

AMERICAN COLLEGE OF VETERINARY RADIOLOGY

RECOGNIZED VETERINARY SPECIALTY OF RADIATION ONCOLOGY (ACVR-RO)

RESIDENCY TRAINING PROGRAM RE-APPROVAL APPLICATION

NOTE: Some questions in this form are included for data collection purposes. The inclusion of an item does not necessarily imply that the item is a program requirement for ACVR-RO residency program. Please refer to the current Radiation Oncology Training Program Guidelines for comprehensive residency training requirements. This document may be downloaded from Members Only Downloads section of the ACVR website at <http://www.acvr.org>.

APPLICATION INSTRUCTIONS:

Training program directors wishing to have their programs evaluated should submit this electronic form and appropriate attachments electronically to the Chair of the Residency Standards and Evaluation Committee (RSEC) and to the Assistant Executive Director of the ACVR. The application must be received by **January 31st** of the third year following initial program approval / last re-approval. The RSEC will evaluate the application, a vote will be taken, and the results of the vote and the majority recommendation of the committee forwarded to the President of the Recognized Veterinary Specialty for consideration at Executive Council at one of the two annual meetings.

For the required ACVR and ACVIM Diplomates providing consultation in medical oncology and imaging, that are new to the program, please provide a brief 2-page curriculum vitae and specify the number of weeks each year that the individual will be available to actively support the radiation oncology resident.

ACVR-RO RESIDENCY STANDARD TRAINING PROGRAM RE-APPROVAL APPLICATION

1. Date of Application

1/30/2015

Date of Initial Program Approval

2000

Date of Last Re-approval

4/26/2012

2. Program Director(s): (Must be a Diplomate of ACVR Recognized Veterinary Specialty of Radiation Oncology)

Lisa Forrest, VMD, DACVR (Radiology, Radiation Oncology)

Program Director's Contact Information:

Work Phone:	608-263-5668
Fax:	608-263-7930
E-mail:	lforrest@wisc.edu

3. Additional ACVR-RO Diplomates supporting the program (not Program Directors)

Michelle Turek, DVM, DACVIM (Oncology), DACVR (Radiation Oncology)
Neil I. Christensen, BVSc(Hons), MANZCVSc, DipACVR (Radiation Oncology)

Numbers of weeks per year an ACVR-RO Diplomate is available to resident on a daily basis.

52

4. Do you have a radiation oncology resident in training at this time?

Yes	No
X	

5. Name of resident(s)

Lauren Smith Noopur Desai	
------------------------------	--

Is/are the resident(s) in an approved Standard program or an Alternative program:

Standard	Alternative
X	

6. Dates of training program (Please list only those dates of the actual training program. Time spent by the resident at your facility prior to beginning or following the completion of the actual training program should not be included.)

Dates of training program for resident (1) (mm/dd/yy)

07/16/14 – 07/13/16

Dates of training program for resident (2) (mm/dd/yy)

07/16/14 – 07/13/16

7. Location of Primary Institution

Primary Site:

University of Wisconsin-Madison

Department

Surgical Sciences

Hospital/University

University of Wisconsin-Madison, School of Veterinary Medicine

Address

2015 Linden Drive

City, State Zip Country

Madison, WI 53706, USA

8. Cooperating Institution(s) (If applicable):

Department

Hospital/University

Address

City, State, Zip, Country

For cooperating institutions, attach letters of agreement signed on behalf of the institution(s) by appropriate individual(s).

9. Length of Training Program (months):

24

If greater than 2 years, will this period include 24 months of continuous training in radiation oncology?

Yes	No

10. Number of months dedicated solely to radiation oncology training (excluding time on Medical Oncology service, Radiology/Imaging, etc.)

18

11. Advanced Degree:

	Yes	No	Optional
Masters:		X	
PhD:		X	

12. Essential Program Faculty: individual faculty member may serve in only one capacity

Please list all qualified faculty in support of program

a. Diagnostic Radiologist(s): (Must be Diplomate(s) of the ACVR)

Dr. Kenneth Waller, III Dr. Jackie Williams
--

Number of weeks per year an ACVR – Radiology diplomate is available to resident on a daily basis.

52

Faculty member on site?

Yes	No
-----	----

X	
---	--

If off site, please explain relationship.

--

- b. Medical Oncologist(s): (must be Diplomate(s) of ACVIM, Specialty of Oncology)

Dr. Ruthanne Chun Dr. David Vail Dr. Timothy Stein Dr. Xuan Pan Dr. Cecilia Robot Dr. Esther Chon
--

Number of weeks per year an ACVIM-Oncology Diplomate is available to resident on a daily basis.

52

Faculty member on site?

Yes	No
X	

If off site, please explain relationship

--

- c. Surgeon(s): (must be Diplomate(s) of the ACVS)

Dr. Dale Bjorling Dr. Robert Hardie Dr. Jason Bleedorn
--

Number of weeks per year an ACVS faculty member is available to resident on a daily basis.

52

Faculty member on site?

Yes	No
X	

If off site, please explain relationship.

--

d. Pathologist(s): (must be Diplomate(s) of the ACVP)

Dr. Howard Steinberg Dr. Marie Pinkerton Dr. Leandro Teixeira	
---	--

Number of weeks per year an ACVP faculty member is available to resident on a daily basis.

52

Faculty member on site?

Yes	No
X	

If off site, please explain relationship.

--

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

Name	Certifying College / Board
Dr. Karen Young	Clinical Pathology/ACVP
Dr. Lauren Trepanier	Internal Medicine/ACVIM
Dr. Rebecca Stepien	Cardiology/ACVIM (cardio)
Dr. Paul Miller	Ophthalmology/ACVO
Dr. Leslie Smith	Anesthesiology/ACVA
Dr. Christopher Snyder	Dentistry/AVDC

13. How does resident receive training in Medical Oncology? What is time allotted for this training? Please provide description of formal and informal training experiences.

Radiation oncology (RO) works closely with medical oncology. Primary patient care resides with RO. There are daily oncology ward rounds where progress and toxicities of current radiotherapy patients are reviewed and there are daily oncology afternoon rounds to discuss daily appointments (new patients, rechecks; medical oncology & radiation oncology patients). Radiation Oncology Board is held weekly where all current radiotherapy patients, potential cases, and follow-up on previous patients are discussed. There are weekly Oncology Group Meetings where journal articles, research updates and clinical management concerns are presented on a rotating basis. There are weekly clinical pathology rounds where slides from current patients are reviewed. The resident will spend 2 months on medical oncology exclusively, receiving new and re-check oncology patients.

14. How is resident trained in diagnostic imaging? What is time allotted for this training? Please provide description of formal and informal training experiences.

The resident will spend 2 months exclusively in diagnostic imaging, which includes radiography, fluoroscopy, ultrasound and alternate imaging (CT/MRI/NucMed). During this time residents will dictate cases that will be finalized by radiology faculty on duty. The resident will be involved with any oncology patient undergoing CT or MR imaging. The resident attends biweekly MRI rounds with radiology and neurology.

15. How is resident trained in radiation biology? Please provide description of formal and informal training experiences.

The resident attends a formal 2-credit radiation biology course that is offered by the Departments of Human Oncology and Medical Physics.
Twice-weekly RO rounds are held that include review of book chapters in radiobiology, radiation oncology, cancer biology and RO physic texts and journal articles.

16. How is resident trained in cancer biology? Please provide description of formal and informal training experiences.

See #15 above. The resident attends weekly Carbone Cancer Center Grand Rounds Seminars at UW Hospital. The resident will attend resident seminars provided at VCS and ACVR. The resident joins resident-driven book rounds on cancer biology (Tannock & Hill).

17. How is resident trained in radiation oncology physics? Please provide description of formal and informal training experiences.

See #15 above. The resident attends radiation oncology physics courses offered by the Department of Human Oncology and Medical Physics as part of their training program. The resident also attends a dosimetry and treatment planning course. Residents attend the yearly course offered by Dr. Wendell Lutz, if provided. Residents have daily access to a medical physicist that provides support for our TomoTherapy™ equipment and provides general RO physics rounds.

18. Please list any formal courses and their instructors included in the residency training curriculum. Please attach syllabi and instructor credentials for each listed course.

1. Radiation Biology – Course director – Mark A. Ritter, MD, PhD. Two hours a week for one semester. This is a listed graduate course in the Department of Human Oncology and Medical Physics.
2. Resident’s Radiation Oncology Physics Course – Course Coordinator – Rupak K. Das, PhD. Two hours per week for 17 weeks. Course is designed for MD

radiation oncology residents at the University of Wisconsin Hospital and Clinics.

3. Dosimetry and Treatment Planning – Course Coordinator – Jennifer Smilowitz, PhD. This course is taught to students in the Radiation Therapy major who will become dosimetrists.
4. Physics of Radiotherapy – Robert Jeraj, PhD. This is a 4 credit listed course in the Medical Physics department.

19. Does the resident participate in clinical rounds on a daily basis while on clinical rotations? Is a supervising Diplomate available for the majority of rounds? If no, please describe how rounds are attended and supervised.

Yes	No
X	
Comments:	

20. Are formal conferences, such as clinicopathologic conferences, journal clubs, or seminars held on a weekly basis?

Yes	No
X	
Comments:	

21. Please provide a description of the conferences, etc., that are provided and the typical schedule.

1. Daily oncology ward rounds where progress and toxicities of current radiotherapy patients are reviewed and new oncology patients are discussed.
2. Radiation Oncology Board is held weekly where all current radiotherapy patients, potential cases, and follow-up on previous patients are discussed.
3. Weekly Oncology Group Meetings where journal articles, research updates and clinical management concerns are presented on a rotating basis.
4. Weekly clinical pathology rounds where histology slides from current patients are reviewed.
5. Weekly known case conference rounds where radiology, ultrasound, CT, MRI and nuclear medicine cases are given to residents in a mock board examination fashion on a rotating basis. These are attended by RO residents during their 2 months on imaging.

6. Bi-weekly MRI rounds where radiology and neurology faculty discuss recent MRI examinations on clinical patients.
7. Weekly ACVIM rounds where topics are frequently of oncology interest.
8. Daily necropsy rounds.
9. Weekly oncology grand rounds: Presentations and attendance is by faculty and residents of the University of Wisconsin Hospital and Clinics Cancer Center. Veterinary school faculty members attend and have also made presentations.
10. Twice-weekly RO rounds are held that include review of book chapters in radiobiology, radiation oncology, cancer biology and RO physic texts and journal articles.
11. Bi-weekly surgery, oncology, radiation oncology, radiology, pathology rounds current surgical cancer patients are discussed in order to determine adjuvant therapy.
12. Quarterly surgical/medical oncology/radiation oncology topic rounds presented by residents where a resident from each service present a combined presentation.
13. Monthly (fall & spring) Grand Rounds are presented by clinical departments of the veterinary school and attended by faculty, residents and students.

22. Is the resident required to give one or more formal presentations at a conference or in an educational setting on a yearly basis? If yes, please describe these conferences or educational settings.

Yes	No
X	
Comments:	The resident will present an abstract at VCS and/or ACVR-RO meetings. The resident will give 1-2 CE lectures at UW sponsored oncology CE meetings for practioners. The resident will also present formal seminars at oncology and surgery rounds on topics of medical and radiation oncology.

23. How many major veterinary medical or medical meetings is each resident able to or expected to attend during his/her training program? Please list the meetings attended.

None	One	Two	> Two
			X
Comments:	VCS, ACVR-RO, ASTRO		

24. Does the training program require a research project? Please indicate the number of

research projects required.

Yes	No	Optional	Number
X			1
Comments:		1 research project is required	

25. Are one or more publications required as part of the training program?

Yes	No	Number
X		
Comments:		Results of research project

26. Please indicate the availability of the following facilities or equipment. Indicate if these are available at the primary training site, or at a different location. For facilities that are not on-site, please describe the situation and availability in the space at the end of this section.

Equipment / Service	Available?		On-Site?	
	Yes	No	Yes	No
Megavoltage Teletherapy Machine Please specify manufacturer and model: TomoTherapy™ IG-IMRT	X		X	
3D - Computer based treatment planning system Please specify manufacturer and model: Eclipse™ 11.0 and TomoTherapy™ IMRT	X		X	
2D/2.5 D - Computer based treatment planning system Please specify manufacturer and model:		X		X
LDR Brachytherapy treatment and planning	X			X
HDR Brachytherapy treatment and planning	X			X
Diagnostic Radiology / Imaging Services	X		X	
Conventional Radiography	X		X	
Fluoroscopy	X			
Ultrasound	X		X	
Nuclear Medicine	X		X	
Computed Tomography	X		X	
Magnetic Resonance Imaging	X		X	
Positron Emission Tomography	X			X
Intensive Care Facility - 24 hours	X		X	
Clinical Pathology capabilities: (includes CBC, serum chemistries, blood gases, urinalysis, cytology, parasitology, microbiology, and endocrinology)	X		X	
Veterinary Library w/Literature Searching Capabilities	X		X	
Medical Library w/Literature Searching Capabilities	X		X	

27. If any of the above equipment or facilities are available off-site, please explain how the resident can access them for case management, research, or study.

<p>PET/CT is available on the UW campus, 4 blocks from the SVM. An RO1 grant (Dr. Forrest, co-I) has been funded to continue the canine nasal tumor work using helical tomotherapy and PET/CT. We do contours, approve IMRT plans and deliver therapy on our TomoTherapy™ machine to client owned dogs with nasal cancer. LDR & HDR brachytherapy is available on UW campus, 4 blocks from the SVM. Residents tour the human radiation oncology department with our medical physicist to understand how these modalities function.</p>	
--	--

28. Please list numbers of patients treated in the last 12 months using the listed radiation treatment modalities.

Modality	Number Treated*
Megavoltage Gamma / X-ray Teletherapy	125
LDR Brachytherapy	0
HDR Brachytherapy	0
Injectable Radionuclide therapy	42
Radioiodine	42
Other (please specify)	
⁹⁰ Strontium Pleiotherapy	N/A
Other - please specify	

* indicate N/A (not applicable) if the treatment modality is not available

29. Describe procedures for resident record recording of radiation treatment details of all patients.

<p>The trainee will keep a log of patients treated, including tumor type and location, treatment date, and the treatment protocol used. He/She will be involved in providing radiation oncology consults, owner consents for therapy and patient discharges. In addition for every patient treated with radiotherapy a file is kept that includes the following:</p> <ol style="list-style-type: none"> 1. Tumor type and location 2. Radiation prescription (# of fractions, dose/fraction, total dose, dose% prescribed to PTV & GTV) 3. Energy used (currently all are from 6MV linac of tomotherapy machine) 	
---	--

30. What procedures are in place to facilitate collection of follow up information of patients treated?

<p>Weekly radiation rounds are held where current and recheck patients are discussed. All radiotherapy patients are entered into a searchable database and are on a recheck schedule. Follow-up of patients not returning to the VMTH is done by phone contact and/or postcard. Digital photographs are obtained of the patient during radiotherapy and at rechecks.</p>
--

31. By what mechanisms and how often are residents evaluated? Please attach form used in this evaluation (required).

<p>Trainees will be informally evaluated by the training program co-directors at 3 months and formally evaluated by 6 mentors at 6, 12 & 18 months into the program. A written summary is provided to the trainee in the form of a progress evaluation. The trainee will be asked to evaluate the training program at these intervals, as well.</p> <p>Faculty and staff members will provide performance evaluation. Performance in rounds and attendance at seminars will also be included in the overall evaluation. Inadequate progress, based on these evaluations, would be grounds for non-renewal.</p>
--

32. Please list the residents who have completed the training program including the year that each individual's training program ended. If at all possible, please provide an address, and any information you have on the status of each individual with respect to the board certification process.

<p>Eric Green, DVM, DACVR (Radiology, Radiation Oncology) Completed the program in June 2002, successfully completed RO board examination 9/02 Currently on faculty at Ohio State University</p>	
--	--

Dr. Eric M. Green, DVM, DACVR (Radiology, Radiation Oncology)
Department of Veterinary Clinical Sciences
College of Veterinary Medicine
The Ohio State University
601 Vernon L. Tharp Street
Columbus, OH 43210
USA
Work Phone: (614) 292-3551 ext 48697
Fax: (614) 292-3191
Email: green.689@osu.edu

Michelle Turek, DVM, DACVIM (Oncology), DACVR (Radiation Oncology)
Completed the program in June 2004, successfully completed RO board examination
9/04
Currently on faculty at University of Wisconsin-Madison
University of Wisconsin-Madison, School of Veterinary Medicine
2015 Linden Drive
Madison, WI 53706
USA
Phone: 706-206-8677
Email: turekm@yahoo.com

Jessica Lawrence, DVM, DACVR (Radiation Oncology), DACVIM (Oncology)
Completed the program in June 2006, successfully completed RO board examination
9/06.
Currently on faculty at the University of Edinburgh
Royal (Dick) School of Veterinary Studies
University of Edinburgh
Roslin, MLN EH25 9RG
United Kingdom
Phone: 44 (0)1316507650
Fax: 44 (0)1316507652
Email: Jessica.Lawrence@ed.ac.uk

Michael Deveau, DVM, DACVR (Radiation Oncology)
Completed the program in June 2008, successfully completed RO board examination
9/09.
Currently on faculty at Texas A&M University
Dr. Michael Deveau
College of Veterinary Medicine & Biomedical Sciences
Texas A&M University

4474 TAMU College Station, TX 77843-4474

USA

Phone - 979 862 2861

Fax - 979 862 2864

Email: m_deveau@hotmail.com

Randi Drees, Dr. med. vet., DACVR (Radiology, Radiation Oncology, DipIECVDI
Completed RO program in December 2010, successfully completed 2 sections of RO
board examination 9/11, successfully completed examination 9/12

Currently on faculty at The Royal Veterinary College

Dr. Randi Drees

The Royal Veterinary College

Hawkshead Lane

North Mymms, HRT AL9 7TA

United Kingdom

Email: rdrees@rvc.ac.uk

Lyndsay Kubicek, DVM, DACVR (Radiation Oncology)

Completed the program in June 2012, successfully completed RO board examination
9/13.

Currently at Angell Memorial Animal Hospital

350 South Huntington Ave.

Oncology Department

Jamaica Plain, MA 02130

Phone: 617-541-5136

Fax: 617-989-1668

Email: lkubicek@mspca.org

Pamela White, DVM

Completed the program in June 2014, successfully completed 2 sections of RO board
examination 9/14, will re-take examination 9/15

Currently in private practice in Washington, DC area

8231 Crestwood Heights Drive, Apt 511

McLean, VA 22102

Phone: 215-520-5886

Email: pjwhite.ro@gmail.com

Neil Christensen, BVSc(Hons) MANZCVSc, DACVR (Radiation Oncology)
 Completed the program in October 2014, successfully completed RO board examination 9/14 (Allowed to take exam prior to 2-months of medical oncology because he completed a medical oncology residency in Australia).
 Currently on faculty at University of Wisconsin-Madison
 University of Wisconsin-Madison, School of Veterinary Medicine
 2015 Linden Drive
 Madison, WI 53706
 USA
 Phone: 608-263-7600
 Email: nchristense2@svm.vetmed.wisc.edu

33. Please list any additional information of interest in support of this residency re-approval application.

Our physicist has commissioned 6MV 3D-CRT and electron energies on our Eclipse™ treatment planning computer. Residents will spend time planning cases with these energies using forward treatment planning, wedges and blocks and differing electron beam energies.

Attachments:

Please attach the following documents to the application if applicable. Please mark box to indicate which documents are included. Please list any additional documents attached in support of this application.

Attached?	Documents
X	Twenty-four (24) month calendar of resident's activities - Required
X	CV (2-page)- ACVR-RO Diplomate - Program Director(s) - Required
X	CV (2-page) - ACVR-R Diplomate(s) - Required
X	CV (2-page) - ACVIM-O Diplomate(s) - Required
X	Syllabi of formal course work included in the training program - Required
X	Credentials of instructors providing formal course work - Required
X	Forms used in resident evaluation - Required
N/A	Letters of agreement from cooperating institutions - Required