

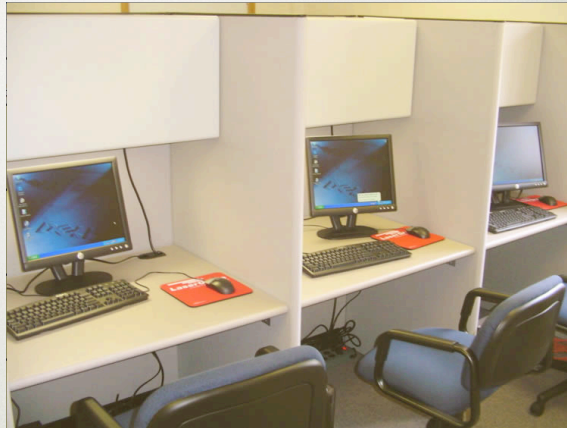
ABR UPDATE: RADIATION ONCOLOGY

GEOFF IBBOTT
AAPM ANNUAL MEETING
HOUSTON, JULY 30 2008

WHY DISCUSS RADIATION ONCOLOGY EXAMS?

- Medical physicists should be familiar with radiation oncology exam process
- Many medical physicists contribute to training of radiation oncologists
- Medical physicists contribute to RO exams

WRITTEN EXAM



- Clinical, biology, and physics exams
- Residents can take physics and biology after 3rd year of training (PGY 1 + 36 months)

ORAL EXAM

- Administered in Louisville
- Residents take following completion of training and written exams
- One examiner in each of 8 major clinical categories
- 30 minutes/examiner



WRITTEN EXAM

- Presently 215 Type A questions (multiple choice, one correct answer)
 - Changing in 2009 to 100 questions
- Content
 - Written by volunteers, assembled by committee
 - Changing focus away from basics, toward newer techniques
 - Consistent with ASTRO Syllabus

ASTRO SYLLABUS



ELSEVIER

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REPORT

ASTRO'S 2007 CORE PHYSICS CURRICULUM FOR RADIATION ONCOLOGY RESIDENTS

AD HOC COMMITTEE ON TEACHING PHYSICS TO RESIDENTS: ERIC E. KLEIN, PH.D.,* BRUCE J. GERBI, PH.D.,†
ROBERT A. PRICE, JR., PH.D.,‡ JAMES M. BALTER, PH.D.,§ BHUDATT PALIWAL, PH.D.,||
LESLEY HUGHES, M.D.,¶ AND EUGENE HUANG, M.D.#

WRITTEN EXAM CONTENT

Section	Topics	2008 content
1	Atomic structure, decay, interactions	29 %
2	Dose measurements	28 %
3	Advanced dosimetry	22 %
4	Brachytherapy	10 %
5	Protons, radiation protection, special topics	11 %

ORAL EXAM

- RO Trustees asking for volunteers to write oral exam questions, assemble, and manage the exam
- Introducing methods to evaluate:
 - Use of imaging
 - Target definition
- Exam to include
 - Improved images
 - Sophisticated treatment plans

PROBLEM AREAS

- Equivalent dose, effective dose
- Relative neutron dose equivalent
- Electron beam penumbra
- TG-43 dosimetry parameters
- IMRT:
 - Effect on leakage radiation
 - Effect on shielding requirements

