts

Check out these webinars available on demand.

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Cell Culture Fundamentals: Cryopreservation, Pipetting, and More

9:30 a.m. EST | June 20, 2024



Presented by
Raquel Matos, Ph.D.
Scientific Support Manager
Corning Life Sciences



Advanced Synthetic Peptide Hydrogel for Physiologically Relevant 3D Cell Cultures

11:00 a.m. EST | May 30, 2024



Presented by

Xiuzhi Susan Sun, PhD
University Distinguished Professor
Kansas State University



Elizabeth Abraham, PhD
Director, New Product Strategy
Corning Life Sciences



Understanding and Managing Cell Culture Contamination

11:00 a.m. ET | April 25, 2024



Presented by
Connie MacDonald
Senior Scientific Support Specialist
Corning Life Sciences



2D versus 3D: Benefits of Moving to 3D Cell Culture

11:00 a.m. ET | April 11, 2024



Presented by
Hilary Sherman
Senior Scientist
Corning Life Sciences



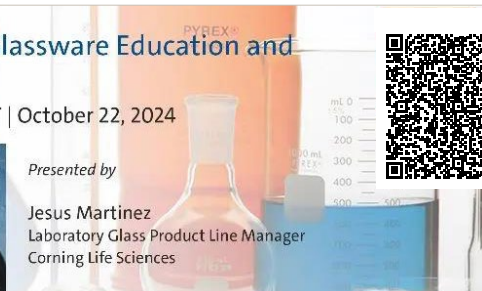
PYREX® Glassware Education and Safety

11:00 a.m. ET | October 22, 2024



Presented by

Jesus Martinez
Laboratory Glass Product Line Manager
Corning Life Sciences



Interferometric Light Microscopy for Rapid Virus Titering and Characterization of Lipid Nanoparticle Preparations

11:00 a.m. ET | September 26, 2024



Presented by
Ben Josey, Ph.D.
Field Application Scientist
Corning Life Sciences



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