



## NTHRYS WORKSHOPS

# Biomanufacturing In Space

### **8:45 AM - 10:15 AM: Session 1: Microbial Production of Biopolymers in Space**

Practical session on microbial biopolymer production in space.  
Protocols for optimizing the production of biopolymers under microgravity conditions.

### **10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break**

Networking and refreshments.

### **10:30 AM - 12:00 PM: Session 2: Microbial Bioreactors for Space Applications**

Hands-on training on setting up microbial bioreactors for space environments.  
Protocols for bioreactor design, microbial growth monitoring, and product extraction in space.

### **12:00 PM - 1:00 PM: Lunch Break**

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Microbial Biosynthesis of Pharmaceuticals**

Hands-on workshop on microbial production of pharmaceuticals in space.  
Protocols for producing key pharmaceuticals using engineered microbes in space bioreactors.

### **2:30 PM - 2:45 PM: Short Break**

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Biofabrication Using Microbes in Space**

Practical session on microbial biofabrication in space.

Protocols for biofabricating materials like bioplastics, textiles, and other bioproducts using microbes.

### **4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break**

Last networking opportunity with snacks.

### **4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption**

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors.

Feedback session and closing remarks.

Certificate Issue

### **5:30 PM: Workshop Concludes**