Jeni Thomas, MD, P&G: In order to have a comprehensive understanding of the issues of hair aging, we are fortunate to have with us Professor Ralph Trüeb who is a real expert on the topic – in fact, he wrote the leading book on Aging Hair. He’s a Professor of Dermatology in Zurich, Switzerland, and works now in private practice at his Center for Skin Diseases and Hair Disorders.

Q(uestion) 1 (Jeni Thomas): Professor Trüeb, can you tell us how relevant is hair aging?

A(nswer) 1 (Ralph Trüeb): The importance of hair aging is twofold: First, there is the consumer demand. Both, the 85-year old great grandmother is concerned about her thin hair, and the 35-year old, active business woman is noticing that she has increasing bad hair days. The hair care industry has become aware of this and capable of delivering appropriate hair care products, and the pharmaceutic industry has discovered specific targets for safe and effective pharmacologic treatment of age-related hair loss. Second, the basic scientist has discovered the hair follicle as an easily accessible substrate for research into the aging process, its prevention and treatment.

Q2 (Jeni Thomas): How did you get interested and involved in hair aging?

A2 (Ralph Trüeb): As a dermatologist I was always interested in the aging process, since the skin and its appendages show the most obvious age-related changes, even though traditionally anti-aging medicine has been the domain of endocrinologists. But there is more than just hormones involved. A lot has been done since in the study of skin aging, but surprisingly the hair had not found the interest it deserved yet.

Q3 (Jeni Thomas): We understand a lot about skin aging, is the research going the same direction for hair aging?

A3 (Ralph Trüeb): Both skin and hair aging share intrinsic aging from within, and extrinsic aging form external factors. While in the skin we understand more of the extrinsic aging process, in the hair we have so far been more aware of the intrinsic factors, such as genetics and hormones. Nevertheless, we have begun to acknowledge the role of environmental factors for hair aging. This is of particular relevance, since her lies the area of most prevention. Accordingly, the science of hair care focuses on the esthetic problem of aging hair and its management in terms of hair color, quality, and quantity, and on the biologic problem of the underlying aging process in terms of microscopic, biochemical, and molecular changes.

Q4 (Jeni Thomas): As a physician, how do you treat these problems?

A4 (Ralph Trüeb): There is the traditional approach based on age-old remedies passed from generation to generation, but without any validated evidence of efficacy and safety, and there is the scientific approach based on a deeper understanding of age-related processes affecting the hair follicle and hair fiber condition. Basically, hair anti-aging aims at delaying, lessening, or reversing the aging process, and consists
of appropriate hair care for prevention and repair, pharmacologic treatments as indicated, and identification as well as management of more general age-related health problems that affect the condition of the hair.

**Q5 (Jeni Thomas):** I know that a pharmacological approach can be effective, but they do not represent immediate solutions, nor are they really something for the majority of people. What other options are there?

**A5 (Ralph Trüeb):** Topical minoxidil for women and oral finasteride for men have been the drugs with the highest medical evidence for efficacy and safety in the treatment of age-related hair loss. For success, patients need to adhere to treatment and have patience. On the other hand, people expect immediate results. This is only possible by adding an appropriate hair care regimen to the pharmacologic treatment. Finally, a physician who is knowledgeable of appropriate hair care, will more easily win patient confidence as a prerequisite for patient compliance.

**Q6 (Jeni Thomas):** How much is psychological problem in hair loss, thinning or general hair aging?

**A6 (Ralph Trüeb):** The condition of our hair is important for both our overall appearance and self-perception. Therefore, it is not surprising that problems related to the condition of the hair may lead to considerable distress and loss of self-esteem. In general, the best way to alleviate the emotional distress caused by a hair disorder is to effectively treat it. The intensity of the distress that the patient expresses should influence the clinician’s decision to effectively treat the hair disorder.

**Q7 (Jeni Thomas):** What does the future bring?

**A7 (Ralph Trüeb):** While mainstream scientists are working on gene polymorphism diagnostics for prediction of risk, prevention, diagnosis, and targeted treatment development, on stem cell technology and on bioengineering of the hair follicle, health care providers are becoming increasingly aware of a more holistic approach to the problem of age-related loss in hair quality and quantity, and will provide more recommendations for appropriate hair care and nutrition, to accompany their pharmacological treatments. This is the essence of my newest book release on successful management of female alopecia to appear 2013 in Springer Scientific Publications, a very personal contribution dedicated to women of all ages complaining of hair loss.