So... You Want To Be an RSO

Cindy Cardwell
Department of State Health Services
What is a Radiation Safety Officer?

An individual who…

☐ meets the regulatory training/experience requirements

☐ Is identified on a license that authorizes medical use of radioactive material and/or radiation machines
RSO Training Requirements

- Current regulatory training/experience requirements don’t need to be met if you had already been identified as an RSO on a....
  - License issued by an Agreement State or NRC
  - Permit issued by a broad scope license
RSO Training Requirements

- For a medical physicist...
  - Certification by a specialty board whose certification process has been recognized
  - Experience in radiation safety for similar types of use of radioactive material
  - Training in radiation safety, regulatory issues, emergency procedures for types of use radioactive material
  - Written attestation of the above
Recognized Specialty Boards

- American Board of Health Physics (1/1/2005 to present)
- American Board of Science in Nuclear Medicine (6/1/2006 to present) for
  - Nuclear medicine physics & instrumentation
  - Radiation protection specialty
- American Board of Radiology (6/2007 to present) for
  - Radiologic physics-medical nuclear physics
  - Radiologic physics-diagnostic radiologic physics
  - “RSO Eligible” appearing above ABR seal
Recognized Specialty Boards

- Certifications meeting requirements for authorized medical physicist also meet RSO certification requirements
- American Board of Radiology (6/2007 to present)
  - Radiologic physics-therapeutic radiologic physics
- Canadian College of Physicists in Medicine (1/2009 to present)
  - Radiation oncology physics
Alternates to Board Certifications

☐ Structured educational program
  ▪ 200 hours classroom and laboratory
  ▪ 1 year full-time radiation safety experience under the supervision of an RSO on a license authorizing similar types of uses

☐ Training in radiation safety, regulatory issues, emergency procedures for types of use radioactive material

☐ Written attestation of the above
Recentness of Training

- Required training/experience must have been within the previous 7 years, or
- Individual must complete related continuing education and experience
License Designation

- License application must contain evidence of the qualifications of the RSO
- Individual is specifically listed on license
12. (Continued)

B. Neurosurgeons for patient evaluation and preparation including stereotactic localization for the treatment of humans.

<table>
<thead>
<tr>
<th>Name</th>
<th>M.D.</th>
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<tbody>
<tr>
<td>Syed S. Azeem</td>
<td>Amy Heimberger, M.D.</td>
</tr>
<tr>
<td>Daniel Cahill, M.D.</td>
<td>Nicholas Levine, M.D.</td>
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<tr>
<td>Franco DelMonte, M.D.</td>
<td>Ian E. McCutcheon, M.D.</td>
</tr>
<tr>
<td>Sujit S. Prabhu, M.D.</td>
<td>Ganesh Ras, M.D.</td>
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<td>Jeffrey S. Weinberg, M.D.</td>
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C. Licensed Medical Physicists for training, treatment planning, calibration, and operation of the unit.

<table>
<thead>
<tr>
<th>Name</th>
<th>Ph.D.</th>
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<tbody>
<tr>
<td>Wei Liang Du</td>
<td>Almon Shiu, Ph.D.</td>
</tr>
<tr>
<td>Dershan Luo</td>
<td>Congjun Wang, Ph.D.</td>
</tr>
<tr>
<td></td>
<td>James N. Yang, Ph.D.</td>
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</tbody>
</table>

13. The individual designated to perform the functions of Radiation Safety Officer (RSO) for activities covered by this license is Michael Gillin, Ph.D.

14. The licensee shall not open or remove sealed sources containing radioactive material.

15. The licensee shall maintain a current copy of the safety evaluation from "The Registry of Radioactive
Responsibilities of the RSO

- Licensee must establish RSO
  - Authority
  - Duties
  - Responsibilities

- RSO must be provided sufficient...
  - Authority
  - Organizational freedom
  - Time
  - Resources
  - Management prerogative
Responsibilities of the RSO

- Serve as the primary contact with the regulatory agency
- Ensure surveys/leak tests are performed and documented
- Maintain required records
- Establish & oversee operating, safety and emergency procedures
- Handle monitoring of occupationally-exposed personnel
Responsibilities of the RSO

- Assume control and initiate corrective actions in emergency or unsafe conditions
- Investigate incidents
- Implement corrective actions
- Perform inventories
- Ensure proper labeling, transport, use, and disposal of radioactive material
Responsibilities of the RSO

- Identify radiation safety problems
- Have a thorough knowledge of management policies and administrative procedures
- Ensure personnel are complying with rules and OSE procedures
Radiation Safety Committee and the RSO

- RSC must be established...
  - Broad scope authorization
  - 2 or more different types of these uses:
    - Unsealed RAM requiring a written directive
    - Sealed sources used in manual brachytherapy
    - Sealed sources used in remote afterloader units
    - Sealed sources used in teletherapy units
    - Sealed sources used in gamma stereotactic radiosurgery units
  2 or more types of above units
Radiation Safety Committee and the RSO

- Authorized user for each type of use authorized
- Representative of nursing service
- Representative of management (not AU or RSO)
- Other members as licensee deems appropriate
RSO/RSC responsibilities

- Meeting as often as necessary, but no less than 3 times a year
- Reviewing summaries presented by the RSO
- Reviewing ALARA program
- Reviewing the audit of the radiation safety program
RSO/RSC responsibilities

- For broad scope licenses
  - All of the above, plus
  - Reviewing overall compliance status for authorized users
  - Sharing responsibility with RSO to conduct periodic audits of radiation safety program
  - Developing criteria to evaluate training and experience of new authorized user applicants
  - Evaluating/approving authorized applicants who request authorization to use RAM at facility
  - Reviewing/approving permitted program and procedural changes prior to implementation
Questions?