

*Appraisal of Physics
Education of Medical
Physicists*

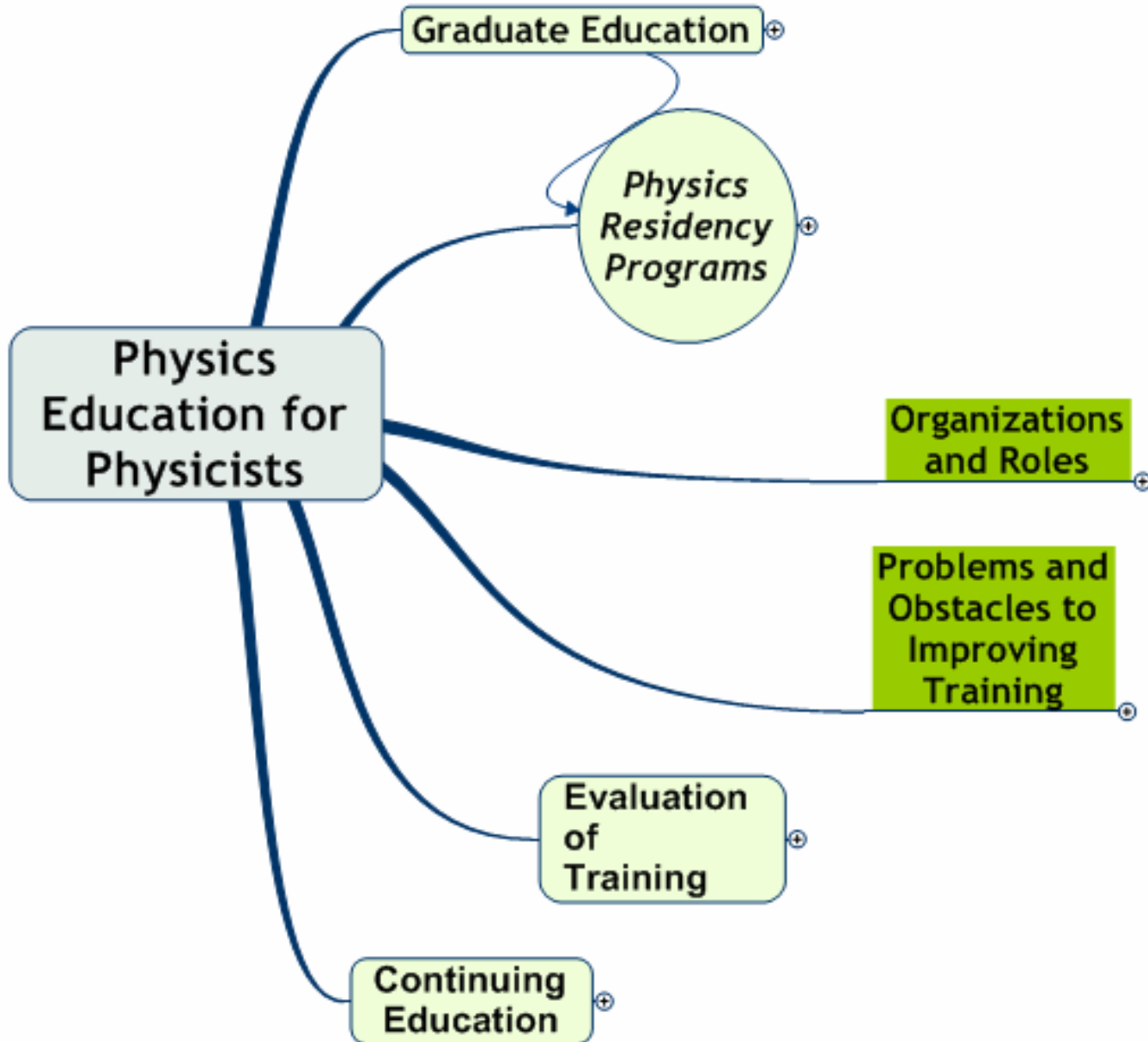
Physics Education Summit

21 Jan 2006

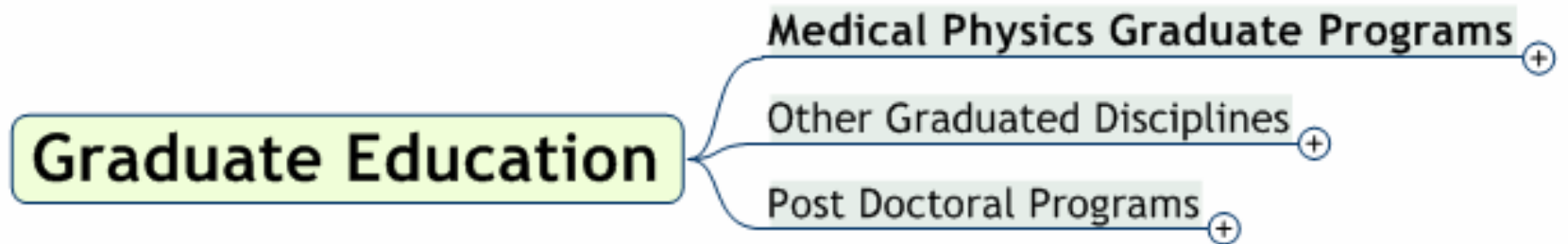
Eric E. Klein, M.S.

Washington University, St. Louis MO

Physics Education for Physicists



Graduate Education



Medical Physics Graduate Programs

- CAMPEP Accredited
- Non-CAMPEP

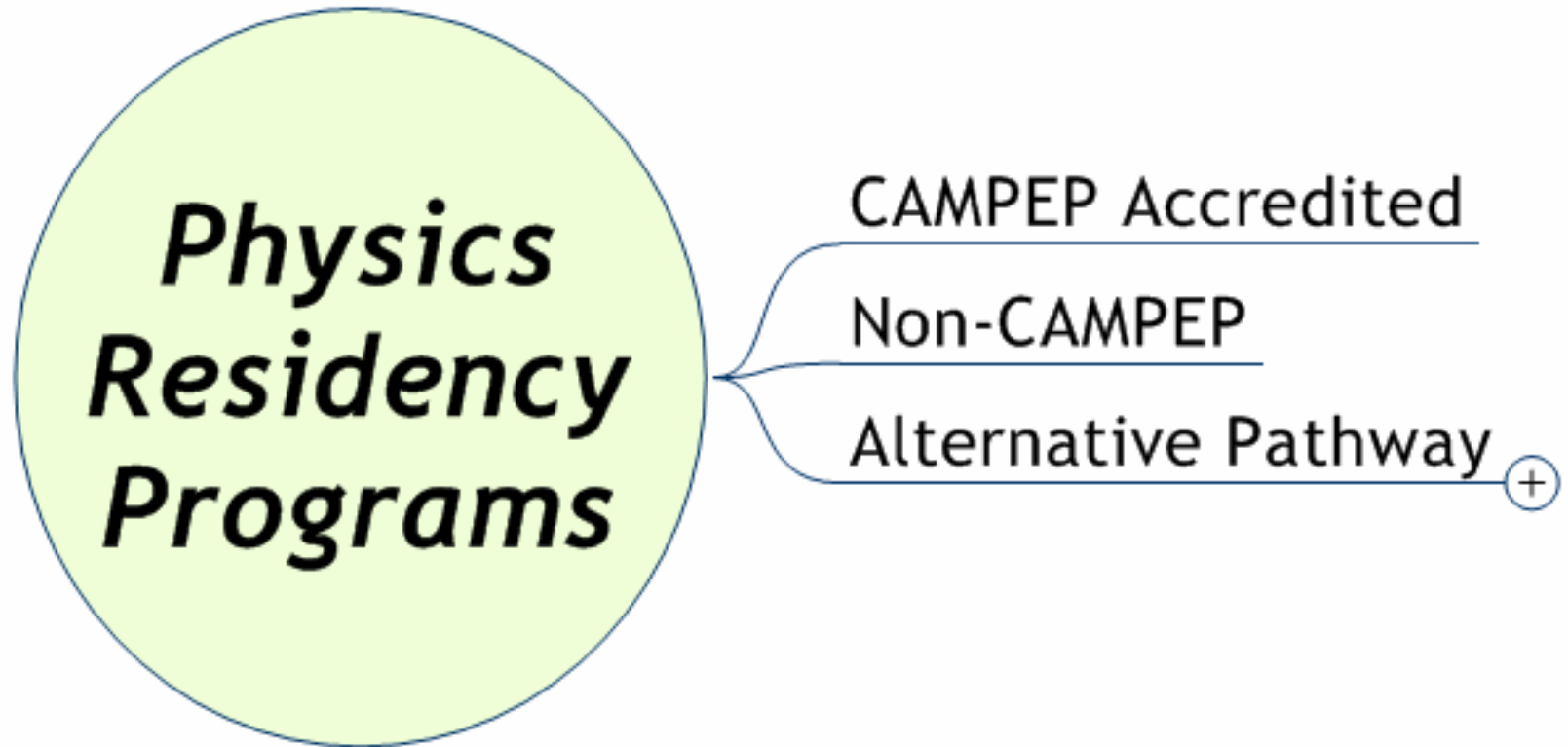
Other Graduated Disciplines

- BioMed Eng (incl MedPhys)
- Radiological Physics
- Others

Post Doctoral Programs

- With Clinical Component
- Pure Research
- Related Field (Bioinformatics, Nucl. Engineer, etc.)

Physics Residency Programs



Alternative Pathway

- Combined with Research
- As Part of Outreach Clinic

Evaluation of Training

**Evaluation
of
Training**

ABR Certification

+

Success of Graduate

+

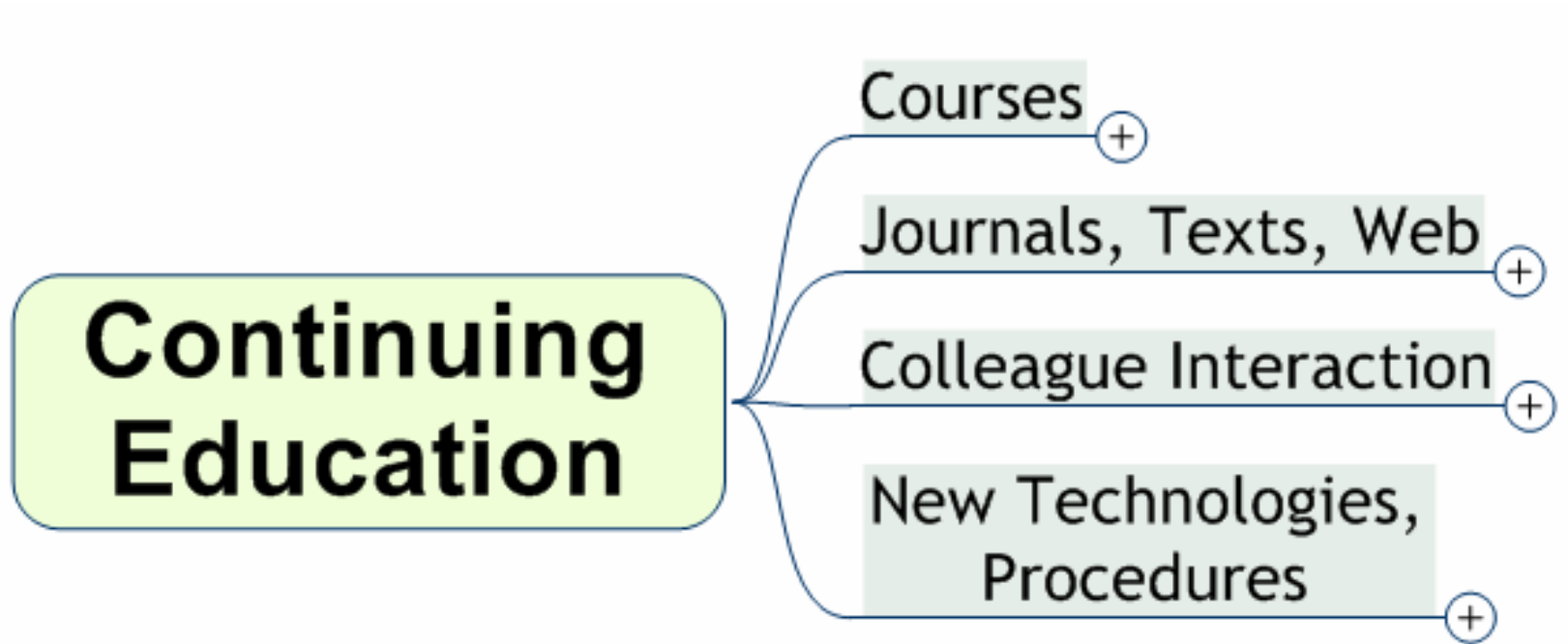
ABR Certification

- Written
 - General
 - Specific for Discipline
- Oral
 - Pass Rate of CAMPEP Resident
 - "Bar Lowering"

Success of Graduate

- First Job Expectations
- Database for CAMPEP Resident

Continuing Education



Courses

- National meetings
 - Needs Survey
 - Evaluations
- On-Line
- For Profit vs. Legit

Journals, Texts, Web

- Journal Variety: JACMP - PMB
- RDCE Program

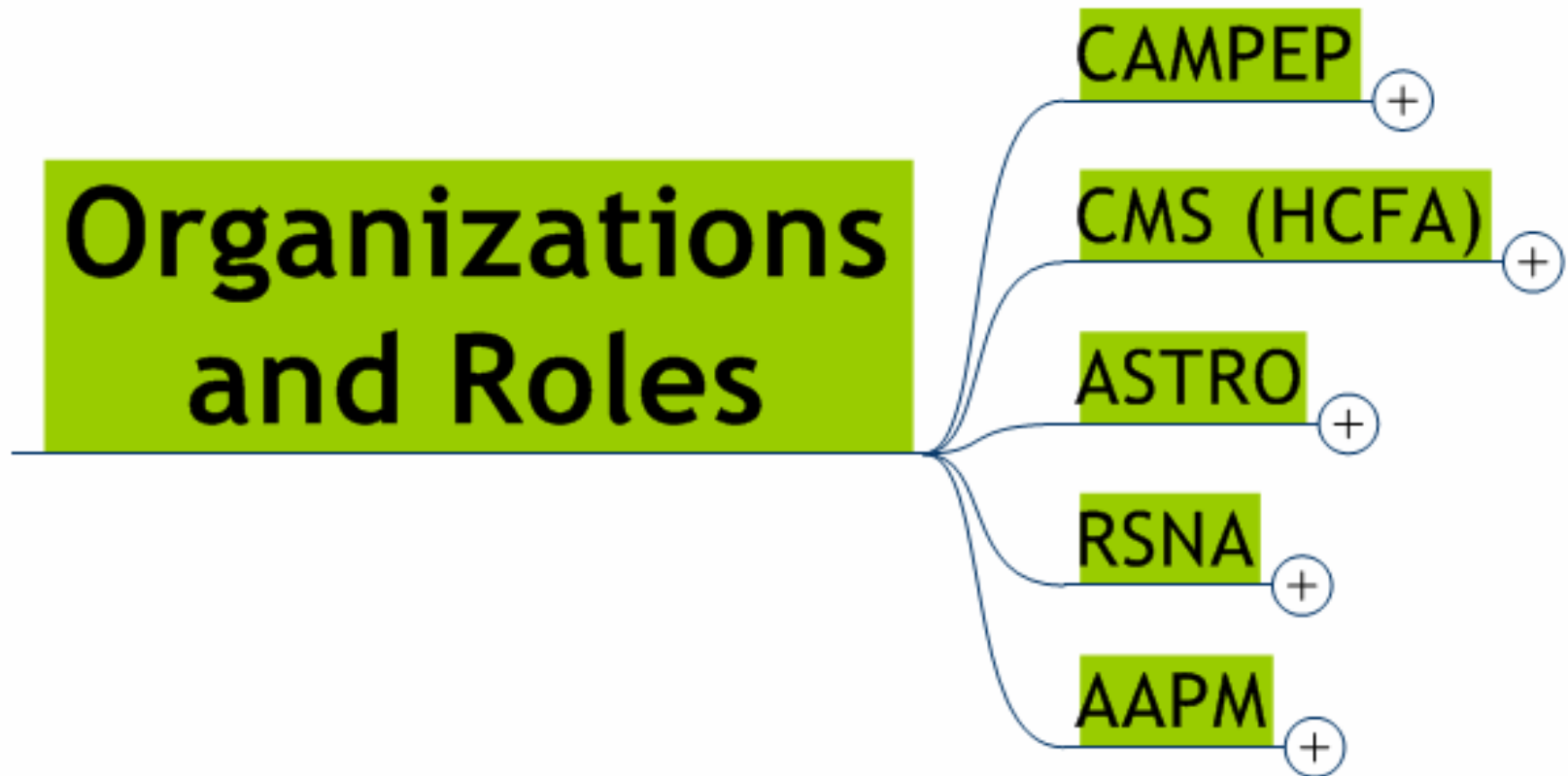
Colleague Interaction

- Vital for Solo Physicist
- Large Institution Niches
- Peer Review of Knowledge

New Technologies, Procedures

- Vendor Supplied
- For Profit Training
- Evaluation: Certificate of Added Qualifications

Organizations and Roles



CAMPEP

- Graduate Program Reviews
- Residency Program
- CME
- Alternative Pathway?

CMS (HCFA)

- Supports Residencies, but not as GME
- Medical Physics as a Specialty

ASTRO

- Previously Supported AAPM's Residency Grant
- Now supports Startup Residencies

RSNA

- Supports Imaging Residency

AAPM

- Supports CAMPEP
- Education & Research Fund
- Virtual Library
- On-Line Continuing Education
- Summer Undergraduate Fellowship Program
- Graduate Fellowships
- Education Council
- Development

Education Council

- Continuing Professional Development
- Education and Training of Medical Physicists

Education and Training of Medical Physicists

- Ad Hoc Committee on Alternative Paths to Medical Physics Residency Training
 - This committee will make recommendations to the AAPM BOD on whether the AAPM should officially support alternate mechanisms for training, if so what the requirements for such training should be.
 - Thus AAPM urgently requests that CAMPEP devise guidelines for an alternative, formally structured training mechanism to help assure that an adequate supply of competent clinical medical physicists will be available.
 - CAMPEP to develop guidelines which create a category of satellite training facilities which are affiliated with the principal accredited residency institutions.
 - AAPM form a Task Group to develop recommendations for alternative funding mechanisms for Residency Programs and to assist CAMPEP in devising guidelines for programs and approved mentors at Affiliated Satellite institutions.
- Minority Recruitment SC
- Summer Undergraduate Fellowship Program SC
- Medical Physicist Workforce SC
- Medical Physics Residency Training and Promotion SC
- TG1: Academic Program for an MS Degree in Medical Physics
- **New Report 36 on Residency Programs**

AAPM Report Number ??

(Revision of AAPM Report No. 36)

Recommendations for Hospital Based Medical Physics Residency Training Programs

A Report of the Sub-committee on
Medical Physics Residency Education and Promotion
AAPM Committee on Education and Training of Medical
Physicists

submitted March, 2005

AAPM
Report No.
36

Table of
Contents

Section I

Introduction

Section II

Essentials and Guidelines

Section III

Stipends and Bennefits

Section IV

Appendices I - V

I. Areas of Competence

II. Education Requirements

III. Radiation Physics
Knowledge

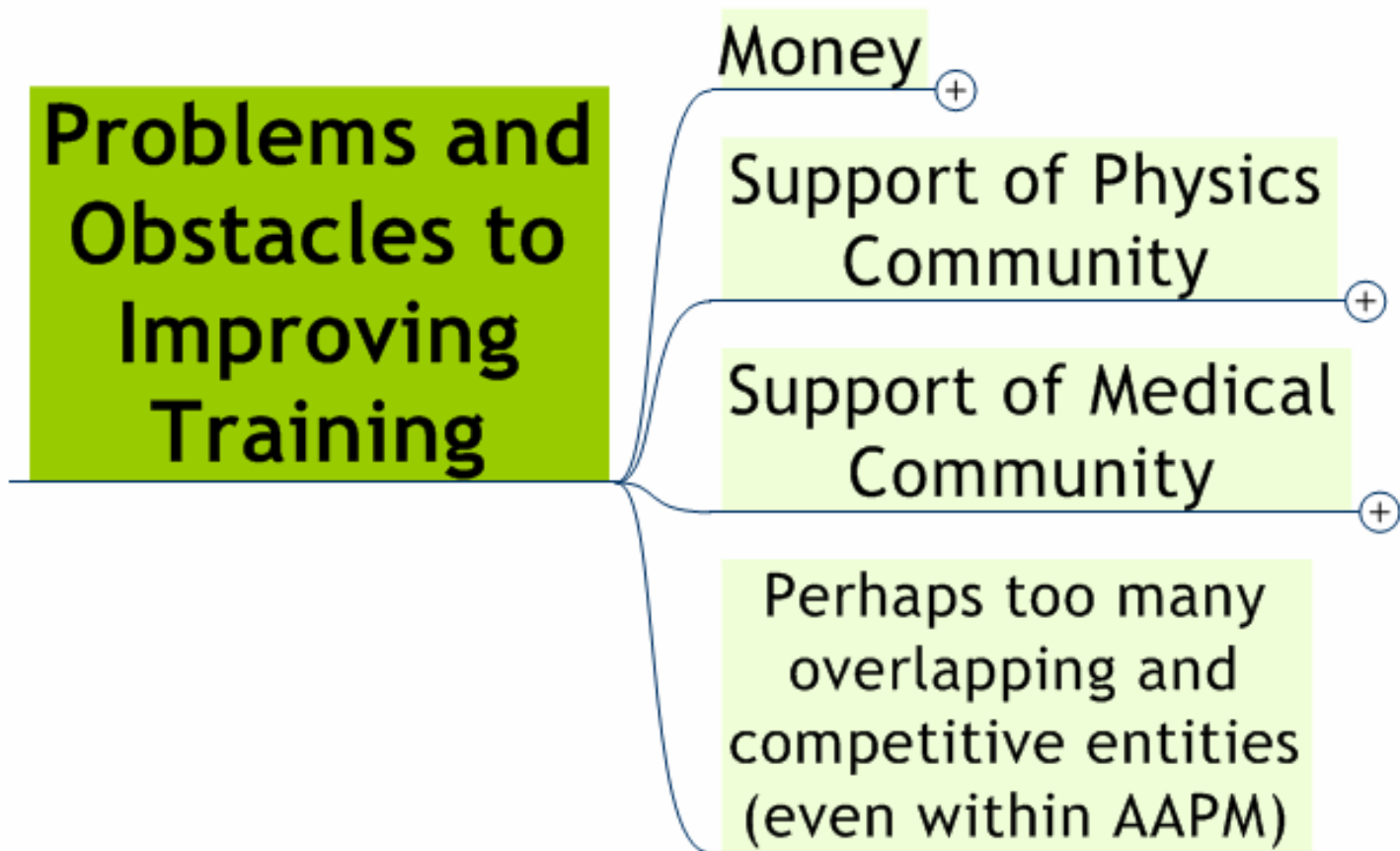
IV. Clinical Knowledge

V. Radiation Biology

Development

- Awards Selection Subcommittee

Problems and Obstacles to Improving Training



Money

- HCFA
- Societies
- Industry
- NIH?

Support of Physics Community

- AAPM, ACMP
- Members?
 - Uneducated
 - Paranoid of Competition

Support of Medical Community

- ASTRO, RSNA Support
- Administrators?