

The Facilities/Special Status at King George's Medical University, Lucknow

1. Cochrane India Network (CIN)

King George's Medical University, Lucknow, is an official affiliate center of Cochrane, United Kingdom. The primary mandate of Cochrane is to generate evidence and train different stakeholders about systematic reviews and meta-analyses



The screenshot shows the Cochrane India Network website. The header includes the Cochrane India logo, the tagline "Trusted evidence. Informed decisions. Better health.", and a search bar. The navigation menu includes "About us", "Join Cochrane", "Cochrane India Network", "Evidence", "News", and "Contact us". The main content area is titled "King George's Medical University" and features a large photograph of the university's main building. To the left of the photo is a list of affiliated institutions, including King George's Medical University, Lucknow. Below the photo, there is a paragraph about the university's history and its status as a premier medical and research institution in Northern India. The text mentions that the foundation stone was laid by the Royal Highness, Prince of Wales, in 1906, and that the university is known for excellence in medical education, ethics, research, and patient care. It also states that KGMU will share evidence from Cochrane results with various stakeholders and policy makers of India.

Cochrane affiliate centre at KGMU have organized “Refresher workshop on Cochrane Protocol Development” on April 11-12, 2022 at Kalam centre. It was organized as training of trainers mode to prepare pool of speakers from King George's Medical University, Lucknow affiliate center who had already some experience or attended Cochrane Protocol Development workshop.

Twenty-five faculty members were trained in this workshop and speakers were Prof. Prathap Tharyan and Mr. Richard Kirubakaran from CMC, Vellore.

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Registrar
King George Medical University
Lucknow



KING GEORGE'S MEDICAL UNIVERSITY

LUCKNOW UTTAR PRADESH INDIA

ESTD 1905



Link of Cochrane India Network – KGMU Affiliate can be found at <https://india.cochrane.org/cochrane-india-network/king-georges-medical-university> Link of this report can be found at <https://community.cochrane.org/organizational-info/resources/resources-groups/geographic-groups-portal/reporting/115361>

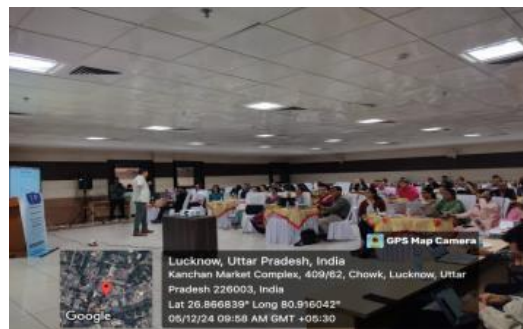
Balendra

Prof. Balendra Pratap Singh
Director, Cochrane India: KGMU Affiliate
Department of Prosthodontics
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2- SARANSH (Systematic Reviews and Networking Support in Health) Department of Health Research, New Delhi

A four-day Systematic Review & Meta-analysis workshop under SARANSH was organized jointly by King George's Medical University and its Research Cell at the Kalam Centre, Lucknow, from 4–7 December 2024. Funded by the Department of Health Research, MoHFW, Government of India, it hosted 60 participants from 15 medical institutions across Uttar Pradesh and Uttarakhand. Renowned experts **Dr. Siddharth Kapahtia**, **Mrs. Pranita Pradhan**, and **Mr. Richard Kirubakaran** served as external speakers. The workshop covered all aspects of systematic reviews and meta-analyses, including hands-on training in literature search, data extraction, risk of bias assessment, and statistical analysis.



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Prof. Balendra Pratap Singh (Deptt. of Prosthodontics)
Principal Investigator, SARASH Grant, KGMU

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3- Technical Resource Centre (TRC) funded by DHR, New Delhi

The Technical Resource Centre (TRC) under the Centre for Evidence for Guidelines, Department of Health Research, MoHFW, was sanctioned on 8th October 2024, with **Prof. Balendra Pratap Singh as Principal Investigator**. The centre focuses on evidence synthesis and conducting systematic reviews. It was assigned three systematic reviews and organized a GRADE workshop on 15–16 February 2025 at KGMU, Lucknow. Prof. Singh also participated in a strategic conclave at Mahabalipuram in January 2025. **Four faculty members from KGMU conducted workshops at AIIMS Bhopal, Deoghar, and New Delhi, promoting evidence-based practices and training in the GRADE framework**



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4. Institutional Animal House (IAH)

Institutional Animal House (IAH), Department of Pharmacology, registered in 2002 by the Committee for Control and Supervision of Experiments on Animals (CCSEA), New Delhi, to keep small animals for research, **where MD/MDS/MCh/PhD students carry out their thesis work along with extramural projects by the faculties of various departments of KGMU.**

The Institutional Animal Ethics Committee (IAEC) meets quarterly and approves around 40 basic science and clinical proposals annually. We house ~600 - 800 small animals, such as mice, rats, guinea pigs, and rabbits, annually. The university has upgraded the facilities and area of the IAH to obtain permission from CCSEA to breed small animals. Now, we are in the process of breeding transgenic mice for biomedical research.

The IAEC includes experts from diverse biological disciplines, veterinarians, socially aware nominees, and scientists outside the institution. It ensures ethical compliance and scientific rigour in Animal-based research. Prof. Amod Kumar Sachan chairs the committee, which is coordinated by Dr. Satyendra Kumar Singh, who serves as Member Secretary.

IAH is an isolated germ-free facility with an air shower at the entrance, air curtains, and a heating, ventilation, and air conditioning (HVAC) system in the facility. CCTV nicely covers this area for monitoring and supervising activities 24/7. We have a veterinary officer supervising animal health and supporting students with their research work. IAH has the facility to maintain immunocompromised mice in an Individually Ventilated Cages (IVC) system, a Stereotaxis system with drill and injector to study brain disorders, a μ CT machine to study bone-related disorders, a well-equipped animal handling and OT room, etc.

The facility ensures that CPCSEA approval is sought for research involving animals. The IAEC ensures that research protocols comply with national guidelines and are reviewed and monitored regularly. The committee is responsible for maintaining annual inspection reports and adhering to CPCSEA's Standard Operating Procedures (SOPs)

S.No.	Facility Developed	Year
1	Infrastructure developed as per CCSEA guideline, which include making facility sound proof, 12 hr day/night light cycle regulator, HVAC system, air shower and curtain installation, and a closed facility with authorised entry etc.	2016
2	Installation of Individually ventilated Cages (IVC) and cage changing station for immunocompromised mice housing and research.	2016
3	Stereotaxis system Installation for brain research.	2017
4	Big autoclave for animal cage, bedding, water and other required items.	2017
5	A separate facility to keep rabbits.	2020
6	Expansion of IAH as per IAEC recommendations to get breeding permission for small animals from CCSEA	2023
7	IAH facility got approval for in-house breeding of small animals.	2024

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Institutional Animal House

IAH registration letter (2002)

No. 25/1/99 - AWD (PL)
Government of India
Ministry of Environment & Forests
Committee for the Purpose of Control and Supervision of Experiments on Animals
Shastri Bhawan, New Delhi-110001,
Dated the 18th July 2002.

The Principal/Director/Dean
King George's Medical College
Lucknow University
Lucknow - 226 003
Uttar Pradesh

Subject: Registration of Establishments/ Breeders under Rule 5(a) of the "Breeding of and Experiments on Animals (Control and Supervision) Rules 1986".

Sir/Madam,

With reference to your application on the above-mentioned subject, this is to inform that your Establishment is hereby registered for "Research". Your Registration Number is 64602/CPCSEA. The members of CPCSEA on the Institutional Animal Ethics Committee (IAEC) of your Establishment will be intimated in due course.

1. You are requested to quote the above Registration Number in all your future correspondence with the Committee.
2. You are also requested to convene IAEC meeting at the earliest.
3. For further correspondence you are requested to contact Office of CPCSEA at Chennai, at the address given below.

Office of the CPCSEA
Ministry of Environment & Forests
37 Seaward Road, Vimala Nagar,
Thiruvananthapuram, Chennai-605 041 (Tamil Nadu)

Yours faithfully,

MEMBER SECRETARY (CPCSEA) (DIRECTOR (AW))
Tel. No. 3201488

IAH registration and IAEC renewal letter (2022)

No. 25/1/2012-AWD
Government of India
Ministry of Fisheries, Animal Husbandry and Dairying
Department of Animal Husbandry and Dairying
O/o Committee for the purpose of Control and Supervision of Experiments on Animals (CPCSEA)
Delhi Milk Scheme Complex,
Shadpur, New Delhi - 110008,
Date: 31/Jan/2022

To,
Prof. Anand Kumar Sachan, Chairperson, IAEC,
King George's Medical College,
Lucknow University,
Lucknow - 226 003, Uttar Pradesh
Email: dr.anandkumarsachan@gmail.com
Mobile: 9936016999

Subject: Renewal of Registration and Reconstitution of Institutional Animals Ethics Committee (IAEC)-regarding.

Sir,

The registration of Animal House Facility of your establishment with CPCSEA has been renewed for a period of five years from the date of issue of this letter.

2. The new registration number of Animal House Facility of your establishment is 64602/CPCSEA for "Research for Education purpose on small animals". Henceforth, the new registration number may kindly be quoted in all your future correspondence with this office.

3. The CPCSEA has accepted the following members recommended by the establishment.

Name of the IAEC Members	Designation in IAEC
1) Prof. Anand Kumar Sachan	Biological Scientist, Chairperson
2) Dr. Satyendra Kumar Singh	Scientist in charge of Animal House Facility, Member Secretary
3) Dr. Shastri Verma	Scientist from different biological discipline
4) Dr. Raja Rupanil	Scientist from different biological discipline
5) Dr. Subhash Chandra Sharma	Veterinarian

IAH Annual Inspection



Veterinarian

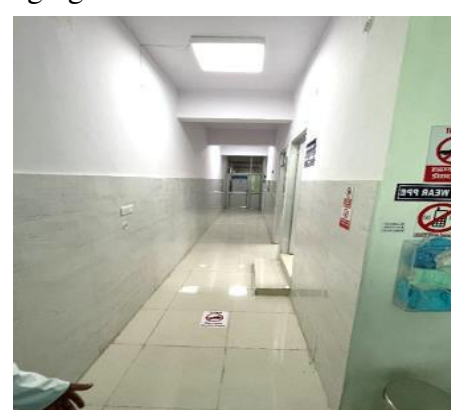


Immunocompromised mice housing and experimentation facility:

This facility has a separate area with IVC cages and a cage-changing station. The facility also has a class A2 biosafety cabinet for animal handling during experiments.



Figure 1: Individually Ventilated Cages (IVC) with cage changing station.



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Figure 2: Stereotaxis system with drill and injector for brain research.

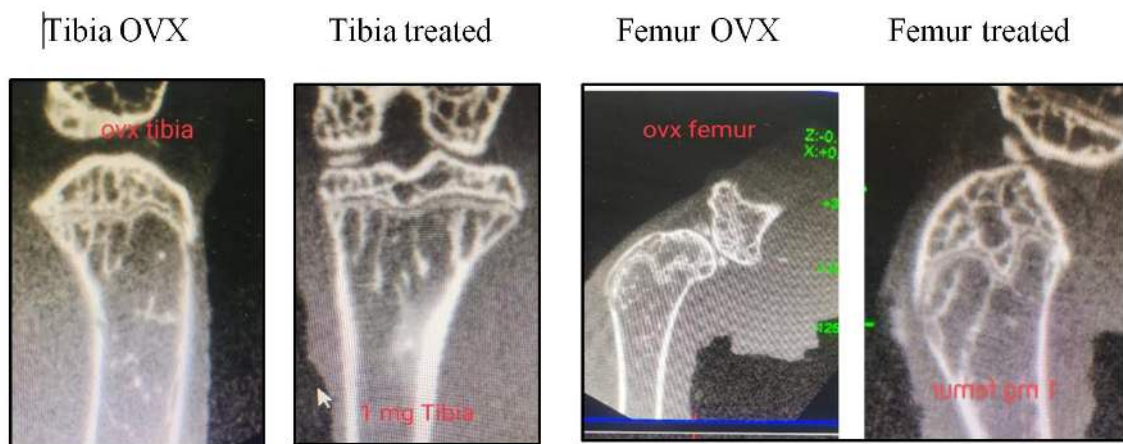


Figure 2: MicroCT scan of femur and tibia of osteoporotic mice before and after the treatment

5. Centre for Advance Research (Central Facility usage by other institutes and universities)

Centre for Advanced Research (CFAR) has state-of-the-art facilities in Molecular biology lab, Stem cell/ Cell culture lab and Cytogenetics lab. These laboratories are equipped with microCT, Drug screening on *ex vivo* patient samples, Gene expression analysis lab, Metabolomics, Pesticide estimation, flow cytometry, Stem cell isolation and characterization, etc.

Several investigators from different universities and Institutes have been used/ using these facilities on a collaborative and reagent-sharing basis. These collaborations have culminated in several good publications and have trained several personnel

Infrastructure Development and Upgradation at Center for Advance Research

S.No.	Facility Developed	Year
1	Molecular and Genomics facility established	2016
2	Stem Cell/ Cell Culture facility established	2016
3	Cytogenetics facility established	2017
4	Agene and Nanostring with HPC installed for high throughput expression analysis	2017
5	An ultracentrifuge was installed for several biological applications in cell and molecular biology	2017
6	MicroCT facility was started for small animals and other extracted bones like human teeth, mice and rat femur etc.	2018
7	The cytogenetics facility has been upgraded.	2020
8	The stem cell research facility procured 12 parameter 3 laser flow cytometer for adult stem cell as cancer research.	2025

a) **MicroCT-based Imaging of animals as well as teeth:**

μ CT is a very powerful equipment to study the bone architecture in small animals and human teeth at 10 μ m resolution.

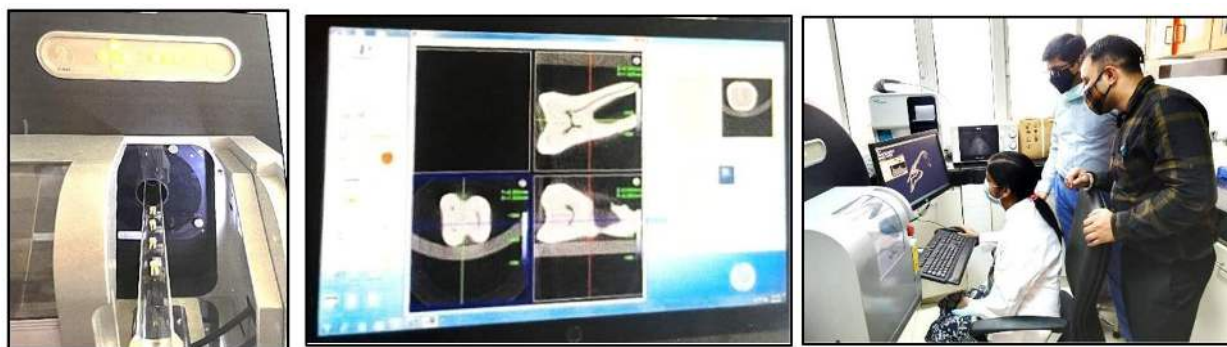


Figure 1: Scanning of teeth, canal centering and animal scanning procedure.

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b) Drug Screening in ex vivo cultured patient samples

Stem Cell/ Cell Culture facility can generate primary cells from different cancers and normal tissues. Various investigators from several universities have used this facility to test their drugs and crude molecules to evaluate the effect on ex vivo patient samples after getting ethical approvals.



Figure 2: BD FACS AriaIII and AccuriC6 for drug screening assay in cancer stem cell Metabolomics and Pesticide Estimation Facility:

GC/MS/MS is a very sensitive equipment that can be used to estimate metabolites as well as pesticides in any biological sample. Several labs have used this facility for their biological samples analysis.



Figure 3: GC-MS/MS equipment analyzing metabolites and pesticides in various biological samples

Gene Expression Analysis Facility:

The gene expression analysis facility is equipped with Nonstring, Affimatrix, Gene Titan and RT-PCR (2 and 5 plex). High throughput bioanalyzer is used for Quality Check. of library DNA & RNA.