



## Synthetic Genomics Workshops

# Synthetic Genomics Workshops

NTHRYS BIOTECH LABS provides a diverse array of workshops in the realm of Synthetic Genomics. Explore our comprehensive offerings below

[Synthetic Genomics Workshops Application Process](#)

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## Navigate the Synthetic Genomics Landscape: Workshop Options Ahead!

1. [Workshop in Practical Techniques in Synthetic GenomicsPDF](#)
2. [Workshop in Advanced Techniques in Synthetic GenomicsPDF](#)
3. [Workshop in Emerging Technologies in Synthetic GenomicsPDF](#)
4. [Workshop in Synthetic Genomics in MedicinePDF](#)
5. [Workshop in Integrative Approaches in Synthetic GenomicsPDF](#)

### 1. Workshop in Practical Techniques in Synthetic Genomics

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**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch

**Facilitator(s):** NTHRYS TEAM

**8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

**8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.

Brief overview of today's focus.

**8:45 AM - 10:15 AM: Session 1: Introduction to Synthetic Genomics**

Overview of synthetic genomics and its applications.

Techniques for designing and constructing synthetic genomes.

Case studies on synthetic genomics projects.

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

Networking and refreshments.

**10:30 AM - 12:00 PM: Session 2: Genome Assembly Techniques**

Hands-on techniques for assembling synthetic genomes.

Practical session on using software tools for genome assembly.

Discussion on optimizing genome assembly processes.

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

Catered lunch and networking opportunity.

**1:00 PM - 2:30 PM: Session 3: Synthetic Biology and Genomic Editing**

Introduction to genomic editing techniques.

Practical demonstration of CRISPR and other gene editing tools.

Case studies on genomic editing in synthetic biology.

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

Time for a stretch and informal discussions.

**2:45 PM - 4:15 PM: Session 4: Case Studies and Applications**

Review of significant case studies in synthetic genomics.

Applications in biotechnology and medicine.  
Future trends and research directions.

**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**

## 2. Workshop in Advanced Techniques in Synthetic Genomics

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**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch

**Facilitator(s):** NTHRYS TEAM

**8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

**8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.  
Brief overview of today's focus.

### **8:45 AM - 10:15 AM: Session 1: Advanced Genome Design**

Advanced techniques for designing synthetic genomes.  
Practical session on using advanced design software.  
Troubleshooting and optimizing genome designs.

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

Networking and refreshments.

### **10:30 AM - 12:00 PM: Session 2: Genome Synthesis and Assembly**

Overview of genome synthesis and assembly methods.  
Practical session on synthesizing and assembling large genomes.  
Case studies on genome synthesis projects.

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

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Functional Genomics in Synthetic Biology**

Using functional genomics to study synthetic genomes.  
Practical session on gene expression analysis.  
Case studies on functional genomics applications.

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

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Biotechnology in Synthetic Genomics**

Strategies for integrating biotechnology in synthetic genomics.  
Case studies on biotechnological applications.  
Future trends and challenges in the field.

### **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**

### **3. Workshop in Emerging Technologies in Synthetic Genomics**

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**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch

**Facilitator(s):** NTHRYS TEAM

**8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

**8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.

Brief overview of today's focus.

**8:45 AM - 10:15 AM: Session 1: AI and Machine Learning in Synthetic Genomics**

Introduction to AI and machine learning applications in synthetic genomics.

Techniques for using AI in genome design and analysis.

Hands-on session with AI tools.

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

Networking and refreshments.

### **10:30 AM - 12:00 PM: Session 2: High-Throughput Screening**

Using high-throughput screening in synthetic genomics.  
Practical session on setting up and running screening assays.  
Troubleshooting and optimizing screening processes.

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

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Integrative Approaches**

Combining synthetic genomics with other biological data.  
Case studies on integrative approaches.  
Practical session on multi-omics data integration.

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

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Future Directions**

Emerging trends and technologies in synthetic genomics.  
Discussion on potential breakthroughs and innovations.  
Networking session for collaborative research opportunities.

### **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**

## **4. Workshop in Synthetic Genomics in Medicine**

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**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch

**Facilitator(s):** NTHRYS TEAM

### **8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

### **8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.

Brief overview of today's focus.

### **8:45 AM - 10:15 AM: Session 1: Gene Therapy and Synthetic Genomics**

Introduction to gene therapy using synthetic genomics.

Case studies on successful gene therapy applications.

Practical session on designing and implementing gene therapy circuits.

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

Networking and refreshments.

### **10:30 AM - 12:00 PM: Session 2: Diagnostic Tools**

Techniques for developing diagnostic tools using synthetic genomics.

Case studies on diagnostic applications.

Practical session on producing diagnostic tools.

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

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Therapeutic Applications**

Using synthetic genomics in therapeutic applications.

Case studies on therapeutic circuits.

Practical session on screening and optimizing therapeutic circuits.

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

Time for a stretch and informal discussions.

**2:45 PM - 4:15 PM: Session 4: Future Challenges in Medical Applications**

Discussion on future challenges and opportunities in synthetic genomics for medicine.

Strategies for addressing these challenges.

Networking session for collaborative solutions.

**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**

## **5. Workshop in Integrative Approaches in Synthetic Genomics**

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**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch



**Facilitator(s):** NTHRYS TEAM

**8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

**8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.

Brief overview of today's focus.

**8:45 AM - 10:15 AM: Session 1: Multi-Omics Data Integration**

Introduction to multi-omics data integration.

Practical session on combining genetic, epigenetic, and proteomic data.

Case studies on integrative approaches.

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

Networking and refreshments.

**10:30 AM - 12:00 PM: Session 2: Synthetic Genomics and Ecology**

Exploring the intersection of synthetic genomics and ecology.

Case studies on ecological applications.

Practical session on ecological data analysis.

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

Catered lunch and networking opportunity.

**1:00 PM - 2:30 PM: Session 3: Computational Tools and Resources**

Overview of computational tools for synthetic genomics.

Hands-on session with popular software and databases.

Discussion on best practices and resources.

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

Time for a stretch and informal discussions.

**2:45 PM - 4:15 PM: Session 4: Future Trends and Collaborations**

Discussion on future trends in synthetic genomics.

Strategies for fostering collaborations.

Networking session for potential partnerships.

#### **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**

Note: NTHRYS Management reserves the right to modify the workshop module at any time without prior notice. Registered or enrolled candidates will receive the module that is current on the day of enrollment.

### **NTHRYS Workshops Department**

**M: +91-7993084748**

**Email: workshops ( a t ) nthrys [ d0t ] com**

### **Synthetic Genomics Workshops Application Process**

1. Select a workshop from the list.
2. Contact via whatsapp on the number present above to request fee details and dates suitable for joining. Alternatively, you can send an email to workshops ( a t ) nthrys [ d 0 t ] com.
3. Our Workshop department will contact you promptly to provide further assistance.