

**REGIONAL CANCER CENTRE
THIRUVANANTHAPURAM-695 011**

Prospectus for Admission to
Fellowship Programme in Onco-Surgical Anesthesia-2022

The Regional Cancer Centre, Thiruvananthapuram (RCC), now in its 41st year of service to the nation is an autonomous institution sponsored jointly by the Govt. of Kerala and the Govt. of India. It is an internationally acclaimed centre for cancer treatment and research and caters to the population of the state of Kerala and adjoining parts of Tamil Nadu. Handling over two lakhs patients including over 15,000 new cancer cases annually (30 lakhs patient visits in the last 15 years) RCC stands tall in the health map of Kerala carrying out innovative and pioneering work in cancer control, treatment, research and training.

RCC is a comprehensive cancer centre with full-fledged departments of Surgical Oncology, Radiation Oncology, Medical Oncology and Paediatric Oncology supported by allied services such as Pathology, Imageology, Nuclear Medicine, Anaesthesiology, Microbiology, Transfusion Medicine, Laboratory services and Nursing services. The centre also has separate divisions for Community Oncology, Medical Records, Cancer Epidemiology, Cancer Research, Palliative Medicine, Dental Care, and Computerized Hospital Information System management. The information support for all these activities is provided by a well-organized Library & Information Services division.

Description:

The program aims to provide a framework and skill set to anesthesiologist to safely and effectively manage the perioperative and postoperative period of an onco-surgical patient. The Department of Anaesthesiology, Regional Cancer Centre, Trivandrum offers a one year clinical fellowship dedicated to patient care and education with the opportunity for focusing on research. Our fellowship provides educational opportunities in an academic medical center dedicated to both patient care and cancer research.

Programme Objective:

To develop teaching, and ongoing quality improvement in the practice of anaesthesia for onco-surgical patients. The aim of this course is to train Anaesthesia postgraduates in Onco-anaesthesia, onco-critical care and cancer pain management. The fellow may administer anaesthesia under the direct supervision of an attending physician or in a supervisory role of a staff with an overseeing attending. To promote a teaching programme which can then be put up for accreditation by renowned centers of excellence in the field of Anaesthesia for cancer patients which will help make the course sought after.

Scope:

Clinical Anaesthesia Training: Anaesthetic care in the operating theatres for all types of surgical, diagnostic and therapeutic procedures. Hands-on experience of advanced techniques such as thoracic epidural, ultrasound guided nerve blocks; ultrasound guided difficult vascular access, difficult airway management techniques such as video bronchoscopic intubation/ video-laryngoscopy and advanced haemodynamic monitoring. The students will also be trained in

anaesthetic management of critical and complex long duration surgeries such as free flap reconstruction surgeries, advanced hepato-pancreatico-biliary surgeries, thoracoscopic lung resection , esophageal surgeries (requiring lung isolation using double lumen endobronchial tubes. Candidates will also get experience in evaluating and optimizing oncosurgical patients pre operatively. These patients often have associated co morbidities and may present after radiation therapy, chemotherapy or nowadays after Covid infection

The areas of work include

- Elective and emergency oncosurgical procedures
- Anaesthesia and sedation in remote areas. They will be exposed to non-operating room anaesthesia (NORA) like MRI, CT, Radiotherapy (RT), minor surgeries, Endoscopic procedures etc.
- Surgical Intensive Care Unit: 24-hour specialist intensive care coverage in the surgical intensive care unit. Postoperative critical care of these complex surgeries will also be part of the training.
- Pain Management Unit Inclusive of:

Acute Pain Service :Providing pre- and post-operative pain management procedures like epidural opioids, patient controlled analgesia and regional nerve blocks.

Pain Clinic: Providing inpatient and outpatient cancer pain management and Palliative care

- Educational activities include journal club, morbidity & mortality meetings, lectures and courses in introductory biostatistics. This fellowship prepares them for leadership roles in the care of people with cancer around the world. They will be expected to be actively involved in departmental audit and research activities. Trainees have the resources of Scientific Publications Office and Research Medical Library to enhance their skills at scientific writing and literature search and review. Fellows have the opportunity to participate in the workshops/conferences for national and international audience
- We have post graduate training . Hence post graduate teaching opportunities will be provided
- There is a well equipped Simulation Lab and trainees have the opportunity to learn (and eventually teach) crisis management in Anaesthesia and Intensive care

Rotation Scheme

Surgical Oncology (Hepato-biliary, Colo-rectal and Gastrectomies)	Eight weeks
Difficult airway (complex Head & Neck, microvascular surgeries)	Eight weeks
Urology, Gynaecology and Orthopaedics	Eight weeks
Breast surgery and limb surgery (Including plastic surgery)	Eight weeks
Surgical Intensive Care Unit	Eight weeks
Acute Pain & Remote Anaesthesia	Four weeks
Palliative Care Clinic	Four weeks

1. INTRODUCTION/ ORIENTATION

- Organization and functioning of operating theaters
- Digital hospital information network and data processing
- Pre-anaesthesia evaluation
- Patient assessment in Post-anaesthesia care unit
- Vasoactive drugs, dosage, infusion preparation
- Establishment of advanced haemodynamic monitoring
- Epidural dosage, infusion preparation
- Preparation and administration of patient controlled analgesia pumps.

2. Anaesthesia for Gastro-intestinal oncological surgery

- Gastro-intestinal and hepatico-pancreatico-biliary (HPB) anatomy
- Introduction to colorectal surgery: Anaesthetic considerations
- Introduction to hepato-pancreatico-biliary surgery- Anaesthetic considerations
- Physiology of gastrectomy and gastric bypass
- Oesophagectomy: approaches and anaesthetic considerations.
- Minimally invasive surgery-anaesthetic considerations
- Fluid management for major colorectal surgery
- Fluid management for major HPB surgery
- Advanced haemodynamic monitoring for major HPB surgery

3. Anaesthesia for gynaec-oncological surgery

- Physiology and anatomy of gynaec-oncology
- Anaesthetic considerations in gynaec-onco surgery
- Perioperative considerations for debulking and cytoreductive surgery
- DVT prophylaxis- mechanical and pharmacologic methods

4. Anaesthesia for uro-oncological surgery

- Pheo-chromocytoma: pre-operative preparation and intra-operative management
- Anaesthetic management for laparoscopic uro-oncological surgeries
- Perioperative management of major radical uro-surgical procedures

5. Anaesthesia for breast and plastic surgery

- Mutations and morphine
- Management of LD flap and TRAM flap surgeries- Anaesthetic considerations
- Lower limb nerve blocks- sono-anatomy
- Upper limb nerve blocks- sono-anatomy

6. Anaesthesia for head and neck oncological surgery

- Head and neck free flap reconstructions- anaesthetic considerations
- Difficult airway management- algorithms

7. Anaesthesia for thoracic oncological surgery

- One lung ventilation- physiology
- Introduction to double lumen tubes and bronchial blockers
- Introduction to fiberoptic bronchoscopy

8. Acute pain service

- Introduction to APS
- Patient controlled analgesia: machines, drugs, regimes
- Patient controlled epidural analgesia
- Post-operative epidural analgesia: trouble shooting
- Continuous nerve block catheters- management

9. Chronic pain management

- Pharmacological management of chronic pain: the WHO ladder
- Interventions in cancer pain

10. Onco-critical Care

- Post-operative ventilation: aims and methods
- Weaning from ventilation: strategies

- Lung ultrasound: role in critical care round
- CLABSI: incidence, prevention and management
- Fungal infections in ICU
- Enteral feeding: when to start, how?
- Parenteral nutrition: introduction
- Sepsis guidelines: review
- Neutropenic sepsis: incidence and management
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PRACTICAL TECHNIQUES IN ONCO-ANAESTHESIA

1. Vascular access techniques:

- Arterial cannulation: catheter over needle (Jelco) and Seldinger technique (Leadercath): Radial, femoral and dorsalis pedis artery cannulation.
- Central venous cannulation- internal jugular, subclavian, femoral veins.

2. Regional anaesthesia techniques:

- Sub arachnoid block
- Epidural anaesthesia: lumbar and thoracic
- Nerve blocks: nerve stimulator and ultrasound guided techniques.

3. Airway management devices:

- LMA- Classic, proseal, supreme
- I-gel
- Flexo-metallic tubes
- RAE tubes
- Laser tubes
- MLS tubes

4. Difficult airway management techniques:

- a. Awake fiberoptic intubation
- b. CMAC video laryngoscope
- c. Cook- airway exchange catheters
- d. Percutaneous cricothyrotomy (PCT)
- e. Trans tracheal jet ventilation device

5. Advanced haemodynamic monitoring: Flotrac technology.

6. Pain interventions:

- f. Nerve blocks

g. Tunnelled epidural catheter implantation- drug delivery with elastometric pumps

Examination (Total marks: 500)

Theory - 2 papers (100 marks x 2)

Practical - 300 marks

[Practicals – 200 marks; Viva Voce - 50 marks; Internal assessment – 50 marks (unit tests -15 + assignments-15 + log books-20)]

Candidates should pass all components separately

Minimum for pass – 50% in theory and 50% in Practical and orals

Internal assessment should be 50% for eligibility to appear for examination

Attendance requirement – 80%

1. Applications are invited for admission to the Onco Surgical Anaesthesia Fellowship Programme .The details of the courses, eligibility criteria etc are as follows

Fellowship Programme in Onco-Surgical Anaesthesia-2022	
No of Seats	1 (One only)
Duration	1 year
Qualification	<ul style="list-style-type: none">• MBBS Degree recognized by the MCI.• Should have passed MD Anaesthesia from any of the Medical Colleges in India, recognized by the MCI or DNB in Anaesthesia approved by the National Board of Examinations, New Delhi.• Candidates should have their MBBS/PG Degree registered permanently with Medical Council(India/State).
Stipend	₹47, 000/- (Rupees Fourty Seven Thousand Only) per month
Age	35 years as on 01/01/2022 .
Caution Deposit	₹10,000/- which will be refunded on successful completion of the course
Selection Process	Selection may be made by conducting written test and interview or interview alone, depending on the number of applications (if the number of applications exceeds four times the number of seats per batch written test and interview will be conducted.
Application Fee	₹1000/- (Thousand rupees only). Fee should be submitted as a Demand Draft payable at State Bank of India or any of its associate

	banks at Thiruvananthapuram for Rs.1000/-drawn in favor of "Director, Regional Cancer Centre". Application Fee is not refundable under any circumstances
How to Apply	Aspiring candidates are to download the application form (Annexure-I) given along with this prospectus and fill it up and submit it along with the supporting documents and application fee. Completed application form should reach the by post on or before 4 pm on 20-02-2022 Note: Incomplete application forms and forms received after the last date will be rejected and no further communication will be entertained in this context.
Address for sending application Form	The Additional Director Regional Cancer Centre Medical College.P.O Thiruvananthapuram-695011

2. Documents to be furnished along with the application form:

- Valid photo ID proof
- Proof of age. (Aadhar/Passport/ Secondary School Leaving certificate showing date of birth/ Tahsildar's certificate).
- Proof of Nationality (Aadhar/Passport/ Voters ID/ PAN Card).
- Self-attested copy of following documents:
 - a) MBBS Degree Certificate.
 - b) MD/ DNB Degree Certificate.
 - c) Medical Council Registration Certificate of MBBS/PG Degree.
- Character/conduct certificate issued by competent authority (head of institute/gazetted officer).
- Photo copy of publications
- Experience certificate
- Certificate from Principal of respective Medical College/Institution for candidates who had appeared/are appearing for MD/ DNB (in case of candidates who have not yet obtained their degree).

3. Selection process

- The application forms will be scrutinized and the list of candidates fulfilling the eligibility criteria will be displayed on the RCC website **on 24-02-2022**
- Candidates have to appear for an entrance test followed by interview on **09-03-2022**
An entrance test will be conducted if the number of applicants are more than 4 times the available seats. The entrance test will be a written MCQ test and candidates will be shortlisted for the interview to be held on the same day based on the marks obtained in the entrance test. Final Rank list will be prepared based on the marks obtained in entrance test and interview (ANNEXURE II).
- Candidates will have to make their own arrangements to appear for the entrance test and interview and no TA/DA will be provided. No personal intimation will be sent regarding entrance test/ interview.
- The Director, RCC will prepare and publish the Select List and Wait list of Candidates.
- Admission Memo will be issued to the selected candidates. The candidate has to report on the date fixed by the Director. All certificates in original will be retained in the office till the completion of the programme.
- Candidates who do not turn up for the allotment as per schedule, at the place and time notified, will forfeit their chance for admission, and will not be considered for admission in future or arising vacancies, irrespective of the rank.
- Candidates who discontinue the course after 10.00 am on **31-05-2022** will be liable to pay liquidation damages.
- The Select List and Wait Lists published will be valid till **31-05-2022**.
- Any vacancy that may arise after the cut-off date for admissions will be considered as lapsed and no allotment will be made to these seats under any circumstance.

4. Documents to be produced at the time of Admission (original & one photo copy)

- a) MBBS Degree Certificate.
- b) MD/ DNB Degree Certificate.

c) MD/ DNB Attempt Certificate.

d) Medical Council Registration Certificate of MBBS/PG Degree.

e) Proof of age. (Aadhar/Passport/ Secondary School Leaving certificate showing date of birth/ Tahsildar's certificate).

f) Proof of Nationality (Aadhar/Passport/ Voters ID/ PAN Card).

g) Character/conduct certificate issued by competent authority (head of institute/gazetted officer).

h) Selected candidates should submit Registration Certificates from the Travancore-Cochin Council of Modern Medicine within one month of admission failing which their admission will be cancelled.

All original documents will be retained in RCC and will be returned only on successful completion of the course

5. Liquidated damages & Execution of Bond:

Candidates selected for the fellowship have to execute a bond as in clause (a) below in stamped paper worth of ₹200/- (Rupees Two Hundred Only) (all pages of the bond should be in stamped paper) at the time of joining the course to the effect that:

- He/she shall not discontinue the fellowship after 10.00 am on **31-05-2022** and in case he/she decides to discontinue the course after 10.00 am on **31-05-2022** he/she shall give one month notice to The Director and pay an amount of ₹1,00,000/- as liquidated damages.

6. Course Completion

Successful completion of the fellowship programme mandates the following --

- Pass in the Exit Examination
- Log book
- One paper / poster presentation in State/National/International conference.

IMPORTANT DATES

Event	Date
Last date of receiving postal application	20-02-2022
Publishing list of eligible candidates	24-02-2022
MCQ Entrance Examination & Interview	09-03-2022
Final Result	15-03-2022
Date of Commencement of course	01-04-2022

7. Leave during the course:

All the 365 days of the year are working days for fellows. However, they will be permitted to avail casual leave for 20 days, but not more than 10 days at a stretch. Any other leave will entail extension of the course. Those who take leave without prior sanction are liable to be considered to be on unauthorized absence. If the fellow is absent without authorization for more than 10 days, he / she will be terminated from the course and liquidated damages will be realized. All fellows are eligible for weekly off for one day. This will be allowed by the Head of the Department concerned without affecting the routine functioning of the Department. Weekly off cannot be accumulated.

CMEs, workshops and other academic programmes conducted by recognized academic bodies are essential aspects of training programme. All fellows will be permitted to attend such programmes without affecting the routine working of the Department concerned. The Head of the Department shall sanction leave-on-duty to fellows provided they apply prior to the CME programme and submit attendance certificate on return. No fellow shall leave the country without prior sanction of the Director, RCC. Any violation will be viewed seriously warranting termination of the course.

8. Private Practice

Fellows shall not engage in private practice of any sort during the course of study.

9. General

All students admitted to RCC will be bound by the rules and regulations as decided by the Director, RCC from time to time. Notwithstanding anything contained in the Prospectus, the Director may at any time revise or amend any clause in the prospectus. Any court cases/disputes shall be within the exclusive jurisdiction of competent courts in Kerala.

Thiruvananthapuram
07-02-2022

Sd/-
DIRECTOR

ANNEXURE – I

REGIONAL CANCER CENTRE, THIRUVANANTHAPURAM

Application for admission to Fellowship in Onco-Surgical Anaesthesia-2022

PERSONAL DETAILS

Full name of the candidate (in block letters)	
Age	
Sex	
Date of birth (dd/mm/yyyy)	
Address for communication & Permanent Address	
Mobile phone number	
E mail id	

ACADEMIC DETAILS

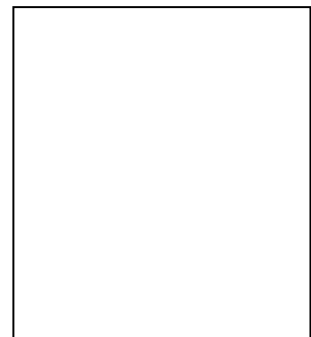
Institute and Year of passing MBBS	
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Institute and Year of passing MD/DNB	
Experience (attach certificate in institute letter head as in annexure III)	
Publications (Yes/No) (if yes please attach photocopy)	
Any other details	

DETAILS OF FEE

DD number	
Date	
Bank	

PHOTO (Please affix a self attested recent passport size photo here)



Date:

Place:

Signature

ANNEXURE – II

MARKS PROCESS

Part I - THEORY – 50 marks

MCQ paper containing 25 Questions (2 mark for correct answer, minus one mark for wrong answer). No marks will be awarded for unanswered questions or multiple responses. Candidates will be short listed purely on the basis of theory marks. The number of candidates short listed will be four times the number of seats.

Part II - INTERVIEW (VIVA) - 40 marks

Candidates will be assessed about their knowledge, skills and aptitude in the subject.

Part III - PRIOR ACADEMIC RECORDS - 10 marks

1. Publications in Indexed Medical Journals only (Please submit Xerox copy of publication)

- One mark per publication subject to a maximum of five marks

2. Work experience in Anaesthesiology (Maximum five marks)

- Six months to 1 year – 2marks
- One year to < 2years – 3 marks
- Two year to < 3years - 4 marks
- Three years or more – 5 marks

Only continuous experience in an exclusive Anaesthesiology department will be considered for this purpose. No marks will be given for experience of less than 6 months and for discontinuous period of experience. Candidate needs to produce a certificate to prove the experience as in **ANNEXURE III**.

ANNEXURE III
EXPERIENCE CERTIFICATE FORMAT
(On the letterhead of the institute/department)

This is to certify that Dr. _____

is working/has worked in the Department of Anaesthesiology at the _____

as _____

_____ ---for a continuous period with effect from

_____ to _____

His/Her conduct during the period mentioned above has been _____

Name of the Employer: _____

Name of the Institute: _____

Place:

Signature of the Employer

Date:

(Office Seal)

ANNEXURE -IV

All candidates should furnish a certificate from the employer under whom the candidate is presently working in the prescribed form as the situation may be .

Form A- Endorsement by the head of the institute under whom the candidate is presently working/studying with, in case of general candidates.

Form B- Declaration by candidate in case the candidate is not currently employed.

FORM A

NO OBJECTION CERTIFICATE

(ON THE LETTERHEAD OF THE INSTITUTE)

Dr. is working as
in the department of from
He / she is a permanent/temporary employee of the institute. The information furnished by the candidate in his/her application form is correct. I have no objection to his/her seeking admission to the Fellowship course at the Regional Cancer Centre, Thiruvananthapuram. He/She will be relieved from his post for a period of one year for undergoing the course if selected and admitted to the course at RCC and his/her salary/stipend will be paid by his/her employer during the one year period of course.

Name of the Employer:

Name of the Institute:

Place:

Signature of the Employer

Date:

Seal

FORM B

DECLARATION BY THE CANDIDATE

I declare that all the information furnished in the application form by me is correct and true. I declare that I am not currently employed / studying in any institution/hospital in either Government/public/private sector and in case of my selection for the course there would not be any issue of my getting relieved from any post held by me.

Place:

Signature of the candidate

Date:

Name of candidate