Shrinking Faculty—Dental Education’s Growing Problem

It happened so slowly that no one noticed. We heard about problems in recruiting faculty. We never thought it would come to this—only a few endodontic departments, a handful of specialists teaching, students who are not adequately trained, no new research or technology coming out of the universities. The weakness in our educational programs is a real setback. If only we had known sooner how serious this would be...

Like “the incredible shrinking man,” whose dilemma is revealed through everyday occurrences, dentistry is facing a problem that has developed almost imperceptibly. There is a shortage of educators. Ignoring the problem, could create a situation like the scenario outlined above. Fortunately, exploring solutions is at the top of the dental agenda. The AAE and the AAE Foundation are committed to initiating activities to stimulate faculty recruitment and retention. Informing members about the gravity of this situation is an important step.

The Statistics

Endodontics and the other specialties are especially hard hit. The American Dental Education Association (ADEA) reports 344 vacancies in the nation’s 54 dental schools, an increase of about 35% since the 1990s. Typically, dental schools have from one to five vacancies as a result of attrition. In 2002, 24 schools had up to four open positions. At 14 schools, ten or more positions were unfilled. According to ADEA, during the 2000-2001 academic year, there were 23 vacant positions in endodontics (17 full-time and 6 part-time).

The situation is made more precarious by the fact that half of the current dental faculty are over 50 years old. If every instructor who is 60 or older retired in the next decade, there would be over 900 vacant positions.

The Economic Equation

“In many ways, dental education is doing quite well,” says Dr. Karl Haden, director for the Center for Educational Policy and Research. “The quality of students is better than it has ever been. The number of applications to dental school is

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2003 Endodontic Educator Fellowship Awards

The AAE Foundation is pleased to announce the 2003 class of fellows. Fellows receive tuition and a $1,000 per month stipend, and in return, they agree to teach full-time for at least five years.

Dr. Joseph Bringas
University of Detroit Mercy

“I believe that a specialization in endodontics will be of tremendous benefit to my advancement as a clinician as well as an educator. I am fascinated with working with the latest technology. No other branch of dentistry has exhibited such advancements.”

Dr. Bringas is currently a full-time faculty member at the University of Detroit Mercy School of Dentistry in the Department of Restorative Dentistry. He will be pursuing a certificate in endodontics and a Master of Science degree.

Dr. Mario D’Addario
University of Toronto

“After completing my Master’s thesis and entering dental school, my passion for science and teaching drove me to pursue a concomitant Ph.D. During six years in general practice I also acquired an interest in endodontics. While my previous research was based on immunology and cell biology associated phenomena, I have now started to work on an endodontic project.”

Dr. D’Addario is currently a researcher and a graduate student at the University of Toronto. He is pursuing a Master of Science degree in endodontics.
Volunteer Commitment Makes Endowment Grow

Successful fund raising is one half heart and the other half hard work. The AAE is blessed with members whose commitment to their specialty is matched only by their willingness to volunteer. Thanks to their efforts, as of January 30, 2003, $11,053,324 is invested in the Endowment Fund. Another $2,825,457 is pledged and $1,100,000 is promised in deferred gifts. Sixty-three percent of active U.S. members and 36 percent of current students have already pledged. The endowment fund is a labor of love. It has been growing steadily, pledge by pledge, because when asked to give time, talent or treasure—AAE members unfailingly say yes. The AAE Foundation salutes these volunteer fundraisers:

Friends of the Foundation

Deborah S. Bishop
George Bogen
Russel K. Christensen
Philip W. Cohen
Stephen Cohen
H. Groves Cooke
Gerald C. Dietz Jr.
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Graduate Student Pledges to be Part of the Solution

Dr. Tanya Machnick doesn’t make important decisions lightly. Before choosing a career, she explored dozens of opportunities. She interviewed chiropractors, podiatrists, physicians and even spent a day learning to make beer. But pledging to the AAE Foundation was a no-brainer. “This is important,” says Dr. Machnick. “It’s money that is going to grow.”

The research paid off. Commenting on her endodontic residency at Loma Linda University, Dr. Machnick says, “I like it even more than I thought I would. Every tooth is a puzzle. It’s not just technique, it’s understanding the biology of the case. I was happy to pledge because I’m eager to invest in this profession. Pledging puts you on the team.”

Enthusiasm is catching. After Dr. Machnick told her co-residents about the AAE Foundation, they agreed to sign on too! “My classmates wished they were able to pledge even more than $2,000.”

Dr. Machnick has been quick to contribute time as well as financial support to her new specialty. During the first year of her residency, she participated in the AAE’s strategic planning process and she currently serves on the Ad Hoc Student and New Practitioner Advisory Committee. “Some people hate to sit on committees. I love brainstorming and being part of the formative group.”

Learning more about the AAE has focused this resident’s attention on issues that impact the specialty’s future. “The whole wave of evidence-based research is very significant,” she says. “Research will put the specialty on the map. Here at Loma Linda, we are reviewing the literature to identify clinical studies. We’re finding a huge need for more clinical investigations.”

As a student, Dr. Machnick is also keenly aware of the challenges in attracting and retaining faculty. “Loma Linda is more fortunate than some schools,” she says, “We have no shortage of faculty or volunteers. Knowledge is at our finger tips. But I know that keeping faculty is difficult. Education is an area that demands our attention.”

“I’m the kind of person who wants to be involved and make things happen rather than dwell on what is not working,” says Dr. Machnick. “That’s what I like about the AAE Foundation. Pledging makes you part of the solution.”

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**ALLIANCE SILENT AUCTION**

6:30 - 8 P.M., Wednesday, April 30
TAMPA CONVENTION CENTER RIVERWALK

**FOUNDATION LIVE AUCTION**

5 - 6 P.M., Thursday, May 1
TAMPA CONVENTION CENTER EAST HALL

**SILENT BIDDING**

A dazzling array of member-donated items, including:

- Exotic vacation getaways
- Original artwork
- Autographed memorabilia
- Fabulous jewelry
- and much more!

Held in conjunction with the Annual Session Welcome Reception, a casual, outdoor festivity.

Visit the Alliance Registration Booth in the AAE Registration and Information Area for more information.

**LIVE BIDDING**

Incredible bargains on quality endodontic products, including:

- **ASI Medical, Inc.**
  Advanced Endodontic System with Satelec ultrasonic unit. System can be upgraded or customized.

- **CK Dental Specialties, Inc.**
  Apico package, retrieval instruments, general endodontic items

- **Carl Zeiss Surgical, Inc.**
  $5,000 certificate to be applied to any Carl Zeiss product (limited to U.S. residents)

- **Dentsply Tulsa Dental**
  Complete endodontic and surgical systems

- **Discus Dental Software**
  EndoVision, a multi-user license

- **Dog Breath Software, Inc.**
  TDO Imaging Software

- **Global Surgical Corporation**
  Nikon digital camera Model 4500, Digital adapter, beam splitter and Personal Display System

- **Obtura/Spartan**
  The “New” MTC 2 Endodontic Cart

- **Schick Technologies, Inc.**
  CDR Wireless, size 2 sensor and room kit

- **SybronEndo**
  Elements Diagnostic Unit and 100 packs of K3 files

Held during an all-new Exhibit Hall Happy Hour, where you can relax with a beverage and light snack. See a Foundation representative at the AAE Oasis in the East Hall for more information.

All proceeds benefit the AAE Foundation.
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Increasing. Right now, there is a great need for oral health providers and dentists are enjoying excellent incomes.”

Paradoxically, prosperity is a significant factor in the difficulty schools experience attracting new teachers. An article in the November 2000 issue of the *Journal of Dental Education* reports that between 1990 and 1998, the mean income for private practitioners jumped 66% to about $156,380. During the same period, income for full professors grew just 25% to about $97,652. Associate professors earned an average of $76,632 and assistant professors were earning about $65,500. The average total compensation, including income from faculty practice, for a full-time clinical faculty member at the professor rank is just over $133,000.

For graduating students, whose first order of business is to whittle down six-figure educational loans, teaching is simply not on the radar screen.

According to a 1999 American Association of Dental Schools task force study, only 0.5% to 1.3% of approximately 4,000 graduating dental students plan to pursue academic careers. The high cost of dental education coupled with the income discrepancy between private practice and academia has made the job of recruiting new faculty extremely challenging for many institutions.

The negative side of the equation may be pushed further out of balance by the continuing weak economy. Many institutions rely heavily on state support. As states cut back their budgets, the response will be rising tuition.

Money is not the Bottom Line

Finances are driving the faculty shortage, but money is not the bottom line. In any career decision, lifestyle issues come into play. For those who choose teaching, the benefits of an academic career are a countervailing factor.

“I'm the kind of individual who likes variety and challenge. Teaching is filled with wonderful opportunities,” says Dr. Gerald N. Glickman, Professor and Chairman of the Department of Endodontics at the Baylor College of Dentistry. “When you teach, you also do research, write, practice, collaborate, and even travel.”

Dr. Jeffrey W. Hutter, Associate Dean for Academic Affairs and Chair, Department of Endodontics, at Boston University, expressed a similar view, “I enjoy interacting with students. Teaching is very rewarding. I had reservations regarding the financial aspects but when my wife and I put the pluses together, being involved in education and in an academic setting was our fulfillment.”

According to educators, passing that enthusiasm on to students is one of the best ways to recruit new teachers. Most departments do not have the resources to initiate a formal recruitment program or a large-scale marketing effort. Recruiting typically takes place on a one-to-one basis. However, educators are quick to point to examples from their own experience to explain how effective relationship-building can be. They view mentoring as one of the best ways to develop new talent.

“I was recruited out of full-time practice by a dental educator,” says Dr. James L. Gutmann, retired educator and past president of the AAE. “He believed strongly in education and he searched for that spark of interest in everyone he met. When he saw it in me, he dove in. For the next nine months, we had breakfast several times a week. During that time, he educated me about being an educator. We discussed the challenges, expectations and pitfalls I might face. He convinced

Great Reasons to Pledge

- Endodontics has been generous to you.
- It feels good to return that generosity.
- Your colleagues have contributed generously.
- It feels good to do your share.
- You'll be ensuring strong research and educational programs.

Recognition for Donors

The list of donors of $2,000 or more is published four times annually in the *Journal of Endodontics*. Members who contribute less than $2,000 are listed once. Donors receive a lapel pin and a ribbon to wear at the Annual Session. A certificate of appreciation is awarded to donors when their pledge is completed.

2002-2003 Funds Budgeted for Grants ($545,962)

- Grant to Educators
  - $75,000 (14%)
- Grants to Research
  - $260,000 (47%)
- Endodontic Educator Fellowship Awards
  - $210,962 (39%)

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me that academics would be a great career and provided me with the skills to succeed. We have to make the effort to replenish our own. We must seek out the right people and stimulate them to move into education. But at the same time, we must provide constant guidance and support as their careers unfold. This intense level of mentoring requires direction, patience and understanding but the rewards are well worth it. It is an investment that returns a plethora of dividends.”

Dr. Eric J. Hovland, Dean of the School of Dentistry at Louisiana State University agrees. “You can’t advertise for teachers in the New York Times. But, we’ve attracted an incredibly strong faculty by making a conscious effort to develop and expand our contacts both in the United States and internationally.

In addition to spreading a wide net, Dr. Gutmann suggests that universities look outside the academic model. “We need to take an active approach to recruitment,” he said. “We should study how the most successful businesses recruit employees. Faculty should receive in-service training on new techniques.”

**Stopping the Revolving Door**

Providing a palette of opportunities is a critical factor in preventing a recruitment program from turning into a revolving door. Dr. Hesham Youssef, who as a recipient of an Endodontic Educator Fellowship Award, will be seeking a teaching position in the near future says, “One thing I’ll look for is the ratio of students to faculty. That gives you an idea of how much a school is willing to invest in personnel and education.”

The departments that are most successful strike a balance between providing adequate financial incentives and appropriate professional rewards. “You have to protect the faculty’s time and you have to put money and resources in the department so that they can succeed.” says Dr. Hovland. But he cautions, “You need a critical mass of faculty. In smaller departments, the teaching and administrative activities can be overwhelming, and faculty simply don’t have time to pursue their interests.”

Offering educators the opportunity to supplement their income through private practice is a strategy that some schools are pursuing to close the salary gap. “We have a faculty practice,” says Dr. Hovland. “All the income from the faculty practice goes back to the practitioners and the practice.”

**The Impact on Endodontists**

Problems in the dental schools may seem far removed from the world of the practicing endodontist, but the quality of education has a significant impact on the well-being of the entire specialty. When dental schools cannot recruit endodontists, endodontic departments may be eliminated or consolidated into other areas and the school may rely on generalists to teach the specialty. Students who receive limited exposure to endodontics become dentists who are less likely to refer patients routinely. The lack of endodontic educators also means fewer people to conduct research and therefore limited growth in the specialty’s body of knowledge. A diminishing academic presence lowers the specialty’s profile within the dental health community.

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**Dentistry’s Aggressive Response**

Although the statistics are alarming, the problem is mitigated by a quick and well-organized response from the dental organizations. “I think the strength of dentistry right now is that the respective stake-holder organizations are talking more and working closer together,” says Dr. Haden. “I truly believe that we will see results and outcomes from that.”

The ADA, through its Educational Summit, is providing a forum for educators, clinicians and researchers to collaborate to meet educational challenges. On a more practical level, ADEA has developed an academic careers Web site. The site is open to postings from both employers and job seekers. In tandem with the Web site, the organization is creating new materials to teach students and dentists about the benefits of an academic career.

The AAE and the Foundation are making dental education a top priority. In Tampa, the General Assembly will consider a resolution to create a special category of membership for full-time educators. Proposed dues are $248. In addition, the AAE’s new strategic plan contains seven specific educational objectives. The Foundation is working closely with the Association to realize those goals. The Endodontic Educator Fellowship Awards are a first step. Fellowships pay tuition and provide $1,000 per month to students who agree to teach full-time for at least five years. Since 1999, the Foundation has awarded eight Fellowship grants. This year, the Foundation will also support current faculty with a grant to full-time educators to defray the costs of the Annual Session. The grant pays one-half the registration fee, one-half the cost of the Pre-Session Symposium and provides $250 for travel. Applicants are eligible for up to $585.

**Building a Vibrant Academic Community**

Now that the challenges of faculty recruitment and retention are being acknowledged and addressed, it is also important to recognize that strengthening education must be an ongoing commitment. No matter how successful we become, we can never be complacent. Nurturing academic talent is not just important, it is an obligation to the specialty and to the future. ■
Dear Colleague:

Early on, we thought that at $5 million the Foundation’s endowment campaign would be completed. It was a popular concept because it meant that the hard task of raising money would be over in several years. As the fund grew, we became more sophisticated. We realized that the best decisions are not dictated by the bottom line. Inventing the future requires a bolder vision.

We continued fund raising and now over $11 million is invested—double the original goal! In the process we discovered that there is no ceiling on generosity. Over 60 percent of active members have pledged, and many donors have already increased their original contribution.

The Foundation allocates up to five percent of the endowment’s value each year to research and education. In 2003, we were able to budget $545,962 for grants. We will fund new Endodontic Educator Fellowships ($210,962), grants to researchers ($260,000) and a grant to full-time educators to defray the cost of attending the Annual Session ($75,000). Never before have we been able to invest so significantly in our specialty.

The current priority is increasing the number of full-time endodontic educators and advancing the AAE’s research agenda. A long-range initiative is to develop the scientific and financial resources to fund large-scale clinical projects. The AAE’s new strategic plan charges the Research and Scientific Affairs Committee with identifying institutions to carry out clinical trials and the Foundation with providing funding, so I believe we are moving closer to that goal.

It would be nice to say that because we have done well, we do not need to do better. But knowledge never stops growing and endodontists cannot stop striving to make a unique contribution. This fund reflects our values. It demonstrates that endodontists put a premium on the advancement of their specialty and the well-being of their patients.

So many members have already invested in this mission. We owe it to them to continue raising the bar. That is why every member’s participation is important. If you have not pledged, I hope you will sign up today. If you have completed your original commitment, I hope you will consider increasing your pledge to the next level. Your colleagues, your specialty and I will be grateful for your continued support and we will applaud your commitment to the future.

Sincerely,

Noah Chivian, D.D.S.
President