ACVR RO Residency Training Program Re-Approval Application

Submission Date	2018-02-06 19:04:24
Date of Application	01-31-2018
Date of Initial Program Approval	05-01-1997
Date of Last Re-Approval	04-01-2015
Your Name	Susan LaRue
Your Email Address	Susan.LaRue@colostate.edu
Your Address	Colorado State University Flint Animal Cancer Center 300 West Drake Road Fort Collins Colorado 80523-1620

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

First Name	Last Name	Title/Credentials	Email	Phone #	Number of weeks per year faculty member is available to resident on a daily basis	Fax #
Susan	LaRue	Professor, DACVS, DACVR(RO)	Susan.LaRue@colostate.edu	970-297-0334	32	970-297-1254
Keara	Boss	Asst Professor, DACVR(RO)	Keara.Boss@colostate.edu	970-297-5086	20	970-297-1254

Do you have additional ACVR-RO in support of the program? yes

Additional Radiation Oncologists in support of the program (Diplomate of ACVR recognized Veterinary Specialty of Radiation Oncology):

First Name	Last Name	Title/Credentials	Number of weeks per year faculty member is available to resident on a daily basis	Faculty Member on site (yes or no)?
Molly	Holmes	Fellow, DACVR(RO)	39	yes

If applicable, upload CVs of the Program Director and any supporting Radiation Oncologists:

Biosketch_LaRue For ACVR.pdf
Boss Biosketch Jan 2018 v2.pdf
Molly Holmes-CSU CV-PDF.pdf

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

Residents

First Name	Last Name	Dates of Training
Benoit	Clerc-Renaud	07/13/2015-7/15/18
Carolynne	Kruckman	07/15/2016-7/15/19
Tiffany	Wormhoudt	07/15/2016-7/15/19

Application is made for (check one):	Standard Program
Primary Site:	Colorado State University
Hospital/University:	Voss Veterinary Teaching Hospital
Department:	Environmental and Radiological Health Sciences
Address:	Flint Animal Cancer Center 300 West Drake Road Fort Collins Colorado 80523-1620
What is the total length of the training program?	24 or 36
If greater than 2 years, will this period include 24 months of continuous training in radiation oncology?	Yes
Number of months dedicated solely to radiation oncology training (excluding time on Medical Oncology service, Radiology/Imaging, etc.)	28

Advanced Degree:

	Yes	No	Optional
Masters	✔	-	-
PhD	-	✔	-

Upload calendar of resident's activities (24 or 36 month) including required rotations and vacation:	Calendar January 2018 redo.doc

Diagnostic Radiologist(s): (Must be Diplomate(s) of the ACVR or ECVDI):

First Name	Last Name	Title/Credentials	Number of weeks per year a boarded radiology diplomate is available to resident on a daily basis	Faculty Member on site (yes or no)?
Angela	Marolf	Associate Professor, DACVR	30	yes
Elissa	Randall	Associate Professor, DACVR	30	yes
Lynn	Griffin	Asst. Professor, DACVR	30	yes
Linda	Lang	Asst. Professor, DACVR	36	yes

Upload CVs of diagnostic radiologists listed:

Griffin Biosketch ACVR.pdf
Lang NIH Biosketch 1_18.pdf
Marolf Biosketch updated.pdf
Randall_NIH_Bio Feb 2018 2 page.pdf

Medical Oncologist(s): (Must be Diplomate(s) of the ACVIM, Specialty of Oncology:

First Name	Last Name	Title/Credentials	Number of weeks per year an ACVIM-Oncology Diplomateis available to resident on a daily basis	Faculty Member on site (yes or no)?
Susan	Lana	Professor, ACVIM	30	yes
Doug	Thamm	Professor, ACVIM	12	yes
Barbara	Biller	Assoc. Professor, ACVIM	18	yes
Kristen	Weishaar	Asst. Professor, ACVIM	20	yes
Rodney	Page	Professor, ACVIM	2	yes

If off-site, please explain relationship:

One or more of above is always on the oncology service. In addition, Brian Scansen, Assoc Prof and ACVIM, is on faculty in cardiology. He provides who provides advanced minimally invasive shunting and chemoembolization for oncology patients.

Upload CVs of medical oncologists listed:

Biller NIH Biosketch_2018.pdf
Lana_S NIH biosketch 2017.pdf
NIH biosketch Weishaar.pdf
Thamm NIH Biosketch New Format JAN 2018.pdf

Surgeon(s): (Must be Diplomate(s) of the ACVS:

First Name	Last Name	Title/Credentials	Number of weeks per year an ACVS faculty member is available to resident on a daily basis	Faculty Member on site (yes or no)?
Nicole	Ehrhart	Professor, ACVS and Surgical Oncology	16	yes
Bernard	Seguin	Assoc. Professor, ACVS and Surgical Oncology	18	yes
Deanna	Worley	Assoc. Professor, ACVS, Surgical Oncology	18	yes

If off-site, please explain relationship:

One of the above is always on the oncology service. In addition, we have 2 ACVS fellows in training. Dr. Christopher Orton provides surgery for heart tumors, Dr. Eric Monet provides minimally invasive thoracic and abdominal surgery, and Drs. Rebecca Packer and Stephanie McGrath provide surgery for brain tumor patients.

Pathologist(s): (Must be Diplomate(s) of the ACVP:

First Name	Last Name	Title/Credentials	Drop down	Number of weeks per year an ACVP faculty member is available to resident on a daily basis	Faculty Member on site (yes or no)?
Barbara	Powers	Professor, DACVP	Anatomic Pathology	40	yes
EJ	Ehrhardt	Professor, DACVP	Anatomic Pathology	12	yes
Colleen	Duncan	Assoc. Prof, DACVP	Anatomic Pathology	8	yes
Tawfik	Aboellail	Asst. Prof, DACVP	Anatomic Pathology	12	yes
Gary	Mason	Professor, DACVP	Anatomic Pathology	10	yes
Terry	Spraker	Professor, DACVP	Anatomic Pathology	10	yes
Sushan	Han	Asst. Professor, DACVP	Anatomic Pathology	12	yes
Paul	Avery	Professor, DACVP	Clinical Pathology	17	yes
Andria	Bohn	Asst.Professor, DACVP	Clinical Pathology	18	yes
Christine	Olver	Professor, DACVP	Clinical Pathology	17	yes

If off-site, please explain relationship:	Dr. Powers or EJ Ehrhardt is always available for slide review. One of the other anatomical pathologist is on service for 52 weeks/year. A Clinical pathologist is available for 52 weeks/year.

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

Name	Certifying College/Board	Subspecialty (if applicable)	If offsite, please explain relationship
Peter Hellyer	Anesthesia		
Kursheed Mama	Anesthesia		
Rachel Hector	Anesthesia		
Gregg Griffenhagen	Anesthesia		
Pedro Boscan	Anesthesia		
Sarah Shropshire	ACVIM	endocrinology	
Kristy Dowers	ACVIM	endocrinology	
Stephen Dow	ACVIM	immunology	

Please describe the role of the radiation oncology resident and the radiation oncology service in the daily clinical management of patients and clients:

Role of the Radiation Oncology Service

The Clinical Oncology Service at Colorado State University is unique in that medical, surgical, and radiation oncology are all integrated into a single clinical service. Our radiation caseload is quite high, and as such we generally have 3-4 residents, or 3 residents and a fellow or visiting faculty member in radiation oncology. There are differences in the number of weeks on each service based on whether the resident in here for a 3 year residency and Master's degree or a two year residency. To be eligible for a 2 year residency, the candidate must have board certification or a Ph.D in a related field. The implication is that the 2 year resident would already have a strong clinical skill set or strong reasoning skills and knowledge base in at least one aspect of radiation oncology (e.g. cancer biology, anatomy). Additionally, based on background, these candidates may need to only take classwork relevant to radiation oncology instead of all the classwork required for a MS degree.

Three Year Program

Candidates for the three year program typically have little background in the radiation or cancer related disciplines. In general writing skills are not strong, nor are their reasoning skills. We feel that they need extra time (beyond the 24 month minimum) to develop the skills necessary to be a well-rounded radiation oncologist.
Unlike most private or academic radiation oncology program, our radiation oncology service is completely integrated with the clinical oncology services, which includes medical oncology, surgical oncology, and our Argus client communication program. This provides multidisciplinary patient care, and a wonderful learning opportunity for radiation and medical oncology residents and surgical fellows. However, to create a more focused and structured environment, we have divided the resident responsibilities into 2 distinct rotations.
Three year residents are assigned to the "Radiation Oncology Rotation" for 5-7 months per year. In this capacity, they serve directly under the guidance of 1-1.5 radiation oncologists and a radiation physicist to understand and master CT set-ups, clinical set-up and calculations, forward and inverse treatment planing, SRT, quality assurance plan development and evaluation of QA plans, patient positioning for treatment, and match assessment, machine operation, and treatment scheduling. They also have responsibility for the admission, physical examination, and owner communication for ongoing palliative patients and some radiation recheck patients. While on the "radiation oncology rotation", they still attend Clinical Oncology Rounds (combining all faculty, residents and students) twice daily. This allows them to provide day-to-day information about the patients they have planned.
Responsibilities during this rotation also include 2 1-hour teaching sessions with the veterinary students where principles of radiation oncology and terminology is discussed, and radiation rounds showing specific radiation plans, outcome photos, etc. These rounds help educate the future generations of veterinarians to the complete realm of radiation modalities available for the treatment of animal patients.
The "Radiation Oncology Service" residents also provide consultation for all the potential radiation patients, under supervision of the radiation oncology faculty member. As they become more comfortable with radiation oncology, they can take greater responsibility in this area, and also start participating in our radiation oncology phone consult service.
One of the most important aspects of this rotation is for the resident, initially under the supervision of faculty, to go over the radiation plan with the client, and to answer any additional questions that are specific to radiation. We call the radiation review. Residents are also responsible for logging cases into our data base.
For approximately 3-4 months each year, the radiation oncology residents are assigned to the general "Clinical Oncology Service". This service generally sees 26-30 new cases each week, and about 75 recheck patients. There are no specifically identified slots for radiation, surgical or medical oncology appointments, so some days there may be 10 medical oncology appointments, and some days there may be 10 potential surgery or radiation cases. The clinicians and house staff (residents and fellows) see patients in all 3 disciplines. The radiation oncology residents have primary care responsibility for medical oncology, surgical oncology, and radiation oncology cases, including all paperwork and follow-up correspondence. Over time, they become comfortable treating lymphoma patients and complications of both radiation therapy and chemotherapy. This also provides a great opportunity for the residents to distinguish which patients may better benefit either surgery or radiation therapy. The radiation oncology residents on this service also see the radiation rechecks, including post-radiation complications and follow-up staging.
Our program is not compartmentalized into "spend 2 months in medical oncology". We feel that the 9-12 months they spend on the clinical oncology service, (and the time they spend in oncology rounds during the radiation oncology rotations) more than meets the requirement for 2 months in a medical oncology only arena, and provides ample opportunity to learn staging and manage radiation patients and complications.
Time spent on the radiation oncology portion provides structured technical training and to gain experience. From a practical standpoint, a resident in an exam room can't leave and set-up a patient in CT, or run to radiation therapy and do a clinical set-up. So it allows the resident to concentrate on their patient management or their radiation technical skills. It better utilizes their time, exam room availability and limitations in number of treatment planning systems.
The 3 year residents also have 2 weeks each year for vacation and one month for board study. Addition weeks are spent for their required rotations in radiology, and in other relevant areas, such as neurology, or out rotations at other veterinary or human radiation centers.

Two year residency
We only accept 2 year residents who have a background in a related discipline such as medical oncology, radiology, or a Ph.D in a related field. The program is specifically designed to focus on aspects of in which they are less familiar. Training schedule will be based on area of their incoming expertise. The program is still split into radiation oncology or clinical oncology rotations, so both patient care and radiation

How will the resident receive training in Medical Oncology? What is the time allotted to this training? Please provide description of formal and informal training experiences as well as description of the resident's role while rotating on a medical oncology service:	(Part of this is repeat from last paragraph).For approximately 3-4 months each year, the radiation oncology residents are assigned to the general “Clinical Oncology Service”. This service generally sees 26-30 new cases each week, and about 75 recheck patients. There are no specifically identified slots for radiation, surgical or medical oncology appointments, so some days there may be 10 medical oncology appointments, and some days there may be 10 potential surgery or radiation cases. The clinicians and house staff (residents and fellows) see patients in all 3 disciplines. The radiation oncology residents have primary care responsibility for medical oncology, surgical oncology, and radiation oncology cases, including all paperwork and follow-up correspondence. Over time, they become comfortable treating lymphoma patients and complications of both radiation therapy and chemotherapy. This also provides a great opportunity for the residents to distinguish which patients may better benefit either surgery or radiation therapy. The radiation oncology residents on this service also see the radiation rechecks, including post-radiation complications and follow-up staging. Our program is not compartmentalized into “spend 2 months in medical oncology”. We feel that the 9-12 months they spend on the clinical oncology service, (and the time they spend in oncology rounds during the radiation oncology rotations) more than meets the requirement for 2 months in a medical oncology only arena, and provides ample opportunity to learn staging and manage radiation patients and complications. Time spent on the radiation oncology portion provides structured technical training and to gain experience. From a practical standpoint, a resident in an exam room can’t leave and set-up a patient in CT, or run to radiation therapy and do a clinical set-up. So it allows the resident to concentrate on their patient management or their radiation technical skills. It better utilizes their time, exam room availability and limitations in number of treatment planning systems. The 3 year residents also have 2 weeks each year for vacation and one month for board study. Addition weeks are spent for their required rotations in radiology, and in other relevant areas, such as neurology, or out rotations at other veterinary or human radiation centers.
How is resident be trained in diagnostic imaging? What time is allotted for this training? Please provide description of formal and informal training experiences. Please specify if the resident is required to generate imaging reports while on diagnostic imaging rotation:	The relationship between radiation oncology and radiology is very strong because we are members of the Department of Enviromental and Radiation Oncology. (Most of the other clinical faculty, including medical oncology and surgical oncology, are in the Department of Clinical Sciences). As such, the radiation oncology residents take many courses with the radiology residents. Classes are taught by the radiologists, radiation oncologist, radiation physicists, and radiation biologist. So there is tremendous departmental interaction. The radiology group is quite robust, with 4 small animal radiologist and 2 large animal radiologists. One of these faculty members is always present for real-time case discussion in radiology, advanced imaging, and ultrasound. Additionally, there is always a resident present in these disciplines. This allows constructive case discussion between all of the involved oncologists, radiologists, and associated residents. This real-time forum represents a strong informal training experience. The radiation oncology residents and oncologist have tremendous access to the radiologist for specific information about the identification of tumors and normal tissue structure. In addition to contact while on "radiation oncology" or "clinical oncology", the residents spend a month month (split over their program) on the radiology service. The residents take 2 graduate level courses in radiology. During this time, the are required to generate imaging reports.

Will the resident be provided with training in anesthesia? If yes, please include a description of the training:	Colorado State University has a robust anesthesia service, with 5 faculty members. Residents generally spend at least a week on the anesthesia service to become familiar with the philosophy of the anesthesia service. Since our radiation oncology service predates the development of the anesthesia service, we are the on service in the hospital to provide anesthesia to a high volume of patients. We do this with the support of the anesthesia service. The Radiation Oncology Service has 4 highly trained anesthesia technicians, 2 of whom worked for years with our anesthesia service. As such, we have a tremendous interaction with the service. The anesthesia service generally provides anesthesia for the initial CT scan. If there are problems, or any questions about other cases, we consult with the anesthesia service. The radiation oncology anesthetists provide high level anesthesia including the use of neuroparalytic agents for patients who have tumors that may move during treatment due to respiratory motion. Our residents are required to spend time with our in-house anesthesia group. They learn how to break apart and put back together anesthesia machines and both volume and pressure respirators. They learn how to operate a neurostimulator to evaluate neuroparalytic agents. In addition to hands on training, there is a anesthesia course that is available every 3 years. It also includes pain management. The residents are encouraged to take this course, but it conflicts with some of the other required courses that are more important for first year and second year residents, so all residents cannot fit this into their schedule.
How is resident trained in radiation biology? Please provide description of formal and informal training experiences:	Our department, ERHS, provides a graduate course in radiation biology (ERHS 550). This is a challenging 5 credit course that covers radiation repair, radiation oncology, and radiation carcinogenesis. Additionally, both faculty radiation oncologists have Ph.Ds in radiation biology, so during journal articles and on clinical cases, radiation biology is commonly discussed. We encourage the residents to review the textbooks by Eric Hall and by Joiner and van der Kogel.
How is resident be trained in cancer biology? Please provide a description of formal and informal training experiences:	As part of MS training, our department has 2 important courses in cancer biology. ERHS 510, is a 3 credit cancer biology course. Additionally, ERHS has a 2 credit course in cancer genetics (ERHS 611). Cancer biology is routinely discussed in Oncology rounds, where Doug Thamm, Susan Lana, and Barbara Biller are well trained in the discipline. We also encourage the residents to have individual resident reviews of the Cancer Biology Textbook by Tannock and Hill.
How is resident trained in radiation oncology physics? Please include a description of the medical physics support available at your institution and any role institutional medical physics support may provide in training of the resident:	We have a full time medical radiation physicist, Del Leary, in support of our program. He teaches 2 didactic courses, Radiation Therapy Physics (ERHS 714) and the Physics of Diagnostic Imaging. He supervises the residents in the instruction of point calculations. He can troubleshoot issues with the treatment planning system, the record and verify system, the Trilogy, and the QA program. He attends physics rounds every week and is available to discuss any plan outside the normal, such as compensation for hardware and imaging artifacts, etc.

Please list any formal courses and their instructors included in the residency training curriculum. Please attach syllabi and instructor credentials for each listed course. NOTE: Please ensure syllabi are up-to-date within the last year:	NOTE: Some courses are taught biannually, so syllabi may not be from last year. ERHS 550, 5 credit,Radiation Biology. This course is coordinated by Claudia Wiese, an assistant professor of radiation biology. Teachers include Drs. Lucas Argueso, Susan Bailey, Takamitsu Kato, Susan LaRue, Howard Liber, Ralf Sudowe and Michael Weil. All are members of ERHS, and are highly regarded in their fields. Topics covered are in the syllabus. ERHS 610, This 2 credit course is taught by Dr. Michael Weil, who is a strongly funded research in the field of space radiation effects. His course has one of the highest ratings in the department. ERHS 510. This 3 credit course is coordinated by Dr. Howard Liber. It is team taught and includes instructors from ERHS, clinical sciences and Microbiology, Immunology, and Pathology. ERHS 712. This 3 credit course on the physics of imaging is coordinated and primarily taught by our medical physicist, Dr. Del Leary. It also includes lectures from the radiologists and other guest lectures. ERHS 714 is a 3 credit class on radiation therapy physics that is coordinated and taught by Dr. Del Leary. It includes basic radiation interactions, radioactivity, and simple and advanced concepts in treatment planning. ERHS 721 is a 2 credit overview class in Radiation Oncology, coordinated and primarily taught by Dr. LaRue, that includes basic physics, basic radiation biology, and radiation oncology. This class is taken by medical and radiation oncology residents as well as Radiation and Cancer biology Ph.D students. A large number of elective course are also offered. These include Post Graduate Medicine, a review of all clinical disciplines, Cardiac and Respiratory Physiology, Statistics, Radiographic Imaging, Advanced imaging, etc. Our catalog is available upon request.
Upload syllabi here:	ERHS 510 SYLLABUS - 2018.docx 2017 Outline cancer genetics.pdf ERHS 550 Spring 2017 syllabus (2).pdf ERHS 712 Syllabus Fall 2017.pdf ERHS 714 Syllabus Fall 2016.pdf ERHS 721 Syllabus Fall 2017 REVISED (1).pdf
Upload instructor credentials here:	Credentials of Instructors Providing Formal Course Work 2015.pdf
Will the resident participate in clinical rounds on a daily basis while on clinical rotations?	yes
Is a supervising Radiation Oncology Diplomate available for the majority of rounds?	yes
Are formal conferences, such as clinicopathologic conferences, journal clubs, or seminars held on a weekly basis?	yes

Please provide a description of the conferences, etc., that are provided and the typical schedule. Please specify which conferences are mandatory vs. optional:	Physics rounds are held weekly.* Journal club for radiation oncology is held weekly.* The residents may participate in other relevant journal clubs if desired. Clinical trials rounds are held twice monthly Non-protocol rounds are held yearly for the clinical oncology service* Oncology Grand rounds are held each semester (3 times/year)* Large service communication meeting (monthly)* Radiation Biology student seminar series (weekly for one semester each year)* A wide number of seminar speakers are brought in by various groups in the college and department. Residents can attend based on schedule. * Mandatory
Is the resident required to give one or more formal presentations at a conference or in an educational setting on a yearly basis?	yes
If yes, please describe these conferences or educational settings:	Residents are required to present at the Radiation Biology Seminar Course once yearly. Residents are expected to present or give a poster at every outside meeting they attend.
How many major veterinary medical or medical meetings is each resident able to or expected to attend during his/her training program?	Two
Please list the meetings attended:	ACVR or VCS Radiation research or ASTRO Local meetings such as the University of Colorado SRT course
Does the training program require a research project?	Yes
Please indicate the number of research projects required:	2 although the size and scope of projects for 2 year residents is more limited.
Are one or more publications required as part of the training program?	No
Comments:	Manuscripts are required by our graduate department, but not publications. As residency advisors we strongly encourage it, and have had a good track record for resident publications.
Do you have a megavoltage teletherapy machine available?	Yes
Is the megavoltage teletherapy machine on-site?	Yes
Please specify the manufacturer and model:	Varian Trilogy

Do you have a multileaf collimator available?	Yes
Is the multileaf collimator on-site?	Yes
Please specify number of leaves and width of leaves:	120 leaves, 0.5 cm
Do you have an on-board portal or CT imaging available?	Yes
Is the on-board portal or CT imaging on-site?	Yes
Please specify type:	Varian
Do you have a 3D - computer based treatment planning system available?	Yes
Is the 3D - computer based treatment planning system on-site?	Yes
Please specify manufacturer and model:	Eclipse
Do you have a 2D or 2 1/2D computer based treatment planning system available?	No
Is the 2D or 2 1/2D computer based treatment planning system on-site?	No
Do you have intensity modulated radiation therapy available?	Yes
Is intensity modulated radiation therapy on-site?	Yes
Do you have stereotactic radiation therapy or radiosurgery available?	Yes
Is stereotactic radiation therapy or radiosurgery on-site?	Yes
Do you have strontium-90 plesiotherapy available?	Yes
Is strontium-90 plesiotherapy on-site?	Yes

Do you have LDR brachytherapy treatment and planning available?	No
Is LDR brachytherapy treatment and planning available on-site?	No
Do you have HDR brachytherapy treatment and planning available?	No
Is HDR brachytherapy treatment and planning available on-site?	No
Is diagnostic radiology/imaging services available on-site?	Yes
Do you have conventional radiography available?	Yes
Is conventional radiography available on-site?	Yes
Do you have fluoroscopy available?	Yes
Is fluoroscopy available on-site?	Yes
Is ultrasound available?	Yes
Is ultrasound available on-site?	Yes
Is nuclear medicine available?	Yes
Is nuclear medicine available on-site?	Yes
Do you have computed tomography available?	Yes
Do you have computed tomography available on-site?	Yes
Do you have magnetic resonance imaging available?	Yes
Do you have magnetic resonance imaging available on-site?	Yes

Do you have positron emission tomography available?	Yes
Do you have positron emission tomography available on-site?	Yes
Do you have an intensive care facility (24 hours) available?	Yes
Do you have an intensive care facility (24 hours) available on-site?	Yes
Do you have clinical pathology capabilities (includes CBC, serum chemistries, blood gases, urinalysis, cytology, parasitology, microbiology and endocrinology) available?	Yes
Do you have clinical pathology capabilities (includes CBC, serum chemistries, blood gases, urinalysis, cytology, parasitology, microbiology and endocrinology) available on-site?	Yes
Do you have a veterinary library with literature searching capabilities available?	Yes
Do you have a veterinary library with literature searching capabilities available on-site?	Yes
Do you have a medical library with literature searching capabilities available?	Yes
Do you have a medical library with literature searching capabilities available on-site?	Yes
Do you have computerized medical records with searching capabilities available?	Yes

Do you have computerized medical records with searching capabilities available on-site?	Yes
Megavoltage Gamma/X-ray teletherapy:	342
LDR brachytherapy:	0
HDR brachytherapy:	0
Injectable radionuclide therapy:	0
Radioiodine:	0
Other (please specify):	The Radioiodine service is based in diagnostic imaging. Approximately 1 cat per week is treated. We encourage residents to observe, but this is not an active focus of our training program.
Stronium plesiotherapy:	12
Describe procedures for resident record recording of radiation treatment details of all patients.	The resident who performs any plan using eclipse or hand calculations is recorded on our aria system. All details of the plans are available and searchable. In addition, a log recording each case, including the resident who planned the case, is recorded, along with tumor and treatment type, and follow-up information.
What procedures are in place to facilitate collection of follow up information of patients treated? What is a standard recheck schedule for patients? In the absence of routine patient rechecks at the facility, is there a system in place to obtain follow-up?	Many of our patients are not located in the region. Those that choose to come back to CSU are evaluated based on metastatic potential (q 3 months) or local recurrence potential (q 6 months). A follow up phone/email system pings clients are regular intervals for follow-up information. Information obtained by other sources (calls to medical oncology) is entered into our medical records system. This source is checked before any of the radiation specific calls/emails are sent.
By what mechanisms and how often will trainees be evaluated? Please comment on radiation therapy specific evaluation as well as general clinical evaluation.	Trainees are evaluated twice yearly. Input is sought not only from the radiation oncology/physics faculty, but from the faculty on clinics who supervise cases. The template is attached. Comments from faculty are collated and are read to the student without knowledge of the evaluator.
Please upload form used in evaluations.	Radiation Oncology Resident Evaluation Form - Resident copy.pdf

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 at all possible, please provide an address, and any information you have on the status if each individual with respect to the board certification process.	Lynn Griffin 2013 Faculty, CSU Environmental and radiation oncology lynn.griffin@colostate.edu passed boards Michael Nolan 2013 Faculty, North Carolina College of Veterinary Medicine mwnolan@ncsu.edu passed boards Hiroto Yoshikawa 2015 Faculty, North Carolina College of Veternary Medicine marothewhitecat@gmail.com passed boards Katie Swift 2016, fellow CSU, 2017, Currently in private practice kasey2wd@yahoo.com passed boards Kelsey Pohlmann, 2016 Currently in private practice klericksen@gmail.com passed boards Beatrix Jenei, 2017 Currently in private practice Beatrix.jenei@colostate.edu failed first effort, retaking in 2018
Please list any additional information of interest in support of this residency application.	We have a unique program based on our multidisciplinary program. It does not necessarily fit into the boxes of the RO residency standards committee. But I believe our commitment to working with medical and surgical oncology, our masters program, which provides didactic training in most major areas, and our state-of-the-art as well as old school technology provides an outstanding training program.