

THE UNIVERSITY OF TEXAS  
**MDAnderson**  
**Cancer Center**  
 Making Cancer History®

## ABR Exam Prep for Diagnostic Part 3

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**From the ABR website**

- This exam is designed to test your knowledge and fitness to practice applied medical physics in your specified specialty
- Includes same material as Part 2 computer-based exam, but with strong emphasis on practicing clinical medical physics, clinical judgment, and communication.
- Successful completion of Parts 2 and 3 demonstrate a level of achievement that is necessary for a medical physicist to practice independently.

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**ABR Exam Diagnostic Part 3**

<b>Basis</b>	Same material as Part 2 with emphasis on practicing clinical medical physics, clinical judgment and communication.
<b>Eligibility</b>	Passed Part 1 and Diagnostic Part 2.
<b>Application Date</b>	Invitation to participate sent out 5 months prior to exam
<b>Cost</b>	\$765 (2019)
<b>Exam Date</b>	Late April to Early May

Exam	Category/Topic
<ul style="list-style-type: none"> <li>• English proficiency, basic mathematics, reading, and communication skills</li> <li>• Fundamentals of radiation physics</li> <li>• Fundamentals of clinical oncology</li> <li>• Fundamentals of radiation oncology</li> <li>• Fundamentals of radiation therapy</li> <li>• Fundamentals of radiation protection</li> <li>• Fundamentals of radiation safety</li> <li>• Fundamentals of radiation physics</li> <li>• Fundamentals of radiation oncology</li> <li>• Fundamentals of radiation therapy</li> <li>• Fundamentals of radiation protection</li> <li>• Fundamentals of radiation safety</li> </ul>	<ul style="list-style-type: none"> <li>• Fundamentals of radiation physics</li> <li>• Fundamentals of clinical oncology</li> <li>• Fundamentals of radiation oncology</li> <li>• Fundamentals of radiation therapy</li> <li>• Fundamentals of radiation protection</li> <li>• Fundamentals of radiation safety</li> </ul>
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Slide courtesy of Jessica Nute

## Historical Exam Results

### Part 3 (Oral) Exam Results First-Time Takers

Year	Percent Passed	Percent Failed	Percent Conditioned	Total Examinees
2016	61	27	12	254
2017	66	18	16	199
2018	60	20	20	228

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## Test Format

5 examiners will each ask you questions for 25 minutes

- 5 main questions with multiple parts
- Each main question is from one of the 5 categories outlined in Content Guide
  - One failed category – ‘Conditioned’ exam result and only the failed category is retested
  - Composite score from all examiners will determine pass/fail for each category
- Sub-questions will test your depth on the subject
  - Clinical application, typical protocol, dose estimate, patient safety, etc.

You move from hotel room to hotel room

- Each room has a computer & monitor to display images and questions

### Content Categories

Radiography, Mammography, Fluoroscopy, IR Imaging

Computed Tomography

MRI and Ultrasound

Informatics, Image Display, and Image Fundamentals

Radiation, Dosimetry, Protection, and Safety

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## Experience

Avoid oversharing or guessing

- ‘Pull of Silence’
- Offer a reference or manual that you would use



Examiner may not react to your response

- Not an adversarial role, but as a safety check
- If the examiner needs more information they will ask follow up questions



Mock Board Exams may help simulate the experience

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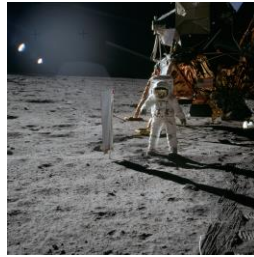
**How to Study**

**Group Study**

- Identify hardware or testing equipment
- Physics involved
- Clinical application
- Patient safety concerns

**Hands-On Practice**

- Observe clinical procedures
- Participate in QA testing
- Assist in shielding/site planning



images.nasa.gov

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**How to Study**

**Shadow and discuss with other physicists**

- If you have no other ABR eligible candidates, ask colleagues
- Allows you to practice delivering your responses verbally

**Mock board exams**

- Simulates the experience of responding verbally
- Identifies weaknesses in your knowledge or depth

**Make notes to review**

- Electronic/hand written notes will allow you to regularly review
- Useful for MOC too




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**Know Your Weak Points – Start Early**

Do you specialize in a specific modality?

What do you not see in your own clinical experience?

Do you work or train at a specialty site?

Have you used different types of testing equipment?




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### Study Materials/References

Textbooks

Task Groups, NCRP, ICRP, NRC

AAPM/RSNA Physics Tutorial for Residents

ACR manuals

MQSA limits

Biologic effects of radiation

DICOM header/overlay information

Review articles

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### Questions?

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