

Choosing to Play with the Big Boys

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“We love all of our students; we care for every one of them.” This statement, made by BMES Historian and Board member Paul Fagette summed up his reason for advocating the recent Board decision to support further actions toward establishing a Professional Engineers licensing exam for Biomedical Engineers. The decision was not made without opposition; a significant number of Board members were not convinced that professional registration for Biomedical Engineers was warranted; they pointed to the facts that Biomedical Engineering had been practiced just fine in recent years, and that there was a decided lack of enthusiasm for BME PEs in industry. Resources, meaning real money, is necessary to support the PE exam, and, they said, BMES could better spend the money on other projects.

Those points being made, there are more transcendent reasons for the Board to support professional licensure of Biomedical Engineers. Perhaps the most idealistic of these is to realize that, for Biomedical Engineering to be considered professionally equal to the older and larger engineering disciplines, it must demonstrate that equality. Professional registration is one of those means.

BMES took a big step toward recognition of its role as the professional society representing Biomedical Engineering when it assumed the role of lead society for ABET accreditation of BME programs. BMES has now taken the second big step by leading the way toward legal recognition of our profession.

Biomedical Engineering, according to data supplied by the American Society for Engineering Education, is now the fastest growing engineering discipline in the US. Thus, the exposure of Biomedical Engineers to the public, with all its positive and negative ramifications, is bound to increase in the coming years. There will be more opportunities for Biomedical Engineers to be held accountable for public health and safety outcomes of their professional activities. Professional registration is necessary for other engineers who directly affect public health and safety; it will be the same for Biomedical Engineers.

On a more pragmatic level, at least for BMES, is the retention of membership of BME students after they graduate. Only a very small percentage (roughly 30%, based upon experiences of other societies) of the 3600 student members (out of a total of 5600 BMES members) decide to transfer to full membership after they receive their degrees. No one knows exactly why this percentage is so small, but I would guess that student members see a number of positive reasons to belong as students, including enthusiastic fellowship with other students, but do not see BMES as providing needed benefits after graduation. This professional posture on the part of BMES may change that. I fully expect that BMES will offer refresher courses, continuing education course, and PE examination

preparation courses that not only provide desirable services for post-graduate Biomedical Engineers, but also provide additional revenue for the society. We can win on all counts.

Steve Schreiner did a wonderful job shepherding the PE proposal through the labyrinth of BMES Board questions and requirements. One of the things he did was to poll students about their desire to become professionally registered as Biomedical Engineers. Fully 78% of the undergraduates polled favor a PE for BME, 74% agree that the PE benefits the profession, and 70% of the students questioned showed interest in taking the exam. This is a large enough segment of our student population that we cannot ignore them. It is for this reason that Paul Fagette made his pronouncement appearing at the beginning of this piece.

This is a great move for BMES and for Biomedical Engineering. Folks, we're becoming big-time.