



REGIONAL CANCER CENTRE
THIRUVANANTHAPURAM-695 011

PROSPECTUS FOR ADMISSION TO
HEAD & NECK CLINICAL - ONCOLOGY FELLOWSHIP

2019

The Regional Cancer Centre, Thiruvananthapuram (RCC), now in its 37th 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 16,000 new cancer cases annually 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 Radiation Oncology, Surgical Oncology, Medical Oncology and Paediatric Oncology supported by allied services such as Anaesthesiology, Palliative Medicine, Pathology, Imageology, Nuclear Medicine, , Microbiology and Transfusion Medicine. The centre also has separate divisions for Community Oncology, Medical Records, Cancer Epidemiology, Cancer Research, Dental Care, Computerized Hospital Information System and Library & Information Services division. As a tertiary referral center, this hospital is involved in activities such as promotion of health (cancer) awareness, prevention and early detection of cancer besides evaluation and management of patients with cancer. The centre is also involved in the task of generating manpower resources for various facets and thus has a variety of training programmes for students at the postgraduate, sub-specialty and doctoral levels

Radiation Oncology

Regional cancer centre, Trivandrum has been running speciality based clinics since the year 2000. Highly qualified and experienced faculties run the speciality clinics since its inception. The head and neck speciality clinic [B clinic] takes care of all the non surgical management of head and neck malignancies (Chemotherapy and Radiotherapy). Head and Neck Cancers constitute a major cancer burden in our country. These cancers are unique because of their association with habits abuse and oncogenic viruses, there by opening avenues for preventive approaches like habit cessation and vaccination. Most of these cancers remain localized to the head and neck region and prompt, aggressive management produces good cure rates. The last few decades have witnessed rapid advances in the field of Head Neck oncology with emergence of advanced diagnostics and organ preservation approaches – both surgical and non-surgical. The last decade also saw considerable advances in radiotherapy delivery, thereby enabling treatment of these patients with least toxicity.

A dedicated training program is expected to produce Oncologists specialized in the field of Head & Neck Clinical Oncology. They will co-ordinate the entire management of Head and Neck Cancer in close association with Head & Neck Surgical Oncologists.

The department has all the capabilities to support this new specialisation. Nearly 120 patients are seen in the Head & Neck Specialty clinic every day [about 36,000 patients/ year including 2400 new cases]. Presently there are 5 faculty members of which 3 have more than 10 years of work experience in the Head & Neck Clinical Oncology. All forms of Radiation therapy [2D, 3DCRT, IMRT, IGRT, Brachytherapy] are delivered. About 175 patients receive IMRT every year. A dedicated surgical oncology team with expertise in handling complex surgeries form part of the Head & Neck clinic. The Radiation Oncology department MD Radiation Oncology course with annual intake of 8 residents/year. In addition training is imparted to PG students from other Medical Colleges including MDS and ENT residents. The faculty are also experienced in conducting national and international clinical trials.

Head & Neck Clinical Oncology Fellowship Program

Aims and objectives of the training

The One year course proposes to develop a highly qualified and competent professional in the field of Head & Neck oncology who is exceptionally skilled in diagnosis, evaluation and non-surgical management. The candidate is expected to harness in-depth knowledge of evidence-based radiotherapy and chemotherapy and gain the ability to execute complex radiotherapy treatment and chemotherapy for Head & Neck Cancers. The candidate is expected to achieve basic knowledge in molecular oncology, radiation physics and biology, clinical and translation research methodology, epidemiology, biostatistics and preventive oncology. Fellow should possess a broad understanding and comprehension of the principles of oncopathology, and diagnostic radiology/nuclear medicine. Another objective is to understand the basics of Head & Neck oncologic surgery and develop the capacity to formulate treatment decisions incorporating a multi-disciplinary approach where necessary. Research training during the course will help to take up major research projects addressing the specific problems encountered in India. This course is expected to improve the care of Head and Neck cancer patients in India. The main objective of the fellowship is to equip the candidate to take care of the entire non surgical management of Head & Neck Cancer.

Curriculum

1. Epidemiology of Head and Neck Cancers and prevention
2. Pathology, Molecular Biology and Aetiology of Head & Neck Cancers
3. Cancer biology and radiobiology, tumour control probability and cell survival curves, tumour biology, genetics of normal and malignant cells, cell cycle and cell growth control, radiotherapy fractionation, radiobiological aspects of brachytherapy, role of the immune system and other biomarkers
4. Principles of Multidisciplinary Team Management
5. Radiation Physics, Radiotherapy treatment planning and treatment delivery, physics perspectives of external beam radiation therapy, Conventional 2D, 3D, IMRT and IGRT in the treatment of Head and Neck malignancies, Principles of brachytherapy, Brachytherapy systems and clinical applications, Dose-fractionation schemes, Normal Sectional and PET imaging, use of sectional imaging for contouring Head & Neck malignancies, preparation for radiation treatment planning and treatment delivery
6. Clinical Pharmacology-Gompertzian growth rate of tumours, Host-tumour interactions, absorption, distribution, transport and excretion of drugs, Drug metabolism and pharmacogenomics, mode of action of cytotoxic drugs, toxicity, clinical use of systemic therapies ,targeted therapy, ,clinical pharmacology of supportive drugs and analgesics, drug interactions, safe handling of cytotoxic drugs, methods of assessing tumour response, modification of dose in the setting of renal and hepatic impairment
7. Basics of surgical management of Head & Neck Cancer
8. Oncological emergencies
9. Regulations in respect to radiotherapy practice
10. Understanding the design of trials, read and use trial protocol, present and interpret data, interpret results of clinical trial and critically evaluate papers, levels and quality of evidence

11. Ethics-Conversant with ethics code for scientific research, informed consent, breaking bad news
12. Palliative care and Quality of life
13. Site specific learning - Head & Neck Cancer: Sub sites ,Carcinomas arising from Oral cavity, Oropharynx, Larynx, Hypopharynx, Nasopharynx ,Para nasal sinus ,Salivary gland tumor, Thyroid & Metastatic Neck node unknown origin which include
 - i. History and physical examination, Diagnostic investigations
 - ii. Clinical and radiological anatomy
 - iii. Epidemiology and etiology
 - iv. Staging and prognostic factors
 - v. Pathology, Immunohistochemistry, Biological markers
 - vi. Indications for treatment, Evidence-based treatment options, Potential risks and benefits of various treatment options
 - vii. Evidence-based chemotherapy options, protocols, toxicities, drug interactions
 - viii. Evidence-based biological and novel therapies, protocols, toxicities, drug interactions
 - ix. Indications for radiotherapy, acute and long-term side effects, benefits and toxicity of treatment, tests and other procedures
 - x. Define GTV, CTV, PTV and ITV, organs at risk, PRV and organ and tumour contouring, applying DVH constraints and evaluate radiotherapy treatment plans
 - xi. Thorough understanding of Organ at Risk
 - xii. Radiotherapy delivery techniques, consideration of beam arrangements, including static and rotational IMRT
 - xiii. Head and Neck Brachy therapy - Principles of brachytherapy physics, indications for and aims of treatment, dose prescription, acute and chronic side effects, radiation protection issues
 - xiv. Prescribe radical and palliative radiotherapy and dose-fractionation schemes
 - xv. Basic concepts about re irradiation
 - xvi. Advanced radiotherapy technology in Head & Neck Oncology
 - xvii. Head and Neck Oncology rehabilitation
 - xviii. Ongoing major clinical trials in Head & Neck Oncology

At the end of the course the candidate should have acquired:

1. Broad understanding of Oncological concepts related to Head and Neck Cancer .
2. Skills in the clinical diagnosis, planning of investigations in Head and Neck Oncology
3. Competence in all non Surgical treatment options in Head & Neck Oncology
4. Capabilities to take independent decisions in emergency situations, perform required procedures and manage complications
5. Competence in intensive care with practical knowledge
6. Ability and skills to conduct translational research and clinical trials in Head & Neck Clinical Oncology

1. **Applications are invited for admission to the Head & Neck Clinical- Oncology Fellowship Programme for the year 2019. The details of the courses, eligibility criteria etc are as follows:**

Number of seats	2 (Two) per year
Duration of the Course	One year (The course is a full time residential course)
Date of commencement of the course	01-01-2019 or on the date of commencement as certified by the Director, RCC for those admitted later.
Nativity	Should be an Indian Citizen
Basic Academic Qualifications	<p>1)M.B.B.S. Degree recognized by the Medical Council of India.</p> <p>2)Should have passed the PG Degree MD in Radiotherapy from any of the Medical Colleges in India, recognized by the Medical Council of India or DNB in Radiotherapy approved by the National Board of Examinations, New Delhi.</p> <p><i>(Candidates who have appeared or are appearing for the MD/DNB examination may apply but the provisional or permanent PG Degree certificate should be produced at the time of admission counseling if selected, failing which admission will not be granted).</i></p> <p>3) Candidates should have their MBBS/PG Degrees registered permanently with Medical Council (India/State).</p>
Stipend	Rs. 47,000/- per month
Upper age limit	35 years, as on 01-01-2019 (with relaxation of 5 years for SC/ST candidates)
Caution Deposit	Rs.10,000/- as caution deposit, which will be refunded on

	successful completion of the course
How to apply	Aspiring candidates have 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 by post on or before 4 pm on 17-11-2018 Note: Incomplete application forms and forms received after the last date will be rejected and no further communication will be entertained in this context.
Application fee	Rs 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 drawn in favor of "The Director, Regional Cancer Centre, Thiruvananthapuram". Application Fee is not refundable under any circumstances.
Address for sending application form	The Additional Director(Academic) Regional Cancer Centre Medical College.P.O Thiruvananthapuram- 695011

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

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

3. Selection process

- a) The application forms will be scrutinized and the list of candidates fulfilling the eligibility criteria will be displayed on the RCC website **on 24-11-2018**

- b) Candidates have to appear for an entrance test followed by interview on **08-12-2018**. Entrance test will be conducted if the number of applicants are more than 4 times the available seats. 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).
- c) 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.
- d) The Director, RCC will prepare and publish the Select List and Wait list of Candidates.
- e) 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.
- f) 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.
- g) Candidates who discontinue the course after **10.00 am on -28-02-2019** will be liable to pay liquidated damages.
- h) The Select List and Wait Lists published will be valid till **-28-02-2019**.
- i) 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) Permanent Medical Council Registration Certificate of MBBS/PG Degree.
- e) Proof of age. (Passport/ Secondary School Leaving certificate showing date of birth/ Tahsildar's certificate).
- f) Proof of Nationality (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 ₹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:

a) He/she shall not discontinue the fellowship after 10.00 am **on 28-02-2019** and in case he/she decides to discontinue the course after 10.00 am **on 28-02-2019** he/she shall give one month notice to The Director and pay an amount of Rs. 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	17-11-2018
Publishing list of eligible candidates	24-11-2018
MCQ Entrance Examination	08-12-2018
Interview	08-12-2018
Final Result	12-12-2018
Date of Commencement of course	01-01-2019

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

Post Graduate students 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

Date :31-10-2018

Sd/-

DIRECTOR

ANNEXURE – I

REGIONAL CANCER CENTRE, THIRUVANANTHAPURAM
Application for admission to Head & Neck Clinical Oncology
Fellowship Programme- 2019

PERSONAL DETAILS

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

ACADEMIC DETAILS

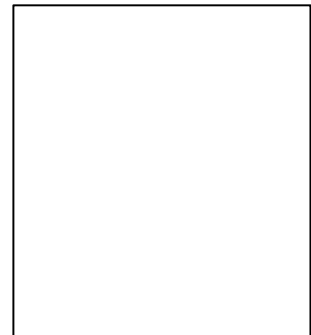
Institute and Year of passing MBBS	
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Institute and Year of passing MD/ DNB	
Experience (attach certificate in institute letter head as in annexure III)	
Publications (Yes/No) (if yes please attach photocopy)	
Any other details	

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 Radiation Oncology/Radiotherapy (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 Radiotherapy/Radiation Oncology 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 Radiotherapy/Radiation Oncology at.....
..... 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:
Date:

Signature of the Employer

(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