Bibliographic Indices. This publication is listed in bibliographic services, including Current ContentsR and Index Medicus.

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Toxicology
Preface

‘Festschrift’, a German word, denotes a publication in honor of a well-regarded individual. Friends and co-workers of Howard I. Maibach gathered on July 1st, 1994 in Basel, Switzerland, in the heart of Europe, to honor him on the occasion of his 65th birthday. With an exceptional inquisitiveness, his interests covered many aspects of dermatology and related sciences, including allergology, bacteriology, bioengineering, mycology, occupational medicine, photobiology, skin pharmacology, and toxicology. These interests are reflected in his abundant publications and edited books, among which are some of the most frequently cited in the dermatology literature. This volume contains 33 contributions written by current and former co-workers, reflecting only a small fraction of his fields of endeavor. Highlights in allergology are contributions of an allergen bank and the ideas behind it, a comprehensive presentation on textile dye contact allergens and the clinical standardization of the TRUE Test™ formaldehyde patch. Contributions in bioengineering and occupational dermatology include quantification of biophysical properties of the skin, irritancy exposure assessment in metal workers and effects of surfactants on skin hydration. A large section on skin pharmacology provides the reader with solid research data and incisive commentaries from researchers and leading authorities on issues of in vitro and in vivo percutaneous absorption, skin metabolism, topical bioavailability and bioequivalency. The volume closes with contributions on the use of cell cultures in skin irritancy assessment. It is hoped that this monograph will foster multidisciplinary dialogue and stimulate future efforts in clinical and nonclinical skin research.

Christian Surber, PhD
Peter Eisner, MD
Andreas J. Bircher, MD

Laudatio for Howard I. Maibach

We are gathered here on this exceptional morning in the historical auditorium
of the old museum which once grew out of the university collection. The
university itself exists since 1460. That was 32 years before the discovery of
America and 469 years before our honored guest, Prof. Howard Maibach, was
born. The University of Basel is thus Switzerland’s oldest university. Its establishment
goes back to the time of the Ecumenical Council in Basel, which took place
from 1431 to 1448. Out of gratitude for the hospitality shown to him, the then
papal legate, Aeneas Piccolomini, later to become Pope Pius the Second, gave his
consent to a small group of citizens to transform their wish for a university within
the walls of their city into a reality. In this auditorium, where all new faculty
members are presented to the public, we are celebrating today the birthday of our
good friend Prof. Howard Maibach.
That I should have the honor of giving the laudatory speech is due to several
fortunate coincidences. The first coincidence, as it were, is because I am head of the
dermatology department. As coincidence would further have it, two of my
colleagues, doctors Surber and Bircher, have studied with Prof. Maibach. Not
only did they bring back some very essential tools of the trade, acquired under his
tutelage, but they, together with Peter Eisner, who was brought to Zürich by an
amicable stroke of fate also had the splendid idea to celebrate Prof. Maibach’s
birthday here in Basel in a fitting and spirited atmosphere.
All of you are familiar with the biography and the brilliant career of our
honored guest. Prof. Maibach was born on the 18th of July 1929 in New York. His
studies encompassed political science at Tulane University, anthropology at
Columbia University followed by Tulane Medical School. After fulfilling his
military obligations, he remained in France for 2 years working in the fields of
psychiatry and dermatology. There he decided to return from his stint at the 42nd
field hospital in France to take on a 4-year residency at the University of
Pennsylvania, where he was profoundly influenced by the innovativeness and
genius of Dr. Albert Kligman. It was this experience which influenced him to begin
a career in academic medicine.
He presently holds positions as Vice Chairman of Dermatology, Academic
Vice Chancellor of the Peer Review Committee, is senior member of ten subcommittees
on quality control and is head of the Occupational Dermatology Clinic. As
if this wasn’t enough, he is also Dermatology Consultant of several hospitals and
university faculties in California and is a member of a large number of medical,
dermatological, pharmaceutical and related areas of scientific committees. His
lecture itinerary reads like a geographical atlas. Prof. Maibach is a homo universi,
a homo universalis, indeed a homo universitatis.
There is one remaining coincidence, so to speak, which has led me to this
gathering of highly esteemed people, the circumstance that I am also Dean of the
Medical Faculty here at Basel. As tradition would have it, the dean shall stand
before you dressed in a robe holding the insignia of his faculty. The insignia
displays the emblem of the university with its symbols for each of the classical
faculties in their appointed order set down in the year 1660. These are the classical faculties known to the Middle Ages.

One thus reads 'pie, juste, sobrie, sapienter'. Does not this coat of arms also mirror our beloved and honored guest? What then do the symbols pie, juste, sobrie and sapienter mean?

Laudatio for Howard I. Maibach X

'Pie' stands for the first of the faculties, the foundation of all sciences. Its religious connotation refers to 'piousness'.

'Juste' stands for the second of the faculties, which by formulating the knowledge about a given political system, the human commonwealth, its jurisprudence, connotes 'just'. Medicine occupies the third place.

The sign of the fourth and youngest of the faculties, the philosophical faculty, which as recently as the last century was divided into a humanistic and a natural science faculty, is designated by the concept 'sapienter ', which could be translated as 'wise, insightful, reasonable, prudent'.

We physicians are thus situated within pious, just and prudent people and are characterized as 'sobrius '. Sobrius means 'sobriety', not in the sense of abstinence from drink, but rather in the broader sense of temperance, levelheadedness, purity and sincerity. Are these after all not the very qualities which distinguish our honored guest? Are these not the prerequisites for his highly successful work, his unparalleled career and the great number of grateful, devoted and, in their turn, successful students?

Without doubt it is true that our emblem is committed to a tradition, but it has also grown with and out of the university's historical development. The characteristics of the three other faculties have hardly lost their relevance. They still form the foundation for contemporary academic thinking. Now, do these very characteristics not also apply unequivocally to our homo jubilans? The order of emphasis might have changed from time to time in the course of history. However, we all base our knowledge and capabilities unmistakably on the tenets of the natural sciences; one sometimes might be tempted to say, perhaps too one-sidedly. Indeed, the scientific achievements of our honored guest today are based on exact methods of research and their correct interpretation. His lifework has been and remains committed to 'sapienter'.

What about 'juste'? The word 'just' stands not only for justice in the sense of administrative justice, the regulation of social life. It also corresponds to an inner attitude which manifests itself in genuine thinking as well as to the inquiring mind bound to the search for truth. I think you know who I am referring to when I characterize it in this way.

Now, what about pie? Contemporary life is no longer merely oriented around the belief in God attributed to the major confessions. Morals and morality are
constantly exposed to changing dictums, too. Intellectual discussions are thus led to the challenge of devising binding ethical norms. However, we may choose the terms, it is the principles of humanity which provide and remain the foundation of our thinking and acting. In discussions with Prof. Maibach one immediately sees his genuine respect for all forms of creation, but, above all, a genuine respect for the human intellect and its potential.

Laudatio for Howard I. Maibach XI

We once spent a morning together viewing the paintings of both Basel’s renowned museums, the ‘Kunstmuseum’ and the Museum for Contemporary Art. I got to know Prof. Maibach as a person who I would like to refer to with the term ‘pie’.

Sobriety, circumspection, purity and integrity refer not only to the work of Prof. Maibach. You remember his speech. I think I would also have understood him even if he had spoken in Japanese. His is a moderate language without frills, his statements are clear, his argumentation devoted purely to truth and his diction clear and distinct.

Dear Honored Guest,
In the name of the university and the medical faculty, and especially from me personally, I wish you many more years of devoutness, justice, sobriety and integrity, as well as wisdom. Moreover, I would like to extend this wish to all of you, dear colleagues.

Unfortunately, our rather austere medical faculty knows of no mark of distinction with which to endow our honored guest. The Swiss Society for Dermatology is also sparing in this regard. We are, however, located here in a German-speaking part of the world and as a member of the board of the German Dermatological Society, the scientific association of all German-speaking dermatologists of Europe, I am privileged to present you with the medal of the German Dermatological Society in commemoration of this day, your day of honor.

Prof. Theo Rufli
Chairman of the Dermatological Clinic
Dean of the Medical Faculty
University of Basel, Switzerland

Laudatio for Howard I. Maibach XII
Tribute to Howard I. Maibach

We are gathered here today to celebrate an event which has significantly enhanced the stature of dermatology in the world of medicine. I refer of course to the birth of Dr. Howard Maibach 65 years ago.
It would require a 100-page document merely to list Maibach’s activities and achievements. For historians this might constitute a valuable record of the great figures of the last half of the 20th century. It would also be mightily uninteresting, like reading a stultifying curriculum vitae. I prefer to tell you something about the personal qualities of this unusual and fascinating man who, if he lived in England, would already have been knighted as Sir Howard Maibach.

In the USA Howard is known as the TWA Professor of Dermatology. His existence is equally divided between terrestrial and aerial experience. Unlike many of us who imbibe alcoholic beverages to reduce boredom on long flights, Howard retains full sobriety and is busily correcting manuscripts, catching up on mail, or planning next week’s experiments. Being a super-disciplined iron man, Howard does not suffer from jet lag, which I suspect he regards as a moral weakness. He thinks nothing of traveling from San Francisco to Sydney, Australia, to give a lecture on contact dermatitis, returning the next day in time to see a few private patients who often have come from equivalent distances to see this great guru.

Dr. Maibach qualifies as a workaholic but that term is inadequate to describe his frenetic work habits. He is in fact a workamaniac who produces published works at a pace which makes the rest of us look downright slothful. Howard has published over 1,700 papers, possibly a world record. He has coauthored over 30 books prompting me to wonder if even this workhorse can possibly have read them? He has been consultant to virtually every pharmaceutical company listed on the New York Stock Exchange, as well as a dozen governmental agencies. He probably thinks that sleeping is sinful.

Dr. Maibach is the greatest impresario of dermatologic symposia in the 2,000-year history of medicine. No international meeting can take place without his inspiration and participation. He is the doyen of international diplomacy and has a huge network of distinguished colleagues. Howard can organize a program complete with topics, speakers and funding in the time most of us take for a quick lunch. He knows everybody who is anybody. Incredibly he can also furnish you with detailed information on all of his colleagues and friends regarding their birthdays and preferences for wine, women and song. I can vouchsafe that he himself is expert in only one of these categories - wine. He hasn’t got time to be a philanderer or womanizer.

I come now to a human quality which makes Howard a unique figure among the world’s great. He is as the Germans say, a complete ‘mensch’. He is a gentleman par excellence. He is a compassionate and caring physician. His kindness and helpfulness to young researchers earn him a place in heaven. He has trained and nurtured a small army of students from all over the world. He meets them at the airport, puts them up at his beautiful home, entertains them royally and of course provides facilities and funds which enable them to pursue the
research of their liking. Naturally, as has been evident in this celebration, Howard is respected, admired, and above all, loved.

How he has found time to be an effective, loving father and husband is a mystery which merits psychoanalytic investigation. His wife, Cecil, is a living proof of the cachet that 'behind every good man is a good woman'. Her devotion to Howard and their fine, well-adjusted, high-performing children is an inspiration for all womanhood.

Finally, Howard was one of my first students. He was in fact troublesome - always asking thorny questions, doubting authority, creating controversies with maddening detachment and poking his nose into everything that was going on in the department. Anyone who ever saw Maibach in action can never forget it. His talent for identifying unsolved problems and finding simple ways to get answers was evident from the start. His students and coworkers can testify to that.

He has done all of us, and myself in particular, proud.

Long live Saint Howard!

Albert M. Kligman, MD, PhD
Emeritus Professor of Dermatology
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Tribute to Howard I. Maibach XIV

Lessons That Influence the World Entire

The organizers of this conference and festschrift issued me an open invitation to contribute a familial perspective. Such an invitation is both daunting and laden with opportunity. After considering the many things I could share in praise of my father, I decided to focus not on Howard Maibach as father and family member, but rather on Howard Maibach as teacher and mentor. While that may at first seem an odd topic for a familial perspective, on closer inspection, it is the most obvious of all possibilities. The roles that best define my father, student, teacher, and mentor are not activated in the morning on his way to work and deactivated in the evening upon returning home. Those roles are my father - he would no sooner abandon them in parenting his children (or grandparenting his grandchildren) than he would abandon his common sense. It is only natural, therefore, that my contributions to this celebration should focus on lessons that I have learned from my father. As his biological progeny, I have been given this opportunity to formally record some of my father's numerous lessons, however, I am confident that many of his academic progeny and other friends have already recorded these lessons in their heads and in their hearts.
Lesson 1: Learning should be a joy. If it isn’t a joy, you may be learning about the wrong things.

Prof. Kligman noted earlier at the conference that my father exhibited an insatiable joy of learning from the first day of his residency onward (much to the annoyance of certain faculty members). I believe that my father’s joy of learning can be best understood in relation to the Judeo-Christian notion of dualism: life is composed of both the sacred and the profane. The sacred in his case is the process of learning, the profane is that which defiles the learning process and renders it mundane.

That my father never once took notes in medical school is a story told to me by his closest medical school friends. The story used to perplex me. My father claims that as a young man he wasn’t much of a student, and that his refusal to take notes was mostly indicative of the fact that he wasn’t yet engaged in the learning process. That explanation never seemed complete to me. After much consideration I have devised an alternative explanation, one I believe to be more fully consistent with the evidence. By shunning notes and the concomitant self-conscious anxiety associated with the testing process, I believe my father was attempting to find the sacred in medicine. He may or may not have known what he was attempting to accomplish with his seemingly cavalier behavior, but the results have more than spoken for themselves.

Lesson 2: In teaching, strive to simplify the complex; doing so will invoke a sense of wonder.

Although this lesson was never put into words, I have observed it in action repeatedly over the course of my life. My first memory of this lesson comes in the form of my father’s guest lecture about ‘The Skin’ to my fifth grade classmates. We were spellbound while he explained the structure and function of the skin in a manner children can easily grasp. Since then I have seen him engaged in this process with medical students, with paraprofessionals, with medical colleagues in general medicine, dermatology and other specialities, with large audiences in non-English speaking countries, with his grandchildren, and most recently with students and colleagues at my school of public health. In all of these instances he held his audience in rapt attention by striving for a playful simplicity.

Prof. Rufli commented earlier at the conference that he would be able to understand my father’s lectures even if they were delivered in a language as foreign to him as Japanese. That is the ultimate compliment for a person who strives to simplify the complex.

Lesson 3: Keep your eyes open and don’t be afraid to ask questions.

If you do, it’s amazing what you will learn.
Anyone who has ever accompanied my father on a walk in San Francisco realizes that he does not seek a straight line between points A and B. Rather, between points A and B lay at least 100 opportunities to explore and learn. Therefore, no walk with my father is ever a straight line, and no opportunity is missed to broaden one’s horizons.

Lesson 4: Keep your mouth shut unless you have something to say. This lesson has been conveyed to me repeatedly. I have, therefore, had ample opportunity to ponder its meaning and have come to understand it on two levels. The most obvious meaning parallels the expression ‘it is better to keep your mouth closed and be thought a fool than to open your mouth and remove all doubt.’ Although I do speak foolishly on occasion, avoiding such talk doesn’t strike me as my father’s full message. Rather, by keeping my mouth shut when I have nothing to say, perhaps I will improve my understanding of what others have to say.

Maibach XVI

closed and be thought a fool than to open your mouth and remove all doubt.’ Although I do speak foolishly on occasion, avoiding such talk doesn’t strike me as my father’s full message. Rather, by keeping my mouth shut when I have nothing to say, perhaps I will improve my understanding of what others have to say.

Lesson 5: Don’t accept no for an answer (until you know what no means). The world is full of naysayers. People generally have their reasons for telling you ‘no’, but their reasons may or may not be valid for you. ‘No’ is a statement of opinion, or preference, not a statement of fact. While ‘no’ may truly mean ‘it can’t be done’, it is more likely to mean ‘that would be inconvenient’ or ‘I don’t usually do it that way’ or ‘I’m too scared to try’. Until you know why you are being told ‘no’, you are forced to accept other people’s negative opinions. Recognizing that ‘no’ doesn’t typically mean ‘it can’t be done’ allows one many more options in life.

Lesson 6: Stop telling yourself that you can’t do it. I was told as a child by my father, on dozens of occasions, that if I expended half as much energy working to accomplish my assigned tasks as I did in complaining about them, they would have long since been completed. This is his most fundamental lesson: what we choose to tell ourselves is our greatest strength, or, our greatest weakness. This lesson prepared me for my career in public health in a most unexpected way.

In graduate school at Stanford, I was given the opportunity to become a student of Prof. Albert Bandura. Prof. Bandura, through decades of deeply insightful theorizing and research on personality psychology, has conclusively demonstrated that the way we think about our abilities directly influences both what we choose to pursue in our lives, as well as how successful we are in those pursuits. Moreover, he has specified the mechanisms by which self-defeating thoughts can be converted into self-enabling thoughts. The relevance and importance
of Prof. Bandura’s work was immediately apparent to me thanks to my father’s earlier techniques. My career is currently devoted to translating these ideas into effective public health behavior change programs. An ancient Talmudic verse has recently been popularized through the movie Schindler’s List: ‘He who saves a single life saves the world entire.’ I will close my thoughts by revising that verse: He who influences a single life influences the world entire. This conference and the accompanying festschrift are testament to the fact that my father has influenced many lives. Those whose lives he has influenced are continuing on to influence the world entire.

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Lessons That Influence the World Entire XVII