

# The Rotating Anode

## SUMMER 2021



From the KSRT archives: These three past members always sat together at the annual convention and enjoyed shaking things up by voting no on everything.

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# KSRT BOARD OF DIRECTORS

## Chair of the Board

Ronda Sunnenberg, RT(R)  
rsunnenberg@nemvch.org

## President

Katilyn Slaton, BS, RT(R)(MR)(CT)  
slatonk8@gmail.com

## Past President

Harmony Ibarra, RT(R)(CT)  
hiradct@gmail.com

## President-Elect

Gale Brown, EdS, RT(R)(CT)  
galeb@labette.edu

## Vice President

Alexa Ritter, RT(R)(CT)  
ajritter@mail.fhsu.edu

## Secretary-Treasurer

Jason Elliott, MHA, CRA, RT(R)(CT)  
jason.elliott@cleveland.edu

## Director at Large

Lisa Eddy, RT(R)  
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## Education Co-Chairs

Harmony Ibarra, RT(R)(CT)  
hiradct@gmail.com  
Becky Dodge, MET, BA, RT(R)(T)  
becky.dodge@washburn.edu

## Professional Development Chair

Tara Rohn, BS, RT(R)(CT)(MR)  
tkrohn@fhsu.edu

## ASRT Senior Delegate

Denise Orth, MS, RT(R)(M)  
ksrt.exsec@gmail.com

## Area Representative, West

Kelly Denton, RT(R)(M)  
dentonkellyann@gmail.com

## Area Representative, East

Ronda Sunnenberg, RT(R)  
rsunnenberg@nemvch.org

## Area Representative, Central

Kyle Ibarra, RT(R)(MR)  
ibarrakb@gmail.com

## Student Representative

Kirsten.Oswald@washburn.edu

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# KSRT COMMITTEE CHAIRS AND APPOINTMENTS

## Bylaws

Harmony Ibarra, RT(R)(CT)  
hiradct@gmail.com

## Fellows

Denise Orth, MS, RT(R)(M)  
ksrt.exsec@gmail.com

## Legislative

Toni Caldwell, BA, RT(R)  
mmcaldwell@aol.com

## Membership

Alexa Ritter  
ajritter@mail.fhsu.edu

## Profess. Development Vice Chair

Katilyn Slaton, BS, RT (R)(MR)(CT)  
slatonk8@gmail.com

## Social Media Coordinator

Susan Dumler, MS, RT(R)(M)(CT)  
(MR)  
skdumler@gmail.com

## Social Media Co-Coordinator

Toni Caldwell, BA, RT(R)  
mmcaldwell@aol.com

## Nominations

Vacant

## Scholarship

Melinda Chiroy, RT(R)(T)(CT)  
melindachiroy@yahoo.com

## Historian

Kyle Ibarra, RT(R)(MR)  
ibarrakb@gmail.com

## Editor, *The Rotating Anode*

Jen Smith, BSJ, BS, RT(R)(M)(CT)  
jen.smith.rtr@gmail.com

## Executive Secretary

Denise Orth, MS, RT(R)(M)  
ksrt.exsec@gmail.com

## Student Interns

Vacant

Editor: Jen Smith  
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 PRE-CONVENTION MINUTES

7 p.m. March 26  
Lawrence

**Call to order:** Chair of the Board Toni Caldwell called the meeting to order at 7:14 p.m.

**Quorum:** Executive Secretary Denise Orth confirmed a quorum was present.

**Members present:** Toni Caldwell, chair of the board; Ronda Sunnenberg, immediate past president; and Harmony Ibarra, president.

**Approval of minutes:** Harmony moved to accept the minutes, Ronda seconded. Motion passed.

**Financial report:** Denise presented the financial report through March 23. The report showed income of \$13,815.22 and expenses of \$15,543.62. The net worth report showed a checking account balance of \$9,428.99 and certificates of deposit worth \$44,683.96 for a total net worth of \$54,112.95. Harmony moved to accept the financial report as presented. Ronda seconded the motion. Motion passed.

## Old business:

**Legislative update:** Naturopath physicians are wanting to add language to the radiology bill. The changes have been reviewed in committee but the bill has not been heard yet. Student licensure is an option for students to be permitted to work before receiving their ARRT certification.

**New business:** None.

**Announcements:** None.

**Adjournment:** Harmony moved to adjourn the meeting, Ronda seconded. Meeting adjourned at 7:27 p.m.

# BOARD OF DIRECTORS PRE-CONVENTION MEETING MINUTES

7 p.m. March 24  
Via Zoom

**Call to order:** Harmony Ibarra called the meeting to order at 7:31 p.m.

**Quorum:** Jen Smith established a quorum.

**Voting members present:** Harmony Ibarra, president; Ronda Sunnenberg, immediate past president; Toni Caldwell, chair of the board and legislative chair; Katilyn Slaton, president-elect and professional development chair; Jen Smith, secretary-treasurer and editor of *The Rotating Anode*; Alexa Ritter, director at large; Megan Rucker, education chair; Denise Orth, ASRT senior delegate and executive secretary; Kelly Denton, western area representative; Lauren Whittington, student representative.

**Non-voting members present:** Kyle Ibarra, nominations co-chair.

**Approval of the consent agenda:** Toni moved to approve the consent agenda, Ronda seconded. Motion passed.

**Approval of minutes:** Toni moved to approve the minutes from the last meeting, Katilyn seconded. Motion passed.

## Other reports:

**Education:** As of the evening of March 24, Megan said 22 students and 22 techs were registered, which will provide an income of \$900. The society should break even on the convention, if not show a little bit of profit. She emailed speakers with information about how to connect to our Zoom conference.

**Social media coordinator:** Megan updated the website with convention information. Toni and Katilyn helped with publicizing the convention on Facebook.

**Financial report:** Denise presented the financial report. There was \$2,800 in carryover from last year's

convention, from vendors who told us to keep their registration fee. Membership is down a lot this year because a lot of sign-ups in the spring come from students who attend convention, and they are not joining this year. Toni moved to approve the financial report as presented by Denise, Katilyn seconded. Motion passed.

## Old business:

**ADP update:** Harmony sent in the mid year progress report, detailing the membership recruitment flyer, website redesign discussions, and leadership academy. She also is working on the financial application to pay for Zoom licenses.

**Convention:** Megan, Denise, and Toni have been testing some of the Zoom features in advance of the conference. Denise shared the Powerpoint for the business meeting. Katilyn brought up giving away a KSRT membership at the end of the convention. Toni moved that we give away one KSRT membership during the convention, Katilyn seconded. Motion passed.

**Basket project:** Members of the board are bringing snacks and bottles of water to put into a big basket to donate to the imaging department at Lawrence Memorial Hospital.

**Nominations:** Most positions have a candidate nominated. We are still waiting to hear back from a possible president-elect, as well as a student representative.

**New business:** None.

## Announcements:

Deadline for next issue of *The Rotating Anode* was April 15.

**Adjournment:** Denise moved to adjourn the meeting, Kelly seconded. Motion passed. Meeting adjourned at 8:20 p.m.



# 2021 ANNUAL CONVENTION BUSINESS MEETING MINUTES

7 p.m. March 26  
Via Zoom

**Call to order:** President Harmony Ibarra called the business session of the 84th annual meeting of the Kansas Society of Radiologic Technologists to order at 7 p.m. She discussed the process for the meeting, including how participants would be able to comment and vote during the meeting. Some technical difficulties briefly were encountered.

**Governance report:** The 2020 annual convention minutes and board reports have been available on [ksrad.org](http://ksrad.org) and in *The Rotating Anode*. Executive Secretary Denise Orth presented the financial report and proposed budget. Membership is down because of fewer students registering for the society in order to attend the annual convention. In the proposed budget, the society's expenditures are more than the income, but as a not-for-profit organization, this is to be expected. The governance report was passed unanimously.

**Nominations:** Gale Brown was nominated for president-elect, Alexa Ritter was nominated for vice president, Jason Elliott was nominated for secretary-treasurer, and Lisa Eddy was nominated for director at large. Denise Orth reported that all nominees met the qualifications for the offices. Each nominee was given the opportunity to speak, and all four were voted into office.

**Image categories:** The options for the contrast media category were LPO stomach, AP axial sigmoid, lateral rectum, and RAO esophagus, and RAO esophagus received the most votes. In the general category, the options were lateral knee, Waters sinus, lateral hand, plantodorsal axial calcaneus, scapular Y-view of the shoulder, posterior oblique ribs, swimmers thoracic spine and submentovertex skull. The three highest votes were scapular Y-view of the shoulder, swimmers thoracic spine, and lateral knee.

**Professional development awards:** Professional Development Chair Katilyn Slaton presented the first-, second-, and third-place awards in the essay, scientific exhibits, radiographic image, and most interesting case competitions.

**Scholarships:** Katilyn Slaton presented the \$500 scholarship awards to Brian Carter, Laurn Moore, and Madelyn Koester, all from Washburn University.

**Membership awards:** The KSRT recognizes members for their years of membership to the society. The following members were honored:

- 5 years: Jason Elliott, Abigail Jewell, Julie Sulzman, Trudi Zeckser
- 10 years: Kimberly Brandt, Anna Hommertzhaim, Jeffery Vaughn
- 15 years: Heidi Chermak, Scott DeBarge
- 25 years: Maureen Kearney
- 30 years: Betty Jo Evers

**Board plaques:** Harmony presented a plaque to Toni Caldwell as outgoing chair of the board, then Toni presented plaques, medallions, and lapel pins to Ronda Sunnenberg (for being the 2020 president) and Harmony Ibarra (as 2021 president).

**Installation of officers:** Toni Caldwell installed the new officers. The elected officers for 2021-22 assumed their roles at the conclusion of the meeting. The new board of directors officers are Katilyn Slaton as president, Gale Brown as president-elect, Alexa Ritter as vice president, Jason Elliott as secretary-treasurer, and Lisa Eddy as director at large.

## Announcements:

**2022 annual meeting:** The dates and location are still to be determined. Please keep an eye on *The Rotating Anode* and [ksrad.org](http://ksrad.org) for updates.

**Student representative:** The society is still looking for a student representative for the 2021-22 board of directors.

**Service project:** Toni Caldwell discussed the society's service project. Originally plans were to collection donations for the Lawrence Humane Society, but COVID has changed those plans. Instead, snacks and drinks were collected to put together into baskets to give to the imaging department at Lawrence Memorial Hospital.

**Adjournment:** Harmony Ibarra adjourned the meeting at 7:55 p.m.

# EXECUTIVE COMMITTEE POST-CONVENTION MINUTES

March 26  
Lawrence

**Members present:** Ronda Sunnenberg, chair of the board; Harmony Ibarra, immediate past president; and Katilyn Slaton, president.

**Call to order:** Katilyn called the meeting to order at 9:22 p.m.

Katilyn nominated Ronda Sunnenberg as chair of the board. Harmony seconded the motion. Motion passed.

Ronda assumed control of the meeting and the following appointments were ratified by the board:

- Denise Orth, executive secretary
- Becky Dodge and Harmony Ibarra, education committee co-chairs
- Tara Rohn, professional development committee chair
- Katilyn Slaton, professional development committee vice-chair

**New business:** None

**Adjournment:** Ronda adjourned the meeting at 9:23 p.m.

## 2022 IMAGE COMPETITION CATEGORIES

**Contrast:**  
RAO esophagus

**Radiographs:**  
Scapular Y-view of the shoulder, swimmers thoracic spine, and lateral knee



# BOARD OF DIRECTORS POST-CONVENTION MEETING MINUTES

9 p.m. March 26

Via Zoom

**Call to order:** Katilyn Slaton called the meeting to order at 9:23 p.m.

**Quorum:** Jen Smith established a quorum.

**Voting members present:** Katilyn Slaton, president and professional development vice-chair; Harmony Ibarra, immediate past president and education co-chair; Ronda Sunnenberg, chair of the board; Gale Brown, president-elect; Toni Caldwell, legislative chair; Denise Orth, ASRT senior delegate and executive secretary; Kyle Ibarra, central area representative.

**Non-voting members present:** Jen Smith, editor of *The Rotating Anode*; Megan Rucker, outgoing education chair; Lauren Whittington, outgoing student representative.

## Reports:

**Executive Committee:** Ronda presented the appointments ratified by the Executive Committee. These include:

- Chair of the board: Ronda Sunnenberg
- Executive secretary: Denise Orth
- Professional development chair: Tara Rohn
- Education co-chairs: Becky Dodge and Harmony Ibarra

Denise will send out a list of volunteers to contact to serve on committees and will follow up at the summer board meeting with update.

**Education:** Outgoing education chair Megan Rucker gave a preliminary report on the annual meeting. There were 46 registrants, and the approximate profit is \$300. A final report will be presented at the summer board meeting.

## Committee appointments:

- Membership (vice president): Alexa Ritter
- Bylaws (immediate past president): Harmony Ibarra
- Professional development vice-chair: Katilyn Slaton

- Legislative: Toni Caldwell
- Historian: Kyle Ibarra
- Fellows: Denise Orth
- *Rotating Anode* editor: Jen Smith
- Social media coordinator: Susan Dumler
- Scholarship: Melinda Chiroy
- Central area representative: Kyle Ibarra
- West area representative: Kelly Denton

## Future meeting dates:

Summer meeting: June 26

Fall meeting: Sept. 25

Winter meeting: Jan. 22

A new list of officers and appointees' addresses and phone numbers will be placed in the Google Drive and new board members will have the documents shared with them.

**Old business:** None.

## New business:

**2022 convention:** The board discussed possible locations for the 2022 convention. The DoubleTree in Lawrence has been excellent to work with, and Harmony feels perhaps the society should have the 2022 convention here in person. She will speak with the hotel sales manager.

## Announcements:

Deadline for *The Rotating Anode* was April 15.

**Adjournment:** Toni moved to adjourn the meeting, Harmony seconded. Motion passed. Meeting adjourned at 9:33 p.m.

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*Save the date!*  
*The 2022 KSRT Annual Convention*  
*will be March 31-April 2 at the*  
*DoubleTree by Hilton in Lawrence*



# THORACIC DUAL-ENERGY SUBTRACTION RADIOGRAPHY

By Shelby Mitchell, Washburn  
Second-place essay

## Abstract

Dual-energy subtraction technology has been a useful tool in the health-care industry for a few decades. It is an imaging technique that applies algorithms to digital images to selectively remove certain tissues. The digital images are created using high-energy x-ray photons and low-energy x-ray photons separated out. Because various body tissues react differently to various levels of energy from x-ray photons, mathematical calculations could be applied to remove all of the bone or all of the soft tissue. In thoracic radiographs, this is especially helpful when bony structures are overlapping a pulmonary lesion or the mediastinum is skewing costal abnormalities. Research has found that dual-energy subtractions help reveal many different pathologies as compared to single-energy imaging. The main disadvantage for this imaging method is that it can increase patient dose, but techniques have been employed to ameliorate the problem. The basics behind dual-energy x-ray imaging also have been applied to computed tomography imaging to similarly exclude certain body tissues to better visualize pathologies and enable more precise diagnoses.

Dual-energy (DE) subtraction radiography is an advanced imaging technique that has been in use for close to three decades. It largely has been utilized to improve medical diagnoses, especially for thoracic radiographs, by displaying calcium-rich anatomy and soft-tissue anatomy in separate images. This allows radiologists to better identify abnormalities within the thorax.

There are two methods for creating DE radiographs. Both strategies operate based on the physical

principles of x-ray interactions within the body. In every x-ray exam, x-ray photons travel through the patient to strike an imaging plate situated behind or below the patient. Lower energy x-ray photons are more easily attenuated, and thus they likely will not strike the image receptor and help form the image. Body tissues with higher atomic numbers (i.e. bone or calcium) also attenuate x-ray photons more readily than lower atomic numbers (such as soft tissues). Both DE methods take radiographs that capture the non-attenuated photons at different energy levels and use algorithms to create weighted subtraction images, which selectively show bony structures and soft tissues structures separately. The final presentation of radiographs includes a composite image, which looks like a standard chest x-ray, along with the two subtracted images: one with soft tissues, the other one with bones and calcified materials.

The first method for dual-energy radiography involves a single exposure received on a configuration of two phosphor plates separated by a copper filter. The front plate absorbs what would comprise a standard chest x-ray image, while acting in conjunction with the copper layer to filter out low-energy photons. The back plate only receives the higher-energy photons. The images from both the front and back plates are used to create the final subtraction images. One benefit of this method is that there are fewer incidents of motion artifacts, since the images are captured simultaneously. However, the radiographs can exhibit a low signal-to-noise ratio.

The second option for dual-energy capture uses a single flat-panel detector and takes two exposures at different energy levels in quick

succession (around 160-230 milliseconds delay). The first exposure is done with a high-energy beam (around 120 kVp), while the second is much lower in energy (around 60 kVp) (Kuhlman et al., 2006). Because the exposures are not simultaneous, motion within the body can produce artifacts on the final images. This most frequently and most notably occurs from the motion of the heart, where a shadowed outline appears on the subtracted images, indicating that the contraction of the cardiac muscles caused a shift in position. Dual-exposure systems produce images with better signal-to-noise ratio than the single-exposure systems.

As the use of DE radiography has expanded, advantages of this imaging technique have emerged. Most especially, pathological conditions can be better visualized. On a normal, single-energy chest radiography, ribs may superimpose certain lung conditions, whereas the diaphragm or mediastinum may block issues on the bones.

One study from Martini et al. (2017), involved a set of 199 patients, all of whom received postero-anterior and lateral dual-shot DE chest x-rays. A subsequent CT was performed on each patient within days of the x-rays. Two radiologists reviewed the images for various pathologies. The results showed that the DE subtraction increased the detection of interstitial lung diseases. Ide et al, (2007) found that DE subtraction aided radiologists in correctly identifying lung cancer in chest radiographs. Bone-subtracted radiographs can improve the detection sensitivity of even small cases of pneumothoraces, regardless of the reader's level of expertise (Urbaneja et al., 2018).

Considering the multitudes of pa-



thologies that can become more evident through DE subtracted imaging of the chest, patients with a history of smoking, cancer, or tuberculosis may benefit the most from receiving these exams (Kuhlman et al., 2006). These patients are at the highest risk for pulmonary lesions and other thoracic pathologies. For other patients, without the histories listed, potential benefits may not outweigh the risks.

If a patient were to have a chest x-ray with DE radiography techniques employed on the postero-anterior and lateral projections, the radiation dose would be about 15 percent greater than that for the same exam using standard techniques (Klein, 2019). When DE is deemed beneficial, the risk can be mitigated by using the DE technique on only the posteroanterior projection, and using standard techniques on the lateral projection. Shielding a patient through all exposures is also important.

Another disadvantage is that dual-energy subtraction radiography has been limited to fixed x-ray machines. However, companies and researchers are working to change that issue. Last year, a portable imaging detector was cleared by the Food and Drug Administration that possesses a dual-exposure dual-energy software application which claims to have reduced the patient dose for DE to equal that of non-DE radiography (FDA, 2019). More recently, a single-exposure dual-energy portable detector was approved (FDA, 2020).

While companies work to expand the application of DE in conventional radiography, biomedical engineers already have found uses for the technology in computed tomography (CT). Dual-energy CT (DECT) functions similar to DE in conventional radiography, using high-energy photons for one scan and one with low-energy photons for another. The data retrieved from these scans then can be applied to algorithms that can

separate specific body tissues into a single image. For example, bone may be selectively removed to construct a better angiogram.

All imaging technologies ought to improve upon a patient's care, whether that comes in the form of discovering or confirming a diagnosis to negating one. Dual-energy subtraction technology has been around the industry long enough to find some useful applications, yet it is new enough to still have a lot of potential. Revealing the differences in various tissues by using both high- and low-energy x-ray photons has allowed DE to become a useful tool for making diagnoses. Conventional radiography has found the technology most practical for thoracic anatomy, allowing better visualization of pathologies from cancer to pneumothorax. Patients with the greatest risk of pulmonary or costal pathologies present the greatest potential benefit to outweigh the increased radiation dose.

## References

*FDA clears KA imaging's portable dual-energy X-ray detector.* (2020, September 8). Imaging Technology News. <https://www.itnonline.com/content/fda-clears-ka-imaging%E2%80%99s-portable-dual-energy-x-ray-detector>

*FDA clears new dual-energy x-ray technology from Carestream.* (2019, November 22). Imaging Technology News. <https://www.itnonline.com/content/fda-clears-new-dual-energy-x-ray-technology-carestream>

Ide, K., Mogami, H., Murakami, T., Yasuhara, Y., Miyagawa, M., & Mochizuki, T. (2007). Detection of lung cancer using single-exposure dual-energy subtraction chest radiography. *Radiation Medicine*, 25(5), 195-201. <https://doi.org/10.1007/s11604-007-0123-9>

Klein, J. S. (2019, January 23). Dual energy radiography and tomosynthesis. *Pulmonology Advisor*. <https://www.pulmonologyadvisor.com/home/decision-support-in-medicine/pulmonary-medicine/dual-energy-radiography-and-tomosynthesis/>

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Martini, K., Baessler, M., Baumueler, S., & Frauenfelder, T. (2017). Diagnostic accuracy and added value of dual-energy subtraction radiography compared to standard conventional radiography using computed tomography as standard of reference. *PLOS ONE*, 12(3). <https://doi.org/10.1371/journal.pone.0174285>

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Urbaneja, A., Dodin, G., Hossu, G., Bakour, O., Kechidi, R., Gondim Teixeira, P., & Blum, A. (2018). Added value of bone subtraction in dual-energy digital radiography in the detection of pneumothorax: Impact of reader expertise and medical specialty. *Academic Radiology*, 25(1), 82-87. <https://doi.org/10.1016/j.acra.2017.06.015>



## ASRT SENIOR DELEGATE INFORMATION

### Senior Delegate

#### SECTION 1: Selection

- Two KSRT delegates (one (1) senior delegate and one (1) junior delegate) and two alternate delegates shall be appointed to the ASRT House of Delegates by the KSRT.
- The KSRT shall submit to ASRT the names of the KSRT delegates and alternate delegates by the last business day of January or the KSRT delegate positions shall remain open until after the ASRT House of Delegates' meeting.
  - A delegate shall show proof of continuing education.
  - A delegate shall be a voting member of the ASRT and the KSRT for two (2) years immediately preceding nomination.
  - A delegate shall have served as an officer or on the Board of Directors or as a committee member in the KSRT.
  - The senior delegate must have at least one year of experience as a voting delegate.
  - A delegate shall practice in the radiologic science profession or health care.
  - A delegate may serve concurrently on the board of any national radiologic science certification or national accreditation agency.
- A delegate shall have the time and availability for necessary travel to represent the KSRT.
- A delegate shall attend the ASRT House of Delegates meeting and all meetings required of delegates.

#### Delegate appointment:

- The Senior Delegate to the ASRT and Immediate Past President (junior delegate) shall represent the KSRT as Affiliate Delegates to the American Society of Radiologic Technologists House of Delegates. The Board of Directors will appoint alternate delegate(s). Delegates attending the ASRT House of Delegates shall act as official representatives of the ASRT at the KSRT annual meeting.

#### Responsibilities:

- The Senior Delegate to the ASRT shall serve a three (3) year term. The Senior Delegate's term may be extended in one (1) year increments upon recommendation by the Board of Directors and ratification by the membership.
- Delegates shall be required to submit a written report to the Board of Directors regarding the ASRT meeting. Delegates shall be required to submit a written report to the KSRT Annual meeting regarding the ASRT meeting.



## **ASRT SENIOR DELEGATE APPLICATION**

**NAME:**

**ADDRESS:**

**PHONE:**

**EMAIL:**

1. Years of continuous KSRT membership:
2. List positions in which you have served on the KSRT Board of Directors or committees and the year or years which you served:
3. Years served as a KSRT Delegate to the ASRT House of Delegates:
4. List positions in which you have served on the ASRT Board of Directors or committees and the year or years which you served:
5. Current employer and position:

Please submit a cover letter detailing your qualifications as they pertain to this position along with the application and scanned ARRT/ASRT/Kansas license cards to:

Denise Orth, Executive Secretary, at [ksrt.exsec@gmail.com](mailto:ksrt.exsec@gmail.com) or mail to 1702 Mermis Ct., Hays, KS 67601.

**Deadline is September 1, 2021.**



## **AREA REPRESENTATIVES INFORMATION**

**QUALIFICATIONS:** Active, senior or life member of the KSRT; ASRT member; licensed radiologic technologist by the Kansas State Board of Healing Arts; ARRT registered in Radiography (at a minimum).

### **DUTIES:**

1. Attend all board meetings and meetings of the society, or notify the president in advance if unable to attend.
2. Contact hospitals and imaging centers in the designated area of the state (east, central, west). Keep facilities apprised of society events, such as the annual meeting and fall symposium.
3. Assist other committees and board members with their tasks as able and requested by the president and/or board.
4. Submit a report of activities to the president before each board meeting and a year-end report of activities to the membership at the annual meeting.
5. Serve as ex-officio member of the education committee.
6. Appointment is for three years. Eligible for reappointment.

The area representatives are voting members of the board.

- Attend two out of three of the scheduled board meetings, excluding pre- and post-convention meetings, to receive complimentary registration at the next annual meeting.
- Receives complimentary registration to the fall symposium.

## **APPOINTMENT PROCESS FOR AREA REPRESENTATIVE(s)**

- Announcements will be published in *The Rotating Anode* seeking members interested in serving as Area Representative(s).
- **Electronically submit** Appointment Application for Area Representative, available at [ksrad.org](http://ksrad.org), to the Executive Secretary at [ksrt.exsec@gmail.com](mailto:ksrt.exsec@gmail.com) by **Sept. 15**.
- Completed forms will be disseminated to Executive Committee (including President-Elect and Vice President).
- Following review of submitted forms, Executive Committee will make recommendations to the Board and the Board will vote to confirm appointments. (*The Board will attempt to make appointments based on East [roughly U.S. Highway 77 and east], Central, and West [roughly U.S. Highway 281 and west] areas as qualified members are available.*)
- Initial appointments will be for a one-, two-, or three-year term. This will provide continuity with one three-year appointment confirmed annually.
- Appointees (*and those not selected*) will be notified in writing by the President by Nov. 15.
- Appointees will assume duties at the Winter Board meeting in January.

Vacancy of the position of Area Representative will be filled during the next appointment process and join the Board the following calendar year. The appointed person will fulfill the remainder of the original appointment.



## AREA REPRESENTATIVE APPLICATION

**NAME:**

**ADDRESS:**

**PHONE:**

**EMAIL:**

**KSRT STATUS:**   **ACTIVE** \_\_\_\_   **SENIOR** \_\_\_\_   **LIFE** \_\_\_\_ **ASSOCIATE A** \_\_\_\_

Are you an ASRT MEMBER?   **Yes:** \_\_\_\_   **No:** \_\_\_\_

If not are you willing to join the ASRT?   **Yes** \_\_\_\_   **No:** \_\_\_\_

Which area (*arbitrary*) are you interested in representing?   **EAST**   **CENTRAL**   **WEST**

Why do you want to serve as an Area Representative?

Do you have aspirations to pursue further offices in the KSRT?

Please email application to Denise Orth, Executive Secretary, at [ksrt.exsec@gmail.com](mailto:ksrt.exsec@gmail.com), by Sept. 15.



# ARRT® Professional Education and Growth Scholarship

Get up to \$500 for professional development expenses.

**One recipient per active affiliate will receive up to \$500 as reimbursement for:**

- ✓ CE products
- ✓ ARRT® Primary or Secondary Certification Exam fees
- ✓ Educational conferences
- ✓ Affiliate membership dues

Complete an application and submit a short essay answering the question, **"How does acquiring and maintaining certification improve patient care?"**

**Apply by Aug. 13, 2021, at [foundation.asrt.org/advance](https://foundation.asrt.org/advance).**

*Visit the website for eligibility requirements.*

*Funded by*



THE AMERICAN REGISTRY  
OF RADIOLOGIC  
TECHNOLOGISTS®

*Administered by*

**asrt**  
FOUNDATION®

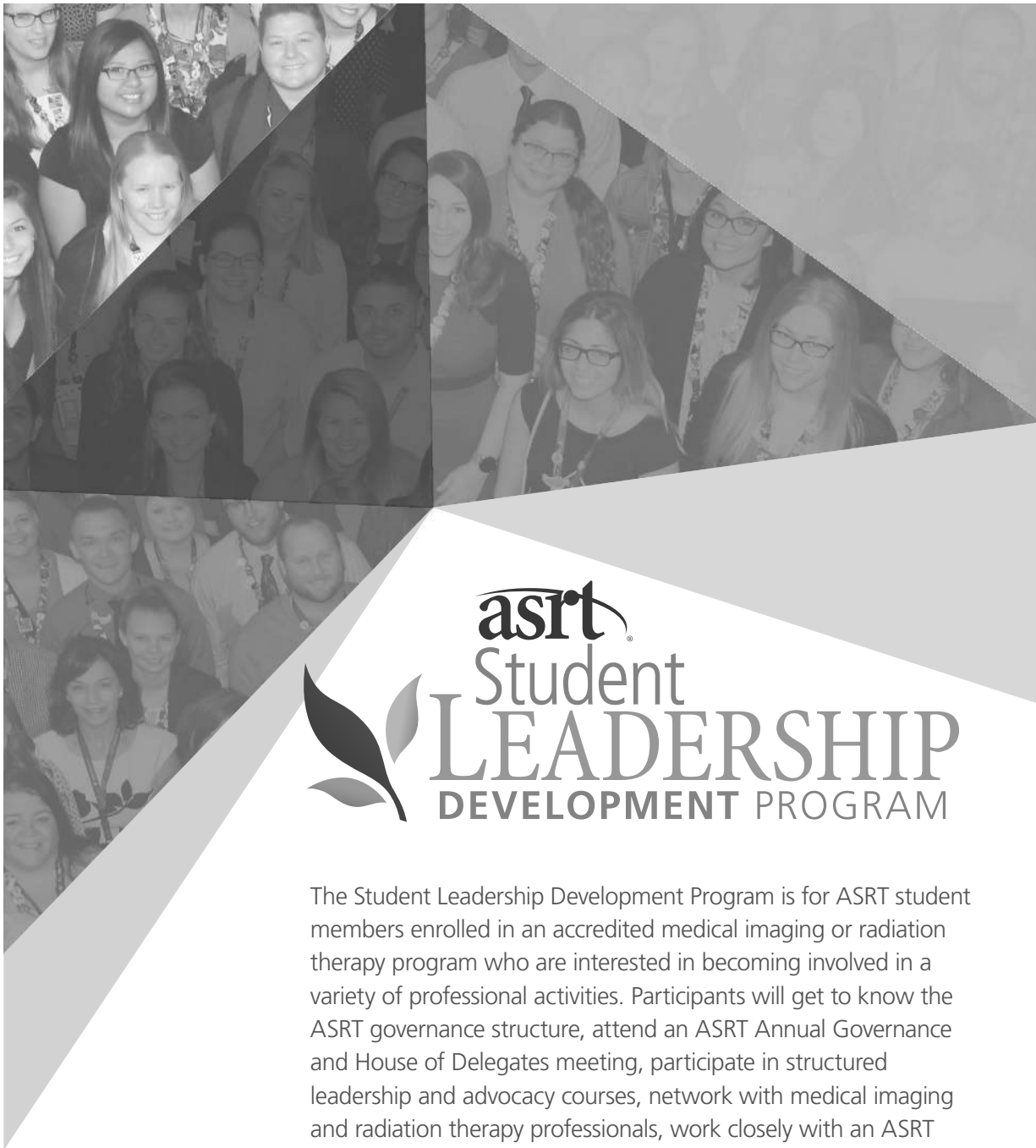
**Make a Gift, Make a Difference**

800-444-2778 Ext. 1912

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[foundation.asrt.org/ARRTscholarship](https://foundation.asrt.org/ARRTscholarship)





The Student Leadership Development Program is for ASRT student members enrolled in an accredited medical imaging or radiation therapy program who are interested in becoming involved in a variety of professional activities. Participants will get to know the ASRT governance structure, attend an ASRT Annual Governance and House of Delegates meeting, participate in structured leadership and advocacy courses, network with medical imaging and radiation therapy professionals, work closely with an ASRT affiliate, collaborate with a mentor, contribute to the future of the profession and more.

- ASRT and affiliate membership required
- Applications open July 1 and close Sept. 30
- Program begins Nov. 1
- 3-year program
- email [sldp@asrt.org](mailto:sldp@asrt.org) for more information

[asrt.org/sldp](http://asrt.org/sldp)



# ***MRI Safety~Did you know?***

## **Preventative Safety Measures:**

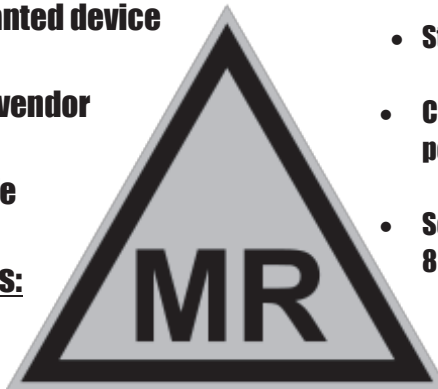
- Call outpatients a day or two prior and ask MRI screening questions
- If possible check previous imaging such as x-rays & CT scans for implanted devices
- Call vendors prior to appointment if a patient has a known implanted device
- Research and confirm with vendor if the device is MR safe, MR conditional, or MR unsafe



- Check and know your facility's policies on implanted devices
- Not all facilities will scan MR conditional pacemakers due to additional staffing requirements such as Cardiologist & nurse present

## **Information on Loop Recorders:**

- Loop Recorders are safe to scan
- Make the patient aware that data recorded from the device could be deleted or corrupted
- Patient should contact their physician prior to scan to communicate data could be effected by MRI scan



## **Information on Stents**

- Stents are typically safe or conditional
- Check with manufacturer if there is a post-op delay before a MRI can be done
- Some manufacturers suggest waiting 6-8 weeks post-op implantation date

## **Implants Considered Safe:**

- Joint Replacements
- Spinal Fusions
- Bone Pins, Screws, Plates, Nails, Rods, Staples

**\*Disclaimer: If metal is located in the area of interest suboptimal quality images could occur due to metal artifact**



***20 years ago, Michael Colombini's death sparked a need to spread safety awareness about MRI to the general public, non-radiology hospital staff, and radiologic technologists.***





# KANSAS SOCIETY OF RADIOLOGIC TECHNOLOGISTS

## Who is KSRT?

Professional society for radiologic technologists and medical imaging professionals in Kansas

## Our Mission:

Serve to advocate for imaging professionals in health policy, education, and advancing modalities

## Why Join?

- Support advocacy efforts
- Get involved
- Advance your career
- Network with local professionals
- Earn CEUs

## Become a member today!

Active KSRT Member: \$50

Associate KSRT Member: \$50

Student Member: \$25

## Don't Miss These CEUs

### Coming Soon!!

5 Free Online CEUs (\$50 value)

with membership

First CEU Available Sept. 2021

## Mark Your Calendar!

Convention 2022 March 31<sup>st</sup>-April 2<sup>nd</sup>

Lawrence at Hilton Double Tree Hotel

Apply for membership online: [ksrad.org/join-us.html](https://ksrad.org/join-us.html)



Follow KSRT on:







## 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



# THE KANSAS SOCIETY OF RADIOLOGIC TECHNOLOGISTS

FULL NAME			
First	Middle Initial	Last	Credentials

DOB \_\_\_\_\_ Email \_\_\_\_\_  
 Month Day Year

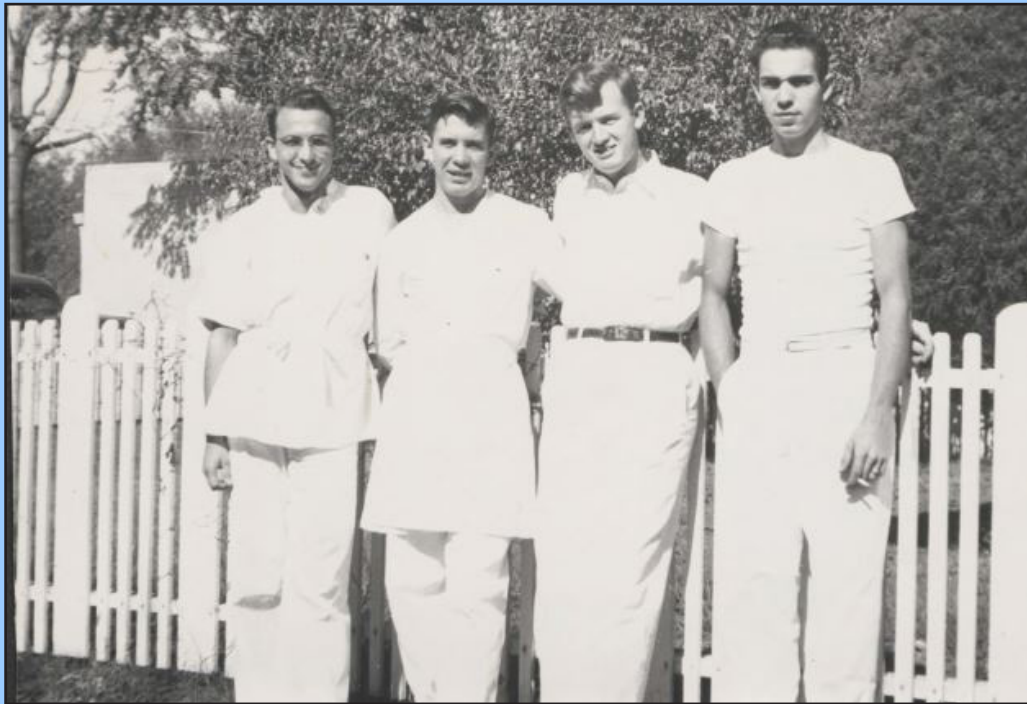
**Check membership category.**

**Denise K. Orth    Executive Secretary, KSRT    1702 Mermis Court    Hays, KS    67601    KSRT.exsec@gmail.com**  
**Pay with PayPal or make checks/money orders payable to the KSRT. No partial dues accepted.**  
**\$25.00 CHARGE FOR ALL CHECKS RETURNED FOR INSUFFICIENT FUNDS!**



ADDRESS SERVICE REQUESTED

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



A couple more historical photos. Above: Some first-year radiography students in the 1960s. Right: The past presidents of the KSRT gathered in 2003.



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