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A SENIOR QUALIFICATION FOR LEADERS IN MEDICAL PHYSICS --
IS THERE A NEED FOR A SENIOR QUALIFICATION?

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I understand that in Europe the term "senior qualification" means some sort of qualification, presemably by peer review, of a person who, in addition to having completed formal training in medical physics, has considerable experience in the field. In the United States there are a number of engineering fields in which professional degrees are awarded. To qualify for such a degree, an individual must have passed specified courses in engineering, give documentary evidence of high professional competence, and have contributed appropriate manuscripts to professional, refereed engineering journals. It is also required that the engineer show competence in supervision of other engineers, and persons in allied fields carrying out engineering projects. I would interpret the professional engineering degree as an example of "senior qualification".

Neither physicists, chemists, nor mathematicians have the equivalent of a professional engineering degree. A substantial number of the medical physicists in the united States are associated with medical schools and hospitals affiliated with universities. The various professional people who work within these institutions have no senior_qualification program.

The subject of senior qualification has not been an item of discussion in the United States. One possible reason for the lack of interest in a senior qualification is the fact that we have few medical physicists who are above the age of fifty. Figure 1 shows the distribution of age versus the number of individuals in a sample of 400 members of the American Association of physicists in Medicine. Only 11.4% are 52 years and above.

I consider it unlikely that it would be of any substantial benefit to either the American recipient or his institution since there are at present mechanisms, usually through academic promotion, for the advancement of leaders in medical physics.

Other alternate recognition rewards for scientific achievement are great, as examples, prizes, awards, fellowships, honorary membership and committee work in scientific organizations, editorships, honorary degrees, acknowledgement in other's work and evaluation by colleagues. One noteworthy honor is membership in the National Academy of Sciences. This

recognition of Achievement in American Science apparently ranks second only to the Nobel Prize.¹ Another is election to membership in the American Academy of Arts and Sciences. This is the older award and by some, more valued.

Although it may not be pertinent to the topic of senior qualifications, I should mention that various professional segments of our society are seriously considering programs of re-certification for senior professionals. With the rapid advancement of technology, continuing education is necessary and re-certification may be one mechanism for assuring that the senior person is still qualified to practice his profession. Many segments of the medical profession are actively studying the most difficult subject.

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NUMBER OF INDIVIDUALS

AGE IN TWO YEAR INTERVALS