

# भारतीय प्रौद्योगिकी संस्थान गुवाहाटी Indian Institute of Technology Guwahati



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EOI Ref. No. IITG/IISI/24-25/T21E

• To

• Date : 05.07.2024

## All interested vendors

# SUBJECT: EXPRESSION OF INTEREST FOR COLLABORATION ON THE CONTENT DEVELOPMENT OF ARTHROSCOPIC SURGICAL TRAINING MODULES FOR THE DEPARTMENT OF DESIGN (PROJECT NO. XDESICNXHML00821XXKS015), IIT GUWAHATI.

Dear Sir/ Madam,

The Director, Indian Institute of Technology Guwahati, invites hospitals and individual doctors to submit an Expression of Interest (EOI) for collaboration on "Content Development of Arthroscopic Surgical Training Modules" as per details attached herewith. The response is to be submitted in sealed envelopes to the undersigned on or **before 22/07/2024.** 

In case of doubt please contact us at 0361 258 2948 or the Principal Investigator at 0361 258 2456.

Thanking you.

Yours Sincerely,

स्तीयक प्रत्यापिव, औषोगिक सहभाषिता एवं विशेष प्रहेल Asidant Registrar, industrial Interactions & Special Initiatives भारतीय प्रीर्थागिकी संस्थान गुवाहाटी Indian Institute of Technology Guwahati गुवाहाटी; असम 781039 Guwahati, Assam 781039

# **Expression of Interest (EOI)**

For

# Services of an Organization

For

**Project: Content Development of Arthroscopic Surgical Training Modules** 

**Project Sponsored by: Healthium Medtech** 

Project Number: xDESICNxHML00821xxKS015

Prepared by: IIT Guwahati

Guwahati, Assam - 781039

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# 1. Invitation of Expression of Interest

The IIT Guwahati invites hospitals and individual doctors to submit an Expression of Interest (EOI) for collaboration on the content development of VR-based arthroscopic surgical training modules. This project is sponsored by Healthium Medtech, under project number xDESICNxHML00821xxKS015. We seek expertise in content creation, documentation, and ongoing support to review and ensure medical accuracy for the following surgeries:

- 1. ACL Reconstruction Surgery
- 2. Meniscus Repair Surgery
- 3. Rotator Cuff Repair Surgery
- 4. Bankart Repair Surgery

# 2. Key Timelines

- EOI Release Date: 05.07.2024
- Deadline for Submission of Proposal: 22.07.2024
- Evaluation Period: 23.07.2024 to 29.07.2024
- Final Selection Announcement: 30.07.2024
- Contract Start Date: 01.08.2024
- Contract End Date: 30.09.2024

# 3. Background

The IIT Guwahati, is dedicated to advancing surgical education through innovative technologies. In collaboration with Healthium Medtech, we aim to develop VR-based surgical training modules that provide immersive, accurate, and interactive learning experiences. This project focuses on creating detailed training modules for mentioned orthopaedic surgeries and various approaches of those surgeries to enhance surgical skills and outcomes.

# 4. Aims and Objectives

# **Content Creation and Documentation**

- **Procedures:** Develop detailed step-by-step descriptions of each surgical procedure, including steps, instructions, purpose and tips.
- Steps: Break down each surgical step with purposes.
- Instructions: Provide details on how to perform those steps
- **Purpose:** Provide details on the purpose and objectives of the surgical steps.
- **Tips:** Provide professional tips and best practices for each step.
- Quiz Components: Create quiz questions for each step to reinforce learning.

# **Visual Data Collection**

- **Surgical Tools and Implants:** Capture high-resolution images and videos of surgical tools such as bone saws, drills, arthroscopes, scalpels, proploops, etc.
- **Hand-**pose: Provide accurate hand poses with relevant high-resolution images and videos of hand poses of surgical tools such as bone saws, drills, arthroscopes, scalpels, proploops, etc.
- Working animation: Provide accuracte animations of the working of the surgical tools and implants, such as bone saws, drills, arthroscopes, scalpels, proploops, etc.
- Implants: Provide detailed high-resolution visuals, both images and videos, of implants used in each surgery.

# Anatomy and Surgical Step Recording

- Anatomy: Collect high-quality images and videos of relevant human anatomy. Include animation videos and real anatomical videos.
- **Surgical Steps:** Record video and image documentation of each surgical step to aid in creating accurate 3D models for VR experiences. This includes providing animation videos and real surgery videos.

### **Ongoing Support and Evaluation**

- Support: Offer three months of support to address queries and guide the development of the VR modules.
- **Review:** Review the developed VR modules, suggest changes and modifications to ensure medical accuracy and training effectiveness.
- Evaluation: Conduct weekly two-hour sessions with two senior surgeons to evaluate VR-based surgical steps

### 5. Deadline for Submission of Proposal

Proposals must be submitted no later than 22<sup>nd</sup> July 2024. Late submissions will not be considered.

### 6. Period of Contract

The contract period will be for a maximum of two months, starting from the contract start date of 1<sup>st</sup> August 2024.

### 7. Eligibility Criteria

- Hospitals or individual doctors with expertise in orthopaedic surgeries.
- Ability to develop surgical content and documentation.
- Ability to provide high-quality visual data collection, both in animation and real surgical videos.
- Ability to use Virtual Reality (VR) devices to review and evaluate the developed training modules
- Commitment to ongoing support and evaluation.

#### 8. Evaluation Criteria and Method of Evaluation

#### **Experience and Expertise (60%)**

- Relevant surgeons and expertise in orthopedic surgeries.
- Commitment in recording surgical content creation and documentation.
- Commitment to provide 2 dedicated surgeons for a period of 2 months of the contract.

#### **Quality of Proposal (30%)**

- Detailed and clear proposal outlining the approach and methodology.
- Comprehensive plan for content creation, visual data collection, and ongoing support.
- Ability to provide high-resolution images and videos of surgical tools, implants, and anatomy.

#### **Commitment to Support, Review and Evaluation (10%)**

• Willingness to provide three months of constant dedicated support in reviewing and evaluating the developed surgical training modules for the mentioned surgeries

#### 9. Final Selection

The final selection will be based on the evaluation criteria outlined above. The selected agency will be notified by 30<sup>th</sup> July 2024. A formal contract will be issued, outlining the terms and conditions of the collaboration.

#### 10. Method to Communicate to the Final Selected Agency

The final selected agency will be contacted via email and official letter. A formal contract will be issued, detailing the terms of collaboration, including responsibilities, timelines, and deliverables.

#### Summary

The Department of Design, IIT Guwahati, in collaboration with Healthium Medtech, invites expressions of interest from hospitals and individual doctors for the development of VR-based arthroscopic surgical training modules. This project aims to enhance surgical education through detailed documentation, high-quality visual data collection, and ongoing support. Proposals must be submitted by [22.07.2024], and the contract period will be for a maximum of two months. The final selection will be announced by [30.07.2024].

For further information and submission of proposals, please contact:

Dr. Keyur Sorathia Associate Professor Department of Design, IIT Guwahati Contact No.: 361-258-2456, +91-8011693660 Email: <u>keyur@iitg.ac.in</u>

The address of the firm submitting the proposal and the Officer to whom the quotation is addressed must appear distinctly on sealed covers. Further, on sealed cover, the following are to be written:

EXPRESSION OF INTEREST FOR CONTENT DEVELOPMENT OF ARTHROSCOPIC SURGICAL TRAINING		
MODULES FOR THE DEPARTMENT OF DESIGN (PROJECT NO. XDESICNXHML00821XXKS015), IIT GUWAHATI		
LAST DATE OF SUBMISSION: 22/07/2024		
EOI Ref. No. IITG/IISI/24-25/T21E		
То,		
The Assistant Registrar		
Industrial Interactions And Special Initiatives		
Indian Institute of Technology Guwahati		
Guwahati 781 039, Assam, India.		
From: M/s		
Phone No.:		
mail ID :		