

Wanted: Sailors and Dental Educators

Recently, the United States Navy launched its newest aircraft carrier. Built at a cost of more than \$4 billion, it has two nuclear reactors and the latest state-of-the-art equipment. Yet, due to a shortage of sailors, the Navy was unable to run the vessel with a full crew. Furthermore, this carrier is not the only vessel short of crew, since the vast majority of the Navy's more than 300 ships also have empty positions. Regrettably, the situation facing dental education echoes that of the US Navy. Buildings are being remodeled, clinics are being rebuilt, and new lecture halls are being installed, yet there is a great shortage of dental educators to teach future practitioners.

There are many causes for the shortages of armed forces personnel. One major factor is the thriving American economy that competes for young recruits. In like fashion, recent dental graduates are attracted to the financial rewards of private practice, particularly at a time when they leave school burdened by personal debt.

In the Navy it is estimated that there are 22,000 empty positions in an authorized force of about 375,000. In 1997 there was a similar percentage of unfilled

full time clinical faculty in American dental schools (244 of 5,124 positions), which included 16 unfilled funded full-time pediatric dentistry positions. Moreover, the shortage in pediatric dentistry is bound to become worse, since today the average age of program directors is 51 and the average age of department chairs is 54. In addition, this past year 25 different institutions advertised for pediatric dentistry positions. To solve the shortage of sailors, the Navy has proposed an increase in military salaries as a possible solution. To compete with private practice, dental education also will have to raise salaries and initiate innovative programs, such as loan reimbursement, in order to attract desirable young graduates into academic careers.

Compared with private practice, there are disadvantages of full-time academic careers. Financial remuneration is less and there is no built-up equity in a practice which could eventually be sold. In academic institutions, where there is usually an established bureaucracy of administrators and committees required to approve actions, new programs are sometimes inhibited. In addition, pressure to "publish or perish", the requirement to participate in scholarly ac-

tivity in order to advance in academic rank, is ever present. Nonetheless, for the right individual these disadvantages are more than offset by the many advantages of an academic career.

Ask dental educators why they would rather spend time at a dental school than at a private office. Responses would include the opportunity to move beyond the four walls of one's office; the satisfaction of being a role model for new students; the excitement of performing research and being at the cutting edge of science; and the stimulation of daily interaction with other colleagues. Dental schools usually provide an opportunity for faculty practice and, for many educators, there is also the challenge of administrating a large multi-chair clinic.

An academic career is not for everyone, but it should be considered by recent graduates or by practitioners who are interested in a career change. Though not a particularly easy job, it is suited for dedicated, energetic persons. For the right individual, an academic career is extremely rewarding, especially due to the ripple effect of influencing a few who will maintain the health of many.

An Insignificant Trend is Insignificant!

Consider three words: measurement, significance, trend.

Measurement assigns numbers to characteristics of things. These numbers consist of the true quantity plus an amount of error. A really accurate number has little error, whereas, a fuzzy estimate might have a large amount of error. Moreover, we never know how much of measurement is real and how much is chance error.

Significance denotes importance. If there is a difference between two sets of numbers, we use statistical tests to deter-

mine if the difference is large enough to be significant and not due to chance error. However, it is more meaningful if it is determined whether or not the difference is *clinically* important.

Trend is the direction of movement. If dental caries is trending downward, it is decreasing. If the cost of materials is trending upward, it is increasing. Trends can be significant or insignificant. A significant trend could be important, however, an insignificant trend cannot be considered important since it could be

due to chance. An insignificant trend is just that, insignificant.

The next time a materials salesperson suggests that a new restorative material is not only significantly better than the old material, but also functions better clinically, *get* it. However, if the salesperson suggest that though the statistical difference between the two materials is insignificant, there is a trend toward better performance of the new material, *forget* it. An insignificant trend is still just plain insignificant!

