

## 2017-2018 Annual Program Assessment Report

Please submit report to your department chair or program coordinator, the Associate Dean of your College, and to [james.solomon@csun.edu](mailto:james.solomon@csun.edu), Director of the Office of Academic Assessment and Program Review, by September 28, 2018. You may, but are not required to, submit a separate report for each program, including graduate degree programs, which conducted assessment activities, or you may combine programs in a single report. Please identify your department/program in the file name for your report.

**College: Health and Human Development**

**Department: Health Sciences**

**Program: Radiologic Sciences**

**Assessment liaison: Suzanne Spear**

**1. Please check off whichever is applicable:**

- A.  Measured student work within program major/options.
- B.  Analyzed results of measurement within program major/options.
- C.  Applied results of analysis to program review/curriculum/review/revision major/options.
- D.  Focused exclusively on the direct assessment measurement of General Education Basic Skills outcomes

**2. Overview of Annual Assessment Project(s).** On a separate sheet, provide a brief overview of this year's assessment activities, including:

The Radiologic Sciences (RS) program has a multi-faceted assessment plan that is developed and revised annually to meet the requirement of national accreditation. The program measures and analyzes SLOs by calendar year and assessment methods required by the Joint Review Committee on Education in Radiologic Technology, the national accrediting body for Radiological Sciences. The current report for academic year 2017-2018 includes our assessment work from January to December 2017.

The RS program faculty and program director as a whole meet once a year to review, revise and update the outcome assessment plan. Faculty collect and summarize the data at the end of each calendar year. In order to obtain feedback from program stakeholders on program performance and "close the loop", RS faculty present a summary to the RS advisory committee every January and incorporate the committee's recommendations for changes to the curriculum and our assessment plans.

The RS program produced a self-study in 2017 for the Joint Review Committee on Education in Radiologic Technology (JRCERT). The program submitted the self-study in November 2017. The accreditation site visit was in June of 2018. The program passed with only very minimal changes suggested by the accreditation team and has achieved the maximum 8 year accreditation.

## **Summary of Program SLOs, Measurement, and Results, Jan.-Dec. 2017**

### Program SLOs and Assessment Plan

The RS program has five SLOs listed below. For each SLO, the program has a rigorous assessment strategy that includes both direct assessment (i.e., clinical supervisors observe students performing tasks like an MRI and rate their performance immediately after completion) and indirect assessment via student self-report surveys at program entry, exit, and follow up post-graduation (i.e., alumni survey). Please see attachment #1 “2017 CSUN Radiologic Sciences Outcome Assessment Plan” for a list of program SLOs, assessment tools, and performance benchmarks.

1. Demonstrate a mastery of basic radiographic and advanced medical-imaging skills in MRI, CT, and IR.
2. Demonstrate effective communication skills that provide compassionate, culturally competent and age-appropriate patient care.
3. Demonstrate problem-solving/critical thinking skills that provide ethical and safe patient care.
4. Demonstrate the value of professional development for patient care and medical imaging through life-long learning that meets the needs of the medical imaging community.
5. Maintain program effectiveness through continual assessment.

### Summary of Assessment Results

The RS program continues to see a high level of achievement among its students. In 2017, students outperformed all benchmarks for SLOs 1-5. The only category in which students did not meet the predetermined benchmark was for participation in professional conferences. Only 17% (versus 30%) presented work at a professional conference. Please see attachment #2 “2017 Data Summary – CSUN Radiologic Sciences Outcome Assessment Data Summary” report.

A few explanations for the decline in students participating in professional conferences include cost, location of events, and the decline in the number of events offered. The program met and exceeded its benchmark for students participating in ongoing professional development events. The RS advisory committee in March 2017 decided to include the annual alumni sponsored speed-mentoring event that started in 2014 as a part of the lifelong professional commitment. This is a free event for RS students that is located on campus. The event provides dinner for students. Ninety-five percent of students participated in the 2017 event.

Based on the 2016 results, the RS program decided to use a new assessment tool for the critical thinking SLO (#3). The student assignment is the “Critical Thinking Portfolio Assignment,” which requires students to analyze radiographic quality of images. This assignment occurs in the HSCI 285 “Radiographic Anatomy and Positioning” course. The program set a benchmark of 80% success rate, but results showed that 92% of students successfully passed the assignment.

**3. Preview of planned assessment activities for 2018-19.** Include a brief description as reflective of a continuous program of ongoing assessment.

National accreditation requires annual assessment plan review. The program as a whole reviews and presents the plan to the advisory committee for feedback. The RS Program Director brings back the committee’s recommendations to the faculty for discussion and implementation. Any changes resulting from the feedback received from the advisory committee results in the collection of data that is simultaneously collected and analyzed and reported back the following year to the advisory committee members.

Program faculty are still evaluating that data through this year (2018) and will not be able to compare until January 2019 when the 2018 cohort graduates and turns in an exit interview. No changes in assessment methods took place in 2017. The program is currently collecting data to evaluate its outcomes for 2018.

The last report stated that RS faculty decided to assess students’ cultural competency levels via the clinical competency assessment form, the affective assessment form and class assignments that assessed effective cultural diversity skills. Students met the benchmark set for these areas. The program has decided to monitor these areas again for the 2018 year and will decide in March 2019 if these will remain in the outcome assessment plan.

DATA SUMMARY

2017 CSUN RADIOLOGIC SCIENCES OUTCOME ASSESSMENT

January 2017 to December 2017

**GOAL 1.** Demonstrate a mastery of basic radiographic medical-imaging skills and advanced medical imaging skills in MRI, CT, and Interventional Radiography.

Outcomes Measured	Assessment Tool(s)	Benchmark	RT Program Assessment Data
Graduates will produce diagnostic quality Radiographic, CT, MRI and Interventional Radiography Images.	Clinical Competency Assessment form (CCA) and exit interview questionnaire are used to assess the <b>production of qualitative medical images.</b>		
	1. CCA-Section II <i>(Technical Requirements/ Patient Positioning &amp; Radiation Positioning)</i> Items 1-15.	Section II ≥ <b>27 pts. for Juniors</b> Section II ≥ <b>30 pts. Senior &amp; GS</b>	<u>Class averages:</u> <b>Junior</b> 39.89 <b>Senior</b> 43.31 <b>Gr. Sr.</b> 48.68 <b>**Benchmark met**</b>
	2. Exit Interview Questionnaire Item #4 <i>Note areas they feel weak in broken down to two questions , one in general diagnostic and the other in advance modality</i> Questionnaire Item # 4	15% or less graduates may report they felt weak in basic radiographic imaging (see question #8 below) [Class of 2016]  35% or less graduates may report they felt weak in MRI,CT, and/or IR. [Class of 2016]	<b>Q#4 See Number #8</b> <b>Benchmark met</b>  <b>30%</b> <b>**Benchmark met**</b>
	Exit Interview Questionnaire Item #8.	85% graduates will report they are prepared or very prepared to enter the Radiologic Sciences Field [Class of 2016]	<b>95%</b> <b>**Benchmark met**</b>
	Exit Interview Questionnaire Item #9.	75% graduates respond that they are prepared or somewhat prepared in advanced imaging areas of CT, MR and Interventional Radiography	<b>87%</b> <b>** Benchmark met**</b>

Outcomes Measured	Assessment Tool(s)	Benchmark	RT Program Assessment Data
		<b>[CLASS OF 2016]</b>	
<p>Graduates provide appropriate radiation protection during imaging procedures.</p>	<p>Clinical Competency Assessment form (CCA) is used to assess the student's ability to provide appropriate <b>radiation protection</b> during imaging procedures.</p> <p>CCA-Section IV (<i>Radiation Protection</i>) Items 1 - 4.</p>	<p>Section IV <math>\geq</math> <b>8 pts. for Juniors</b> Section IV <math>\geq</math> <b>8 pts. for Seniors &amp; GS</b></p>	<p><u>Class averages:</u> <b>Junior</b> 10.63 <b>Senior</b> 11.57 <b>Gr. Sr.</b> <b>13.09</b> <b>**Benchmark met**</b></p>
	<p>HSCI 285/286: Radiographic Anatomy &amp; Positioning I and II, students are assessed on radiation protection as part of their final practical exam.</p>	<p>85% will practice proper radiation protection Junior Yr. semester</p>	<p>85.76% <b>[Class of 2019]</b></p> <p>100% <b>[Class of 2018]</b> <b>**Benchmark met*****</b></p>

**GOAL 2.** Demonstrate effective communication skills that provide compassionate and age appropriate patient care.

Outcomes Measured	Assessment Tool(s)	Benchmark	RT Program Assessment Data
<p>Graduates will communicate effectively with patients in an age appropriate and culturally diverse &amp; compassionate Manner.</p>	<p>Clinical Competency Assessment form (CCA), Affective Assessment form, and the exit interview questionnaire are used to assess the student's ability to <b>communicate</b> with patients in an age appropriate manner.</p> <ul style="list-style-type: none"> <li>▪ CCA-Section I (<i>Patient care and Communication</i>) Items 1 – 10</li> <li>▪ Affective Assessment Items # 14, 18, 19.</li> </ul> <p>HSCI 487: Professional Development of Radiographers, periodic assessment items that assess effective cultural diversity skills</p>	<p>Section I ≥ <b>18 pts. for Juniors</b> Section I ≥ <b>20 pts. for Seniors &amp; GS</b></p> <p>Items 14, 18, 19 ≥ <b>6 pts. for Juniors</b> Items 14, 18,19, ≥ <b>8 pts. for Senior &amp; GS</b></p> <p>80% total score on assessment Senior Year Spring Semester</p>	<p><u>Class averages:</u> <b>Junior 26.63</b> <b>Senior 28.64</b> <b>Gr. Sr. 31.78</b> <b>**Benchmark met**</b></p> <p><u>Class averages:</u> <b>Junior 9.60</b> <b>Senior 10.29</b> <b>Gr. Sr. 11.37</b> <b>**Benchmark met**</b></p> <p><b>94.25%</b> <b>**Benchmark met**</b></p>
<p>Graduates will demonstrate effective Professional communication.</p>	<p>HSCI 487: Professional Development of the Radiographer.</p> <p><i>Professional PowerPoint presentation to the class on a topic related to Radiologic Sciences.</i></p>	<p>80% total score on assessment Senior Yr., Spring Semester</p>	<p><b>94.76%</b> <b>**Benchmark met**</b></p>

Outcomes Measured	Assessment Tool(s)	Benchmark	RT Program Assessment Data
	HSCI 486A Seminar: Advances in Radiologic Imaging I: Each student independently develops a topic related to radiologic technology for presentation to the program in either a scientific display or research paper assignment	80% total score on assessment  <i>Junior Yr., Spring Semester</i>	<p style="text-align: center;"><b>92.5%</b></p> <p style="text-align: center;"><b>** Benchmark met**</b></p>

**GOAL 3.** Demonstrate problem-solving/critical thinking skills that provide ethical and safe patient care.

Outcomes Measured	Assessment Tool(s)	Benchmark	RT Program Assessment Data
Graduated will have critical thinking/problem-solving skills.	HSCI 285: RAP I Critical Thinking Portfolio Assignment in Radiographic Anatomy and Positioning Course:	80% successfully analyze Radiographic Quality of images <b>[CLASS OF 2019]</b> <i>Junior Yr., Fall Semester</i>	<b>92%</b> <b>**Benchmark met****</b> <i>Image Critique</i>
Graduates will have problem solving /critical thinking skills appropriate to medical imaging and safe patient care.	HSCI 284: Clinical Education V, students are to compose a professional research paper on a specific clinical case study based on a clinical education experience	80% total score on assessment [CLASS OF 2017] <i>Grad Seniors Spring semester Case Study</i>	<b>92.6%</b> <b>**Benchmark met**</b>
Graduates will have critical thinking/ problem solving evaluation appropriate to patient safety/ethical care	<ol style="list-style-type: none"> <li>1. HSCI 285: RAP I <i>Periodic assessment items which require analysis of scenario questions</i></li> <li>2. HSCI 286: RAP II</li> </ol>	<p>80% total score on assessment [CLASS OF 2019] <i>Junior Yr., Fall Semester</i></p> <p>80% total score on assessment <b>[Class of 2018]</b></p>	<p><b>82%</b> <b>**Benchmark met**</b></p> <p><b>92%</b> <b>**Benchmark met**</b></p>

**GOAL 4.** Demonstrate the value of professional development for patient care and medical imaging through life-long learning that meet the needs of the medical imaging community.

Outcomes Measured	Assessment Tool(s)	Benchmark	RT Program Assessment Data
<p>Students in the professional program participate in at least one professional conference.</p>	<p>Seminar attendance records and short educational summary paper</p>	<p>30% of students will <b>participate</b> via submissions, publications, scientific display, oral presentations at a continuing education conference</p> <p>20% of students will demonstrate lifelong commitment to learning through <b>attendance at</b> speed mentoring, presentations and conferences.</p>	<p><b>17%</b> <b>**Benchmark not met**</b></p> <p><b>93%</b> <b>Benchmark met</b></p>
<p>Students will complete all program requirements within the 150% of the professional program length.</p>	<p>Student transcripts</p>	<p>80% of the students starting the program will complete the program</p> <p>[CLASS OF 2017]</p> <p># of graduates/ initial # in cohort</p>	<p>100%</p> <p><b>**Benchmark met**</b></p>

**GOAL 5.** *Maintain program effectiveness through continual assessment.*

Outcomes Measured	Assessment Tool(s)	Benchmark	RT Program Assessment Data
Graduates will pass the national ARRT exam the first time.	ARRT exam report	100% pass rate [CLASS OF 2016]	100% <b>**Benchmark met**</b>
Graduates will have averaged a score or 85% per class for the national ARRT exam.	ARRT exam report	85% average per class [CLASS OF 2016]	89.5 <b>**Benchmark met**</b>
Graduate's employers will report that they were ready to perform in the medical imaging environment after one year of employment.	One-year employer assessment tool <ul style="list-style-type: none"> <li>▪ Tool has 10 questions and a Likert Scale of 10</li> <li>▪ Tool has a Likert scale of 4</li> </ul>	<ul style="list-style-type: none"> <li>▪ 8 out of 10 (80%)</li> <li>▪ 3.2 out of 4 (80%)</li> </ul> [CLASS OF 2016]	8.5 out of 10 Std 0.4 Likert <b>**Benchmark met**</b>
Graduates who are actively seeking employment in medical imaging upon graduating will have ≥75% employment rate within 12 months of graduation.	One-year employer assessment tool	75% [CLASS OF 2016]	100% <b>**Benchmark met**</b>
Graduates are employed in advanced imaging positions.	One-year post graduate survey	One-year postgraduate ≥ 35% advanced imaging employment [CLASS OF 2016]	57% <b>**Benchmark met**</b>
Graduate Satisfaction	Exit interview questionnaire, Item # 2.	90% of graduates satisfied with education [CLASS OF 2016]	100% <b>**Benchmark met**</b>

FINAL

## 2017 CSUN RADIOLOGIC SCIENCES OUTCOME ASSESSMENT PLAN

Data collection January 2017 – December 2017

### MISSION STATEMENT

The mission of the California State University, Northridge baccalaureate Radiologic Sciences Program is to provide the community with a competent, professional Radiologic Technologist who possesses additional advanced medical imaging skills in Magnetic Resonance Imaging (MRI), Computed Tomography (CT), and Interventional Radiography (IR) that meet the needs of the medical imaging community through a highly integrated and advanced level clinical and academic curriculum.

### Program's Goals (overall student learning Outcomes)

Graduates of the Radiologic Sciences Program at California State University, Northridge will:

1. Demonstrate a mastery of basic radiographic and advanced medical-imaging skills in MRI, CT, and IR.
2. Demonstrate effective communication skills that provide compassionate, culturally competent and age-appropriate patient care.
3. Demonstrate problem-solving/critical thinking skills that provide ethical and safe patient care.
4. Demonstrate the value of professional development for patient care and medical imaging through life-long learning that meets the needs of the medical imaging community.
5. Maintain program effectiveness through continual assessment.

**(GOAL) 1. Demonstrate a mastery of basic radiographic and advanced medical-imaging skills in MRI, CT, and IR.**

Outcomes Measured	Assessment Tool(s)	Timetable	Benchmark	Person / Group Responsible
<p><b>Graduates will produce diagnostic quality Radiographic, CT, MRI and IR images.</b></p>	<p>Clinical Competency Assessment form (CCA) is used to assess the students in obtaining diagnostic quality radiographic, CT, MR and Interventional Radiography images.  <i>(The CCA is used for each student to attain competency for procedures and to attain proficiency through re-competency assessment beginning in their senior year and for terminal competency assessment in their graduating senior clinical education. The following components of the CCA are used for outcome assessment.)*</i></p>			
	<p>CCA-Section II                      (Technical Requirements/Patient Positioning and Radiation Protection)                      Items 1-15</p>	<p>Each semester for every competency                      **</p>	<p>Section II ≥ <b>24 pts for Juniors</b>                      Section II ≥ <b>27 pts for Seniors &amp; Graduating Seniors</b>  <b>New benchmarks set</b>  <b>Junior benchmark is 27</b>  <b>Senior and Post Grade is 30</b>  <b>Per advisory meeting</b></p>	<p><b>Clinical Coordinators</b></p>
	<p>Exit Interview Questionnaire Item # 9</p>	<p>Annually</p>	<p>75% graduates respond that they are prepared or somewhat prepared in advanced imaging areas of CT, MR and IR</p>	<p><b>Program Faculty</b></p>

\*Clinical Competency Assessment Forms

\*\*Clinical Competency Assessment Schedule

	Exit Interview Questionnaire Item #4 Note: areas they feel weak in broken down to two questions, one in general diagnostic and the other in advance modality	Annually	15% or less graduates may report they felt weak in basic radiographic imaging 35% or less graduates may report they felt weak in MRI, CT and/or IR.	<b>Program Faculty</b>
	Exit interview Questionnaire Item #8	Annually	85% graduates will report they are prepared or very prepared to enter the Radiologic Sciences Field	Program Faculty
<b>Graduates provide appropriate radiation protection during imaging procedures.</b>	Clinical Competency Assessment form (CCA) is used to assess the students' ability to provide appropriate radiation protection during imaging procedures.	Annually		
	<b>CCA-Section IV (Radiation Protection) Items 1 – 4</b>	<b>Each semester for every competency **</b>	<b>Section IV ≥ 7 pts for Juniors Section IV = 8 pts for Seniors &amp; Graduating Seniors</b>  <b>New benchmark for Juniors is 8 Per advisory meeting</b>	<b>Clinical Coordinators</b>  <b>Program Faculty</b>
	<b>HSCI 285 and HSIC 286 Radiographic Anatomy &amp; Positioning I and II, students are assessed on radiation protection as part of their final practical exam.</b>	<b>Junior year Fall and Spring semester</b>	<b>85% students will practice proper radiation protection</b>	

\*Clinical Competency Assessment Forms

\*\*Clinical Competency Assessment Schedule

**GOAL 2. Demonstrate effective communication skills that provide compassionate, culturally competent and age-appropriate patient care.**

Outcomes Measured	Assessment Tool(s)	Timetable	Benchmark	Person / Group Responsible
<b>Graduates will communicate effectively with patients in an age appropriate, culturally diverse and compassionate manner.</b>	Clinical Competency Assessment form (CCA) is used to assess the student's ability to communicate with patients in an age appropriate manner during imaging procedures.  CCA-Section I (Patient care and Communication) Items 1 to 10	Each semester for every competency **	Section I ≥ 16 pts for Juniors Section I ≥ 18 pts for Seniors & Graduating Seniors  <b>New benchmarks: Juniors 18 Seniors and post grads 20 Per advisory meeting</b>	<b>Clinical Coordinators</b>
	Affective assessment items # 14, 18, 19	Each clinical rotation	Item 14, 18, 19 ≥ 6 pts for Juniors  Item 14, 18, 19 ≥ 7 pts for Seniors & Graduating Seniors	<b>Clinical Coordinators</b>
	HSCI 487: Professional Development of Radiographers course, examination items that assess effective cultural diversity skills.	Senior year  Spring semester	80% total score on assessment items on examination	<b>Program Faculty</b>
<b>Graduates will demonstrate effective professional communication.</b>	HSCI 487: Professional Development of the Radiographer, professional presentation to the class on a topic related to Radiologic Sciences.	Senior year Spring semester	80% total score on assessment  Request to see high scores and low scores with this data by advisory committee.	<b>Program Faculty</b>

\*Clinical Competency Assessment Forms

\*\*Clinical Competency Assessment Schedule

	<b>HSCI 486A Seminar: Advances in Radiologic Imaging I.</b> Each student independently develops a topic related to radiologic sciences in either a scientific display or research paper assignment.	<b>Junior year Spring semester</b>	<b>80% total score on assessment</b>	<b>Program Faculty</b>
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**GOAL 3. Demonstrate problem-solving/critical thinking skills that provide ethical and safe patient care.**

<b>Outcomes Measured</b>	<b>Assessment Tool(s)</b>	<b>Timetable</b>	<b>Benchmark</b>	<b>Person / Group Responsible</b>
<b>Graduates will have critical thinking/ problem-solving skills.</b>	HSCI 285 - Critical Thinking Portfolio assignment in Radiographic Anatomy and Positioning I course.	Junior year Fall semester	80% successfully analyze radiographic quality of images presented	<b>Program Faculty</b>
<b>Graduates will have critical thinking/ problem-solving evaluation appropriate to medical imaging and safe patient care.</b>	HSCI 284: Clinical Education V, students are to compose a professional research paper on a specific clinical case study based on a clinical education experience.	Senior year Spring semester	80% total score on assessment	<b>Program Faculty</b>
<b>Graduates will have critical thinking/ problem-solving evaluation appropriate to patient safety/ ethical care.</b>	<b>HSCI 285 &amp; 286 – Periodic assessment items which require analysis of scenario questions.</b>	<b>Junior year Fall and Spring semester</b>	<b>80% total score on assessment</b>	<b>Program Faculty</b>

\*Clinical Competency Assessment Forms

\*\*Clinical Competency Assessment Schedule

**GOAL 4. Demonstrate the value of professional development for patient care and medical imaging through life-long learning that meet the needs of the medical imaging community.**

Outcomes Measured	Assessment Tool(s)	Timetable	Benchmark	Person / Group Responsible
<p><b>Students in the professional program participate in at least one professional conference.</b></p>	<p>Seminar attendance records and short educational summary paper</p>	<p>After each conference</p>	<p>50% of students will participate and write an overview of what they learned at a continuing education conference</p> <p>Change was suggested to use students who participate via submissions, publications, scientific displays, oral presentations to measure. Benchmark to be set to 30%</p> <p>Advisory committee suggested add an additional metric dedication to lifelong commitment and use attendance of speed mentoring evens, presentation, conferences, Benchmark to be set tp 20%</p>	<p><b>Program Faculty</b></p>
<p><b>Students will complete all program requirements within 150% of the professional program length.</b></p>	<p>Student transcripts</p>	<p>Annually</p>	<p>80% of the students starting the program will complete the program</p>	<p><b>Program Faculty</b></p>

\*Clinical Competency Assessment Forms

\*\*Clinical Competency Assessment Schedule

<p><b>Students will obtain ARRT advance certification within two years.</b></p>	<p>One-year post graduate survey</p>	<p>Annually</p>	<p>30% will have advance certification with in two year after program completion</p>	<p><b>Program Faculty</b></p>
<p><b>Students will actively participate in Professional activities such as publications, oral presentations, scientific Poster presentations, etc. Conference attendance alone does not count.</b></p>	<p><b>Seminar records and professional publications.</b></p>	<p>Annually</p>	<p><b>30% of students will participate in professional dissemination of knowledge through publications, posters or oral presentations. .</b>                       Advisory committee suggested 20%</p>	<p><b>Program Faculty</b></p>

**GOAL 5 : The Radiologic Sciences Program at CSUN shall maintain program effectiveness through continued assessment.**

Outcomes Measured	Assessment Tool(s)	Timetable	Benchmark	Person / Group Responsible
<p><b>Each cohort of graduates will pass the national ARRT exam the first time.</b></p>	<p>ARRT exam report</p>	<p>Annually</p>	<p>100% pass rate</p>	<p><b>Program Faculty</b></p>
<p><b>Each cohort of Graduates will have averaged a score or 85% per class for the national ARRT exam.</b></p>	<p>ARRT exam report</p>	<p>Annually</p>	<p>85% average per class</p>	<p><b>Program Faculty</b></p>
<p><b>Graduate’s employers will report that they were ready to perform in the medical imaging environment after one year of employment.</b></p>	<p>One-year employer assessment tool</p> <ul style="list-style-type: none"> <li>▪ Likert Scale of 10</li> </ul>	<p>Annually</p>	<p>8 out of 10</p>	<p><b>Program Faculty</b></p>

\*Clinical Competency Assessment Forms

\*\*Clinical Competency Assessment Schedule

<p><b>Graduates who are actually seeking employment in medical imaging upon graduation will have <math>\geq 75\%</math> employment rate within 12 months of graduation.</b></p>	<p>One-year post graduate survey and web base electronic survey, Survey Monkey</p>	<p>Annually</p>	<p>75%</p>	<p><b>Program Faculty</b></p>
<p><b>Graduates are employed in advanced imaging positions.</b></p>	<p>One-year post graduate survey and web base electronic survey, Survey Monkey</p>	<p>Annually</p>	<p>Three months postgraduate <math>\geq 35\%</math> advanced imaging employment</p>	<p><b>Program Faculty</b></p>
<p><b>Graduate Satisfaction</b></p>	<p>Exit Interview</p>	<p>Annually</p>	<p>90% of students satisfied with their education.</p>	<p><b>Program Faculty</b></p>
<p><b>Program Complete Rate data for students who receive federal funds.... State funds....</b></p>				

## Exit Interview

1. After going through the program, do you plan to actively seek employment once licensed in Radiologic Sciences?

Response	Average	Total
Yes	 96%	26
No	 4%	1
<b>Total</b>	 100%	27/27

2. Overall, were you satisfied with the education provided by the CSUN Radiologic Sciences Program?

Response	Average	Total
Very Satisfied	 26%	7
Satisfied	 74%	20
<b>Total</b>	 100%	27/27

3. Do you feel that our "minor" affiliates such as Holy Cross, Cedars-Sinai, and Olive View strengthen or weaken the program? Why?

### Response

I feel that the minor affiliated sites strengthen the program, as they provide different hospital and clinical experiences. Many of these "minor" sites provide great upper modality rotations, such as Cardiac Cath Lab and MRI rotations.

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Strengthened. I had positive experiences. They bring forth more and different opportunity to learn.  
Strengthen.

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The more sites we rotate through, the more networking and potential job opportunities we get.  
strengthen

## Response

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Minor clinical sites definitely Strengthen the program! Especially the new site Simi Valley for CT/MRI where techs are very knowledgeable and willing to teach!

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STRENGTHEN; allows us to experience working in high level trauma hospitals. Very different from OP clinics and rotations. Also high number of exam request means students are able to learn more.

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They strengthen the program because all of those minor sites expose the students to meet and work with more people in the field.

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Minor sites were great aside from Cedars-Sinai's Medical Office Tower (CT).

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Strengthened!

I thoroughly enjoyed my rotation at Holy Cross & Olive View.

Holy Cross because of the technologists (Mario & Aijaz)

Olive View because it exposed me to a different patient population & the county system.

I was not allowed to rotate through Cedars-Sinai due to my varicella being .01 away from negative which is BEYOND frustrating and discouraging :( Cedars was in my top 3 hospitals to work for after the program and I was not allowed to experience their facility based on a technicality.

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The minor sites definitely strengthen the program because students are exposed to a variety of radiology department culture. Every hospital is different and students come across patients with diverse backgrounds. This promotes student to be more culturally open-minded and competent in treating patients. I believe that being able to speak Spanish is an essential skill that students should be encourage to learn.

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Strengthen.

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I feel that the more clinical sites that we rotate through, the better. I feel that rotating through these minor sites strengthened the program because we were able to build more connections within the radiology field. We learn something new and different ways of doing things at every site that we go through and the minor sites are no different.

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Holy Cross- Bryan H. is great to work alongside. He knows the physics and concepts of MRI very well.

Cedars- I highly recommend that students are NOT sent to the outpatient center (MOT imaging) for CT. It is not the best place to learn nor is it the most professional environment. The techs are aggressive and inappropriate in the work area. I did not enjoy my rotation there. I would feel extremely stressed out and anxious throughout my entire shift. If you make a mistake, the techs make fun of you or make you feel stupid. Not a good place to learn.

Olive View- Building and machines are old and outdated. Staff is friendly. However, Eric Skiver is rude, aggressive and inappropriate. He stares at you during procedures and calls his coworkers names behind their back. He made me uncomfortable (this was brought to the attention of Mike Ruiz).

I believe that incorporating the minor sites improves the learning experience for CSUN students by allowing us to experience different areas in many different facilities as well as by exposing us to many more personalities to learn to work with.

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Strengthen our program. The experience of a tightly knit team is essential to those who get overwhelmed with big sites like UCLA and Cedars. Students get a more hands on experience and can focus more on exceling.

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This question very much depends on the site. I had two of my worst experiences at Olive View (for two different rotations) and in the Angiography rotation at Cedars. I did my time there like one would serve in prison, just surviving one day at a time.

However I had two excellent learning experiences at Holy Cross and I enjoyed my time at Children's LA and Shriners.

I think Olive View should be removed as a clinical site.

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I have not been to Cedars Sinai. Holy Cross and Olive View are good sites for student learning and I don't think that they weaken the program.

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The minor sites give, like the variety of major sites, well, variety. They definitely are a strong asset to the program and allow for different perspectives and challenges. By far the biggest problem foreseeable with any of the minor sites is the commute, but the same could be said of UCLA's location.

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I feel like they strengthen the program. They are great sites and benefit to our learning.

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strengthen, they provide us with additional sites to learn how other hospitals function and provide additional learning opportunities for students

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The minor sites were where I had some of my best clinical experiences. Therefore, I feel that they definitely strengthen the program.

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I feel that our "minor" affiliates strengthen the program since we got to see different aspects of the clinical such as different procedures and protocols. We also get to see new techs and learn new techniques from them. ^

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I feel like they strengthen the program. These minor sites run their hospital very differently from the larger hospitals. The smaller sites also allows the students to get acquainted with the staff more quickly.

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I do not think they strengthen the program because the type of workload at some of the rotations that i had were not even for what i was rotating there for so there is no point of having a student go for ex. to holy cross for angio because they will get more of a specials rotation. Olive view was okay but not that great specially when the techs are very lazy

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Yes, I feel that the minor sites positively improve the program because they provide a great deal of the advanced modality training. Majority of our advanced rotations take place in those sites and they provide a great training experience (most places).^

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Yes. It allow more networking opportunities and allowed me to learn additional styles of work and techniques. Over all, I was able to gain more experience from them.

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I feel like some of these rotation within the sites do strengthen our program. But from personal experience I can only detail the rotations that I happened to be assigned to at "Angio" Holy cross and MRI Cedars. My experience at Holy Cross lacked cases at the time that I was there. This made my experience there very poor education wise since I was stuck learning nothing but watching PICC and

Port insertions which I had already had a Specials rotation for. This in my opinion should be considered because then the actual time I spent in Angio was a lie, since I did not watch angio related cases during my entire stay there yet I am considered to have had an Angio rotation just like someone who actually did get the chance to watch cases every day at a different site. I feel that situations like this should be addressed and immediate action should be taken because promoting equal learning education opportunities only seems fair considering we are paying the same tuition. The techs and the whole Angio department was amazing and they really tried to answer questions I had but that does not replace the fact that I saw no angio cases. MRI at Cedars was a good rotation I just believe that the militant attitude of the management makes students feel less than at times being called out of scanning to transport when there are "DA's" who are paid to do the work. I even had a tech apologize to me saying that "this is what they have been doing to students lately". The amazing techs make up for the attitudes and the knowledge they share is unlike any other. I think students should be appreciated more and at least be assigned a spot to place their bag within the MRI department since I struggled for 3 days straight to find a spot to leave my bag claiming "we don't have room down here". Yet I did not feel comfortable leaving my bag with strangers upstairs the entire day. I was also asked not to ask questions because he "wanted the tech to scan quickly to get the patient out of here", when all I was doing was responding to my tech who was explaining to me the scan after she had initiated the conversation. The tech after this kept explaining and talking to me and would ask me things and I didn't want to respond so that I didn't look like I was disobeying orders, but then again didn't want to be rude to the tech who was being kind and explaining despite being asked not to. I felt really discouraged by this and felt against the wall in this situation. I think that should have been addressed with the tech and not me. If management has something they don't want their techs doing it should be addressed with the tech and not the student. Other instances like this were where they didn't want me planning the first sequence so that we wouldn't waste time, but then the tech would say "set it up from the beginning". Should I have refused and said no? According to management yes I should have refused, but would that tech than think less of me and not want to teach me the same way? I got called out on this as well was told in front of my tech "student remind your tech that you cannot plan the first sequence". Why tell me? Address that with the tech so that I am not put between the walls and made to look bad since it's not my idea in the first place, I am simply there to learn. This made it slightly more challenging to learn and adapt to, but seeing the interesting scans they do was the only good thing about this rotation.

#### **4. What areas of clinical do you feel weak in, and why?**

##### **Response**

I feel that I could have benefited with a second Cardiac Cath Lab rotation, as one was clearly not enough time to fully appreciate the department and environment. Also, I was stuck with a poor rotation as my one and only cath lab rotation, which forced me to choose a cath lab rotation as my elective, so as to get a feel of how the department actually functions.

MRI. Simply because some sites don't have enough variety. And the way some sites run their MRI department could make it difficult for some students to practice. At children's they put me on the scanner more dedicated to outpatients. So I saw nothing but brains most days. Med Plaza 200 they put a different tech on the scanner every week. So it made be difficult to practice when they don't know you and you don't know they are way of doing things. Especially when this is a first site.

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The short clinical rotations (2 week) are not useful and shouldn't be allowed. We go through different modalities and this span of time is too short to learn their protocol and workflow well enough to show our abilities.

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None

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Pediatric general x-ray. There are not that much clinical exposure with pediatric patients in any of the hospitals we rotate through. And at a Children's Hospital we do only CT/MRI/ANGIO and not allowed to do general diagnostic x-ray.

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Weak in technical ability. Although it is GREAT that we work with so many different systems, sometimes we forget minor details in how to use one vs. another due to fast rotation cycles MRI--my 2 rotations were placed 10 months apart, with the second rotation being only 9 days long. I was far from competent in the beginning of my second rotation and was worried that I would not be able to get all of my required comps. Rotation scheduling could have been improved on.

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Scrubbing in for IR or Cath due the fact that I didn't do it much  
MANUAL TECHNIQUES!!!!

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We were only required to make a technique book based on hospitals pre-determined charts. It was NOT presented as we learned each position. KVP & MA were not pounded into our heads as much as I wished they were.

Positioning - our RAP teacher was not a well prepared teacher. This class was the FUNDAMENTALS of our entire career. It should be taught to us by someone knows the information like the back of her hand and have "tips of the trade" to pass along. I do not feel like the class was properly instructed at a BS level by the teacher

OR - it is a difficult rotation & I did not have enough practice as the VA WEST LA tech did not like students and would never allow me to participate in cases.

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Angio/Cath Lab: The lack of scrubbing in and manipulating wires/catheters, other devices. Some sites let you drive the c-arm such as Northridge and Holy Cross, which is great for students.

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No weakness, but still room to be better

I feel weak in radiographic positioning due to the education I received in the RAP courses. I do not feel strong or confident going into the ARRT exam for the anatomic positioning section which makes up a lot of our test so it is very unfortunate that I did not get a good foundation while in the RAP courses.

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CT- My first rotation was the summer before we had our cross-sectional anatomy and CT classes. My last CT rotation was at Cedars about a year and a half after my initial rotation in a very poor learning environment. I do not feel entirely comfortable in CT.

Anatomy and Positioning- this was a bit of a struggle since our instructor was not the most qualified. All too often a trochanter was being confused for a tubercle which is an error you do not want a professor to be making when you are learning. I would say that the anatomy and positioning class was a waste of time. Everything I know was self-taught or taught to me by a tech.

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Upon finishing, I feel weakest in general radiographic positioning and general bony anatomy. Probably IR just because there is so much to learn as far as tools and devices. Also protocols for the bigger sites demand more knowledge from students so it takes longer to get your feet on the ground. With time I've gained strength and knowledge. Experience comes a long way.

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I don't feel weak in any area, I simply feel that some of the more involved procedures in the Cath lab and Angio rotations take longer to gain confidence in and very much depends on the site and techs, and student interest. I showed interest and was allowed to get involved, but there is so much to do that I wish I had more time and experience in those procedures.

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MRI because I didn't get to learn anything about MRI scanning in my first rotation at USC. I feel like I just wasted 5 weeks of my MRI rotation, a lot of gas money, time and effort to travel back and forth. The techs there don't care about teaching the students, they just use students as free labor. All they ask you to do is to get the patient changed, fetch them a warm blanket, set up the room, clean up the room after the procedure and stock the linen. During the in between times if you sit and observe they don't allow you to scan, they answer questions and don't tell you what exactly they are doing as they plan the different sequences of the scan, why they pick some sequences and not others. If I had been able to learn anything and been allowed to scan I would be much more confident about MRI.

I felt the same about my CT rotation at Children's hospital, where they don't let you do anything. The only thing I was allowed to do was to put the sheet on the table before the procedure and clean up afterwards.

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Question and answer in some aspects of the occupation with patients is the first thing that comes to mind. Patients can ask a myriad of things about the job, potential hazards, or other such criteria.

A stronger background in both Interventional/Angio and Cath Lab would be desired as well. While our rotations in both are quite long, higher traffic sites for both those rotations would be more greatly desired.

A third aspect of the occupation that comes to mind is dealing with children, or pediatric imaging in general. A full pediatric rotation at Children's or Shriners would be greatly desired. Regardless of modality, children present an entirely different spectrum of stressors and challenges from adults, and it would be a benefit to us as students to have been able to interact more with child patients in a variety of modalities and not limited near exclusively to two sites and the occasional outpatient or ER visitor.

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GI/GU and the ability to produce manual techniques in general x-ray. I was not given great GI/GU rotations and feel that I am not 100% ready to tackle them on my own. I also feel that with digital being so prominent in the clinical site, I did not receive proper knowledge on what techniques should be used for which exams. This is a big deal to me and makes me feel unprepared as a technologist in those situations.

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i don't feel extremely weak in any areas in particular.

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I feel that I am weakest in general radiography. Most of my rotations were in advanced modalities from the beginning with a few general rotations in between, As a result, I feel as though my foundation in general radiography is as solid as it should be.

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I feel that my communication skill is my weakness. but throughout the last 2 years, i had a chance to improve it. i got to see many different technologists and worked with different people which helped to build my confidence in communication.

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An area that I feel weak in during my clinical rotation is the use and understanding of different brand equipment. As students, we do not stay at a single rotation for a long period of time. Therefore, I was never able to fully understand the functionality of each equipment.

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Angio because i got two angio rotations that were specials at VA and holy cross. I never got to experience an actual angio rotation and it was very unfair with people that got ucla and cedars. I also feel weak in my techniques i do not think the technique book really does anything helpful at all. and in anatomy i basically taught myself anatomy first semester

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I feel the weakest in my X-ray skills at this moment. I think this is the case because there was about a year and a half gap between my last general rotation and my final general rotation. I know what I'm doing and i remember the positions, but they are just a little rusty.

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I feel weak in trauma radiography, MRI, and portables because there are situations which require adaptation to the situation. I don't feel that I got enough training in trauma radiography. I also feel my RAP are extremely weak. The teacher we had (Saunders) did a terrible job at preparing us for the clinical situations.

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Rotations where I was assigned to but learned very little due to poor clinical sites. For example Cath lab and Angio I feel are my weakest. Cath lab at Henry Mayo I did not get the chance to do many things I heard my classmates doing at their sites. I never got offered to scrub I never got taught how to monitor all of which are things I heard other classmates got to do. Hearing that makes me feel like that is my weakness because I didn't even get the

chance to learn something about this specialty in order to see if I would have been interested. Was my only Cath lab rotation and again had that time go to waste.

## 5. What areas of clinical do you feel strong in, and why?

### Response

Cath Lab, XR and CT

Cath Lab because I was very hands on and took the time to learn essentials there. The rush of a code is unparalleled and the feeling of contributing to the team is amazing. Truly in a day's work we make differences in people lives. A reason I got into XR.

I enjoy refining my skill in XR and love to think outside the box to get quality images whether it is in OP or hospital setting.

CT on new scanners is amazing. The 3D recons are awesome and cardiac imaging is fun to learn.

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I think my basic x-ray is very strong and I'm very comfortable doing almost any exam. I also feel I could jump into CT without any hesitation.

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I feel good about Cath lab because during my rotation at NHMC I got an opportunity to learn a lot, I was allowed to set up the table using sterile technique, and also prepare the room and the patient before Catheterization procedures. It really helped me to learn a lot and to boost my confidence. I learned quite a lot about MRI at UCLA but my rotation was not long enough for me to learn as much as I would have liked to learn.

I also feel strong about CT scans, general xray, which includes fluoroscopy procedures like GI/GU, General Specials and Angiography, and Mammography because I was able to get a lot of practice and hands on training during my rotation in the respective modalities.

I feel good about pretty much all the modalities that I have learnt in the past 2.5 years and that I can work in any or all of those modalities if given a chance.

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The upper modalities--specifically both CT and MRI. Both the classes and the rotations were particularly insightful, and getting the first rotation in those modalities just as you were going through or right before lecture was definitely a plus.

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I feel strong in CT and gaining much more confidence in x-ray. A had very good rotations for CT and learned a lot, and had some great x-ray rotations that helped me nail down positioning much more in the later semesters.

I feel strong in areas of proper patient care, x-ray, CT, MRI, cath lab because of great rotations where I learned how to excel in these areas.

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I feel strongest in CT and specials because they were the rotations I was exposed to the most. I feel comfortable with my sterile technique as well as scanning patients in CT.

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i feel that my ability to follow instruction, technical confidence, initiative and follow through are my strength. Most of the time it doesn't take long for me to learn new procedures and protocol from a hospital. i feel like i always want to learn new techniques and try to finish my work as best as i can.

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I feel confident and comfortable in CT and General x-rays. These two modalities were easy for me to pick up.

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I feel very good clinically in CT because when i was in inpatient Cedars they really let me be hands on and i was doing PEs by myself and full traumas from start to end all alone.

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I feel confident in my MR because i was also very hands on at USC and simi working with philips, toshiba, siemens, and GE.

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My UCLA cath lab rotation made me feel very confident in my procedures and anatomy and materials used one of my all-time favorite rotations.

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I feel very strong in CT. I have had quite a few rotations in CT and i am very confident using the various platforms and scanning.

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I feel strong OR, general diagnostic, CT.

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I feel I am strong radiographically in general and CT because I spent a lot of quality time at sites that know how to teach students and allow them to grow on their own. For example the VA general and CT, UCLA 200MP general and CT.

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I feel that I was very well prepared in my CT rotations, the reason being that there were two rotations and the CT concepts are easier to grasp.

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CT I had good rotations & decent exposure I got to learn more

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Cath Lab/Angio I had good experiences. Although my rotations lacked comparatively to other student rotations

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Being able to adapt to different modalities from going to different rotations throughout the program.

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I am very interested in MRI and I tried to use any chance I had (when it wasn't busy at general diagnostic or CathLab/Angio) to get all my unassisted MRI numbers. And I succeeded :)

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Pt interaction=ability to talk to patients and doctors/ radiologist and communication with staff.

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Knowledge of exam procedure: I feel confident when starting exams, the program gives you the tools you need and lectures to know what to do with exam and procedures.

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Patient interaction. From the first day of clinical, I've been watching the way certain technologists interact with their patients. I learned what is a good patient experience, and I also learned how not to treat/talk to patients.

Patient Care and general x-ray because i had the most rotations in general.

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patient care. trauma. interventional.

It came naturally to me. Paying attention to detail and staying calm in high pressure situations is essential.

I had wonderful technologists that I studied under at various sites. The technologists can make ALL THE DIFFERENCE in a rotation.

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General x-ray, CT, MRI: The amount of clinical time is sufficient to get a good feel on these modalities.

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Patient relations

I feel strong in the areas of patient and staff relations. Being able to effectively communicate with your coworkers and your patients is extremely vital in this field. This isn't really something that you can teach so selecting the right candidates for the program is very important. Perhaps also learning about being professional in our Professional Development course with Doris helped as well!

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I feel confident doing portable exams. I also enjoy doing spine xrays. Huge thank you to Valley Presbyterian staff and Emil at Sepulveda.

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I feel strongest in the advanced modalities and pathology since they were most recent.

## **6. What were some of the most valuable components of your clinical?**

### **Response**

I believe hands-on experience was the most valuable component of my clinical experience. Observational rotations were not as impactful nor as useful as those rotations which allowed students to be involved and immersed into the department. Hands-on clinical rotations, I believe, are the rotations that best prepare us for the type of work environment we may encounter in the future.

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Being able to move around and learn from other institutions.

Being able to scrub in or just being able to physically participate

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Meeting so many technologists and managers. Having all the upper modalities to rotate through.

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all the different rotations gives you ample experience

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The most valuable component is being able to go to so many hospitals and have a clinical experience in so many different areas of patient care.

Most valuable would be the number of hospitals we are able to work and rotate through in addition to the advanced modalities we get to learn. NETWORKING; getting your name out there all throughout LA/ SVF.

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Meeting people in the field. One of things that I am most grateful for in the program is being given the opportunity to meet amazing, genuine rad techs through clinical. Some of those techs were amazing mentors/friends that taught me lessons in both clinical and in life.

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The most valuable components would have to be the all the different sites and rotations we were exposed along with the great techs I got to meet, aside from a couple that were not great to work with.

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Being able to partner with a knowledgeable technologist and follow them.

Being able to be HANDS-ON. To actually drive the fluoro, or scrub in, or attempt the trauma shoulder. It is invaluable!!! Everyone should take advantage of every situation & jump in

Eventually gaining the confidence over time, to relax and thoroughly enjoy my job as a technologist. To be an asset in the department and actually help in the daily workflow.

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The amount of knowledge and tips that techs tell students.

The various clinical sites I rotate through.

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The experience to be exposed to many different cultures and types of patients

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Being able to make connections and learn from technologists that have been working for many years is an invaluable experience from clinical.

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I enjoyed having the opportunity to rotate to so many great hospitals. I met many great techs (Misael Garcia at UCLA) that taught me so much throughout my career as a student.

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Seeing how different techs at all the different sites work and interact with each other.

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The techs in my opinion. We need great teachers to show us the ways of XR. Students can only learn so much from the textbook but the clinical experience is heavily dependent of the quality of techs that we interact with.

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Learning from so many different techs; it is very easy to see who are the ones to not learn from and who are the ones that will shape the great techs to come. There are some who simply don't care about patient care, or image quality, and they just do it as a paycheck with no real investment into those they are caring for, and that is the type of person nobody should learn from.

Similarly, learning to use so many different equipment setups at all the various sites makes it easier to walk into a facility and generally know how to use the equipment.

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The opportunity to do patient care and be a part of their healing process in a small way, nonetheless. All the moments when a patient held my hand because they felt that they could trust me during a time, when they were terrified, or in pain during procedures.

The trust that was placed in me when I was assigned duties and allowed to work independently as a Radiology intern and the confidence that I gained by strengthening that trust.

Every little opportunity that I got, to learn the skills and qualities of a good technologist, every time when I was put in an ethical dilemma and I did what was right for my patient.

All these times were a valuable part of my journey from a radiology student towards becoming a successful technologist in the near future.

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Probably the biggest asset and most valuable component of clinical was just interacting with the different patient populations--the VA and Olive View stand out in particular for having such distinct populations to work with. Giving us the experience to work with so many different age groups and nationalities gave a lot of perspective into the different sort of groups that inhabited LA County.

Other than that the thing the second most valuable component from clinical that comes to mind was interacting with all the technologists from all the different sites. Learning the different ways of obtaining the same image, different tricks and tips to use--it was nice having that inside knowledge first-hand.

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Having great techs made a huge difference in clinical. Some of the sites have extremely knowledgeable and helpful techs that love to teach the students and tech them well. Some of the techs I got to work with made learning and my over experience excellent. I really learned a lot from the staff at VA WLA CT and USC OP Ortho and general specials.

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The wide range of clinical sites we got to experience to prepare us for different jobs and all the different equipment we got to learn how to use.

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I feel that rotating through various facilities was very valuable because I got to meet many techs with different methods of doing things and got to work with all kinds of equipment and technologies. By that same token, moving around all the time was taxing because we had to start all over again when we got to new sites.

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Some of the most valuable components of my clinical are the experience we get from rotating through different hospital, the chance to learn new techniques and work with different people. Although we did not get pay for our clinical time, i was worth it since we get to see the aspect of a full time technologist and we was able to help many patients while sharpening our clinical skills.

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Meeting different people from different clinical sites. This allowed me to network and make new friends in this professional field.

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Having techs that are willing and have the patience to teach because we don't go in always knowing what to do sometimes we haven't even had the class for it yet but they wouldn't understand that.

Also having sites that actually let you be hands on. Even though i loved USC my first rotation there was frustrating because they basically had me just getting the patients for all the scanners and doing their IVs and ISTAT and never really getting the chance to scan.

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The rotations were definitely the most valuable component. If it wasn't for the experience and the techs teaching us in clinical, i don't think we would have received as much clinical knowledge as we did.

Learning from the different sites the different styles, work flows, and attitudes that are out there in this profession.

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The ability to meet and network with hospitals was amazing and will help a lot in the future.

## **7. What can be improved in your clinical experiences? And how? Please be specific in your comments if they refer to a specific affiliate.**

### **Response**

Having proper clinical rotations is essential for preparing us for the awaiting job market. Rotations which do not need students, or do not want them, are a waste of our time as well as the program's time. Some sites include Henry Mayo Cath Lab and General Specials, as they do not provide students with any hands-on experience. Also, sites which do not have a medium- to high-patient volume are also seemingly a poor use of our limited time, such as Shriner's hospital.

It would have been nice to experience angio in a bigger capacity than I did clinically.

My two angio rotations were west la and olive view. Pretty much an identical work load. While other students got both cedars and UCLA. Bigger institutions where they could have the increased chance or just a chance at seeing more or different angio procedures.

Despite this, I still had a good experience with angio. I just don't think it was equal.

My two of MRI rotations lacked variety Children's (because I was sent to the outpatient scanner) and med Plaza 200

Last clinical rotation should not end on a Monday. It really shorted out some students trying to get exam numbers with only 2 weeks and 1 day at that rotation.

We should not be placed in upper modalities that we have not learned about yet. Students cannot get any exam numbers if they are not allowed to do it unassisted because they haven't been tested on it yet.

At Children's Hospital we do only CT/MRI/ANGIO and not the general diagnostic x-ray. CT rotation at Children's Hospital was in my opinion absolutely useless and unnecessary. Students there are allowed ONLY to clean the table after patients, give lead aprons to children's parents and observe. And when it's not busy (and it's not busy most of the clinical day) students are NOT even allowed to go to general diagnostic x-ray, because they have students from different school.

VP is the Only hospital where I (actually Most of female students) had a Very unpleasant and unprofessional clinical experience. There are 2 female techs (Katy and Rina) who have a Huge Negative Attitude towards most of female students. They ignore you when you say hi, talk about you like if you weren't even there, use vulgar and disrespectful language (and I'm not talking about regular everyday cussing words). Our Clinical coordinator knows about the situation. He even said to me once you going to do portables with Katy today. I know she is tough. I am sorry

Having a clinical instructor at each site, would help when students have questions and also for students to be able to go to them and evaluate how they are doing in clinical.

CHLA CT- I had close to absolutely no experience here during my entire rotation time. On an average day, we had 4 CT patients, most of whom I was not allowed to scan. During my free time, I was not allowed to help out in the general area due to students from other programs occupying the area. I would spend 75% of my entire time of clinical each day working on class work on my laptop because there was nothing else (clinically) that I was allowed to do.

I heard great things about MRI at CHLA; however CT unfortunately, is a waste of time at this location. Stop sending students to MOT for CT, not a good learning experience. The program should offer an evening option for clinical for all rotations

Have clinical coordinators there on first day to introduce new students. Makes a world of difference when it did happen.

be sure to place students in clinical sites with technologists who are willing to teach-

VA WEST LA - OR - the tech upstairs is TERRIBLE with students. He never called down like he said he would to have me come up for cases. It was a waste of an OR rotation. OR is a difficult rotation and I wish i would have had more practice!!!!

FOR CT & MRI, tell students AHEAD of time that you will need the following information from the technologists to input into the website for your numbers-

name, email, address, and license number/

CSUN could create a master list of technologists so students are not scrambling to get information.

Also providing the list of studies for CT numbers ahead of time would be helpful so we could be aware of what to look for ahead of time. I feel like i had to do all this alone. CSUN encourages us to apply for CT and get numbers.... but that's it. There is no guidance in how to go about it. I understand that we are in a BS program and can figure it out on our own. But considering how important it is to obtaining our licenses it seems like it should be covered more thoroughly.

Remove angio/general specials at Henry Mayo as a rotation. I couldn't do much as a student other grabbing supplies and setting up trays. The environment is hostile too.

Have all students rotate through Cedars-Sinai and Shriners. They are both essentially life-changing rotations. Angio at Cedars-Sinai is definitely one of the best rotations I ever been to. Have program documents available to us without the need to print ourselves, especially at minor sites.

I feel that our Angiography sites should be thought over. I rotated through 2 different Angio sites (Olive View and Holy Cross) and both of them were more like General Specials rotations so I feel that those rotations weren't very beneficial for Angio experience.

I feel that my personal experience with clinical rotations I got very lucky (except for my Angio

rotations) however I know of other students that got very bad or unlucky rotations.

For instance, it does not make sense to put someone in a Portable, GI/GU, CT, or MRI rotation before they've even taken the course/class for them. The odds are stacked up against these students in regards to finishing comps in these areas.

If a student rotates through MRI before even taking the course with Binesh then they cannot comp on any exams meaning they can't log any numbers and it turns out to be a waste of a rotation. Finishing the MRI and CT numbers is hard enough, it would be nice if this was considered for the future classes.

Ensuring there are techs that are willing to work with students at every site is key.

There are a few sites which do not fit the criteria that students' rotations are based in such as the junior UCLA peds rotation at Med Plaza, since they reserve pediatrics for Wednesday when there is not student it is wasted as a pediatric rotation. And outpatient angio at USC which does not perform angio procedures but is limited to special procedures.

Maybe like small short videos explaining what to expect, equipment, and protocols before students go to the clinical sites.

I think Olive View should be removed as a clinical site. The people there are largely useless for education, some of them are simply a negative impact on one's learning experience.

Otherwise, I think everything is really well organized and the oversight at most facilities is good. The VA WLA needs some work so student's aren't left completely alone for hours at a time to get patient exams done, and despite what we're told and what is said, it happened every day when I was there. On that same coin though, we really learned our manual technique and how to adapt to situations by learning with and from each other (the students) because we sometimes had no techs to oversee and teach us.

Children's hospital CT rotation and USC MRI OP is a waste of time and should not a clinical site for the future batches if that is possible because there is no learning opportunity provided there.

The main thing that comes to mind is interaction with technologists at some sites. It became clear with some technologists at some sites that after the initial interactions there was either a pronounced or understood reluctance to teach the students unless real initiative was shown. We are here to learn and pick up new things, and it is difficult being able to pick up new talents when there is a reluctance to see what we can do--to "hand over the keys", as it were.

Other than that, the biggest complaint I can raise about the program that I can remember was my MRI rotation at UCLA SMI. The rotation itself wasn't bad; rather the most irksome thing about that rotation was that the technologists were constantly rotating week after week. I do not know about others, but I need that consistency of seeing familiar faces day in and day out to build a rapport and trust and eventually learn a thing or two--and that was quite frankly impossible for the majority of my shift until the afternoon crew filed in, because at least they remained constant, regardless of how little time I spent with them once they clocked in.

I feel something that can be improved in clinical is possibly taking away some rotations at certain sites. I know that OR at the VA was awful, as I rarely got to assist or be in cases. I also heard that Henry Mayo's Cath lab rotation wasn't great either as many cases did not come in, even though the staff were great.

I personally also think the clinical coordinators and faculty are too hard on the students about

uniforms. I feel that it should not be such a big deal to wear a basic black jacket to clinical, or the need to wear scrubs to the hospital just to change out of them into OR scrubs.

The only issue I really had was with venipuncture. We took the class a year ago and i didn't get a chance to get my sticks until my last rotation and was rusty and it was a stressful experience.

Perhaps making some rotations longer at the expense of going to many facilities would be a bit more helpful because as students we would have more time to polish our technical skills more rather than worry about learning new equipment and protocol and meeting new staff.

I hope there will be improvement in clinical in which students will have more beneficial rotation. For example, some students got their IR rotations at minor affiliates (for example, Henry mayo) which there is rarely any case for us to learn. So when our second IR rotation comes, we don't have enough experience in IR which sometime become a bad impression for some technologists.

I felt that some rotations were a waste of time because certain sites did not have any procedures schedule. Also not having enough venipuncture sites made it extremely difficult to get enough sticks. PLEASE DO NOT SEND ANYONE TO OUTPATIENT CT CEDARS!!!! The techs there are very RUDE and MEAN to students. One got in my face and got so close to my face i could feel her breathing on my cheek and that wasn't the first time i heard something bad about that place and i did not believe it until i experienced it myself. I told Roland and bobby about my encounter with this tech and it was taken care of, but one of my classmates told me that she was saying if she ever saw me outside of the hospital she would beat me up and this is coming from a 44 year old woman. Tech like her shouldn't be working with our students and if things like this occur students should be pulled out immediately.

1. inform future students about the CT/MRI requirements and how to properly document.

Get rid of Valley Press. I had a horrible learning experience there. The environment is very hostile towards students. In particular Katie and Bernice made my learning experience terrible. That being my first clinical rotation as well caused me to have a bleak outlook of the profession. Those two individuals in particular are extremely unprofessional, unwilling to teach, and rude to students. Having less students in the program would have improved clinical experience because it would allow more room for moving students in the event one rotation is lacking in cases or positive learning experiences. I also feel like talking to the techs so they are aware of what Evaluate is and what comps are so they feel less bugged about us having them fill out paper would be nice. Because at some sites it seems like no one has told them what comps are and why we bug so much about having them fill out stuff for us.

## 8. Do you feel prepared clinically to enter the Radiologic Sciences field?

Response	Average		Total
Prepared		55%	15
Very Prepared		33%	9
Somewhat Prepared		12%	3

<b>Total</b>	<b>██████████</b>	<b>100%</b>	<b>27/27</b>
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**9. If you are given the opportunity to enter an advanced imaging modality (CT, MRI, Specials, Mammography), do you feel prepared?**

<b>Response</b>	<b>Over Prepared</b>	<b>Prepared</b>	<b>Somewhat Prepared</b>	<b>Not Prepared</b>	<b>Total</b>	<b>N/A</b>
Overall Preparedness	23(85%)	4(15%)			27	
CT	1(4%)	22(81%)	3(11%)	1(4%)	27	
MRI	2(9%)	12(55%)	6(27%)	2(9%)	22	1
IR		9(33%)	14(52%)	4(15%)	27	
Cath Lab	2(8%)	8(32%)	11(44%)	4(16%)	25	1
Mammography			2(25%)	6(75%)	8	18
Special Procedures		15(55%)	10(37%)	2(8%)	27	
QA/QC						

**10. Do you plan to further your education in the imaging field, i.e., Ultrasound, Nuclear Med, Radiation Therapy, Radiology PA, or in a Master's degree program?**

<b>Response</b>	<b>Average</b>	<b>Total</b>
<b>Yes</b>	<b>████</b>	<b>12%</b>
<b>No</b>	<b>████████</b>	<b>26%</b>

Possibly		62%	17
<b>Total</b>		<b>100%</b>	<b>27/27</b>

**11. Do you plan to wait for employment in an advanced imaging modality rather than take a position in Diagnostic Radiology?**

Response	Average		Total
Yes		63%	17
No		37%	10
<b>Total</b>		<b>100%</b>	<b>27/27</b>

**12. These questions are solely meant for open discussion. If you have any further comments, suggestions, and/or recommendations, please feel free to write them out anonymously. Thank you for your cooperation**

This program has definitely prepared me for a future in Radiologic Sciences.

I am thankful to be done.

Professor J.Little was in my opinion a Huge loss for the program when she left last semester and a Very appreciated surprise when she came back to teach at CSUN.

I'm Extremely glad Professor C.Saunders no longer teaches RAP to juniors! And I wished we had Lisa Grate for that class. As my experience at CSUN has shown - Not the instructor with officially/legally higher degree is better choice for the program, but the one that Actually Knows what she/he is teaching and Knows How to teach and deliver the subject!

Because what it all comes to is We (the future tech generation) and our knowledge and skills that we acquired at CSUN and our clinical sites are The True Business Card of the CSUN Radiologic Sciences Program that speaks for itself!

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no other comments.

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MOT at Cedars isn't a good learning site, and certain rotations at certain sites aren't really what they are supposed to be. The communication among the faculty is sometimes confusing because we never get a unanimous answer on certain issues.

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I do not believe that the program is very well structured in email communication with students & expectations being communicated in a timely manner.

I also believe that the teachers should be more experienced & passionate about the classes that they are teaching!!! Our RAP teacher was not prepared, experienced, or passionate about her class. There were error after error after error. It is the ENTIRE FUNDAMENTALS of our career and i do not believe i was educated at a BSRS level.

It seems like there are ALOT politics going on at the teacher's level. IT AFFECTS YOUR STUDENTS!!!! Please allow the teachers who actually want to teach be in the classroom

Also... positivity goes a long way. If a student comes for advice or guidance... positivity in what small accomplishments they have made should be celebrated not belittled.

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\* Acquire more sites for venipuncture sticks practice.

\* Clinical coordinators need to communicate more among each other.

\* Top sites for students.

General: VP, OV, VA WLA

CT: Med Plaza 200, VA WLA

MRI: Tower imaging, UCLA SM 1919

IR: Cedars-Sinai

Cath Lab: Holy Cross

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Documenting exam numbers for higher modalities should be gone over with students before they rotate at clinical to a different modality.

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I am very thankful for this program and the staff that has taught me. I feel that getting involved in the program has been very beneficial and an irreplaceable experience.

I strongly believe if students are expected to be held to professional standards, especially when sending emails that clinical instructors should lead by example. All too often, I found myself reading an email that had no greeting, grammatical errors and an improper sign off at the end (or lack thereof). I do not think it is fair to ask students to be mindful of the way their emails are written if those we look up to cannot even write a half decent email. It is unprofessional.

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Thank you.

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Northridge hospital has earned a reputation of being a hostile environment for students. I have heard CSUN BSRS Alumni talk about this during speed mentoring events and also CSUN graduates from previous batches. I have experienced this myself on several occasions. It seems that most techs there don't like working with students and treat them badly.

Some techs at Henry Mayo are glued to their phone when they go on portable rounds with students and they leave the student to do the x-rays on their own. And some contaminate all the surfaces of the procedure room by touching everywhere with bloody gloves.

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It was an honor, and it was enjoyable. Onward to the next adventure!

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A lot of changes happened during the course of our years in the program. I feel that there was not enough communication between faculty and students. There was a lot of discrepancy when it came to things pertaining to clinical, like comps, objectives, and a few other things. It seemed like one person would say one thing, and another would say something completely different, making it confusing for the students. I think better communication is necessary.

I was also disappointed in some of the teaching faculty. There were plenty of times where I felt that this is supposed to be an extremely professional program, but in certain areas I am not getting the best education. I remember going to ACERT as a junior and not knowing some proper positioning during ARRT review. That made me feel unprepared.

Also, I remember as a junior being told how I would fail and that this would be the hardest thing I would ever do in my life, or that my relationships would fail because I would only have time for the program. I heard that from so many faculty members, and I don't know if it was meant to scare us into doing well, but I found it uncalled for. In the grand scheme of things it is not a big deal, but I think the incoming juniors should be more so encouraged to do well. And I did not feel that way and heard some of the newest juniors felt the same.

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I think that rotations in the same modality shouldn't be so far apart. My first CT rotation was in January and my next one wasn't until 6 months later. It is easier to learn something if you get more than one rotation near each other I feel like.

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Please add more sites where we could do more venipuncture practice. That would be really helpful. Also, perhaps some classes could be removed or replaced from the program because I feel as though they contributed little to my overall learning experience. Perhaps the PACS

class could become a lesson spread out in a few days rather than be a class that last the entire semester. Also the seminar/research classes went over material previously covered in other classes and therefore were redundant.

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Thanks for the help and support from our wonderful clinical coordinators and professors throughout the program.

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DO NOT SEND STUDENT TO CEDARS OUTPATIENT CT!!!!!!!!!!

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Inpatient was great but not outpatient.

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My only recommendation is to inform the students. Sometimes things are said to us as if we know what the process is and how to do it. I think that somethings are just so obvious to faculty because you guys do it so often that you don't realize the students don't have the same amount of information as you guys do.

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also, make it a point to educate the student leaders on what is allowed/ not allowed. Information between classes isn't always transparent.

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Again, Valley Press needs to be addressed as a clinical site. In speaking to classmates, it is the least liked rotation. And that is 90% because of the negative environment that is put out by some of the techs. (katie in particular) Please look into this site so that it can be reformed into a better teaching facility to future students.

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I would hope that student's opinions would be considered during their rotations so that something could be done about it when it still matters and can make a difference in their education.