

## ACVR - RO New Residency Program Application

Please review the <u>Radiation Oncology (RO) Residency Program Essentials Training Standards and</u> <u>Requirements</u> 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:
  - 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

Friday, January 26, 2024

Your Name

**Submission Date** 

Your Address

2015 SW 16th Ave Gainesville, FL, 32608

**Your Email Address** 

mtakada@ufl.edu

Marilia Takada

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

First Name	Last Name	Title/Cre dentials	Email	Phone	Number of weeks per year Diplomat e is available to supervis e* the resident
Marilia	Takada	DVM, MSc, PhD, DACVR (RO)	mtakad a@ufl.e du	352- 392- 2235	22
Jishnu Rao	Gutti	BVCs, MVSc, MS, DACVR (RO)	guttij@ ufl.edu	352- 392- 2235	30

\*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.

Marilia Takada

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

#### **Comments:**

Between the two board-certified ROs, we have a coverage of 52 weeks per year with at least 1 faculty on clinics at all times.

A standard residency program is one that meets all of the residency program requirements set forth in the <u>ACVR-RO Residency Essentials Training Standards</u> 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?	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
Primary Site:	University of Florida
Hospital/University:	Small Animal Hospital
Department:	Small Animal Clinical Sciences
Address	2015 SW 16th Ave Gainesville, FL, 32608

#### **Advanced Degree and Research/Publication Requirement**

Masters	No
PhD	No
Research Project	Optional
Publication	Optional

Documentation of residency completion is required to obtain Diplomate status. Is receipt of residency certificate dependent on completion of advanced degree/research/publication?

No

Yes

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

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?

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

#### 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.

The resident will required to take a radiation and cancer biology course over the three years during his/her residency (syllabus attached to this application). The courses/lectures are provided via teleconference by Dr. Barry Rosenstein (Icahn School of Medicine at Mount Sinai, New York). In addition, the resident will participate in a radiation biology book club to go over the chapters of "Radiobiology for the Radiologist" by Eric Hall with the RO faculties.

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

Barry Rosenstein, PhD, Radiation and cancer biology (Icahn School of Medicine at Mount Sinai, New York: Tel conference)

Marilia Takada, DVM, MSc, PhD, DACVR (RO) and Jishnu Rao Gutti, BVCs, MVSc, MS, DACVR

### 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.

Lectures on cancer biology will also be taught by Dr. Barry Rosenstein (see above). In addition, the resident will participate in a weekly book club to go through the chapters of "Biology of Cancer" by Robert Weinberg, and "The basics science of oncology" by Tannock and Hill, with the medical oncology house officers along oncology faculty.

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

Barry Rosenstein, PhD, Radiation and cancer biology (Icahn School of Medicine at Mount Sinai, New York: Tel conference)

Marilia Takada, DVM, MSc, PhD, DACVR (RO) and Jishnu Rao Gutti, BVCs, MVSc, MS, DACVR, Rowan Milner (DACVIM, MO), and Paulo Vilar Saavedra (DACVIM, MO)

### 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.

The resident is required to take a Radiation Physics Course in the second year of residency (syllabus attached to this application). The courses/lectures will be provided through the UF College of Medicine, and attended by the residents in radiation oncology of their program. In addition, the resident will be trained in daily QAs and patient specific QA plans by Dr. Frank Bova, PhD (Lillian S. Wells Department of Neurosurgery at University of Florida) and his medical physics team. Residents will have the opportunity to shadow Dr. Bova and his medical physics team when QAs are performed at monthly and annual basis.

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

Frank Bova, PhD

### 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.

Residents will have the opportunity to shadow Dr. Bova and his medical physics team when QAs are performed at monthly and annual basis. The residents will also have the opportunity to join the Physics Bootcamp once during their program organized by Dr. Michael Kent at University of Davis, CA.

Medical Physicist(s) in support of clinical training in the residency	First Name	Last Name	Title/Credenti als	Physicist on- site? Y/N
program	Frank	Bova	PhD	No

#### 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 resident will participate in 1-hour weekly radiation oncology journal club with the RO faculties to review the pertinent RO literature. At daily basis, residents are encourage to review the current literature related to the clinical cases they are responsible for. Data from publications is brought up when discussing cases, treatment plans and prognosis.

### 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:

Residents at UF are required to present their topics of interest once a year at the house officer seminar series from the UF Small Animal Hospital. It is a 30 min powerpoint format presentation to house officers and faculties from the UF CVM.

Although not mandatory, the resident will be highly encouraged to develop a research project during their residency and present the results at the ACVR annual conference, or similar conferences.

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:

Edge radiosurgery linear accelerator system from Varian, with 6MV photon and 6-20 MeV electron energies. Integrated features including a 6-degree of freedom couch (PerfectPitch), a high definition 2.5 mm multi-leaf collimator (HD120), and an advanced kV imaging system provide treatments of high precision

## 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, ver. 16, capable of both forward and inverse planning, that is used clinically to deliver treatments.

The clinical training requirements in the following six questions, described on pages 15 and 16 of the <u>RO</u> <u>Essentials</u> 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 selfsufficiency in manual setups and manual treatment planning with photons. How does the program fulfill this requirement?

The resident will have hands-on clinical experience for manual RT treatment with photons for some patients whose treatment do not required a computer generated plan

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

The resident will have hands-on clinical experience for manual RT treatment with electrons for some patients whose treatment do not required a computer generated plan

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

Most of our treatments are IMRT plans inversed planned. Residents will generate forward planning for 3DCRT to practice on Eclipse, and to compare to other modalities. The goal is having the resident learn the difference of the planning process and dose distribution between 3D conformal radiotherapy (non-IMRT) and IMRT plan.

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

We have Eclipse treatment planning system (Varian, Ver 16). The majority of our UF radiation therapy patients receive IMRT plan.

### 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?

We have Edge Linear accelerator and we perform acquisition of position of verification images (KV CT scan) prior to delivering RT dose for all RT patients. The resident will perform a minimum of total 1 week/year of radiation therapist activities.

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

We have Edge Linear accelerator and we perform KV digital radiographs prior to delivering RT dose for manual RT setup cases.

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

We have Edge Linear accelerator and we perform KV digital radiographs or MV portal imaging prior to delivering RT dose for manual RT setup cases.

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

First Name	Last Name	Title/Credenti als	Diplomate on- site? Y/N
Aitor	Gallastegui	LV, MSc, DACVR	Yes
Federico	Vilaplana Grosso	DVM, DACVR	Yes
Hayley	Paradise	DVM, DACVR	Yes
Elodie	Huguet	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?

We have a full diagnostic imaging service with 4 faculties that cover the service for 52 weeks/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 spend four weeks in diagnostic imaging service. The resident will be trained to generate reports of imaging studies under supervision of radiology faculty. The resident will have opportunities to be involved in multiple imaging modalities such as CT, MRI, ultrasound, nuclear medicine, and radiography. Special emphasis will be placed on oncologic imaging and oncologic patients who present as a part of staging and/or radiation therapy planning. During this rotation, the resident will participate in daily radiology rounds to discuss cases.

In addition, we encourage our residents to discuss cases in person with the faculty or resident in DI for diagnostics or for planning purposes.

#### 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?

Our UF radiology have modern radiographic equipment, including digital radiography, ultrasound, C-arm fluoroscopy, 1.5T MRI (Toshiba Titan®), and helical CT (Toshiba Prime®). The resident will have the opportunity to use those equipment as diagnostic tools when staging tests are performed.

Medical Oncologist(s) in support of the residency program [Must be Diplomate(s) of the ACVIM, Specialty of Oncology]	First Name	Last Name	Title/Credenti als	Diplomate on- site? Y/N
	Paulo	Vilar Saavedra	DVM, MSc, PhD, DACVIM	Yes
	Rowan	Milner	DVM, PhD, DACVIM (Oncology and Internal Medicine)	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?

We have 2 board certified medical oncologists who cover 52 weeks/year of on-site medical oncology support.

## 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:

During the medical oncology rotation, the resident will perform staging tests, clinical problem solving, managing hospitalized cases, and prescribe chemotherapy agents. The resident will spend a total of 8 weeks at medical oncology service. Due to the fact that we are a combined service, the resident will participate in daily case rounds, and have interaction among medical, surgical and radiation oncologists. We also have weekly clinician rounds when we discuss shared cases, and the resident can learn more about interdisciplinary treatments.

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

First Name	Last Name	Title/Credenti als	Diplomate on- site? Y/N
Judith	Bertran	DVM, MS, DACVS, Surgical Oncology Fellow	Yes
Elizabeth	Maxwell	DVM, DACVS, Surgical Oncology Fellow	Yes
Josep	Asias	DVM, DECVS, Surgical Oncology Fellow	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?

Our Oncology services are consistent of medical. surgical, and radiation oncology. We have 3 board certified ACVS/DECVS with Fellow in Surgical Oncology. We also have 6 board certified ACVS surgeon who mainly perform soft tissue and orthopedic surgery but are not involved in the care of oncology patients at our institution, so were not added to this application.

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/Credenti als	Diplomate on- site? Y/N
Michael	Dark	DVM, PhD, DACVP	Yes
lan	Hawkins	DVM, DACVP	Yes
Aline	Rodriguez Hoffmann	DVM, MS, PhD, DACVP	Yes
Willian	Craft	DVM, DACVP	Yes
Lisa	Farina	DVM, DACVP	Yes
Robert	Ossiboff	DVM, PhD, DACVP	Yes
Felipe	Pierezan	DVM, DACVP	Yes
John	Roberts	DVM, DACVP	Yes
Adam	Stern	DVM, DACVP	Yes
Shir	Gilor	DVM, DACVP	Yes
Cleverson	de Souza	DVM, MS, PhD, DACVP	Yes
Chris	Lanier	DVM, MS, 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?

We have a total of 11 board certified ACVP (8 anatomic, 3 clinical pathology) pathologists who cover clinic for 52 weeks.

### 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 rotate through clinical pathology for 1 week. In addition, they will participate in weekly onco-histopathology rounds where oncological cases are discussed, and weekly cytology rounds, where slides (mostly, but not all oncological) are reviewed and discussed among the clinicians.

Anesthesia Specialists in support of the residency program [Must be Diplomate(s) of the ACVAA or ECVAA,	First Name	Last Name	Title/Credenti als	Diplomate on- site? Y/N
or Veterinary Technician Specialists (VTS)]	Marta	Romano	DVM, MSc, PhD, DACVAA	Yes

First Name	Last Name	Title/Credenti als	Diplomate on-site? Y/N
Ludovica	Chiavaccini	DVM, MS, DACVAA	Yes
Alanna	Johnson	DVM, DACVAA	Yes
Luisito	Pablo	DVM, MSc, DACVAA	Yes
Diego	Portela	DVM, DACVAA	Yes
Enzo	Vettorato	DVM, PhD, DECVAA	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 spend 2 weeks (40-hour per week) clinical rotations in anesthesia service. During the anesthesia rotation, the resident will have the opportunity to formulate anesthesia or sedation protocol under the supervision of the attending anesthesiologist, as well as manage patients under anesthesia from premedication to extubating/recovery. The resident will be exposed to a variety of cases not limited to diagnostic imaging cases such as CT/MRI cases.

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/Credenti als	Diplomate on- site? Y/N
	Sheila	Carrera- Justiz	DVM, DCVIM	Yes
	Gabriel	Garcia	DVM, DCVIM	Yes
	Arianna	Negrin	DVM, MS, PhD, DECVN	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 resident will rotate in UF neurology for 2 weeks. The radiation oncology resident will have a primary case responsibility for initial evaluation, diagnosis, and case management. Special interest will be placed on neurological examination, localization, and neurological assessment. Additional focus will include CT and MRI evaluation for neurology patients.

#### 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?

Residents are evaluated by radiation oncology faculties every six months. A formal evaluation meeting is conducted with a written evaluation form (attached to this application) from our institution stating the resident's progress, performance and areas that need more attention. Faculties and resident meet and verbally discuss their evaluation, as well as their feedback about the resident's program overall.

# 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.

N/A

#### Please list any additional information of interest in support of this residency application.

At UF, we are able to provide a well rounded RO residency program because of the support structures in terms of facility and personnel. We are proud to have a very cohesive oncology team, where medical oncologists, surgical oncologists and ROs work very close together to offer the best possible patient care. We communicate to each other at daily basis on mutual consults. Our common goal is to form oncologists that know how to collaborate with other clinicians and formulate treatment plans that meet the patient's best interest and the client's goal.

Our RO service is continuously growing over the past 3 years. We have currently 2 radiation oncologists, 3 technicians, 1 radiation therapist, 1 assistant, and 2 residents. Our caseload has increased in ~70% over the past 2 years, providing a great amount of clinical experience and teaching opportunities to our residents.

#### 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



