I was educated in Göteborg and received my degree in 1979. During the final 2 terms I became involved in a small project at the prosthodontic department. This stimulated my interest in the subject, which increased even further after I left the university and became a private practitioner. I shared this practice with another woman, and our patients were mainly older people with a large need for prosthodontic treatment, thus necessitating our gathering of new knowledge. After 11 years, I longed to go back to academic life and was fortunate to be accepted as a PhD student at the laboratories of Prof Tomas Albrektsson, a supervisor I had met as an undergraduate student and regarded as one of the most enthusiastic lecturers during my years of training. Shortly after I started my PhD program, I was also accepted to be an assistant at the Deptartment of Prosthodontics, headed by Prof Gunnar E. Carlsson. He is another important person in my professional career, and I am indebted to him for guiding me toward the postgraduate program to become a prosthodontist. I defended my thesis in 1996 and became a prosthodontist in 1997.

Regarding gender perspective, I have never felt being a woman has obstructed my career, possibly because I was in private practice when my sons were small; hence I could set my own working schedule to accommodate family life. However, today I have experienced another sort of problem because of the demand from the faculty and university for equal gender representation in various committees and boards. This is of course important and praiseworthy, but poses a problem since rather few women have reached a senior position in academics, and the few of us who have are committed to numerous tasks that limit the time for research. This, in the long run, will have negative consequences on academic qualification.

My own research has been mainly focused on implant surface characterization and bone tissue response. Today I am heading a research group with the aim to continue investigating different aspects of biomaterial surfaces and their interaction with biologic tissue. Our interest is directed toward nanometer structures and possible bioactivity, and our group consists of 5 PhDs and 9 PhD students.

I am also the head of the Department of Prosthodontics/Dental Material Science at Göteborg University. The department is heavily involved in undergraduate education from terms 4 to 10. Naturally, this takes a lot of time from all of our teachers, and combined with the increasingly limited economic resources, the time available for research is most unfortunately decreasing. For a true academic environment, a high level of research is necessary, and the major challenge in the future may be to sustain high-quality education with clinical practice based on high-quality research. Another challenge for dental education is to find dedicated people who are interested in teaching and research and to provide them with the ability to develop both qualifications.

I believe the *IJP* and ICP can be of great help when it comes to facilitating and stimulating contacts between researchers/clinicians/teachers for a mutual exchange of experiences, stimulation of research interests, and promotion of relevant clinical issues.

Ann Wennerberg
Professor and Chair, Institute of Odontology
Professor, Department of Biomaterials/Handicap Research
Sahlgrenska Academy, Göteborg University
Göteborg, Sweden

Over the past decade, women have comprised one half of the freshman classes in dentistry and medicine in the United States. Twenty-five years prior, female students comprised just 2% to 5%. A woman with aptitude in the sciences was encouraged to become a nurse or hygienist. I was enrolled in a college nursing program, and my roommate's father was a dentist and her mother was a hygienist. Immediately, her parent's encouraged me to change my studies…to dental hygiene. On visits to their home, I tutored their son in geometry and chemistry. He was a high school senior on his way to predental college courses. I transferred from my small college to a major university to attend a dental hygiene program; however, I was not accepted into the program because of my small high school and college background. I became a university meter maid by night, and went to general science courses full time by day. I enrolled in physics, chemistry, applied physiology, etc. A few semesters later, the same university that would not accept me into the dental hygiene program accepted me for early admission to the dental school.

I attempted to return to my small hometown to offer dental services to a community that had no dentist. Achieving a bank loan for a woman required that my father cosign and literally "mortgage the farm." Another door shut. With limited postgraduation options, I decided in my D4 year to attend the prosthodontic residency at my university. My interest was piqued because of the hospital and maxillofacial components of the Iowa residency. My high school employment had been summers and vacations at the local nursing home. I felt comfortable and fulfilled caring for sick and elderly patients. Without that component of the prosthodontic program, I would have been less interested. In addition, it paid a limited stipend because of the hospital components, and tuition was only required for my masters program.

At the end of the residency, I considered an academic appointment because of the financial concerns of taking out a loan, and again, I had no cosigners. Male faculty advisors and mentors suggested the maxillofacial fellowship at the MD Anderson Cancer Center. Benefits of a stipend and the hospital patient population again drew my attention. I arrived and never left. Twenty-five years later, the hours are long and the salary better than most dental schools, and there is a postgraduate program. I treat patients 5 days a week and still have the opportunity to teach. I have observed many scientific advances in craniofacial reconstruction, including the slow introduction of implants in the cancer patient. The ubiquitous use of implants in this population has become my fervent pursuit.

Whether male or female, today's graduate students must face an insurmountable debt and acquire even further debt to begin a practice. However, the risk of taking these loans appears to be more appealing than working in an academic environment with financial rewards equivalent to today's advanced practice nurse or physician's assistant with only 6 years of education—almost one half the educational time commitment of our prosthodontic trainees. Often, the opportunity to augment salaries with institutional clinical practice has such convoluted algorithms of "payout" that any substantial financial benefit goes to the institution and little remuneration is seen by the clinical faculty. The dental schools of the future must consider creative financing to offer more substantial stipends to their graduate students and improve faculty salaries. I predict these issues will be solved with industry partnerships. A few visionary academics have sought this partnership and been demeaned for their efforts. Time will tell.

Although there is a good balance of men and women in prosthodontic training programs, this ratio is dragging behind in educational environments, particularly at the higher echelons. The vast majority of department chairs, program directors, and deans are men. At times, certain instances of daily interaction will reflect gender bias, such as when a male leader has the preconceived notion that a given task is too complicated for a woman, or that awarding that task to a woman will result in a redistribution of power, thereby upsetting the status quo. In these instances, the wise and strong male leader must be ready to set the record straight. Inequities and professional jealousies thrive in these instances when the leader fails to publicly recognize the female clinician as a valued part of the team. When the leader marginalizes the contribution of a female faculty member, it sets the tone that all other male faculty members may do the same. This mindset trickles throughout an entire department, including support staff. Ultimately, the career, production, and influence of that female faculty member are stinted.

I have benefited from the mentoring and career opportunities afforded me by many forward-thinking men in the profession. I have achieved an opportunity to lead, be productive, learn from team members, and treat the patient population that fulfills my humanity. As women in influential positions in the profession, we must not spend all of our time being vigilant for our own opportunities. It is time for us to be mentors as well.

Rhonda F. Jacob
Professor, Department of Head and Neck Surgery
University of Texas MD Anderson Cancer Center
Houston, Texas

Why are there so few female prosthodontic teachers? When we look around the world, we can see that there are only a few female prosthodontists who have taken up an academic career, while women comprise the majority of dental students. The decisive factor may be that female dental clinicians do not favor prosthodontics for an academic career because, in their perception, prosthodontic academia is a male-dominated field.

Also, academic salaries may have led many prosthodontists to work in private practice to earn more money. In Turkey, among dental clinicians in private practice, prosthodontists form the highest income group. However, I believe that women, who often have better esthetic perception, can be very successful in prosthodontics, which is, after all, a discipline where esthetics holds an overall importance. This belief and the satisfaction of giving patients a happy smile were the main reasons for my involvement in prosthodontics in my undergraduate days. The use of a prosthesis to restore lost function and particularly esthetics was the main attraction for me. Additionally, wide research possibilities with a broad spectrum of related disciplines have made prosthodontics even more attractive. I owe my success, however modest it may be, to the methods of disciplined study that I acquired in my student years. Although there are a number of female prosthodontic teachers in Turkey, achieving such a career in my country is still not easy for a woman, just as in the rest of the world. A female prosthodontist must strike a good balance between her academic and family lives. As a woman climbs the steps of her academic career, she must also carry her responsibilities toward her family. In other words, female teachers often have 2 main roles as a mother/wife and a teacher/clinician/researcher. Personally, although I am a mother, I have experienced no hindrance in my academic career, partially because of my constant efforts to separate my academic and family lives. Nevertheless, I have had to make some adjustments in my personal life, though I have always tried to compensate for the limitations that result from a life of continual study. Eventually, however, my faculty and home lives harmonized.

I hope that there will be more female academics in this discipline who can be more successful thanks to their nature as a sharing and protective role model. I also believe that a woman's grace and loving nature would reflect positively on her faculty and academic career.

How can the ICP help? Well, in a number ways. The ICP can organize a forum with the participation of female prosthodontists. Held at least every other year, a workshop for female prosthodontists may prove fruitful. Also, more female academics should be given opportunities and positions within the ICP. Overall, I like to think that I manage my career, despite difficulties here and there, with a fair degree of success, and this fills me with great pleasure and pride.

Senay Canay
Professor, Department of Prosthodontics
Faculty of Dentistry, Hacettepe University
Ankara, Turkey

The typical beginning for any biosketch usually states the individual's educational background, and so begins mine… born, raised, and educated in Texas. As a 1984 graduate of Baylor College of Dentistry, I was encouraged by faculty members to pursue specialty training in prosthodontics. Subsequently, I was accepted at the University of Texas Health Science Center San Antonio Dental School, with a prosthodontic program directed by Dr Robert M. Morrow.

The desire to pursue specialty training in prosthodontics was based on maximizing my capabilities and having a positive effect on the quality of care I can provide. Mentoring was the key to becoming a prosthodontist, as I was surrounded by well-respected educators and leaders who instilled a foundational knowledge in prosthodontics and steered me down a path of life-long learning and leadership. I learned enthusiasm and scholarly curiosity by working with clinicians around the world, including Dr Sumiya Hobo of Tokyo, Japan, who demonstrated scholarship in groundbreaking areas that to this day have an effect on the practice of prosthodontics, including computerized analysis of jaw movement and innovative concepts in the theory of occlusion and instrumentation.

My current position as the first female department chair at the University of Texas Health Science Center San Antonio Dental School has offered challenges I could never have anticipated and that have led me to explore additional opportunities, such as the highly respected Hedwig van Ameringen Executive Leadership in Academic Medicine Fellowship. The stimulus for continued growth has helped me gain professional strengths beyond prosthodontics that translate into improved dental education.

I am living many of my long-range professional and personal objectives with the support of my husband,

who is a fellow prosthodontist. Through shared professional vision and personal goals, I have been able to pursue academic and volunteer positions, such as service to the American College of Prosthodontists, based on a strong family support system. My professional activities may serve as a model to the next generation of women in this field as they meet unforeseen challenges.

My wish list for prosthodontists, especially those who have chosen to dedicate themselves to an academic career, is for higher education to have the support and innovative leadership to recruit the highest caliber of prosthodontic educators, since they are the role models for future recruitment and have the greatest impact on the education of general dentists. This is a challenge in times of vast economic disparity between prosthodontists in the academic realm and those who have chosen to pursue private practice.

I do not believe that gender has made a significant difference throughout my career; my mentors always encouraged and motivated me to pursue my goals. It must be said that most women, whether in prosthodontics or general dentistry, have to endure special challenges that their male colleagues may not face. As an under-represented minority, Mexican-American, I have experienced further challenges that other Anglo/Caucasian women and men may not have experienced. However, I feel that my gender and ethnic background provide me with experiences and a unique perspective that can enhance my professional life.

When asked how the *IJP* or ICP can help other female prosthodontists fulfill their goals, I must respond that offering this type of venue in which many of us can share a vignette of our experiences can only enhance the environment for my colleagues and possibly create an opportunity for those who have yet to enter our profession and specialty.

Lily T. Garcia
Professor and Chair, Department of Prosthodontics
University of Texas Health Science Center San Antonio Dental School
San Antonio, Texas

I was born in Kiel, in northern Germany, and studied dentistry in Bonn, where I received my dental degree in 1984. Subsequently, I worked at the Department of Prosthetic Dentistry at the University of Bonn as a scientific assistant, where my professional activities comprised teaching, clinical care, and research. For my thesis, I obtained my Dr Med Dent in 1987. After data analysis was complete, my supervisor registered me to present my research at a national scientific meeting—truly against my will! Until the last minute I always said I wouldn't go for anything in the world, but then I encouraged myself with a new dress and a pair of red shoes, and finally I went…and liked it. After graduating at the age of 24, I felt too young to enter the working world for good, and so a scholarship from the German Academic Exchange Service allowed me to catch a breath of the "wide world" by funding me for 1 year (1988 to 1989) to work with Robin Heath in the Prosthetics Department at the London Hospital Medical College. In this multinational academic environment, I specialized in gerodontology and was encouraged and motivated to pursue an academic career. In 1992, I shifted to the University of Mainz, where I received my Habilitation (Privatdozent) in 1996, again based on work I did in London, funded by a DFG research grant. In 2003, I was appointed professor and chair of the Department of Gerodontology and Removable Prosthodontics at the University of Geneva.

Why are there so few female prosthodontists? Winking, my prosthodontic mentor from Bonn used to joke that God made women out of a rib, and ribs cannot think…luckily he never meant it seriously. In my view, one of the inherent problems of female promotion is that the strengths of women are rarely taken into account. So do we need to adopt "male behavior strategies" to succeed? Women have—and hopefully will continue to have—a different approach to their professional life. Obviously it is difficult to generalize, but women tend to diversify their activities, network more easily, and act in a less competitive and more group-oriented manner. These features may be very enriching in an academic environment and facilitate different scientific approaches that add new facets to the prosthodontic field. Thus, to benefit from the richness of both genders, not only do we need to encourage young and talented women to choose an academic career, we also need to guide them through the "Bermuda Triangle" of founding a family and having children by providing an effective infrastructure for delegating domestic responsibilities. Finally, promotion criteria should be less restrictive and allow for different patterns of an academic career.

Frauke Müller
Professor and Chair
Department of Gerodontology and Removable Prosthodontics
University of Geneva, Switzerland

In order to answer Joke Duyck's provocative editorial, "Why are there so few female prosthodontic teachers," I first asked myself if this was question was true. Obviously, male academics are still dominant in universities today, but are there actually less women entering the field than men? I decided to split the question into 3 parts to simplify the problem:

1. Are there fewer women in advanced education?
2. Are there fewer women in prosthodontics?
3. Are there fewer female prosthodontic teachers?

Are there fewer women in advanced education?

According to a recent Canadian survey, the percentage of female dental clinicians has been increasing by 1% annually over the past 5 years. Female graduates are currently dominant in dental schools of Canada, comprising 52% of the 2004 graduates. Of these graduates (male and female combined), approximately 10% to 12% will eventually go into advanced dental education.

If the female proportion remains the same in advanced dental education and in academics, a higher percentage of females should be enlisted in specialty programs such as prosthodontics, and a higher percentage of females should be enrolling in teaching careers. Of course, we must realize that it will take some time to see the effect of these recent changes, and so in the meantime, there will still be fewer women.

When scrolling through our Quebec dental directory, I noticed that most specialty programs are male dominated, some more so than others. Maxillofacial surgery, for example, has a ratio of 5 practicing women for every 86 men, whereas pedodontics has the best female ratio with approximately 50% women. Prosthodontics remains a male-dominated specialty, with a ratio of 9 women for every 42 men.

However, as we look at the last 2 decades, there has been a clear increase in the female presence. For example, in prosthodontics, there were 2 graduating women for every 12 men in the 1990s, and already there are 6 graduating women for every 5 men in the new millennium. Therefore, the female presence in prosthodontics is definitely increasing in Quebec.

According to a 2004 survey by the American Dental Association, 25.4% of student survey respondents applied to a specialty program, with 18.0% being accepted. According to the same survey, slightly more women intended to pursue advanced education after graduation, and slightly more women intended to go into teaching, research, or administration (1.6% of responding students wanted to pursue teaching).

I believe it is fair to say that in North America in the new millennium, women are very present in the field of prosthodontics, and more likely to become academics than men.

What are some of the deterrents for students when making the decision to pursue an academic career? Location of the program (if it is far from home), time commitment, compromised family and social lives, financial factors, and future working conditions are some of the most important factors. When student debt is juxtaposed with potential income, private practice may be more enticing for both men and women.

Deciding to pursue specialty training may push back important life decisions, such as marriage and having children, and not all women are comfortable with this idea. Even though family priorities are very important for the modern male, the decision to have a family is still a more significant influence on career decisions for women than men. After all, women are the ones going through the physical and emotional changes. In a 2006 study, Rupp et al (J Dent Educ 2006;70:1051–1060) noted that having children had a significantly greater effect on the number of hours worked per week among female dentists than among male dentists. Men worked more hours and worked part time less frequently.

Are there fewer female prosthodontists?

According to a 2004 ADA survey on advanced dental education, there were only 894 applications in prosthodontics compared to 8,951 applications in orthodontics. The specialty of prosthodontics gets approximately 5% to 6% of specialty program applications each year. Why is prosthodontics so unpopular?

Prosthodontics is a discipline that specializes in the restoration of oral function by creating prostheses and restorations. It may be that prosthodontics is not promoted properly, and does not capture the graduating dentist's interest because it may seem that this specialty is just advanced general dentistry made complicated and with more responsibilities. Further, prosthodontics is a specialty that requires advanced laboratory training, which is not very popular with most undergraduate students.

An interesting study by Grandy et al (J Am Dent Assoc 1996;127:253–258) using the Myers-Briggs Type Indicator (MBTI), noted that a majority of dental clinicians and specialists are of sensing and judging temperament. Sensing (S) types prefer established procedures, enjoy acquired skills, appreciate standard methods for resolutions, are patient with routine, and like precise, practical tasks. They dislike solving new problems, are impatient with complications, and often ignore their inspirations.

Apparently, intuitive and feeling temperaments are more likely to prefer prosthodontics. Intuitive (N) types

enjoy solving problems and learning new skills, persevere with complicated situations, follow their hunches, and work with bursts of enthusiasm. They dislike routine tasks, are subject to errors of fact, and prefer innovative rather than practical tasks. This could begin to explain why few dental clinicians join prosthodontic programs.

I believe that all specialties attract a specific type of temperament, and that we will notice in the coming years that prosthodontics, formerly categorized as more masculine, will attract equally as many women as men.

Are there fewer female prosthodontic teachers?

Compared to the private practitioner, the academic leads a varied life. Interacting with students, patients, and clinicians in the practicing community is typical for faculty members. Most are also required to participate in some form of research. Some may travel to professional conferences and collaborate with colleagues on projects of national and international importance. Academic life is definitely not boring! Yet, there is a lack of interest in academic careers among students, with only 0.5% to 1.6% of students pursuing an academic career since 1980.

This lack of interest may be due to several factors. According to Rupp et al, dental students in general do not possess the knowledge and information necessary to make an informed decision regarding a career in dental education. Factors contributing to the intent to pursue some form of faculty career were gender, plans to specialize, knowledge of academic issues, having a parent in higher education, and personal teaching experience. Anecdotal observations indicate that students are often dissuaded by faculty from entering teaching and research.

Also, with increased debt and the prospect of earning substantially more in private practice, dental students may also be less attracted to academia for financial reasons. Of the 10 reasons students chose dentistry as a career, "control of time of work," "being self-employed," and "service to others" were most important.

However, unlike private practice, the faculty member does not bear the responsibilities associated with operating a business and clinical enterprise. The faculty member has a predictable, stable source of income and benefits that increase over time. This can be an extremely interesting advantage for a woman who desires to raise a family. Academia offers maternity leave advantages and a lighter workload for new mothers. This could be why the number of female faculty has increased by 35% between 1990 and 1996. In fact, 25% of American dental full-time faculty members are currently women, and there are more part-time women faculty than men as well. Getting a full-time faculty position in a university is also partly a question of timing. It is not every year that there is a faculty position opening in the department of the specialists' choice.

Women tend to choose a career that allows time for them to care for their children. This may explain why many women will choose part-time positions in private practices or academia.

As I am one of these few female prosthodontists in academics, I will elaborate on what made me choose this path and my thoughts on this choice. The factors that led me onto my career path can be summarized as follows:

- *Desire.* I had the desire to go into advanced education since my second year as a student, and I was ready to invest the time.
- *Mentoring.* I had a mentor who told me about prosthodontics and academics and their advantages for a female clinician.
- *Temperament.* According to MBTI, I am an intuitive and feeling type. Of course, this is not something you decide on.
- *Timing.* I was lucky to be at the right place at the right time. A faculty position was available at the University of Montreal exactly when I was ready to leave for specialty training. Had this opportunity presented itself 2 to 3 years later, I would have felt like I was jeopardizing my personal life.
- *Financial support.* I had the opportunity to receive funding from the University of Montreal for tuition fees at the university of my choice. I felt I could support myself with loans and could not pass up this opportunity.
- *Relationships.* My relationship with my boyfriend at the time was not too serious, so did not restrict my career choices.

My preferred areas of activity are treatment planning, fixed prosthodontics, and implant prosthodontics. I do not believe that these choices have much impact on my personal and family life. Fixed prosthodontics requires planning and communicating with the patient and treatment team. Without the help of a secretary and assistant, the added burden of administration and insurance forms on an already demanding academic career makes it difficult to take on interesting cases with a 1-day private practice schedule. With time already an issue, with a family I would not be able to add extra hours to my schedule, and I worry that things would not get done. Private practice is essential for me as it is at the center of what I teach.

My personal aspirations are to have children and be able to manage both a fulfilling career and a family. I do not believe I can have it all. I realize I will have to

make choices by either accepting that a career in academics will be interesting and challenging without completely fulfilling my clinical practice goals, or by orienting my career toward private practice without being in academics full time.

I believe it is important to have gender balance in all fields, but I do not believe a 50/50 ratio is needed. Women tend to have a different way of approaching patients and their problems than men. It is important for women to have role models and for both genders to have input on problem solving and patient approach.

The total number of full- and part-time faculty and the average number of faculty per school has been declining since the 1990s. As individuals retire, faculty shortages will increase and academics will feel overwhelmed with responsibilities. I believe that the *IJP* and ICP can fulfill an important role by conveying to men and women that academic careers are exciting and challenging. Promoting advanced education and prosthodontics to both genders is of primary importance if we are to have fulfilling academic environments.

Genevieve Guertin
Assistant Professor, Faculty of Dental Medicine
University of Montreal
Quebec, Canada

When finishing high school in Cologne, Germany, where I was born and raised, I was looking for a profession that allowed me to exercise my love of manual work in an occupation that not only dealt with people, but also enhanced the quality of people's lives. My decision was made easier by a family tradition and background in dentistry, and so I elected to study dentistry at the University of Aachen. I was certainly fortunate to have as my professors the likes of Walter Koberg for maxillofacial surgery and Hubertus Spiekermann for prosthodontics. After receiving my dental degree and passing my board examinations in 1991, I initially planned to do a specialization in oral surgery. It was a general prerequisite to have at least 2 years of clinical experience, so I served as an assistant in a private dental office and finished my doctoral dissertation in 1992. In the meantime, I received the opportunity to visit the Department of Fixed and Removable Prosthodontics and Dental Material Sciences headed by Peter Schärer at the University of Zürich, Switzerland. I was impressed by this exceptional group of enthusiastic colleagues and admired the excellence in their professional work. I asked Peter Schärer for a postgraduate position and moved to Zürich a year later in 1994. I was given the opportunity to take over responsibility for clinical studies in implantology and guided bone regeneration, and to write a compendium on dental implantology on behalf of the clinic. Collaborating with Peter Schärer was an outstanding challenge. He was an inspiring teacher, enthusiastic lecturer, far-sighted clinician, and exceptional person, who transferred his enthusiasm by believing in your ability, sharing responsibilities, and instilling confidence in his coworkers. In 1997, when I finished my postgraduate program, I asked Peter Schärer if he would support me in an academic career, and his honest answer was that I would be better off joining one of his former students, since he was fairly close to retirement. Thus, I took a position as assistant professor at the Clinic for Reconstructive Dentistry and Temporomandibular Disorders under Carlo P. Marinello at the University of Basel.

In German-speaking parts of Europe, the habilitation thesis is still an obligatory requirement for an academic career. This requirement is very demanding, and comprised, at that time, 10 to 15 original papers in peer-reviewed journals related to the researcher's scientific subject. Additional requisites are at least 6 months of time abroad, several teaching assignments in an undergraduate program, fulfillment of numerous didactic courses, and a separate habilitation thesis. Concomitant with my commencement in Basel, fundamental reorganization was needed in the department that required me to dedicate my entire energy to the clinic and undergraduate program, putting the habilitation temporarily aside. Nevertheless, this was a great opportunity to improve my knowledge and clinical proficiency in overdenture and complete denture therapy, since the department comprised both fixed and removable prosthodontics. Due to my responsibilities in the clinic during the semester periods, Carlo Marinello made it possible for me to participate in research projects at the Department of Periodontology at the University of Göteborg, where I registered for the PhD program as a visiting assistant with Tord Berglundh and Jan Lindhe as my supervisors. After several visits during the holiday periods, I had established a unique and intensive collaboration between Basel and Göteborg that continues today and facilitates exciting research projects. I am extraordinarily grateful to Jan and Tord for their patient teaching and critical discussions, which are opening different perspectives and continue to motivate me for future projects, and I would like to acknowledge their con-

stant help and support. I completed my specialist training in reconstructive dentistry in 2001 and finished my habilitation thesis, "Prosthodontic Treatment of the Edentulous Patient with Particular Consideration Given to Implant-Supported Restorations," in 2004 at the University of Basel. In 2006, I defended my PhD thesis in Göteborg with a subject in periodontology: "Inflammatory Reactions in the Gingiva and the Peri-implant Mucosa."

The program in periodontology and implantology together with the structured PhD courses in Sweden were very important for me, and I am lucky that I could combine my own educational goals with the ongoing clinical work at the University of Basel. This synthesis was ideal, as I am convinced that continuing treatment of patients is still a requirement for faculty involved in clinical education of students, according to the axiom, "if you can't do it, you can't teach it."

I am aware that I was presented several unique opportunities in my professional career and I acknowledge these as exceptional gifts, along with a duty to share this knowledge with others. I am currently teaching periodontology at the Department of Periodontology, Endodontics and Cariology at the University of Basel, and I am thankful to Roland Weiger, head of the department, for giving me the opportunity to contribute to the under- and postgraduate programs. I still love to work clinically and have some research projects in the field of prosthodontics and periodontology. Treatment planning in complex cases in reconstructive dentistry is extremely challenging and stimulating, and currently many exciting scientific questions arise particularly in the field of periodontology, where treatment follows more or less traditional rules. My utmost wish within the prosthodontic discipline is for a recognition of the importance of biologic aspects in both the fields of periodontology and prosthodontics, with respect to optimizing treatment for our patients.

When it comes to the question of whether gender makes any difference in our field, I have to admit that in this respect, I have really enjoyed my time in Scandinavia, where I never felt any advantages or disadvantages in how I was treated as a women in my profession. Differences still exist in the rest of Europe, where women are often driven to behave like men and perform even better than their male colleagues to be equally recognized in academics. Although I adopted Switzerland as my beloved homeland, I am thankful that I experienced Sweden, where gender differences are well accepted and appreciated, giving me more confidence as a female professional.

I am convinced that the easiest way to encourage female students to go into academics is to have female teachers show them that normal female attitudes are welcome and that women's competence in leading positions can enrich the male-dominated academic world. Certainly, financial support for all young researchers, irrespective of gender, should be encouraged. I gratefully acknowledge the *IJP*'s and ICP's approach and interest in supporting our successors.

Nicola U. Zitzmann
Associate Professor
Clinic for Periodontology, Endodontics and Cariology
Dental School, University of Basel, Switzerland

In 1982, George Zarb introduced the concept of osseointegration to North American dentists. Since then, arguably no topic in dentistry has generated more interest than oral rehabilitation with dental implants. In 1990, President George Bush declared the 1990s the "Decade of the Brain" to raise the profile of brain research. This led to great progress in brain research on the topic of the mutable brain and its remarkable capacity for change. Such changes have been shown to be associated with various adaptation and learning processes in animals and humans. After many years of researching the brain, we are at a very exciting time where it is now possible to suggest evidence-based therapies.

These developments had a significant impact on my decision first to specialize in prosthodontics with an emphasis on implant prosthodontics and then to pursue MSc and PhD studies, aiming at an academic career that will enable me to combine clinical and basic science research activities with possible future clinical application to oral rehabilitation.

While attending international meetings and reading professional literature, I realized that the faculty of dentistry at the University of Toronto has a long tradition of research and a well-earned international reputation, especially in the field of prosthodontics. In particular, I wanted to come and work with Prof Zarb, a great clinical scholar. Indeed, this special milieu, along with its unique groups of researchers and clinicians, such as James Anderson and Aaron Fenton, have provided me with a comprehensive knowledge and the best possible skills to pursue an academic ca-

reer. Other important reasons for choosing the University of Toronto were its equity, declared commitment to enhancing diversity by increasing the number of under-represented groups (eg, women), and well-known family-friendly policies.

During my postgraduate prosthodontic studies, I was constantly exposed to various research activities with a strong sense of evidence-based patient management, which further enhanced my desire to pursue a higher level of education. I applied and was accepted to the MSc program at the same faculty. My thesis, "Prosthetic Replacement of the Missing Single Tooth with Implant-Supported Prostheses ad Modum Brånemark," was the most comprehensive prospective study on the topic at the time.

Ongoing studies in Prof Barry Sessle's laboratory have demonstrated in animals and humans that the sensorimotor cortex representing the orofacial muscles have a crucial role in orofacial motor movements, and that this representation may change (so called neuroplastic change) in association with learning novel oral motor tasks (eg, tongue protrusion). It is well documented in humans that loss of teeth may be associated with reduced oral sensory and motor functions that can usually be improved following prosthetic treatment. These sensorimotor functions may further improve with time as patients learn to adapt to their new prostheses; however, we still do not know how patients learn to adapt to a new prosthesis, or why some patients adapt quickly while others do not adapt at all. For my PhD studies, these questions led me to propose the development of an animal model to study the ways in which the motor cortex area representing the orofacial muscles is reorganized in association with various alterations in the oral environment (tooth extraction, tooth trimming, dental implants). By using electrophysiologic techniques, we hope that these experiments will uncover some possible mechanisms underlying orofacial motor learning and sensorimotor adaptation processes. My long-term plan is to further develop expertise in the field of brain imaging to be able to apply similar studies to humans treated with dental implant-supported prostheses. Such studies may further our understanding of brain functions, which in turn may be translated into the development of new diagnostic tests and better oral rehabilitation strategies to promote clinical success and improve patients' quality of life, especially for patients suffering from sensorimotor deficits (eg, peripheral damage to the nervous system after implant surgery).

Pursuit of a full-time tenure-track position means a 5-year commitment to long research hours, teaching, attending out-of-town conventions, writing papers, and competing for continuously decreasing grant-funding resources. This is a 5-year commitment that requires a dedication to the university and prosthodontic department without the promise of a secured professional future. No wonder that dental clinicians (and other clinicians too) often choose a more secure, clinicallyoriented career trajectory.

Several changes may benefit both women and men and help recruit and retain them in academia. The most important change is the creation of a mentoring program to help women find the right balance between research, clinical academic activities, and family responsibilities. Second, scholarship opportunities are necessary to foster women entering clinical research careers by offering financial support and time off. Last but not least, it is important to foster family-friendly tenure-track positions and change the way funding agencies operate, so that CV differences between men and women will not impact negatively on women's opportunities to achieve their tenure position, particularly in the clinical academic route. In this respect, the ICP can play a leading role by providing incentive awards not just for young prosthodontists, but also for clinical prosthodontists pursuing PhD studies, and by creating a mentoring program for new clinical academics.

Once I achieve my professional goal, a tenure position, I hope to play a major role in opening new doors for future generations of clinical professors and to develop new personal approaches to teaching.

Limor Avivi-Arber
Lecturer, Prosthodontics and Oral Physiology
Faculty of Dentistry, University of Toronto
Ontario, Canada