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YEAR BOOK OF DERMATOLOGY® 1989

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The Year Book of DERMATOLOGY®

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Acta Cytologica
Acta Dermato-Venereologica
Acta Paediatrica Scandinavica
Aesthetic Plastic Surgery
Allergy
American Journal of Clinical Pathology
American Journal of Diseases of Children
American Journal of Medicine
American Journal of Ophthalmology
American Journal of Surgery
American Journal of Surgical Pathology
Annales Chirurgiae et Gynaecologiae
Annales de Chirurgie Plastique et Esthetique
Annales de Dermatologie et de Venereologie
Annals of Allergy
Annals of Internal Medicine
Annals of Plastic Surgery
Annals of Rheumatic Diseases
Annals of Surgery
Archives of Dermatological Research
Archives of Dermatology
Archives of Disease in Childhood
Archives of Emergency Medicine
Archives of Internal Medicine
Archives of Pathology and Laboratory Medicine
Archives of Surgery
Arthritis and Rheumatism
Australasian Journal of Dermatology
Australian and New Zealand Journal of Medicine
British Heart Journal
British Journal of Dermatology
British Journal of Plastic Surgery
British Journal of Surgery
British Medical Journal
Canadian Journal of Psychiatry
Canadian Medical Association Journal
Cancer
Cancer Research
Chinese Medical Journal
Clinical Allergy
Clinical and Experimental Dermatology
Clinical Pediatrics
Contact Dermatitis
Cutis
Dermatologica
Diagnostic Microbiology and Infectious Disease
Diseases of the Colon and Rectum

Family and Community Health
Gastroenterology
Genitourinary Medicine
Hautarzt
Human Pathology
Indian Journal of Dermatology, Venereology, and Leprology
Infections in Surgery
International Journal of Dermatology
International Journal of Leprosy and Other Mycobacterial Diseases
Journal of Allergy and Clinical Immunology
Journal of the American Academy of Dermatology
Journal of the American Medical Association
Journal of the American Podiatric Association
Journal of the Association of Military Dermatologists
Journal of Bone and Joint Surgery (American volume)
Journal of Bone and Joint Surgery (British volume)
Journal de Chirurgie
Journal of Clinical Endocrinology and Metabolism
Journal of Clinical Epidemiology
Journal of Microbiology
Journal of Clinical Pathology
Journal of Clinical Psychiatry
Journal of Cutaneous Pathology
Journal of Dermatologic Surgery and Oncology
Journal of Dermatology
Journal of Hand Surgery (American)
Journal of Infectious Diseases
Journal of Investigative Dermatology
Journal of Medical Genetics
Journal of the National Cancer Institute
Journal of Occupational Medicine
Journal of Pediatric Surgery
Journal of Pediatrics
Journal of Rheumatology
Journal of the Royal College of Surgeons of Edinburgh
Journal of Urology
Lancet
Mayo Clinic Proceedings
Medicine
New England Journal of Medicine
Obstetrics and Gynecology
Oral Surgery, Oral Medicine, Oral Pathology
Otolaryngology–Head and Neck Surgery
Pediatric Dermatology
Pediatric Infectious Disease
Physician and Sportsmedicine
Plastic and Reconstructive Surgery
Practitioner
Presse Medicale
Prostaglandins
Quarterly Journal of Medicine
S.A.M.J./S.A.M.T.–South African Medical Journal

Scandinavian Journal of Dental Research
Scandinavian Journal of Plastic and Reconstructive Surgery
Scandinavian Journal of Primary Health Care
Schweizerische Medizinische Wochenschrift
Science
Semaine des Hopitaux
Skin Pharmacology
Southern Medical Journal
Surgery, Gynecology and Obstetrics
Wiener Klinische Wochenschrift

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The material in this volume represents literature reviewed up to December 1988.

Trends in Dermatology: Whither Dermatology?

RUDOLF L. BAER, M.D.*
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Nineteen eighty-eight having been the 50th anniversary of the foundation of both the American Academy of Dermatology and Society for Investigative Dermatology, the time has come for American dermatologists to reflect upon the developments that have occurred in their specialty during these past 50 years. In particular, they might ask themselves whether our present course will enable us to render steadily better care for our patients and permit us to advance basic scientific and clinical knowledge that can make better care for patients possible.

Dermatology in the United States is thought to have begun in 1837 in New York City when H.D. Bulkley, who had studied dermatology in Paris, taught physicians about skin diseases at his clinic on Broome Street. His activities in this field must have aroused considerable interest, because the first dermatological society in the world was founded in 1869, not as many might have thought, in Paris, London, or Vienna, but in Bulkley's home in New York City (The New York Dermatological Society). Dermatologic teaching at academic institutions began 2 years later, in 1871, when James C. White was appointed professor of dermatology at Harvard University Medical School.

For its first 100 years dermatology in the United States was almost entirely clinically oriented, so that physicians who wanted to find out about the newest advances in dermatology were forced to seek supplementary training in western Europe, particularly in the universities of Vienna, Paris, and London and several German cities.

Major changes in American dermatology occurred in the 1930s with the foundation of the American Board of Dermatology (1932), the Society for Investigative Dermatology (1938), and the American Academy of Dermatology (1938.) These organizations enabled dermatology to fulfill, simultaneously, the critically important tasks of (1) establishing standards of competence for "certified" specialists in skin diseases, (2) providing all dermatologists with an opportunity annually to learn about advances in clinical and basic knowledge that pertained to the skin and to skin diseases, and thereby maintain their ability to deliver competent care of patients, (3) helping American dermatology develop sicentific capabilities, enabling it today to be one of the leaders in the international community.

American experiences during World War II demonstrated the practical importance of diseases of the skin and played an important role in the evolution of dermatologic science in the postwar era. The war had made evident deficiencies in American dermatology and the lack of adequate training in medical schools and at the postgraduate level for American physicians. It caused the government and the medical establishment to review their previous uninterested attitude toward dermatology. As a re-

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sult, the National Institutes of Health and some medical schools took measures to further the development of dermatology, particularly in the scientific field.

The advance of dermatology since 1945 has been noteworthy and gratifying. Why then worry about the future and ask "Whither dermatology?" when so much progress has been made in recent decades? The United States finds itself currently in the midst of fundamental changes in its system of health care, and during these changing times American dermatologists should do all they can to safeguard the clinical and scientific gains as well as the integrity of their specialized field.

Have external factors, arising from changes in the health care system, from advances in the pharmaceutical field, from increasingly closer relationships between pharmaceutical companies and departments of dermatology, and from various other sources, exerted already a powerful influence on where dermatology is going? The answer to this question surely is "yes." I will cite here but a few examples.

Modern research on drugs has had a pronounced impact on the practice of dermatology. The commercial availability of penicillin in the late 1940s enabled dermatologists to treat syphilis with a drug that was much safer than previously used medicaments like arsenicals, mercury, and bismuth. As a matter of fact, penicillin was so safe relatively that it became possible for nondermatologists to treat syphilis as safely and effectively as dermatologists could.

The impact of other, newer, highly specific, and effective drugs on the practice of dermatology has been equally profound. We derive a considerable satisfaction from the availability of specifically effective new compounds such as the retinoids for cystic acne, psoriasis, and other skin diseases, the imidazoles for fungus infections, and increasingly effective topical corticosteroids for a variety of skin diseases. However, with these advances in the field of pharmaceutical therapeutics "bread and butter" diseases of dermatologic practice such as superficial fungus infections, acne, psoriasis, and certain eczematous eruptions have become much more susceptible to effective management by general physicians and internists. Inevitably this will make dermatologists practice increasingly more as consultants.

One happening that could slow these developments in practice could be specific side effects caused by certain modern therapeutic agents. It is only because of greater clinical experience and fundamental knowledge about the pharmacologic effects and side effects of these drugs that dermatologists can expect to be called upon to administer these agents. This creates new, interesting opportunities and new obligations for members of our specialty. When dermatologists fail to fulfill these obligations, they not only may injure their patients but may invite malpractice suits. They also may do serious harm to the specialty itself.

An example is the experience with isotretinoin, when some physicians, including dermatologists, prescribed this drug for women in childbearing age but failed to observe the necessary precautions required by the Food and Drug Administration to obviate the drug's teratogenic properties.

These physicians, could be responsible for curtailment of the use of isotretinoin or even total interdiction of it. This would be particularly regrettable when isotretinoin is essential for so many patients with cystic acne.

Many years ago practically all dermatologic treatment was based on empirical trials or anecdotal experiences. Not so with modern, more effective drugs. Now, investigators first learn as much as they can about the fundamental molecular and functional characteristics of cells or tissues or microorganisms before attempting to alter or inactivate them. Then chemical compounds are devised that affect these specific functions; while seeking to accomplish these aims, it may be necessary to interfere with the most basic properties and functions of important components of the body. Obviously, this entails a greater risk of severe side effects than in the days of less well focused drug research.

Another aspect of present-day drug research and development that has potential for affecting the future of our specialty is the increasingly closer contacts and relationships between some departments of dermatology and pharmaceutical companies. These relationships are essential and legitimate if industry wants to obtain reliable advice from dermatologic experts, but they can benefit the public only if both sides act with integrity and common sense, particularly when a financial relationship exists between scientists and pharmaceutical manufacturers. When, however, dermatologists take on the role of propagandists for pharmaceutical products, they may impair the credibility and image of our specialty as well as their own authenticity and set a poor example for the younger generations of dermatologists.

Dermatology departments are not alone in moving into the realm of commerce and in lowering what were formerly universally accepted ethical standards. Many universities and medical schools now urge their faculty to obtain patents on their inventions and discoveries, because these institutions, like departments of dermatology, feel the need to derive increasingly hard-to-come-by income by collaborating with industry in order to support academic work. One of the most amazing changes in this respect is the acceptance of secrecy in science by universities. The New York Times carried an article on May 24, 1988, that noted sacrifice of the traditional openness in science, as science has ventured increasingly into commerce. An example of that compromise is a large chemical-pharmaceutical company that gave a university $70 million for exclusive scientific information that it can patent.

Economic factors have exerted one of the most potent external influences on the future course of dermatology. An example is reimbursement rates for medical care. Such reimbursement schedules in the United States traditionally have been biased strongly in favor of surgical and procedural services, as contrasted with cognitive services. In dermatology this has had a measurable impact because most services rendered conventionally have been of the cognitive variety and continue to be reimbursed at low rates. At least in part as a consquence of biased reimbursement rates, surgical procedures have taken on greatly increased importance in the

practices of many dermatologists, especially younger ones and, not surprising, in some teaching programs in dermatology.

But at what cost to our specialty have these advances in dermatologic surgery been made? All of the attention to and efforts in dermatologic surgery have done practically nothing to increase fundamental and clinical knowledge of the skin and its diseases.

These factors and others, among them (1) the parasitic attack of segments of the legal profession on the medical profession, solely for monetary gain and referred to ironically as the "liability crisis," (2) the increasing subspecialization in dermatology, and (3) the consequent growth in the number of dermatologic organizations, have had profound influences on the development of dermatology in the United States in the last decades.

Whither dermatology? The factors discussed here apply not only to dermatology. They are likely, however, to have a particularly pronounced effect on a medical specialty like dermatology, which, in the United States, has advanced remarkably, academically, and scientifically only in the past 5 or so decades. Can these advances be sustained in an era of molecular biology and genetic engineering by devoting major efforts to improved minor surgical procedures? Can the standing and credibility of our specialty be increased by engaging in major public relations activities to support a cream that is claimed to combat wrinkling, and by explaining these activities away on the basis that frequent and significant financial relationships between industry and dermatology are a fact of life?

In the 5 decades since the foundation of the American Board of Dermatology, Society for Investigative Dermatology, and American Academy of Dermatology our specialized field has made major gains. As a result, it has become a more comprehensively effective and integrated medical specialty, clinically and academically. With these changes has come improved standing in the academic community and among the lay public also.

An important factor that has greatly contributed to the gains made in recent decades has been the highly constructive role played by some leaders in dermatology at a national level as governmental representatives and by their work for various interspecialty organizations, for committees and councils of the National Institutes of Health, and for committees appointed by the federal government to advise on national health issues involving the skin. That kind of selfless effort must be continued if dermatology is to be esteemed and have self-esteem.

The time has come when leaders in dermatology must concern themselves with correcting the effects of a variety of unfavorable influences on dermatology, i.e., influences that will not enhance the further development of dermatology as an ethical scientific and clinical field. On the contrary, these influences could prove to be destructive.

Statistics of Interest to the Dermatologist

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TABLE 1.—New Cases of Selected Reportable Infectious Diseases in the United States

	1938	1948	1958	1968	1978	1988¶
AIDS	—	—	—	—	—	30,847
Anthrax	52	60	16	3	6	0
Congenital rubella	—	—	—	14	30	4
Congenital syphilis	—	—	—	—	—	426
Diphtheria	30,508	9,493	918	260	76	1
Gonorrhea	198,439*	345,501	232,386	464,543	1,013,436‖	688,087‖
Hansen's disease	—	63	39	123	168	178
Leptospirosis	—	18	55	69	110	51
Measles	822,811	615,104	763,094	22,231	26,871	2,933
Meningococcal infections	2,859	3,376	2,581	2,623	2,505	2,747
Plague	0	0	0	3	12	14
Rocky Mountain spotted fever	434	547	243	298	1,063	615
Rubella	—	—	—	49,371	18,269	221
Smallpox	14,939	57	0	0	0	0
Syphilis (primary and secondary)	480,140†*	68,174	7,176	19,019	21,656‖	40,275‖
Toxic shock syndrome	—	—	—	—	—	351
Tuberculosis	107,021‡§	137,006‡§	63,534‡§	2,623‡§	28,521	21,244
Tularemia	2,088	1,086	587	186	141	179
U.S. population (millions)	129.8	146.1	173.3	199.4	218.1	245.5

—, Data not available.
*Data is for fiscal year.
†Includes tertiary cases.
‡Includes newly reported inactive cases.
§Reporting criteria changed in 1975.
‖Civilian cases only.
¶For 52 weeks ending December 31, 1988.

Sources:
Centers for Disease Control: Annual summary 1984: Reported mobility and mortality in the U.S. *MMWR* 33:124–129, 1986.
Centers for Disease Control: *MMWR* 37:802, 1989.