AROI NEWSLETTER

June 2021 Vol.17, Issue 2

From the office of AROI

Dear All,
Greetings from AROI !!!

AROI continues to serve the academic needs of oncologists in the country. The Covid-19 pandemic has continued and so the webinars and virtual conferences. We had already conducted AROI-ICRO teaching courses thorugh online Webinars and the same will continue in future. As per EC decision the AROI annual meeting is postponed till 2022. We deeply echo the feeling of meeting with you which has been delayed due to current scenario. The current Covid pandemic has also taken a toll on few of our members. We are equally involved in the grief of the families and friends of our colleagues who has lost the battle of life this year. We wish you all a safe and healthy life and wish to see you soon.

Dr. Rajesh Vashistha
President AROI

Dr. G.V. Giri
Secretary General AROI

Dr. Manoj Gupta
President Elect AROI

IN THIS ISSUE

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WWW.AROI.ORG

Minutes of EC meetings

Minutes of the Executive Body Meeting held on May 22, 2021 6:00 PM - 7:00 PM (IST)

The meeting started by Dr Giri, Secretary with permission of the President AROI

1. Obituary was paid by the EC to Dr. Sudhir Bargava, Dr. K Subramanyam and Dr. Kamble by observing silence. The Committee expresses solidarity with family members of the deceased and a letter will be sent to the family.
2. Dr Srinivasan updated the EC that teaching programs of ICRO will be held as webinars:
   - 2 AROI-ICRO SUN PG teaching course
   - AROI-ICRO IINTAS Radiobiology Course
   - AROI-ICRO PRODVANCE
3. Dr Vashishtha asked Dr Srinivasan to conduct 3 AROI-ICRO SUN PG teaching courses. Dr. Srinivasan agrees to do so. The ESTRO AROI program is also postponed for 1 year on request by Dr Shantanu Pal & local organizers.Same information send to ESTRO.
4. Payment of GST on every earning and hence to increase the membership fee to include the GST i.e. Rs 6500 + GST, EC approved.
5. The GBM allows only 12 Lakhs per annum towards the publication of the Journal; however a payment of Rs 24 lakhs has had to be made for the year 2020-21. All chapters are requested to pay the Journal fee at the earliest. North East & west Bengal chapter have paid Rs. 30,000/- for this year Journal contribution. For further support we will discuss with vendors of Radiotherapy Equipments.
6. In view of the prevailing covid situation, 42nd AROICON to have been held in Delhi this year to be postponed by 1 year. No virtual AROI meeting will be done as per EC approval. GBM cannot be held hence the EC will be empowered to take decisions on behalf of the association and will be circulated to all members by mail. 42nd AROICON depends on the 3rd ICC, if held in 2022 then AROICON in Delhi in 2023 otherwise in 2022.
7. The present executive committee to be continue next year. Elections to be held next year 2022. Dr Shanatanu Pal suggested that a circular to be issued so that state chapters also can continue their Executive and hold elections next year & EC approved
8. AROI WEBSITE upgrade was appreciated. Dr Vashistha requested the members to send any suggestions needed by mail, in the format sent.
9. Executive Committee to sensitize the GOI regarding the postings of Radiation Oncology PGs during this covid crisis. (A number of letters by PGs have been received that PGs are being posted in inappropriate areas and would the AROI get involved and write to the GOI regarding this). The EC agreed that a letter to be sent to UP government requesting them not to post RT PG's in peripheral centers and they can be better utilized in oncology centers. AROI Fellowships extended by 1 year to June 2022.
10. The decision of the EC will be circulated to the members by Newsletter.
11. FICRO to be instituted this year also.
12. Dr Umesh Manshetty asked to send a detailed report regarding initiating multi centric studies under AROI.
13. Dr Ashok Kumar raised the point of LDRT in treatment of Covid should be allowed clinically and not only under the ambit of a Clinical study. But the EC decided that in view of limited data the best way forward will be in the setting of a clinical trial.
14. Dr S D Sharma updated the EC that their AMPI meet as of now is on schedule and could be physical or a combination of physical and virtual.
15. President thanks all the members for attending the meet.

AROI Directory
All AROI members are requested to send the updated CV to drvashistha@gmail.com for updating AROI Directory
or
link- https://drrajeshvashistha.com/aroi/aroi-member-form.php

Patterns of failure in Oesophageal cancers after NACT-RT and surgery and radiotherapy implications

Dr. Kaustav Talapatra
National Head
Radiation Oncology
Kokilaben Dhirubhai Ambani Hospital,
Mumbai and Reliance Cancer Hospital

Dr. Ashith Conda
Radiation Oncologist
Kokilaben Dhirubhai Ambani
Hospital, Mumbai and Reliance
Cancer Hospital

Cancer of the esophagus is a lethal malignancy. The management of local-regional esophageal carcinoma has undergone a significant evolution over the past 15 years. After locoregional therapy alone, the low cure rates prompted the inclusion of systemic chemotherapy in multimodality treatment regimens to control distant micrometastatic disease and enhance local radiation effects.

Why is the esophagus different? Due to rich mucosal and submucosal lymphatic system and lack of serosa.

Patterns of spread:

Direct extension: No anatomic barrier as it lacks a serosa and is attached to neighboring structures by only a loose connective adventitia.

Hematogenous Metastasis: Often found in patients with advanced esophageal cancer.

Lymphatic Spread: Esophagus has an extensive lymphatic drainage system where all lymphatic channels intercommunicate with the bidirectional flow in the tracheal bifurcation. Thus, lymphatic fluid from any part of the esophagus may drain to any other part and may metastasize to any region of the thorax or draining nodal basin. There is direct drainage of lymph from submucosa to thoracic duct causing systemic metastases.

Squamous Cell Carcinoma(SCC) Versus Adenocarcinoma - Patterns of failure

SCCs tend to recur locoregionally first, while adenocarcinomas more commonly recur with distant dissemination. Mian Xi et al.(1) studied 895 patients with esophageal carcinoma and observed that the SCC group showed significantly higher regional and supraclavicular recurrence rates but a lower hematogenous metastasis rate than adenocarcinoma patients.

Adenocarcinoma patients had a higher favorable locoregional failure-free survival (P = 0.005) and worse distant metastasis-free survival (P = 0.024). No differences were found in overall survival (P = 0.772) or recurrence-free survival (P = 0.696) between groups. It was reiterated in the study by Barbetta et al.(2), which concluded that adenocarcinoma had a higher incidence of distant recurrences, whereas squamous cell carcinoma had a higher incidence of locoregional recurrence.

Despite these data, many contemporary series suggest that the prognosis of adenocarcinoma is better than that of SCC, particularly in early-stage disease [3-9]. One reason may be the lower prevalence of lymphatic spread for Barrett's associated adenocarcinoma than for SCCs.

Patterns of failure in Oesophageal cancers after NACT-RT and surgery and radiotherapy implications

Literature:

Oppedijk et al.(10) analyzed recurrence patterns in patients from the previously published CROSS I and II trials concerning radiation target volumes. Four hundred eighteen were available for analysis from 2001 to 2008. With a minimum follow-up of 24 months (median 45 months), the overall recurrence rate in the surgery arm was 58% versus 35% in the CRT plus surgery arm. Preoperative CRT reduced peritoneal carcinomatosis from 14% to 4% (P = .001) and locoregional recurrence (LRR) from 34% to 14% (P = .001). There was a small but statistically significant effect on hematogenous dissemination in favor of the CRT group (35% vs. 29%; P = .025). LRR occurred in 5% within the target volume, in 2% in the margins, and in 6% outside the radiation target volume. SZ Ahmad et al.(11) reported patterns of failure in a single-institution retrospective analysis of 46 patients of locally advanced esophageal squamous cell carcinoma treated with a trimodal approach. With a median follow-up of about twenty-eight months, they noted an overall recurrence rate of 37% (17/46). Most of the failures were distant, with or without locoregional recurrence (4 isolated distant and six combined locoregional and distant). Median relapse-free survival was 34 months, and median OS was yet to be reached at the last follow-up. They concluded that optimization of treatment approaches in squamous cell carcinoma of the esophagus is of the highest significance and need of the hour to enhance outcomes in these patients further.Similarly AU. Blackham et al.(12) studied 456 patients treated with nCRT and surgery. Recurrences developed in 167 patients. Distant and Locoregional recurrences were observed in 140 (30.9%) and 69 (15.1%) patients, respectively. Time to recurrence (13.6 vs. 10.4 months), and median overall survival (29.3 vs. 19.1 months) were no different among the 27 patients (6%) who developed a solitary LRR as opposed to patients who developed distant recurrence. This study reinforced that although aggressive tumor biology plays an essential role in LRR, optimizing neoadjuvant treatments to achieve a complete pathologic response may enhance locoregional control.In an Indian study by Mishra et al (13) the neoadjuvant chemoradiotherapy followed by surgery arm had significantly lesser Cumulative locoregional and local failures as compared to the definitive chemoradiotherapy arm

Surveillance strategy — There are no randomized trials to guide the postoperative surveillance strategy and no data that demonstrate improvement in quality of life or longevity from earlier detection of asymptomatic recurrences. The primary purpose of post-treatment surveillance is to implement a potentially beneficial salvage therapy in cases of locoregional failure.

However, the incidence of locoregional failure is low, and the number of potentially curable recurrences that will be detected by intensive post-treatment surveillance is small.

Target Delineation (14)

Delineation is done on the planning (FDG-PET/)CT and includes all available information (e.g., endoscopy, EUS, endobronchial ultrasound (EBUS), diagnostic (FDG-PET/)CT, biopsy, MRI, ultrasound).

GTVp is proposed to include the primary tumor (with the oesophageal wall) as seen on the planning (FDG-PET/)CT scan and includes all available information (e.g., endoscopy, echo-endoscopy (EUS), diagnostic (FDG-PET/)CT, magnetic resonance imaging (MRI), fiducial markers).

The GTVp includes the entire oesophageal wall but does not include the peri-oesophageal fat.

GTVn includes the involved lymph nodes defined as pathological any time before the radiation therapy. Lymph nodes that appear as new on the planning (FDG-PET/)CT compared to the diagnostic FDG-PET/CT, suspected for malignant lymph nodes, have to be included in GTVn. Fine-needle aspiration cytology (FNAC) is recommended in case of doubt and when it has an impact on the delineation of the target volume.

CTV is proposed to be oriented along the esophagus, instead of being a simple geometric expansion.

CTVp = GTVp + 1.0 cm radially and 3.0 cm cranio-caudally along the oesophageal wall.

CTVp is corrected for anatomy (muscles, bones, large vessels, and OARs) if no invasion.

Patterns of failure in Oesophageal cancers after NACT-RT and surgery and radiotherapy implications

Proximal Tumors: CTVp is proposed not to extend above the level of the cricoid cartilage unless there is a gross disease at that level

Lower esophagus and GEJ: CTVp is restricted to 2.0 cm distal to the tumor.
CTVn is proposed to include the GTVn with an expansion of 1.0 cm in all directions and the lymph node stations at this level. It involves the lymph nodes stations along the CTVp as far as they are within 3.0 cm craniocaudal from the GTVp.
CTVn is corrected for anatomy (muscles, bones, large vessels, and OARs) if no invasion.
CTVtotal is the sum of CTVp and CTVn.
CTVtotal is expanded to include potential gaps between the CTV's- esophagus and the lymph nodes station at that level are proposed to be included.
If the distance of the gap is more than 3.0 cm, the decision to expand the CTVtotal or to irradiate two separate volumes is up to the treating physician.
An extensive elective nodal volume can be omitted, and only the involved lymph node stations are proposed to be additionally irradiated.

Basis of omitting elective nodal irradiation:
Recurrence pattern(in-field): Predominant failure pattern with esophageal SCC was local in-field or distant failures. Regional nodal recurrence (out-of-field) was infrequent in the absence of elective node irradiation.(15)
The biological behavior of the disease: a high rate of nodal involvement characterizes esophageal cancer, and its pattern of spread is not always predictable. Skip nodal metastases are also frequently observed. Hence, the biological behavior of this disease makes it difficult to define in advance the extent of coverage of elective nodal irradiation.
Toxicities: If distant lymph node areas were irradiated prophylactically, patients would then experience more **severe radiation complications and have a poorer treatment tolerance.**
Vital Organs: The CTV expansion is proposed to be ≤ 0.5 cm into uninvolved organs (e.g., heart, lungs, liver), given the low likelihood of microscopic extension in the absence of gross invasion.

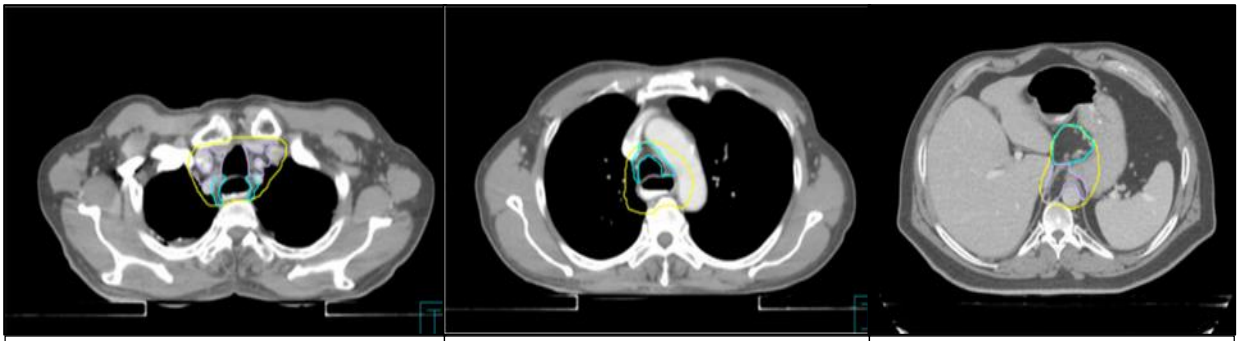
PTV (45Gy): CTV total with an expansion of 0.5 to 1 cm. The uncertainties arising from respiratory motion have to be taken into consideration.
PTV Boost (50.4Gy) = GTVp and GTVn with an expansion of 0.5 to 1.0 cm

Normal Tissue Tolerance and Dose Limits:
Treatment planning is essential to reduce unnecessary RT doses to organs at risk (liver, kidneys, spinal cord, heart, and lungs) and to limit the volume of organs at risk receiving high RT doses. Particular effort to keep RT doses to the left ventricle of the heart to a minimum is recommended. However, it is recognized that these dose guidelines may be appropriately exceeded based on clinical circumstances.

Lungs: V40Gy ≤ 10%; V30Gy ≤ 15%; V20Gy ≤ 20%; V10Gy ≤ 40%; V5Gy ≤ 50%; Mean < 20 Gy
Left Kidney, Right Kidney (evaluate each one separately): No more than 33% of the volume can receive 18 Gy. Mean dose < 18 Gy
Spinal Cord Max 45 Gy •
Liver: V20Gy ≤ 30%; V30Gy ≤ 20%; mean < 25 Gy
Bowel: D05 ≤ 45Gy
Stomach: Mean < 30Gy (If not within PTV); Max < 54Gy
Heart: V30Gy ≤ 30%
Salvaging recurrences with radiation
Recent data with proton therapy, such as is feasible, with a favorable symptom control rate, modest radiation-related toxicity, and favorable survival to salvage recurrences.

Take home message:
1. There is no consensus on ENI vs. no ENI, but most centers practice regional ENIs.
2. There is no consensus on surveillance strategies to pick up recurrences early, but it is important to pick a subset of patients for surgical salvage.
3. Optimal contouring and planning strategies are key to effective delivery of radiation .
4. Newer strategies such as reirradiation and proton beam therapy are emerging for salvaging recurrences.

Patterns of failure in Oesophageal cancers after NACT-RT and surgery and radiotherapy implications



CTV contour (yellow) encompasses level 3 retrotracheal (blue) and level 2 upper paratracheal (purple) nodes	CTV encompasses level 4 lower paratracheal (blue) and level 8 periesophageal nodes	CTV encompasses lesser curvature/gastrohepatic ligament (blue) and paracardial (purple) nodes

Gross tumor volume (GTV), blue volume; PTV, red volume. Carina, yellow, GTV, dark blue; lungs, light blue; PTV, red; spinal cord, brown.

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Obituary

Professor Krishna Marotirao Kamble

26 November 1949 to 16 April 2021

AROI-LM : 76
Qualification: M.B.B.S. , D.M.R.D., D.M.R.T., M.D. Radiotherapy
Date Of Joining Department: 25/10/1978 (As An Assistant Professor)
Designation At The Time Of Retirement : Professor, Radiotherapy (25 May 2019)
Achievements:

- Had Crucial Role In Establishment And Bringing Advanced Treatment Facilities To The Oncology Department.
- Started M.D. Radiotherapy Course In 2011.
- Started Radiotherapy Technician Course.
- Served For 35 Years In Radiotherapy Department Of Government Medical College And Hospital, Nagpur.
- He Was Appointed As Member Secretary Of Dr. Babasaheb Ambedkar Source Material Publication Committee

Dr. Anil Kumar Dhull

28 January 1974 to 14 June 2021

Dr. Anil Kumar Dhull left for his heavenly abode on 14th June 2021. He was born on 28 January, 1974 in Rohtak. After completing his MBBS in 1996 from Pt. B. D. Sharma PGIMS, Rohtak; he joined Haryana Civil Medical Services as Medical Officer. During service, he did his post graduation (MD) in Radiation Oncology at Pt. B. D. Sharma PGIMS, Rohtak. He was very energetic, enthusiastic, knowledgeable and computer savvy. He published more than 100 research papers in national and international journals. He was a reviewer in nine journals and was an active member of many scientific bodies. Dr. Anil attended had five special appreciations of operational excellence by Government agencies. He joined as faculty in the Department of Radiation Oncology at Pt. B. D. Sharma PGIMS, Rohtak in February, 2019 as Assistant professor.

Beyond academics, he had great taste of music, coin collection, philately and photography which he exhibited and got honoured at various platforms. Dr. Anil was known for his jovial nature, sincerity and efficiency.

During the COVID-19 pandemic, he continued his work of attending the patients in the hospital and unfortunately, he got infected from COVID-19 in April, 2021. He fought valiantly, was given best treatment but lost battle after almost 2 months on 14 June, 2021. He will be remembered as a cheerful, sincere and efficient friend, who was always ready to help, whenever needed.

Obituary

Dr Kalluri Subrahmaniyam

Dr Kalluri Subrahmaniyam is one of the senior most practicing Radiation oncologists in the country. He obtained his MBBS in 1969, Diploma in Medical Radiation Therapy in 1972 and MD Radiation Oncology in 1974- all from the prestigious Institute of Medical Sciences, Banaras Hindu University, Varanasi. He started his Post Graduate teaching career as a lecturer in BHU from 1974-78 and later in the Andhra Pradesh Medical and Health services.

He was elevated as a Professor in 1983 and later as Head of the Department, in which capacity he worked till 2003. He took voluntary retirement in August 2003. He trained more than 60 Radiation Oncologists from 1974. From 1993 he was awarded fellowships like Nurgis Dutt foundation, Von Essen and also a British council fellowship, during which he was trained in all the latest technologies both in teletherapy and brachy therapy. He was a Post Graduate Examiner for more than 15 universities in the country and was a External faculty expert for All India Institute of Medical Sciences, New Delhi, PGI Chandigarh, Sanjay Gandhi Post Graduate Institute, Lucknow and Nizam's Institute of Medical Sciences, Hyderabad, where he selected senior faculty.

He was elected as the President of Association of Radiation Oncologists of India from 1996-98 and took it over from late Dr. K. A. Dinshaw at Aurangabad. It was during his tenure as the President that the Indian College of Radiation Oncology was started. He was honored with the Prof P. K. Haldar Oration in 2009. He was a member of several national and international Academic societies like IMA, AROI, ICRO, AMPI, AMPO as well as ASTRO and ASNO. He participated and conducted several research projects like ATALAS in breast cancer, Organ conservation in head and neck cancers by concurrent chemo radiation, and concurrent chemo radiation in cervical cancer (before it became a standard recommendation by WHO), Hyper Fractionation in Head and Neck cancers, CHART in Head and Neck cancers, sequential chemotherapy in Head and Neck cancers, Organ conservation in BREAST Cancers (before it became a standard recommendation in early breast cancers)

After taking retirement in 2003 from Government service, he worked in various leading hospitals like Apollo, Indo American, Yashoda and currently practices Radiation oncology at Omega Hospitals in Hyderabad.

He strongly believes that A good teacher should be able in inspire his students to Excel.

New account details of AROI & AROI-ICRO

AROI
Account No.:39535464615
IFSC: SBIN0000731
STATE BANK OF INDIA
MILLER GANJ, LUDHIANA
POST BAG NO.30, P.O.INDUSTRIAL ESTATE
LUDHIANA DIST: LUDHIANA, PUNJAB 141003
Branch Code: 731
Branch Phone: 2532768

AROI-ICRO
Account No.:39535445525
IFSC: SBIN0000731
STATE BANK OF INDIA
MILLER GANJ, LUDHIANA
POST BAG NO.30, P.O.INDUSTRIAL ESTATE
LUDHIANA DIST: LUDHIANA, PUNJAB 141003
Branch Code: 731
Branch Phone: 2532768

CONFERENCES

13th SRMS Contouring Classes
6th-7th and 13th-14th March, 2021, Bareilly

Update from : Dr. Piyush Kumar

In improving Covid19 pandemic situation, conducting a workshop was a step towards getting things back on track. The workshop was divided into two sessions, one week apart, conducted on 6th-7th and 13th-14th March, 2021. The theme was “Contouring of Head & Neck Malignancies”. The workshop aims to teach faculty and residents about the latest radiotherapy techniques.

Dr. Piyush Kumar, Professor and Head of Department was Course Chairman and Dr. Arvind Kumar Chauhan (Professor), Dr. Pavan Kumar (AssoProf), Dr. Ayush Garg (Asst Prof) and Dr. Rashika Sachan (Asst Prof) were Course Coordinators. Junior Residents from AIIMS (Rishikesh) and KGMC (Lucknow) attended this workshop. At the end of this workshop the delegates were able to identify the normal structures and OARs of Head & Neck. Moreover the delegates were able to delineate various clinical target volumes of Head & Neck region.

The Medical Physics team demonstrated the IMRT planning of Cancer Larynx which was followed by the live demonstration of delivery of Radiotherapy by IGRT technique. The delegates appreciated the efforts taken by the Medical Physics and technical teamto come on a holiday and provide a visual impact of the IMRT and IGRT technique.

The Instructor for the course was Dr. Ankita Mehta (Senior Resident) along with four tutors Dr. S. K. Azharuddin, Dr. Aparajeeta, Dr. Diksha Chaturvedi and Dr. Himanshi Khattar.

The workshop was well appreciated by delegates and the feedback was very motivating. The resident from Rishikesh Dr. Lekshmi, who attended this contouring session for the 1st time, commented “Very informative, interactive, kindly increase duration of physics session in next workshop”.

A compact disk consisting of a collection of relevant books, articles and contouring guidelines is also being provided to the delegates along with a booklet for reference.

WEBINARS

37th ICRO SUN PG TEACHING PROGRAMME - 2021

31st March - 2nd of April 2021

Update from : Dr.V.Srinivasan - Secretary-ICRO

Radiation Oncology is underpinned by technological developments and its roots lie in radiobiology, radiation physics and equipment. Increased knowledge and technological advances in medical physics represent important steps in providing tools for effective imaging and precise radiation delivery to an area of interest. The continuing development and widespread adoption of high-end technology in radiotherapy have led to an increased need for knowledge of radiation physics, because technological innovations can't be accepted without a thorough analysis of benefits versus pitfalls. Therefore, there was a need to understand the physics applied to radiation oncology.

The aim of this 37th ICRO SUN PG Teaching program on Medical Physics is to understand the applications of Medical Physics in Radiation Oncology for cancer management. The course covered all basic radiation physics, mechanisms of radiation interactions, radiobiology, radiotherapy equipment, particle therapy, brachytherapy and advanced treatment techniques.

The teaching course was designed in such a way that students can understand the basics of radiation physics along with advances in equipment and techniques. The program was very interactive and students were able to clarify their doubts.
We chose the 31st March, 1st and 2nd of April 2021 for the program, three consecutive days and three lectures everyday and planned from 6.00 pm to 8.00 pm. While there were many Webinars being done every other day in India, We had an astonishing 160+ paid registrations including 20+ students from FARO countries like Bangladesh and Malaysia.
All the speakers did an excellent job and the participants were very happy and interactive and were firing questions for every lecture. The final day we organised the ICRO Quiz and selected the top three and they will be honoured in our next Annual National Conference of AROI apart from being sponsored completely to attend the Conference.

Winners were:
Rank No 1 – Dr. Bhanu Vashistha, CMC Ludhiana
Rank No 2 – Dr. Ankita Singh, BHU Varanasi
Rank No 3 – Dr. Ayesha Zulaiha A , AIIMS Delhi

The three day Webinar ended in a happy note with all the lectures completed on time and lots of appreciations from the students saying that they are looking forward to such programmes.
Last but not the least our sincere thanks go to Mr.Arvind Suri, SUN oncology who was a strong pillar of support in doing this Webinar and to Webstream World Communications.

Secretary – ICRO
Dr. V Srinivasan

Vice Chairman – ICRO
Dr. D N Sharma

Chairman - ICRO
Dr. Satyajit Pradhan

FICRO Awards

Nomination Paper for Election of Fellowship Indian College of Radiation Oncology

Guidelines and Instructions for nomination of candidates

An individual elected as a Fellow of the Indian College of Radiation Oncology is expected to:

a) Stand out among peers in the profession as a person of distinction at the national/ international level.
b) Have distinguished himself/herself in the profession:
   i. As a physician in his/her specialty; and/or
   ii. In service to Medicine in patient care, teaching, public health work and/or health administration.

The Eligibility Criteria for the Fellowship of Indian College of Radiation Oncology:

1. Founder Members of the ICRO

OR

2. Membership of the ICRO for at least 5 years and possessing more than 15 years of experience after post-graduation.

A. Founder members are automatically eligible for award of the Fellowship, subject to submission of Application and the payment of the Admission Fees for the Fellowship. (Fellowship Fees-6500/- INR.)
B. For other than Founder Members, Application needs to be submitted and after Election as a Fellow, a communication will be sent to the Elected Fellows for depositing the Admission Fees for the Fellowship, by the due date as per the communication.
C. Fellowships will be awarded after the receipt of the Admission Fees.

Format of the Application Form and the Instructions can be downloaded from the AROI Website. A soft copy of the application is to reach Dr. V Srinivasan, Secretary ICRO through e-mail (secretaryicro@gmail.com) so as to reach him not later than 12 midnight of 31st July, 2021. A hard copy of the application along with all supporting documents is to reach the Secretary, ICRO (Address given in the application form) at the earliest but not later than 10th August, 2021. The applications will be valid for a period of 2 years (The current year, if received by deadline, and for the subsequent year).

Late applications will be considered only for the Election of Fellows for the subsequent year.

- Admission Fees for ICRO Fellows: Rs 6500/-(Rupees Six thousand and Five hundred only)+ GST, through DD/ Online Bank Transfer to "AROI-ICRO",
- Name of A/C: AROI-ICRO
- Bank: State Bank of India
- Bank Address: Millerganj, Ludhiana, Punjab-141001
- Account No: 39535445525
- IFSC: SBIN0000731
- Type of Account: Current

The Nominees are to be Proposed and Seconded by Members of AROI of GOOD STANDING of FIFTEEN YEARS duration. The PROPOSERS AND SECONDERS MUST BE ICRO MEMBERS.

Soft copy of the Application must reach the Secretary, ICRO by midnight of 31st July of the year of Election, with a copy to the Chairman, ICRO. Documentary evidence of all Statements/Experience/Awards must be attached to the HARD COPY of the Application and is to be sent to the Secretary, ICRO so as reach him/her on or before 10th August of the year of Election.

The attention of the Proposer and Seconder making the nomination is invited to the Guidelines and Instructions laid down for the purpose.

1. The Proposer and Seconder nominating the candidate should certify from personal knowledge the professional and scientific standing/achievements of the candidate
2. Every candidate shall be proposed and seconded by a statement in writing signed by at least two Life Members of AROI of GOOD STANDING of FIFTEEN YEARS duration. The PROPOSERS AND SECONDERS MUST BE ICRO MEMBERS.

FICRO Awards

Nomination Paper for Election of Fellowship Indian College of Radiation Oncology

INSTRUCTIONS

1. Five copies each and a CD/DVD of the following documents must accompany the application for nomination.
    i. A precise statement limited to 120 words on nominee's professional and scientific standing/ achievements which form the basis for nomination signed by proposer/seconder.
    ii. Information as per format prescribed, duly completed. Follow the same section numbers in their submission as in the nomination form avoiding reference to enclosed appendices.
    iii. List of publications:
        a) Two separate lists of publications i.e. one in Journals included in Medical Databases, Medical Literature analysis and retrieval system (Medlar) etc. and other one in Journals, not included in medical database but published in Journals of National Societies/Professional Associations.
        b) Be written in chronological order and should include (1) Names and initials of all authors, (2) Title of article, (3) Title of publication abbreviated, (4) Volume number, (5) First and last page number, (6) Years of publication. Reference to books should include: (1) City of publication (2) Name of Publisher (3) Year of Publications.

    Abstracts and Proceedings of Conferences etc. Should not be included in the list of publications.

2. Five copies each of six published papers considered to be best by the proposer. The Citation Index of six best published papers of the nominee and Average Impact Factor of the Journals in which the six best papers have been published may also be provided along with nomination for Fellowship. (Impact factor of the Journal in the year of publication of the concerned article).

The under-mentioned guidelines may also please be noted in this connection:

1. Only Life Members of AROI of GOOD STANDING of FIFTEEN YEARS duration and who are ICRO Members can Propose or Second the Nominee.
2. A Member may not propose more than three names for Fellowship in a year. He/She may, however, second any number of proposals.
3. The candidate shall be Indian citizen. Exceptionally foreign national who may have done outstanding work in India or for India in his/her own country may be considered.

Note: Nominations which are either incomplete or not according to the prescribed format will not be processed.

Secretary – ICRO	Vice Chairman – ICRO	Chairman - ICRO
Dr. V Srinivasan	Dr. D N Sharma	Dr. Satyajit Pradhan

Note – Due to the pandemic of Covid -19 time limit to complete fellowship was extended for one year, all are requested to complete their fellowship before June 2022

Awards

WINNERS OF 36th ICRO TEACHING COURSE

Dr. Linkon Biswas
Nil Ratan Sircar Medical College and Hospital
HOD - Professor (Dr.) Srikrishna Mandal
Thesis Guide - Professor (Dr.) Srikrishna Mandal

Dr. Himanshu Pruthi
Saroj Gupta Cancer Centre and Research Institute Kolkata
HOD - Dr. Gautam Bhattacharjee
Thesis guide - Dr. Gautam Bhattacharjee

Dr. Ajinkya Pankaj Gupte
Amrita Institute of Medical Sciences Kochi
HoD: Dr.Debnarayan Dutta

WINNERS OF 37th ICRO TEACHING COURSE

Dr. Bhanu Vashistha
CMC, Ludhiana
HOD- Dr. Jaineet Sachdeva
Thesis Guide - Dr. Pamela Jeyaraj

Dr. Ankita Singh
BHU, Varanasi
HOD: Prof (Dr.) Sunil Choudhary
Thesis Guide: Prof (Dr.) Sunil Choudhary

Dr Ayesha Zulaiha A
AIIMS Delhi
HOD - Prof (Dr.) DN Sharma
Thesis Guide- Prof (Dr.) Suman Bhaskar

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On behalf of Association of Radiation Oncologists of India (AROI)