Tuesday, January 30, 2024

ACVR - RO New Residency Program Application

Please review the Radiation Oncology (RO) Residency Program Essentials Training Standards and Requirements document prior to completing this form.

The following documents will be needed to complete the application:

- CVs (current within 1 year and a maximum of 2 pages each) for radiation oncology, diagnostic imaging, and medical oncology Diplomates involved in the training program
    - As a reminder, CVs will be publicly available on ACVR's website. We encourage you to **NOT** include personal information on the CVs that are uploaded with your application.
- Syllabi for coursework in medical physics, cancer biology, and radiation biology (including internal and external courses)
- Letters of agreement from cooperating institutions
- Letter of agreement from medical physics support for clinical training
- Resident calendar that includes the following:
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    - 24 months of RO-specific activities (primary case responsibility, treatment planning, 1 week/year of radiation therapist activities)
    - 8 weeks of medical oncology
    - 4 weeks of diagnostic imaging
    - 40 hours of medical physics
    - 40 hours of clinical pathology
    - 80 hours of anesthesia in minimum 1-week blocks
    - 2 weeks of neurology
    - 2-week minimum off-clinic time per year (study, research, etc) not including vacation
    - Vacation time as mandated by state/institution
    - Required outrotations at cooperating institutions
- Resident evaluation forms

Submission Date	Tuesday, January 30, 2024
Your Name	Jayme Shay Looper
Your Address	Skip Bertman Drive Baton Rouge, LA, 70803
Your Email Address	jlooper@lsu.edu

Radiation Oncologists in support of the program (Must be Diplomate(s) of the ACVR):

First Name	Last Name	Title/Credentials	Email	Phone	Number of weeks per year Diplomate is available to supervise* the resident
Jayme	Looper	DVM, DACVR (RO)	jlooper@lsu.edu	225-578-9600	48

*Resident supervision is defined as being available on-site 40 hours/week (defined as a 4- or 5-day work week to equal a minimum of 40 hours) to support the resident in radiation oncology-related activities including patient consultation/management, review of treatment plans, position verification and participation in daily case-based rounds.

Which of the Radiation Oncology Diplomates listed above will serve as the Residency Director? This individual will be the primary contact for the residency program and will be responsible for completing all necessary forms/reviews and notifying the RO RSEC of any changes to the program. The Residency Director must be a Diplomate of the ACVR and must be located at the primary training institution.

Jayme Looper

Please confirm that during the minimum 24 months of RO-specific activities, a Supervising Diplomate will be present on site to supervise the resident as defined above for 40 hours/week (4-5 days).

Yes

A standard residency program is one that meets all of the residency program requirements set forth in the ACVR-RO Residency Essentials Training Standards document. An alternative or amended program is designed for one specific individual/resident and satisfactorily meets all of the residency program requirements, but is completed in an extended timeline (more than 3 years but fewer than 5 years).

This application is made for (check one):

Standard Program

What is the total length of the training program?

3 years (36 months)

Number of months dedicated solely to radiation oncology-specific activities as defined in the ACVR-RO Residency Essentials Training Standards document (RO-specific activities include primary case responsibility, treatment planning, 1 week/yr of therapist activities):

27 months

Primary Site:	LSU School of Veterinary Medicine
Hospital/University:	LSU School of Veterinary Medicine
Department:	Veterinary Clinical Sciences
Address	1909 Skip Bertman Drive Baton Rouge, LA, 70803

Advanced Degree and Research/Publication Requirement

Masters	No
PhD	No
Research Project	Yes
Publication	No

Documentation of residency completion is required to obtain Diplomate status. Is receipt of residency certificate dependent on completion of advanced degree/research/publication?	No
It is required that a residency in veterinary radiation oncology provide the trainee with experience in formulation of radiation treatment plans, dose calculation, and treatment administration for veterinary patients with cancer. This includes generation of both manual and computer-based treatment plans for megavoltage external beam irradiation. External beam planning experience must include both forward and inverse planning, even if only one of those types is utilized for treatment at the primary facility. Does the program fulfill these requirements?	Yes

Comments:

We utilize 6MV Photon and 6,9,12,16, and 20 MeV electron treatments. We use manual point-dose calculations, forward 3D conformal planning, and IMRT inverse planning with Varian Eclipse/Aria TPS and RV system.

It is required that a residency in veterinary radiation oncology provide the trainee with experience in primary case responsibility, including new referrals, ongoing radiation patients, and follow-up visits. This includes receiving patients, clinical rounds, client/referring DVM communications, and medical records keeping. Does the program fulfill these requirements as described on page 12 of the RO Essentials document?

Yes

Comments:

The resident works alongside residents in Medical Oncology, specialty interns, and Medical Oncology faculty in an integrated Oncology service. The resident has primary case responsibility on new, recheck, and ongoing radiation patients during all radiation oncology rotations.

It is required that a residency in veterinary radiation oncology provide the trainee with a minimum of 1 week per year of radiation therapist activities to include daily linear accelerator quality assurance and warm up, patient positioning for treatment planning CT and therapy, radiation delivery (as allowed by the state/province), and acquisition of position verification imaging. Does the program fulfill these requirements?

Yes

Comments:

Each year, a minimum of 1 week of therapist activities is scheduled, usually near the beginning of the academic year. The resident also performs machine warm-up and QA sporadically throughout the residency.

How will the resident be trained in radiation biology? Please provide a description of formal and informal training experiences, or indicate time allotted for self-study.

Formal Training: Radiation biology training consists of one class with the LSU Medical Physics department in the Spring semester of Year one (MDEP 7121),
Informal Training: Weekly Book club with the radiation oncologist in year one covering Hall, Radiobiology for the radiologist and Joiner/Van der Kogel Basic Clinical Radiobiology, and ongoing journal/book club topics throughout the residency.

Please provide instructors' names and credentials for radiation biology formal and informal training:

Jeff Chancellor, PhD, Assistant Professor, Department of Physics and Astronomy, LSU Baton Rouge- Course Coordinator MDEP 7121 Radiation Biology.
Jayme Looper, DVM, DACVR (RO), Associate Professor, LSU SVM, Book Club/Journal Club

How will the resident be trained in cancer biology? Please provide a description of formal and informal training experiences, or indicate time allotted for self-study.

Informal training: Weekly book club includes covering Tannock and Hill, The Basic Science of Oncology and relevant journal articles. Weekly Medical Oncology Book club will also be attended when additional

relevant tumor biology topics are covered.

Please provide instructors' names and credentials for cancer biology formal and informal training:

I nformal training: Jayme Looper, DVM, DACVR (RO) Associate Professor of Radiation Oncology for Radiation Oncology Book club; Autumn Dutelle, DVM, DACVIM (O), Assistant Professor of Oncology for Medical Oncology book club.

How will the resident be trained in medical physics? Please provide a description of formal and informal didactic (non-clinical) experiences, or indicate time allotted for self-study.

Formal training: year 1- Radiological Physics for Residents, Years 2 and 3- MDEP 7331 Radiation Therapy Physics
Informal training: Ongoing book club covers Khan chapters in year 1.

Please provide instructors' names and credentials for didactic (non-clinical) medical physics formal and informal training:

Rui Zhang, PhD, Assistant Professor of Physics, LSU Department of Physics and Astronomy, Radiation Therapy Physics Course Coordinator;
Joyoni Dey, PhD, Associate Professor of Physics, LSU Department of Physics and Astronomy, Radiological Physics for Residents (LSU Health Center) Course Coordinator
Jayme Looper, DVM, DACVR (RO), Associate Professor, Book Club Coordinator.

Medical physics training requires 1 week or 40 hours of clinical contact with a qualified medical physicist. Please provide a description of the training experience.

On-site physics support will be provided in 4-8 hour segments during weekly and monthly QA/QC for a minimum of 40 hours throughout the program

Medical Physicist(s) in support of clinical training in the residency program

First Name	Last Name	Title/Credentials	Physicist on-site? Y/N
Daniel	Neck	MS, DABR	Yes

A minimum of 1 hour of medical literature review with an ACVR-RO Diplomate is required monthly. Please describe this experience, and any additional formal or informal conferences available to the resident (including journal clubs, seminars, book reviews, etc.) that are not already listed above:

the ACVR-RO Diplomate meets twice weekly for journal club and book club throughout the residency. Additionally, the resident will attend clinical pathology rounds one hour biweekly, medical oncology journal club one hour weekly, and house officer seminar one hour weekly. These 5 hours of didactic rounds are mandatory and occur one hour daily (Monday-Friday) during designated didactic times throughout the hospital, typically 8 or 9 am depending on the day.

The resident is required to present at least 2 lectures or scientific presentations during the course of the residency. Please describe how the program will fulfill this requirement:

All LSU house officers are required to present at least 1 abstract or lecture-style presentations each year as part of the house officer program. Attendance is mandatory for all house officers. The radiation oncology resident will present at least 3 of these presentations total during the residency (1 per year).

The program must include an external beam radiation therapy machine in the megavoltage range and 3D computerized radiation treatment-planning capabilities to create treatment plans used for treatment delivery. Residents must have on-site access to treatment planning systems capable of forward and inverse planning even if both types of planning techniques are not deliverable at that institution.

Please list the manufacturer and model of the on-site external beam radiation therapy delivery system:

Varian Clinac 21EX with 6MV photons and 6,9,12,16, and 20 MeV electrons, MLC Millenium 120 leaf

Please list the manufacturer and model of the on-site radiation therapy treatment planning system(s). Please indicate whether they are capable of forward or inverse planning, or both, and whether or not they are used clinically to deliver treatments:

Eclipse version 15.6 with Aria Record and Verify, capable of performing forward and inverse planning

The clinical training requirements in the following six questions, described on pages 15 and 16 of the RO Essentials document can be fulfilled at a cooperating institution if the primary institution lacks resources to accomplish them. Training at cooperating institutions must be supervised by a Supervising or Supporting ACVR-RO Diplomate and a letter of agreement from the cooperating institution is required. The training requirements can be combined into a single minimum 2-week learning experience at the cooperating institution.

The residency program requires hands-on clinical experience to develop expertise and self-sufficiency in manual setups and manual treatment planning with photons. How does the program fulfill this requirement?

We plan manual point dose calculations with photons on-site. All setups, port films, and treatments are performed with the radiation oncologist and therapist in years 1 and 2, with all dose calculations checked by the radiation oncologist and medical physicist. In late year 2 and year 3, the resident is expected to perform these treatments independently but with port films and doses checked by the radiation oncologist prior to beam-on.

The residency program requires hands-on clinical experience to develop expertise and self-sufficiency in manual setups and manual treatment planning with electrons. How does the program fulfill this requirement?

We plan manual treatments with electrons on-site. All setups and treatments are performed with the radiation oncologist and therapist in years 1 and 2, with all dose calculations checked by the radiation oncologist and medical physicist. In late year 2 and year 3, the resident is expected to perform these treatments independently but with setup and doses checked by the radiation oncologist prior to beam-on. We train the resident in creating custom electron blocks based on field shape/outline.

The residency program requires hands-on clinical experience with forward planning for 3D conformal radiotherapy (non-IMRT). How does the program fulfill this requirement?

We plan 3D conformal radiotherapy using Eclipse v. 15.6 and administer these forward plans to clinical patients. We also plan 3D conformal treatments and compare them to IMRT plans on clinical patients that are receiving IMRT, to demonstrate the differences in dose distributions between the forward and inverse planning techniques. While this is not performed on every IMRT case, it is performed at least monthly to maintain fluency in forward planning throughout the residency.

The residency program requires hands-on clinical experience with inverse planning for IMRT. How does the program fulfill this requirement?

We routinely perform IMRT inverse planning on multiple patients each week. We utilize Eclipse v. 15.6 and all treatments undergo physics QA prior to beam on.

The residency program requires hands-on clinical experience in on-board imaging verification with MV or KV CT. How does the program fulfill this requirement?

The 21EX linear accelerator has a KV on-board imaging so daily KV cone beam CTs are obtained. CT QA is performed daily, and all IMRT patients receive at least one weekly cone beam KV CT for positioning verification. For patients receiving stereotactic therapy, daily cone beam CTs are obtained prior to each fraction.

The residency program requires hands-on clinical experience in on-board imaging verification with kV digital radiographs. How does the program fulfill this requirement?

The 21EX has KV digital radiograph capabilities. The resident performs daily KV QA during warm ups, and also we perform KV digital radiographs on both manual plan patients and 3D conformal and IMRT patients. We occasionally image patients with MV and KV to compare and contrast image quality.

The residency program requires hands-on clinical experience in on-board imaging verification with MV portal imaging. How does the program fulfill this requirement?

The 21EX has on-board MV image verification. Most manual setup patients receive an MV portal image for image verification

Radiologist(s) in support of the residency program [Must be Diplomate(s) of the ACVR or ECVDI]

First Name	Last Name	Title/Credentials	Diplomate on-site? Y/N
Nathalie	Rademacher	DVM, DACVR	Yes
Abbigail	Granger	DVM, DACVR	Yes

The residency program requires at least 26 weeks/year of on-site diagnostic imaging support from a ACVR or ECVDI Diplomate and availability for remote support for at least 45 weeks/year. How will the institution fulfill this requirement?

With two board-certified radiologists on-site, we have full time support 52 weeks per year.

How will the resident be trained in diagnostic imaging? Please provide a description of formal and informal training experiences as well as a description of the resident's role while rotating on a diagnostic imaging service:

The resident will have 6 weeks of Diagnostic Imaging throughout the residency. During these 2-week rotations, they will participate in image interpretation, generate reports, and attend all radiology rounds and KCC. They will focus on imaging of the cancer patient with an emphasis on thoracic radiograph, CT, and MRI interpretation. We also perform nuclear scintigraphy so some exposure will be given to that modality as well.
Informal training will also consist of regular consultation with diagnostic imaging specialists on image interpretation of clinical radiation oncology patients throughout their training.

The program must have on-site access to modern radiographic equipment, including digital or computed radiography, ultrasound, and CT. Does the institution fulfill this requirement?

LSU diagnostic imaging department contains digital radiography (2 small animal and one large animal suite), ultrasound (2 suites), CT (Fuji 64 slice helical), MR (1.5 T), fluoroscopy, and nuclear medicine.

Medical Oncologist(s) in support of the residency program [Must be Diplomate(s) of the ACVIM, Specialty of Oncology]

First Name	Last Name	Title/Credentials	Diplomate on-site? Y/N
Autumn	Dutelle	DVM, DACVIM	Yes

The residency program requires at least 26 weeks/year of on-site medical oncology support from an ACVIM (Oncology) Diplomate. How will the institution fulfill this requirement?

There is a board-certified medical oncologist on-site 48 weeks/year.

How will the resident receive training in medical oncology? Please provide a description of formal and informal training experiences as well as a description of the resident's role while rotating on a medical oncology service:

The medical oncology rotations will consist of four 2-week rotations for a total of 8 weeks. During these

rotations, the resident will focus on oncology cases not referred for radiation therapy. They will have primary case responsibility and participate in the diagnosis, staging, and treatment recommendations including chemotherapy administration and surgical referrals. They will perform aspirates, biopsy procedures, and
other technical procedures. They will participate in ongoing medical oncology journal clubs and book reviews for cancer biology, basic science techniques, immunotherapy and chemotherapy.

Surgeon(s) in support of the residency program [Must be Diplomate(s) of the ACVS]

First Name	Last Name	Title/Credentials	Diplomate on-site? Y/N
Jude	Bordelon	DVM, DACVS	Yes
Alissa	St.Blanc	DVM, DACVS	Yes

The residency program requires at least 26 weeks/year of on-site surgical support from an ACVS Diplomate. How will the institution fulfill this requirement?

The ACVS surgery faculty are on-site 52 weeks/year.

Pathologist(s) in support of the residency program [Must be Diplomate(s) of the ACVP (Anatomic or Clinical Pathology) or ECVP (Clinical Pathology)]

First Name	Last Name	Title/Credentials	Diplomate on-site? Y/N
Shannon	Dehghanpir	DVM, DACVP	Yes
Fabio	del Piero	DVM, DACVP	Yes
Jeongha	Lee	DVM, DACVP	Yes
Jose Cesar	Menk	DVM, DACVP	Yes
Emi	Sasaki	DVM, DACVP	Yes

The residency program requires at least 45 weeks/year of anatomic and clinical pathology support by ACVP Diplomates. If not on-site, a letter of support must be submitted. How will the institution fulfill this requirement?

There is at least 1 clinical pathologist on-site 48 weeks/year and 1 anatomic pathologist on-site and on clinical duty 52 weeks/year. There are 1 clinical pathologist and 4 anatomic pathologists on staff. Both have active residency training programs as well.

At least 1 week or 40 hours in a clinical rotation or rounds with a clinical pathologist are required during the residency program. If off-site, a letter of agreement must be submitted. How will the institution fulfill this requirement?

The resident will attend at least 1 week of a clinical pathology rotation on-site.
Additionally, the resident will attend one hour clinical pathology rounds every other week.

Anesthesia Specialists in support of the residency program [Must be Diplomate(s) of the ACVAA or ECVAA, or Veterinary Technician Specialists (VTS)]

First Name	Last Name	Title/Credentials	Diplomate on-site? Y/N
Jeannette	Cremer	DVM, DACVAA	Yes

First Name	Last Name	Title/Credentials	Diplomate on-site? Y/N
Gabriel	Castro-Cuellar	DVM, DACVAA	Yes
Noelia	Diaz-Falcon	DVM, DACVAA	Yes
Nicole	Fitzgerald	RVT, VTS	Yes

The residency program requires two 1-week (40-hour per week) clinical rotations (80 hours in total) in anesthesia with an Anesthesia Specialist, as defined above. Please provide a description of this training experience and the resident's role on this rotation.

The resident will attend two 1-week Anesthesia rotations. During this time, the resident will formulate anesthetic plans and be primary anesthetist on clinical patients of all types. Focus will be on the oncologic patient receiving anesthesia for staging, CT, and radiation therapy setups.

Neurologist(s) in support of the residency program [Must be Diplomate(s) of the ACVIM, Specialty of Neurology or ECVN]

First Name	Last Name	Title/Credentials	Diplomate on-site? Y/N
Colleen	Embersics	DVM, DACVIM (N)	Yes
Arturo	Otamendi	DVM, DACVIM (N)	Yes

The residency program requires a 2-week clinical rotation supervised by a Diplomate of the ACVIM (Neurology) or ECVN. Please provide a description of the training experience and resident's role on this rotation.

The neurologist will provide a 2-week clinical rotation. During this rotation, the resident will shadow the neurology team with a focus on the neurologic oncology patient diagnosis and workup. The resident will have opportunities to perform neurologic exams, interpret MRI and other advanced imaging techniques, CSF analysis, and observe neurosurgeries pertaining to the oncologic patient. They will also participate in the medical management of the neurologic patient including management of increased intracranial pressure, seizures, and other neurological emergencies.

Please list all additional board certified specialists in direct support of the residency program. If offsite, please explain relationship:

Name	Certifying College/Board	Subspecialty (if applicable)	Explain Relationship if offsite
Frederic Gaschen	DACVIM	Internal Medicine	
Andrea Johnston	DACVIM	Internal Medicine	
Patty Lathan	DACVIM	Internal Medicine	
Ryan Smith	DACVECC		
Virgine Wurlod	DACVECC		
Jack Lee	DACVECC		
Mark Mitchell	DECZM (Herpetology)		

Name	Certifying College/Board	Subspecialty (if applicable)	Explain Relationship if offsite
Thomas Tully	DACVP, DECZM		
Javier Nevarez	DACZM, DECZM		
Renee Carter	DACVO		
Pilar Camacho-Luna	DACVO		
Aliya Magee	DACVIM	Cardiology	
Henry Green	DACVIM	Cardiology	
Cherie Pucheu-Haston	DACVD		
Melissa Blazevich	DAVDC	Dentistry	

Evaluation of resident performance and progress must be documented every 6 months through appropriate techniques, including faculty appraisal, or oral or written tests, or a combination of these. Institutional resident evaluation forms should be submitted as part of the residency application. How will the program fulfill this requirement?

LSU house officer program generates e-value house officer evaluations every other week. Additionally, the LSU RO residency evaluation takes place quarterly the first year, then semiannually in years 2 and 3.

If applicable, please list the residents who have completed the training program within the last five years, including the year that each individual's training program ended. If possible, provide the status of each individual with respect to the board certification process.

Jennifer Merkle, DVM, DACVR (RO), 2021

Upload the following information

- CVs (current within 1 year and maximum of 2 pages) for each radiation oncologist, radiologist and medical oncologist involved in the training program
- Resident calendar that includes the following:
    - 24 months of RO-specific activities (primary case responsibility, treatment planning, 1 week/year of radiation therapist activities)
    - 8 weeks of medical oncology
    - 4 weeks of diagnostic imaging
    - 40 hours of medical physics
    - 40 hours of clinical pathology
    - 80 hours of anesthesia in minimum 1-week blocks
    - 2 weeks of neurology
    - 2-week minimum off-clinic time per year (study, research, etc) not including vacation
    - Vacation time as mandated by state/institution
    - Required outrotations at cooperating institution(s)
- Letters of agreement from cooperating institutions
- Letter of agreement from medical physics support for clinical training

- Residency evaluation forms
- Syllabi for any formal or informal coursework

CVs

ACVR Short CV Rademacher.docx

Dutelle_CV_2023- ACVR.docx

ACVR Short CV - Granger.docx

ACVR Short CV 2023 - Looper….pdf

Resident Calendar

Radiation Oncology Reside… .docx

Letter of Agreement from Medical Physics Support for Clinical Training

Residency Support Letter_Sig….pdf

Residency Evaluation Forms

Resident Evaluation Form 20… .pdf

Syllabi for Coursework

MDEP 7331 Rad Therapy Phy… .pdf

Radiological Physics course … .pdf

Rad Bio syllabus.pdf