

The Rotating Anode

FALL 2021



X-ray of a teddy bear. From RadsWiki, under CC BY-SA 3.0 <<https://creativecommons.org/licenses/by-sa/3.0/>>, via Wikimedia Commons.

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Vacant

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BSJ, BS, RT(R)(M)(CT)

Interested in contributing to
the *Anode*?
Contact: Jen Smith
Email:
jen.smith.rtr@gmail.com
(Please put *Anode* in the subject
line)

Official Publication of the
Kansas Society of Radiologic
Technologists
Denise Orth, Executive Secretary
1702 Mermis Ct.
Hays, KS 67601

EXECUTIVE COMMITTEE MEETING MINUTES

10 a.m. June 26

Salina Public Library and via Zoom

Members present: Harmony Ibarra, immediate past president; Katilyn Slaton, president; and Denise Orth, executive secretary.

Call to order: Harmony called the meeting to order at 10:11 a.m.

Quorum: Denise established a quorum.

Approval of minutes: Katilyn moved to approve minutes, Harmony seconded. Motion passed.

Financial report: Denise presented the year-end financial report through May 31. The report showed income of \$18,414.21 and expenses of \$18,502.94. The net worth report showed a checking account balance of \$10,108.43 and certificates of deposit worth \$44,809.02 for a total

net worth of \$54,917.45. 1861 Consulting sent an invoice for December 2020 monthly monitoring fee of \$600 and expenses of \$365.25. These invoices were paid but upon review we didn't have a contract with 1861 Consulting for December 2020. They have been contacted and we are awaiting on a reply. Harmony moved to approve the financial report as given. Katilyn seconded the motion. Motion approved.

Old business: None.

New business: None.

Announcements: The next meeting will be Sept. 25.

Adjournment: Katilyn moved to adjourn. Harmony seconded the motion. Meeting adjourned at 10:25 a.m.

BOARD OF DIRECTORS MEETING MINUTES

10:30 a.m. June 26

Salina Public Library and via Zoom

Voting members present: Katilyn Slaton, president; Harmony Ibarra, immediate past president; Jason Elliott, secretary-treasurer; Kyle Ibarra, central area representative; Tara Rohn, professional development chair; Becky Dodge, education co-chair; Toni Caldwell, legislative chair; Lisa Eddy, director at large; Denise Orth, ASRT senior delegate/executive secretary; Kirsten Oswald, student representative; Kelly Denton, western area representative (virtually); Gale Brown, president-elect (virtually).

Non-voting members present: Jen Smith, editor of *The Rotating Anode*; Shanna Bennett.

Call to order: Katilyn called the meeting to order at 10:46 a.m.

Quorum: Jason established a quorum.

Consent agenda: Toni moved to accept the consent agenda, Harmony seconded, motion passed.

Approval of minutes: Toni moved to accept the minutes from the March board of directors meeting, Harmony seconded, motion passed.

Reports:

Kansas Rad Council: Kyle reported that students do not have to

turn in ARRT information for initial licensure. Processing and receipt of licensure is taking 4 to 6 weeks.

Financial report: Denise placed the financial report on the Google Drive for board members to view. Denise reported that \$2,000 was received from the ASRT Affiliate Development Program, and this is the first year that Affiliate Financial Assistance for \$5,000 was received. Convention attendance was lower because of the virtual format and many members prefer a face-to-face format. There was an erroneous invoice from 1861 Consulting in December, and the board is seeking reimbursement for the mispayment of \$965.25. Rates for certificates of deposit have decreased to 0.8% on the two CDs held. Total net worth as of May 31 is \$54,917.45. Toni move to accept the financial report as stated, Lisa seconded, motion passed.

Old business

Affiliate Development Program: Last year before convention, a membership flyer drive was conducted and sent to the membership by email. Three new members were gained through the drive. The board decided to repeat the drive in the fall. This would be a good time to send

out an email blast with an updated flyer with events and convention information. ASRT suggested that members of the board do the Leadership Academy modules. For members interested in completing the modules, they are due at the end of August.

2021 Convention wrap up:

Survey information was posted on the Google Drive for board review. Survey participant comments were discussed. Some comments were made with virtual delivery issues; however, overall the membership was appreciative and satisfied with the CE offerings. Overall comment themes indicated appreciation for virtual delivery; however, there was a strong preference for returning to an in-person format. The board discussed the benefits and challenges of virtual versus in-person and how convention location impacts attendance. It was agreed that central locations result in greater attendance. The board also discussed ways to leverage various CE delivery formats and collaboration with other affiliate societies. Discussions included methods to offer more frequent and convenient CE opportunities, without

Continued on Page 4

diminishing the value of the annual convention.

New business

ASRT House of Delegates:

Denise and Katilyn attended (Katilyn filled in as an alternate for Harmony), and Jen attended as a non-voting participant. Katilyn reported that using Zoom was discussed at the chapter meetings and how it could be used to have more chapter meetings throughout the year. A California bill was discussed, called "Earn and Learn," which if passed would result in students receiving payment during clinical education. Katilyn reported discussion of the challenges it would present to California, as well as the rest of the states. Denise reported discussion in the Education chapter meeting related to conflict of students receiving payment and JRCERT. The board discussed how this may affect the number of students programs can accept, in a time when not enough techs are graduating to meet employer needs. Katilyn reported that the MRI chapter discussed MRI safety and that this is the 20th anniversary of a fatal accident. A 6-year-old was killed when someone walked in with an oxygen tank that was not MRI safe. During the week of July 26, MRI Safety week, Katilyn will be coming up with posts for the KSRT Facebook page to promote MRI safety. Katilyn requested anyone that wants to assist with MRI Safety week activities to contact her. Denise suggested putting something in *The Rotating Anode* if time allows. Delegate reports are due to ASRT by Aug. 19, which will be distributed to the board with more detailed notes. Denise reported that "hot topics" were the California bill and shielding, particularly some inconsistency in the new shielding processes. An example was given of differing information given during the symposium versus chapter meetings. Denise stated she will include multiple bylaw changes in her report.

The ASRT Senior Delegate position is coming open. Katilyn distributed information about the position found in the bylaws.

Student Leadership Development Program:

The program is being changed to a three-year program. Information will be posted on the website and printed in the *Anode*. The application is open July 1-Sept. 30. (*Editor's note: This deadline has been extended to Nov. 30.*) There are not a lot of details about the program available to date, especially how a three-year commitment would relate to educational programs shorter than two years. Katilyn is going to seek more information on the program.

CEUs: Becky supported the mentioned collaboration. She stated there was discussion of five states sharing limited CEU responsibilities throughout the year, which would not interfere with respective conferences. Activities could be offered free to society members.

Rad Tech Week: Katilyn discussed past Rad Tech Week activities that included a free membership. Katilyn suggested repeating an activity with a free membership and/or a CE activity.

2022 Convention: Harmony signed a contract with the Double-Tree by Hilton in Lawrence. The convention will be March 31-April 2. There will be a meet-and-greet event Thursday night, speakers and student events all day Friday (with lunch and dinner), and Saturday will have lunch only. Harmony discussed future venues with 2023 in Hays and 2024 in Wichita.

Member Planet: The Missouri affiliate's webmaster previously had shared advice on how that society handles its website. It was determined it was not financially feasible for the KSRT to hire website management, so it will be managed by the board. Denise distributed a comparison of historical PayPal use versus Member Planet. Currently members must use PayPal. Although Member Planet does have additional

benefits, Denise has a significant stock of supplies and proposes putting Member Planet on hold and exploring what more can be done with the current system.

Practice Standards changes:

Toni distributed the current practice standards and recommended changes to the practice standards. Toni explained a previous desire to eliminate the section related to "Persons Exempt from Licensure" as current practice essentially allows a physician to sign off on anyone to take x-rays. Toni expressed there is always opposition to changes; therefore, the changes propose adding a limited x-ray machine operator category. This largely has been done to accommodate nurses operating C-arms in surgery. Having a limited operator category might offset some of the opposition. Another goal is to get radiologist assistants added to the current scope of practice. This is preferred because starting a completely new profession is costly, lengthy, and complicated. Another proposed change strengthens the radiology scope of practice. Other challenges include that the timing of the CEU requirements for the state and ARRT do not align, and the licensure gap between the time of graduation and full licensure. Graduates can apply for a temporary license, but it expires when the licensure application is submitted and is no longer valid while the application is reviewed. Toni solicited feedback on the current practice standards and the proposed changes.

Announcements:

Toni Caldwell will address the 1861 Consulting invoice discrepancy with Derek Hine.

The next board meeting will be Sept. 25, time and location to be determined.

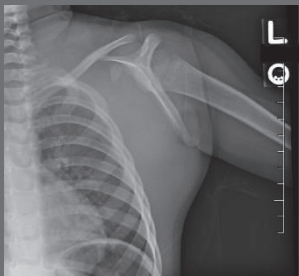
Adjournment: Toni moved to adjourn the meeting, Becky seconded. The meeting was adjourned at 1:26 p.m.

Image Categories:

Lateral Knee
Scapular Y-View Shoulder
Swimmer T-Spine
Contrast: RAO Esophagus
*Most Interesting Case

- Submit films in a JPEG format
- Remove or cover initials from films
- *Typed synopsis must accompany most interesting case study

Previous Image Category Winners



KSRT Competitions

**Entry Submission Due Date:
February 15th, 2022**

Rules are available on ksrad.org

**Contact Professional Development Chair
Tara Rohn with questions or electronic
submissions at tara@ksrad.org**

Research Essay

Include a title page, an abstract and references in APA or MLA format. Submit 4 copies of the manuscript.

Electronic Scientific Exhibit

Choose a topic related to radiology. Exhibit may include pictures and graphs. Exhibit must be submitted as a PowerPoint standard 4:3 ratio slide in landscape orientation.

85th Annual Convention

COMING TOGETHER!

March 31-April 2, 2022

DoubleTree by Hilton

200 McDonald Drive, Lawrence, KS 66044

Hotel Accommodations

DoubleTree by Hilton - 200 McDonald Drive, Lawrence, KS 66044

To reserve your room, call 785.841.7077 and mention the KSRT Group

OR

Reserve online using this link only: <https://tinyurl.com/2xrmaada>

Room rate is \$109 + tax (includes breakfast!) - available through March 2, 2022.

Meeting Registration

Online registration will be available at www.ksrad.org

For greater savings, non-members are encouraged to join the KSRT for \$50 and pay the member rates (membership application available at www.ksrad.org). "KSRT Active or Associate A/B" rate available to out-of-state attendees who send a copy of their state society's membership card with registration.

| Early Bird discount for registrations postmarked or submitted online by March 21 . | Friday, April 1 ONLY | | Saturday, April 2 ONLY | | Friday & Saturday | |
|---|----------------------|-------------|------------------------|-------------|-------------------|-------------|
| | Early Bird | Regular Fee | Early Bird | Regular Fee | Early Bird | Regular Fee |
| KSRT Senior or Student Members | \$40 | \$55 | \$40 | \$55 | \$55 | \$85 |
| KSRT Active or Associate A/B Members | \$80 | \$100 | \$80 | \$100 | \$160 | \$180 |
| Non-KSRT Members | \$160 | \$200 | \$160 | \$200 | \$320 | \$360 |

Name: _____ Phone: _____

Email: _____

Mailing Address: _____

Street Address

City

State

Zip Code

Silent Auction raises funds for KSRT Scholarships.

___ Yes, I want to provide an auction item! If marked, please bring the item to convention or make arrangements with Toni Caldwell, mmcaldwell@aol.com

KSRT's Service Project will be collecting for the Lawrence Humane Society. Greatest needs include soft meaty dog treats (like Pup-Peroni), creamy peanut butter (no xylitol), all-beef hot dogs, cat litter, adult cat & dog food, kongs (all sizes), martingale collars (med.), gallon Ziploc bags, & dawn dish soap.

Indicate days/events you plan to attend:

☐ Thursday (3.31.22) social and free CE (no cost with Friday and/or Saturday registration)

☐ Friday (4.1.22)

☐ Friday (4.1.22) evening reception (cost of bringing a guest is \$20/guest)

☐ Saturday (4.2.22)

☐ Friday and Saturday (4.1.22 & 4.2.22)

Indicate your membership status:

☐ Senior Member

☐ Active, Associate A, or Associate B Member

☐ Student Member

☐ Non-Member (join KSRT and save or show proof of out-of-state membership)

Total Fee Enclosed: \$ _____ (see fee chart above to determine fee; note early bird date!)

Mail to: Denise Orth, KSRT Executive Secretary, 1702 Mermis Court, Hays, KS 67601

Make checks/money orders payable to KSRT. All cancellations and the refund of registration fees are subject to a vote by the KSRT Board of Directors. The Executive Secretary can be reached at ksrt.exsec@gmail.com.

Schedule

Thursday, March 31

| | |
|---------------|---|
| 6:30pm-7:00pm | Registration |
| 7:00pm-8:00pm | Social – Meet & Greet |
| 8:00pm-9:00pm | CE Presentation (free to all who register for 1 or more days of convention) |

Friday, April 1

| | |
|-----------------|---|
| 7:15am-7:45am | Registration |
| 7:45am-8:00am | Welcome |
| 8:00am-9:00am | Presentation |
| 9:00am-10:00am | Presentation for non-students Written Raybowl for students |
| 10:00am-10:30am | Vendor Break |
| 10:30am-11:15am | Business Meeting #1 |
| 11:15am-12:15pm | Presentation |
| 12:15am-1:00pm | Lunch |
| 1:00pm-1:15pm | Vendor Break |
| 1:15pm-2:15pm | Presentation |
| 2:15pm-3:15pm | Presentation |
| 3:15pm-4:15pm | Presentation |
| 4:15pm-5:30pm | Raybowl |
| 5:30-End | Business Meeting #2 – Awards*, Reception, and Silent Auction *Must be present to collect monetary awards |

Saturday, April 2

| | |
|-----------------|--------------|
| 7:15am-7:45am | Registration |
| 8:00am-9:00am | Presentation |
| 9:00am-10:00am | Presentation |
| 10:00am-10:15am | Break |
| 10:15am-11:15am | Presentation |
| 11:15am-12:15pm | Presentation |
| 12:15am-1:00pm | Lunch |
| 1:00pm-2:00pm | Presentation |
| 2:00pm-3:00pm | Presentation |

Room temperature can vary, and we will not have control over it! Please wear layers to ensure your personal comfort level.

*The schedule, speakers, and topics are subject to change. Category A or A+ approval pending for 13 CE's. Attendees must be present for the entire presentation to receive continuing education credit.

*Doors will be closed at the beginning of the presentation and remain closed. Please be respectful of the speaker and do not enter the room while a presentation is in session.

*For accommodation requests or general questions, please contact Becky Dodge at becky.dodge@washburn.edu

KSRT RADIOGRAPH COMPETITION

The radiograph competition awards are open to members of the KSRT, students or technologists. The following rules govern the competition.

Essays, Images and Scientific Exhibit entry forms are due by Feb. 15, 2022.

Categories for the 2022 Annual Convention

- General: Lateral knee, scapular Y-view shoulder, swimmers thoracic spine
- Contrast: RAO esophagus

ELIGIBILITY

- Any student radiologic technologist or radiologic technologist who is a member in good standing of the KSRT is eligible to compete. A copy of the KSRT membership card must accompany the application form.

*** Members of the Radiograph Competition Committee, the chair or members of the Professional Development Committee and the Judge Assistants are not eligible to compete.**

IMAGE ELIGIBILITY

1. Only one radiograph per person per category is allowed.
2. No tomographic radiographs will be accepted.
3. Images must be in electronic form such as USB drive, CD, or e-mailed.
4. Any identifying name or marker **MUST** be masked. This includes patient name, technologist name and/or initials, and the name of the institution.
5. Right or Left markers must be clearly visible.
6. All images must be of actual patients and ordered by a physician.
7. All radiographs must be taken following the close of the prior annual meeting and **before** the deadline.
8. All films must be submitted to the Professional Development Chairman and postmarked on or before the deadline date. Any radiograph postmarked after this date will be disqualified from the competition.
9. A copy of the application form provided on the KSRT website, www.ksrad.org, must accompany each entry.
10. A copy of the KSRT membership card must accompany the application form.

HOW TO COVER INITIALS

Films must have student or technologist initials on markers removed for judging purposes. Save the radiographs into a JPEG format. Once it is in a JPEG format, open the image in Paint. Proceed to black out over the initials using the paintbrush.

MOST INTERESTING CASE

Any imaging modality can be used to:

1. Demonstrate a rare disease or fracture
2. Demonstrate a common disease or fracture
3. Normal variants

4. Any other unusual findings

Each applicant must submit a **typed synopsis** detailing the following:

- Patient history
- Diagnostic finding
- Related imaging procedures
- Justification as to why the case should be awarded the title of Most Interesting Case

JUDGING OF CONVENTIONAL RADIOGRAPHS

- Three judges will be selected by the Professional Development Committee. It is suggested that two of the judges be radiologic technologists and the third a radiologist.
- Judges will award each radiograph points according to the given scales and without knowledge of scores given by the other judges. All scores will be given to the Radiograph Competition Committee. The decision of the judges will be final. There will be one winner per category – no ties.
- There will be a total of 100 points possible scored by each judge for each radiograph in the following categories:
 - Technical excellence (30 points possible) – detail, density, contrast, radiation protection, collimation, clarity of anatomical part to be demonstrated compared to the overlying anatomy.
 - Positioning (60 points possible) – marking, alignment of the patient, centering of the anatomical part, proper demonstration of essential anatomy, evidence that proper positioning was achieved.
 - Imaging processing excellence (10 points possible) – special attention to artifacts, condition of processing solutions, anything detrimental to the finished radiograph.

JUDGING OF MOST INTERESTING CASE

- Three judges will rank the image(s) from 1-5. The image awarded the most points will be the winner. There will be no ties.

DISPLAY OF RADIOGRAPHS

- All qualified radiographs entered into the competition will be displayed to the membership during the course of the annual meeting. If this is not feasible, only the top three films in each division and category, and the recipient of the KSRT Outstanding Radiograph Award, will be on display.

AWARDS

- A first-, second- and third-place prize will be awarded.
- An outstanding radiograph award is given to the highest scoring radiograph in the competition.
- Awards will be presented at the Presidential Banquet during the annual meeting on April 1.
- Winners must be in attendance at convention and awards ceremony to accept the award.

RADIOGRAPH COMPETITION APPLICATION

A copy of the KSRT membership card MUST accompany this application.

Film Category _____

Name _____

Address _____

City _____ State _____ Zip _____

I am an _____ RT _____ Student (please check & provide employment or school information below)

School _____

Place of Employment _____

Home Phone _____ Work Phone _____

**A completed application, a copy of the KSRT membership card & films
MUST be submitted by February 15th, 2022. Please send to:**

**Tara Rohn
408 E 19th Street
Hays, KS 67601
tkmcguire2@gmail.com**

KSRT ELECTRONIC SCIENTIFIC EXHIBIT

The scientific exhibit competition awards are open to members of the KSRT, student or radiologic technologist. The following rules govern the competition.

ELIGIBILITY

- Any student radiologic technologist or radiologic technologist who is a member in good standing of the KSRT is eligible to compete. A copy of the KSRT membership card must accompany the application form.

SCIENTIFIC EXHIBIT ELIGIBILITY

- Individuals may only submit one exhibit at the annual conference.
- Radiologic technologists and student radiologic technologist may not submit an exhibit entry together in either of the categories.
- The exhibit must be the original work of the individual and cannot be commercially prepared.
- A copy of the application form provided on the KSRT website, www.ksrad.org, must accompany each entry.
- Individual's name CANNOT be visible on the exhibit.

SCIENTIFIC EXHIBIT CONTENTS AND MECHANICS

1. Subject matter
 - The subject matter on the exhibit is chosen by the individual.
 - The exhibit should speak for itself and not need explanation.
 - The subject should be pertinent to the radiologic sciences and may be supplemented by charts, descriptive material, photographs, etc., deemed necessary as long as all the components stay within the allotted space permitted.
 - Exhibits should demonstrate originality of subject matter, general interest and value from both practical and educational viewpoints, and technical excellence.
 - Exhibits should not show images or markings that could identify the patient, institution, or department.
 - Exhibits should not contain excessive written descriptions.
2. Requirements of exhibit
 - An exhibit will be submitted as a PowerPoint slide and will be displayed electronically.
 - An exhibit is required to utilize PowerPoint standard 4:3 ratio, with a landscape orientation.

General

- The purpose of the exhibit is to present the subject matter in a readable, viewer-friendly format.
- People of varying degrees of experience may be viewing the presentation, so remember to make the points as complete and brief as possible.
- Successful exhibits achieve both coverage and clarity.

Format

- Use minimum font size of 18 or 24 point, so the display can be read from a short distance.
- Use a clear, easy-to-read font style.

Content

- The poster display should have a title and content with commentary examples.
- Materials should convey clearly a statement of the problem, project objectives, methodology, significant outcomes, and conclusions.
- Use the AMA 11th Edition or APA 7th Edition style guide for technical presentations.
- Minimize the narrative. Use short, separate paragraphs.
- Numbered or bulleted lists can be a concise, effective way to convey a series of points.
- Material should be presented in a logical sequence.
- The final conclusions should leave the observers focused on a concise statement of the important findings.

Visuals

- An exhibit display is a visual presentation and should include sufficient images.
- Visuals should enhance the display and should include informative captions.
- Consider use of charts, drawing, photographs, and illustrations to add graphic impact.
- Use high-quality images.
- Keep overall exhibit presentation clean and clear.

JUDGING

- The Professional Development Committee will select two or three judges who are radiologic technologists for the scientific exhibit competition. The decisions of the judges will be final and will be based on the following criteria:
 - Professional value – Is the project of interest and practicality to technologists and students?
 - Educational value – Does the project contain information enabling observation to be an education experience?
 - Originality of the subject matter – Does the project illustrate a new idea or present information in a new, innovative style?
 - Technical quality – Is the material presented in a neat, well-organized, and creative manner?

The following points will be awarded for each of the criteria:

Outstanding – 4

Above average – 3

Average – 2

Below average – 1

AWARDS

- A first-, second- and third-place prize will be awarded.
- The top three places will be announced during the annual meeting on April 1.
- Winners must be in attendance at convention to accept the award.
- Exhibits with the top three point values will be awarded first, second and third place respectively. An average of 12 or more points must be achieved to be considered for an award.

SCIENTIFIC ELECTRONIC EXHIBIT COMPETITION APPLICATION

A copy of the KSRT membership card **MUST** accompany this application.

Scientific Exhibit Title _____

Name _____

Address _____

City _____ State _____ Zip _____

I am an _____ RT _____ Student (please check & provide employment or school information below)

School _____

Place of Employment _____

Home Phone _____ Work Phone _____

When completed application, a copy of the KSRT membership card and electronic exhibit **MUST be submitted by February 15th, 2022. Please send to:**

**Tara Rohn
408 E 19th Street
Hays, KS 67601
tkmcguire2@gmail.com**

KSRT ESSAY COMPETITION

KSRT is committed to recognizing excellence in scholarly writing by radiologic technologists and student radiologic technologists. The essay competition is open to members of the KSRT. The following rules govern the competition. **The following essay topics may not be used this year due to being awarded at the previous convention: Radiation and Its Effects from Conception to Adulthood, Thoracic Dual-Energy Subtraction Radiography, and Radiation Discoveries Leading to Changes in Radiation Protection Standards.**

ELIGIBILITY

- Any student radiologic technologist or radiologic technologist who is a member in good standing of the KSRT is eligible to compete. A copy of the KSRT membership card must accompany the application form.
- Entry deadline for the essay competition is **Feb. 15, 2022**.

MANUSCRIPT PREPARATION

Submitted manuscripts must meet the following requirements:

General information

1. The length of the text should not exceed 15 pages including body, bibliography, and appendix if applicable.
2. The original and three copies of the manuscript must be submitted.
3. The manuscript must be bound or enclosed in a folder, protector or cover.

Title page

1. This is a separate page, listing the title of the manuscript, author's name, author's permanent home address and telephone number as well as institution name and telephone number. The title page should be attached to only the original copy.
2. To ensure a blind review, the author's name and any other identifying information must not appear anywhere else in the manuscript.

Abstract

1. Generally not exceeding 75 words, the abstract should summarize significant information in the text.
2. This is best written after the paper is complete.

References

1. References must follow the APA or MLA style format.
2. All non-original artwork, drawings, and photos should be referenced on an individual page.

JUDGING

- Three judges will be selected by the Professional Development Committee. One judge must be a registered radiologic technologist and one judge should be an English professor or teacher.
- Manuscripts will be evaluated with the following criteria:
 - Originality, educational/technical value, & scholarship (65%)
 1. Evidence of original work performed by the author.

2. Evidence of novel, unique or unprecedented approach to topic.
 3. Contributes to higher radiological standards.
 4. Updates, expands or enhances existing knowledge.
 5. Mastery of subject matter.
 6. Research of literature.
- Organization of material and mechanics (35%)
 1. Is material orderly and presented in a logical sequence?
 2. Are drawings or illustrations used to support or promote understanding of the text?
 3. Does the paper follow manuscript guidelines?
 4. Is the evidence of proper grammar, spelling, and punctuation?

AWARDS

- A first-, second- and third-place prize will be awarded.
- Awards will be presented at the Presidential Banquet during the annual meeting on April 1.
- Winners must be in attendance at convention and awards ceremony to accept award.

ESSAY COMPETITION APPLICATION

A copy of the KSRT membership card **MUST** accompany this application.

Essay Title _____

Name _____

Address _____

City _____ State _____ Zip _____

I am an _____ RT _____ Student (please check & provide employment or school information below)

School _____

Place of Employment _____

Home Phone _____ Work Phone _____

A completed application, a copy of the KSRT membership card & 3 manuscripts bound in a folder **MUST be postmarked by February 15th, 2022. Please send to:**

**Tara Rohn
408 E 19th Street
Hays, KS 67601
tkmcguire2@gmail.com**

Members...
Watch your
✉ EMAIL
for access
instructions!



▶ **FREE CEU**
ON-DEMAND

FOR MEMBERS ONLY - a PERK of your state society membership!

Teaching E-Professionalism In A Case-Study Based Approach

Tanya Custer, MS, R.T.(R)(T) & Kim Michael, MA, R.T.(R), RDMS, RVT, FSDMS

1 CE Credit, Available between Sept. 24 – Nov. 20, 2021

- ✓ Create an Account ✓ Complete a Quiz
- ✓ Watch the Recording ✓ Receive a Certificate



Brought to you by ACE - A collaboration among the Radiologic
Technologist Societies of KS | NE | ND | SD | WY

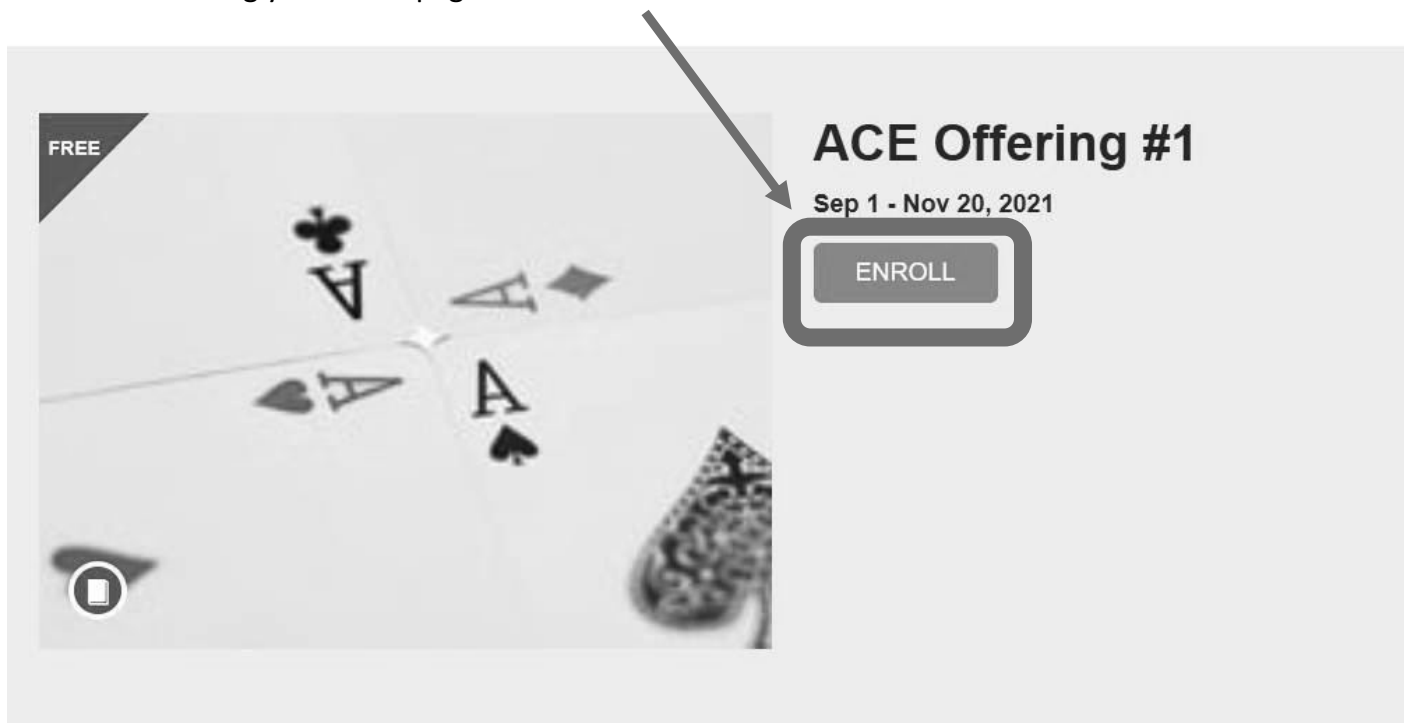
Learn Anywhere
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Up Next... 2 Free
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in November

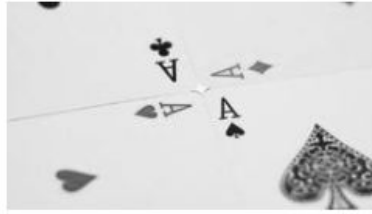
Instructions on how to access the ACE Offerings

Click on the link to enroll in the ACE Offering provided by your local affiliate

The link will bring you to this page – *You will click on the ENROLL button*



Once you click on Enroll, it will ask you to make an account in canvas catalog if you don't already have one. The ACE courses will be run on Canvas Catalog.



ACE Offering #1

Sep 1 - Nov 20, 2021

Sign in to Enroll

Don't have an account? Sign up here!

Full Name

Email

Confirm Email

Preferred Phone Number

☒ I agree to the Acceptable Use Policy and acknowledge the Privacy Policy.

☒ I'm not a robot



Register New Account

Once you register your account you will get an email sent that asks you to confirm your registration. This is when you will make a password for your account.

Once you complete your registration, you will be asked to log in to Canvas. You can log in by accessing this link <https://clarksoncollegepd.instructure.com/login/canvas>

https://clarksoncollegepd.instructure.com/login/canvas

Education P... Projects Server User... Rad Physics Review... Radiology Manage... Radiology Program... School of Radiogra... Sign In SiriusXM Str

You must be logged in to access this page

CANVAS

Email

Password

☐ Stay signed in

[Forgot Password?](#)

[Log In](#)

[Help](#) [Privacy Policy](#) [Acceptable Use Policy](#) [Facebook](#) [Twitter](#)

INSTRUCTURE

Once in Canvas you can access the ACE offering #1

Notifications. Tell us how and when you would like to be notified of events in Canvas.
[Notification Preferences](#)

Dashboard

Affiliate Continuing Education (ACE) Offering #1

To Do

- Teaching E-Professiona... x
- Affiliate Continuing Education (ACE) Offering #1
- 8 points | Nov 15 at 11:59pm

[Show All](#)

Recent Feedback

Nothing for now

[View Grades](#)

The Module will open and you will be asked to answer two questions to identify your affiliate society and enter your ASRT number if you have one. Once you complete this, there will be a green check



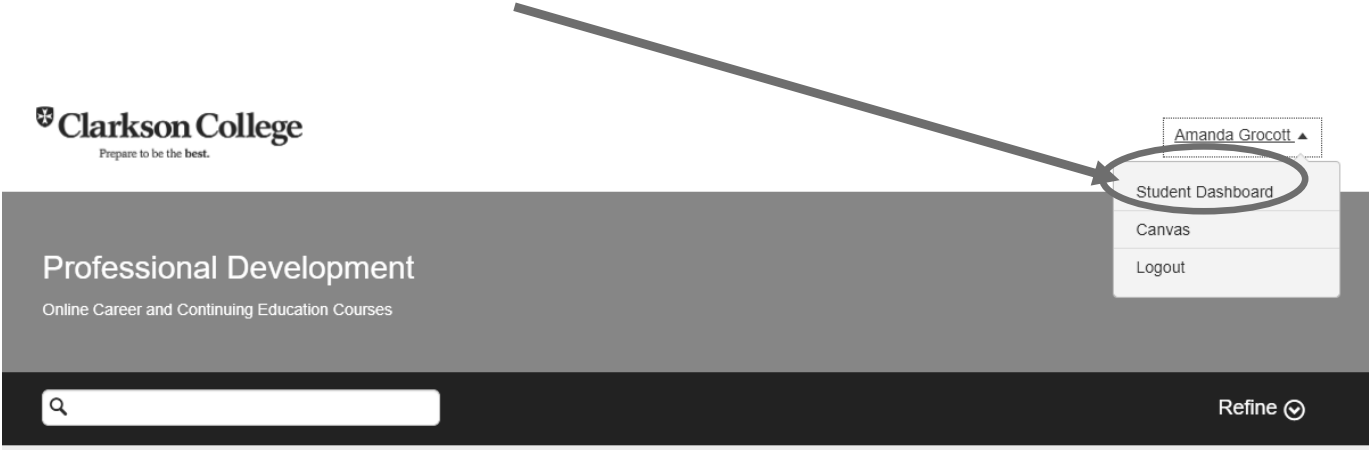
This screenshot shows two sections of a course completion interface. The first section, 'Welcome Module', contains 'Home Page-Welcome!' (marked 'Viewed') and 'Affiliate Society Identification'. The second section, 'CEU Presentation Module', contains 'Teaching E-Professionalism Presentation' and 'Teaching E-Professionalism Quiz' (dated Nov 15, 8 pts, scored at least 6.0). Annotations include a circle around the 'Complete All Items' button and a green checkmark in the first section, and a circle around the 'Complete All Items' button and a green checkmark in the second section. Arrows point from the text above to the 'Affiliate Society Identification' and 'Teaching E-Professionalism Presentation' items.

Next you can view the presentation video and take the quiz. Again, once completed, there will be a green check

After you successfully complete the quiz, the certificate will be emailed to you

If you want to access your completed learnings, or access the learning again, you need to log in here <https://clarksoncollegepd.instructure.com/login/canvas>

Once you log in, select student dashboard



This screenshot shows the Clarkson College Professional Development dashboard. The header includes the Clarkson College logo and the tagline 'Prepare to be the best.'. The main content area is titled 'Professional Development' and 'Online Career and Continuing Education Courses'. A search bar is located at the bottom left, and a 'Refine' button is at the bottom right. An annotation points to the 'Student Dashboard' link in the user menu, which is circled. The user menu also shows the user's name 'Amanda Grocott' and options for 'Canvas' and 'Logout'.

The student dashboard will look like this – you can view and download your certificate under the “completed” tab as well as access the course again via the review course button

The screenshot displays the Clarkson College student dashboard. At the top left is the Clarkson College logo with the tagline "Prepare to be the best." At the top right, the user's name "Amanda Grocott" is shown with a dropdown arrow. Below the header, there are three tabs: "In Progress", "Completed" (which is circled in red), and "Not Completed". To the right of these tabs is a "PDF Transcript" button. Below the tabs, the "Courses" section is visible. It features a course card for "ACE Offering #1". The card includes a small image of playing cards, a calendar icon indicating the course ran from "Started Sep 1, 2021 - Completed September 24, 2021", and the text "CEU course for ACE members". Below this, it says "Teaching E-Professionalism" followed by "View" and "Download" links. At the bottom of the card is the Clarkson College logo and a "Review Course" button, which is also circled in red. A long black arrow points from the text above to the "Review Course" button.

Please Contact Becky Dodge if you have any questions.

becky.dodge@washburn.edu or 785-670-1440



Dear Affiliate Leaders.

As you know, ASRT is not accepting applications for a 2021 cohort for the ASRT Student Leadership Development Program.

ASRT has taken this opportunity to re-evaluate and make changes to the program. These changes will impact areas such as the ASRT and affiliate application process, the structure and student activities for each of the three years of the program and the level of affiliate involvement. We believe each of these changes will help streamline the program and add value for the participants, affiliates and ASRT.

The purpose of this message is to notify your affiliate of these changes and give you time to prepare, ask questions and make any needed changes to your process prior to the opening of the application period for the 2022 cohort. Please review all the information in this message and the attached documentation.

2022 SLDP Application and Affiliate Involvement Plan

New participants accepted into the 2022 cohort will begin participating Jan. 1, 2022, and conclude their participation Dec. 31, 2024. Participants will attend the 2022 Annual Governance and House of Delegates meeting in Orlando, Florida.

2022 Application and Selection Process

Even if your affiliate selects its participants or has its own application process, every student is required to complete the ASRT application process between July 1 and Nov. 30, 2021, to be eligible for participation.

- If the affiliate selects participants prior to or during the ASRT application process, July 1–Nov. 30, the affiliate must provide ASRT with the names of selected students and ensure the selected students complete the ASRT application process by the Nov. 30 deadline.
- If the affiliate selects participants after students complete the ASRT application process — whether by reviewing ASRT application information or by reviewing the affiliate's own application information — the affiliate must ensure the students complete the ASRT

application process by the Nov. 30 deadline. The names and application information submitted to ASRT will be sent to the affiliate by Dec. 10. Affiliates must provide ASRT the names of the students they select by Dec. 20.

- If ASRT selects the participants, those students must complete the ASRT application process by Nov. 30. The students' names and application information will be provided to the SLDP Alumni Committee by Dec. 10. The committee will make its selections for affiliates' student participants by Dec. 20. ASRT staff will notify affiliates of the selections before Dec. 31, 2021.

ASRT Application Process (July 1–Nov. 30)

1. Submit ASRT application.
2. Submit essay, 500 – 700 words. (Why would you be a good participant for this program?)
3. Submit signed letter of recommendation from program director.
4. Submit copy of current affiliate membership card.

Affiliate Involvement

1. Every year: Affiliates will be asked to submit a midterm and final report on how the affiliate has kept their SLDP participants active at the affiliate level.
2. Year one: ASRT staff will assign questions to students and have them reach out to their affiliate to learn more about their affiliate's structure, governance, delegate process, committees, annual meeting, website and so on. Students will report what they learned.
3. Year two: ASRT staff will give students monthly assignments for ASRT Leadership Academy modules and have them reach out to their respective affiliates to answer questions. Students will report what they learned.
4. Year three: ASRT staff will give students monthly assignments for ASRT Online Advocacy Academy modules and have them reach out to their affiliates to answer questions. Students will report what they learned.

Affiliate Support

Based on recent feedback from affiliate leaders and SLDP participants, the attached Affiliate Guidance Sheet has been developed to provide ideas for your affiliate on ways to keep your SLDP participants involved at the affiliate level throughout and beyond their three years in the program. Please review the document and feel free to use these ideas to improve and implement changes to your affiliate's plan for SLDP involvement.

We look forward to working with your affiliate to relaunch and implement these improvements to the ASRT Student Leadership Development Program. We will provide additional information in early 2021. However, after reviewing this information, please email any questions you have at this time to affiliaterelations@asrt.org.

Sincerely,

Jason J. Bradley, B.A., R.T.(R)
ASRT Director of Governance

RADIATION DISCOVERIES LEADING TO CHANGES IN RADIATION PROTECTION STANDARDS

By Kate Strahm, Washburn

Third-place essay

Abstract

Many advances in radiation protection standards have been made from the high dose limits in the 1920s to the much more educated dose limits set today. The earliest standards were vague and tolerated high doses. As the knowledge grew from experimentation, observation, and radiation-releasing events, new standards were created. Knowledge obtained by the public also caused an uproar that caused standards to be tightened and become more specific.

Introduction

Radiation protection standards are important for workers, patients, and the general public. Radiation is all around us in society, in the hospital environment, and in workplaces. Over the years, there have been numerous discoveries that have influenced standards for radiation protection since the initial discovery of radioactivity. Some of these discoveries were relatively small while others affected entire countries, generations, and large populations. Each discovery or event helped shape radiation protection standards to what they have become today.

Discoveries

Ionizing radiation first was discovered in 1895 by Wilhelm Konrad Roentgen. Following this discovery, Henri Becquerel, who was a mineralogist, had the idea that phosphorescence would be possible. "Phosphorescence is the ability of a crystal to absorb light and re-emit light sometime after the exciting light has been removed" (RSC, n.d.). To test his theory, he wrapped a photographic plate in black paper to protect it from being in direct sunlight, placed a uranium mineral on it, and then exposed it to bright sun-

light. When he developed the plate, there was an image of the uranium on the plate. At first, he took this as confirmation of his theory; however, later in the experiment, the weather changed and there wasn't intense sunlight. He stopped this round of experimentation and instead set the materials in a dark drawer. When these days of no sunlight had passed, Becquerel decided to develop this plate as well, expecting only a shadow of the image. This image actually was as intense as when he had put it in direct sunlight, so he came to the correct conclusion that the resulting image was not from the sunlight but from the uranium itself, and radioactivity was discovered. He later went on to show there were no other phosphorescent minerals that showed a similar effect to uranium (RSC, n.d.).

Becquerel's doctoral student, Marie Curie, went on to not only to give Becquerel's discovery its name of "radioactivity," but also to discover two more radioactive elements, radium and polonium. Another scientist, Rutherford, discovered two different types of radiation, alpha and beta. He then went on to study the effects of x-rays on gases, which led to an understanding of the transport of electricity through gases. This discovery later was used for detecting radioactivity in ionization chambers and Geiger-Muller counters.

First Years and Late Effects Discovery

In these first years after the discovery of radioactivity and identification of radioactive elements, the public was fascinated with this new subject, and many believed radium could be used for fertilizer, arthritis, and even as the cure for cancer (Jones, 2005). Little was known of the harmfulness of radiation or the lasting effects on

the body. This meant there were few standards for radiation protection. The first severe case of x-ray induced effects, which was dermatitis, was recorded only one month after the discovery of radiation. In 1902, the first dose limit was recommended, which was 10 rad per day. However, this recommendation was not based on the effects of the radiation but rather on what the lowest amount of radiation that could be detected easily (Inkret, Meinhold, & Taschner, 1995). Experimentation continued, and findings in 1903 from animal studies revealed that x-rays have the ability to cause cancer and kill living tissue. It also was found that the skin, blood-forming organs, and reproductive organs were the most susceptible to this damage (Inkret, Meinhold, & Taschner, 1995). The lack of knowledge and standards for protection also led to injuries and even death.

One of these injuries included Thomas Edison. Edison was a scientist who had taken a special interest in radiation and had done extensive testing and experimenting with another scientist. Edison himself began to complain of irritated eyes, while his fellow scientist fell gravely ill and later died because of the effects of radiation in 1904. By 1910, there were increasing numbers of injuries reported that seemed to be caused by radiation in people ranging from physicians and radiologists to other radiation-related workers. These injuries included skin ulcers, irritations in the skin and eyes, and ultimately skin cancer (Jones, 2005). These numbers continued to climb, and by 1911, at least 94 cases of x-ray-related injuries were reported. This led to the discovery and conclusion by scientists that exposure to radiation could cause many different medical issues, including sterility, bone dis-

ease, and cancer (Jones, 2005).

During this time, there was not a standardized way to measure exposure or calculate dose, but the increasing knowledge that radiation was harmful caused more curiosity and more experimentation. The first person to recommend a “tolerance dose” for radiation workers was Arthur Mutscheller in September 1924 (Inkret, Meinhold, & Taschner, 1995). One of the problems the radiation protection community encountered was to specify a number or limit that did not show any effects on the skin. In the 1920s, after observation, they came to a conclusion for a dose limit for x-rays specifically: “A whole body ‘tolerance dose’ of radiation [0.2 R per day] and a separate finger dose of 5 R per day limit for individuals that were occupationally exposed to x-rays” (Jones, 2005). This “tolerance dose” meant the dose that a person could be exposed to continuously without harm, and anything below this amount was considered safe with little chance of damage to an average individual (Jones, 2005). These advancements in radiation protection standards were because of the discovery of both early and late effects.

World War II

The detrimental effects of ionizing radiation became abundantly clear after the end of World War II with the atomic bombings of Hiroshima and Nagasaki in August 1945 as thousands of survivors of the attacks began to show effects from the immense amount of radiation. These effects ranged from radiation sickness and cancer to birth defects in the next generations (Baumer, 2015). The radiation released from these attacks are classified as gamma rays, which are higher penetrating wavelengths.

Before the first test of the atomic bomb, the detrimental effects of the bomb were not known. The creators did not know how significant both the explosive and radiation effects were going to be. At the time of the test,

the bomb was attached to a 100-foot tower and set off early in the morning. There was a blinding flash that lit up the sky, along with a mushroom cloud. Civilian homes had damage to windows up to 100 miles from the blast site, and there was a half-mile wide crater in the sand surrounding the blast site. These explosive effects were much larger than they had expected. A cover story was released to explain the blast, saying an ammunition dump exploded (U.S. History, 2020). This larger explosion spread the radiation to a larger area, which affected a greater population. Nobody fully anticipated the catastrophe that would ensue as the two atomic bombs were dropped on Japan.

The aftermath of the atomic bombs dropped on Japan was extensively detrimental. There were an estimated 214,000 deaths by the end of 1945 because of the bombs, 70 percent of the buildings in Hiroshima were burnt, and 6.7 square kilometers of Nagasaki were leveled (ICAN, 2017). This physical destruction along with the medical issues that ensued garnered worldwide attention. Healthcare workers were rendered helpless because of the extent of the damage to the cities, and many victims of the bombings died with little to no care to ease the suffering. All but 3 of the 45 hospitals were rendered non-functional, causing access to available healthcare to decline sharply (ICAN, 2017). Some people did attempt to enter these two cities after the bombings, but many of these also died from the radiation.

Years after the bombings, effects of the huge amount of radiation released were still becoming evident. Leukemia, as well as thyroid, breast, and lung cancer numbers rose to much higher levels than normal. There also were noticeable changes in those who were pregnant at the time of the attacks, including higher rates of miscarriages, infant deaths, and intellectual disabilities in children (ICAN, 2017). The attention that this

destruction gathered shined a new light to the subject of radiation.

Public Knowledge in the 1950s and 1960s

The knowledge the scientific community gathered after the atomic bombings of Hiroshima and Nagasaki was kept largely within the scientific community. In 1954, civilian nuclear applications were authorized and put under control of the Atomic Energy Commission, or AEC, bringing some change to public knowledge. The benefits of nuclear energy were broadcasted widely to society, but the detrimental effects and safety issues were kept within the scientific community and considered an internal matter (Baumer, 2015). During the 1950s, the AEC was responsible for both promotion and regulation, but the work was initially heavily weighted toward promotion. “In 1955, AEC Commissioner Willard Libby stated: ‘Our great hazard is that this great benefit to mankind will be killed aborning by unnecessary regulation’” (Baumer, 2015). The very agency that oversaw regulation of radiation also was saying that regulation would harm the development of the useful aspects of radiation.

Eventually, the public knowledge did increase. This caused a public uprising, and debate raged by the late 1950s. Nuclear fallout was the biggest concern of the public, and by the early 1960s, the public debate was greater than ever. In 1961, the AEC responded to the public by tightening the restrictions and dose limits. In the late 1960s, debate picked back up and the public demanded increased restrictions. The AEC again tightened the limits on release of radioactive material from power plants, solely to pacify the public without basing these changes on knowledge or scientific discoveries and seeking to please the public. Public awareness and demands had a large effect on the radiation protection standards in the '50s and '60s.

Continued on Page 26

Chernobyl

After all the tightening of restrictions of radioactive material from power plants, nobody anticipated the disaster that occurred in 1986. The Chernobyl nuclear power plant accident in Ukraine occurred because of a flawed reactor design and inadequately trained staff and personnel. There was a steam explosion and fire, in which some of the radioactive core was released into the environment surrounding the reactor. Although only two workers died the night of the accident, 28 people died in the following weeks because of acute radiation syndrome, or ARS. There were also 209 other people originally diagnosed with ARS, although deaths in the first couple of weeks were reportedly limited to only those 28. There weren't any cases of ARS on others outside of the plant, but thyroid cancer rates in the surrounding community increased over the next years (World Nuclear Association, 2020).

There were around 350,000 people evacuated because of the accident, and the process of resettlement continued for many years after the incident. Another unfortunate effect from the accident was an increase in the number of abortions based on the incorrect advice from doctors who believed the radiation was high enough to cause more birth defects than really would have happened (World Nuclear Association, 2020). This accident caused changes to be made to nuclear reactors around the world to make them safer for operators and for the surrounding communities.

Conclusion

The harmfulness of radiation has not always been fully understood. From the discovery, when nothing was known, to the present, where much has been learned and discovered, protection standards

have changed significantly. Events, scientific discoveries, and observations have influenced the decisions of radiation protection standards. Because radiation is all around us in our everyday lives and is a diagnostic tool often used in the hospital, standards for radiation protection are an important benefit to society.

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THE KANSAS SOCIETY OF RADIOLOGIC TECHNOLOGISTS

| FULL NAME | | | |
|-----------|----------------|------|-------------|
| First | Middle Initial | Last | Credentials |
| | | | |

DOB _____ Email _____
 Month Day Year

Check membership category.



KANSAS SOCIETY OF RADIOLOGIC TECHNOLOGISTS

Scholarship Application Checklist

- Kansas Society of Radiologic Technologists member
 - Scholarship application
 - Essay.
- Students: Official transcript in a sealed envelope and letter of recommendation from clinical instructor or other supervising technologist.
- Technologist: Copy of ARRT card and letter of recommendation from a radiology technology colleague.
- All materials should be in one envelope and postmarked by Feb. 1.
 - Mail to:
Denise Orth, RT(R)(M), FKSRT
KSRT Executive Secretary
1702 Mermis Ct.
Hays, KS 67601
- Winners will be notified and must attend the Kansas Society of Radiologic Technologists Spring Convention to receive the scholarship.



KANSAS SOCIETY OF RADIOLOGIC TECHNOLOGISTS

Scholarship Application

Deadline is Feb. 1

I. Applicant Certification

I certify that I am a U.S. citizen, U.S. national or U.S. permanent resident, that this application information provided is true and correct to the best of my knowledge. I understand that any false statements made herein will void this application, and I will be ineligible for support from the KSRT Scholarship Fund. I hereby authorize the release of all information contained in this application packet as may be required to determine my eligibility for a scholarship. I hereby waive my rights to review any documents pertaining to my scholarship application once submitted.

Signature of Applicant

Date

II. KSRT Member

I am a member. Years of membership _____

I am sending in my membership now.

III. Personal Information

Mr. Ms. Name _____
Last First MI

Mailing Address _____
Number/Street (Apt#) City State Zip

E-mail _____

Phone (_____) _____

ARRT Certifications _____ ARRT #: _____

IV. Educational Information

Radiologic Science Program _____
Name of Institution City/State

Program Director _____

Email Address _____ Phone (_____) _____

Anticipated Graduation date _____ / _____ GPA _____
Month Year

Program Type

- ☐ Certificate Program
- ☐ Associate degree program
- ☐ Bachelor's program

Area/Concentration

- ☐ Medical Imaging
- ☐ Nuclear Medicine
- ☐ Vascular
- ☐ Radiation Therapy
- ☐ Sonography
- ☐ Other _____

V. Letter of recommendation

Name: _____

Position: _____

Email address: _____

VI. Essay

Please provide a one-page typed essay describing why you deserve this scholarship. For objectivity purposes, do not include any statements that would identify your school/instructors or yourself. The essay shall be 12 point font Arial with single spacing and 1-inch margins.

Applications will not be considered if not complete. Please submit application and transcript to:
Denise Orth, KSRT Executive Secretary
1702 Mermis Ct., Hays, KS 67601

ADDRESS SERVICE REQUESTED

KANSAS SOCIETY OF
RADIOLOGIC TECHNOLOGISTS
1702 MERMIS CT.
HAYS, KS 67601



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