

an airborne infrared detector is capable of providing an almost synoptic oceanographic chart of surface thermal gradients over a much greater area and in a shorter time than can be obtained using surface vessels.

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Terminology of Pigment Cells

At a conference¹ on the Biology of the Normal and Atypical Pigment Cell we presented our suggestions for the revision of the terminology of pigment cells. The need for this revision has become apparent with the increasing activity in melanin research being carried out by the many investigators in diverse fields.

Investigators in biology and medicine at the present time are using different terms for the same cell. For example, the term melanophore which has long been used by biologists refers to certain dendritic-shaped cells in the skin of fish, amphibians and reptiles which have "contractile" properties. The melanin contained in the melanophores may, in response to certain stimuli, disperse into the dendrites or concentrate in the perikaryon, thus accounting for the color change. In human cytology and pathology the term melanophore is a macrophage. Similarly, the term melanoblast is used by medical investigators for the mature cell elaborating melanin, whereas in biology the term melanoblast refers to an immature pigment cell during its migration from the neural crest. The confusion of terminology is apparent when the terms used by biologists and medical investigators are compared as in Table 1.

TABLE 1
PRESENT TERMINOLOGY OF PIGMENT CELLS

	Biology	Medicine
Mature melanin-forming cell	Melanophore*	Melanoblast†
Immature melanin-forming cell	Melanoblast	No term
Cell with phagocytized melanin	Macrophage	Melanophore
"Contractile" cell	Melanophore	Melanophore

* Melanophore, melanin-bearing cell (*melas* Gr. black; *phore* Gr. to bear).

† Melanoblast, immature melanin cell (*melas* Gr. black; *blast* Gr. germ).

¹ Third Conference on the Biology of the Normal and Atypical Pigment Cell, held in New York, November 1951.

It is noted from the actual translation of the words melanophore and melanoblast that in their present usage these terms do not connote the meaning desired. The term melanoblast for the *mature* pigment-forming cell as originally suggested by Bloch is objectionable because in the modern cytological sense the suffix *blast* is applied to immature cells which differentiate into mature cells (for example, erythroblast, lymphoblast, and leukoblast).

The terms listed in Table 2 represent the consensus of opinion of investigators² in melanin research in the United States and Europe.

TABLE 2
RECOMMENDED TERMINOLOGY OF PIGMENT CELLS

Mature melanin-forming cell	Melanocyte
Immature melanin-forming cell	Melanoblast
Cell with phagocytized melanin	Macrophage (or melanophage)
"Contractile" cell	Melanophore

This nomenclature of pigment cells has been adopted by the National Research Council, Committee on Pathology, Subcommittee on Oncology, and is used by contributors to the book *Pigment Cell Growth*, edited by Myron Gordon, Academic Press, New York.

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² The following were consulted either personally or by letter: Arthur C. Allen, S. W. Becker, Sr., S. W. Becker, Jr., H. S. Bennett, R. E. Billingham, Helen O. Curth, A. J. Dalton, H. Eastlick, Edward A. Edwards, Peter Flesch, Benson Ginsburg, Myron Gordon, Marie L. Hesselbach, H. Z. Lund, H. S. Mason, P. B. Medawar, Hamilton Montgomery, George Pack, Mary E. Rawles, G. P. DuShane, E. F. Traub, I. P. Trinkaus, Fred Weidman, Helen Wilder, George B. Wislocki.

Miseducation of the Public in Scientific Matters

Today miseducation of the public in scientific matters has become a multi-million dollar industry. As a consequence, all the means of mass communication are being turned upon the public to flood it with "scientific facts" about chlorophyll, about cigarettes, about new drugs, about food, about one's body—indeed, "scientific facts" about almost everything vital to one's very existence.

Unfortunately many of these scientific facts are insidiously concocted by slick advertising copywriters. More are ground out by authors of uncritical, sensationalized magazine articles. Still others are eagerly conveyed by warm, friendly voices on radio and television. Some are invented by novelists and playwrights purely as literary devices. And finally there are the scientific facts poured out by faddists, cultists, pseudo-scientists, and skillfully camouflaged quacks—who sometimes become authors of best sellers.

In 1947 W. Wendell Rázim launched a one-man

campaign in the Metropolitan New York area to provide the public with honest, authentic science information and to combat the kind of miseducation mentioned above. For three years Mr. Rázim worked indefatigably to establish a regular general science radio or television program in this area. For three years he was repeatedly turned away by a total of 17 radio and 7 television stations. But finally by grim determination he won. The result was the radio series *Science for the People*, which made its debut over WEVD on February 3, 1950.

At this writing, *Science for the People* still remains, to our knowledge, the only regular general science radio program directed and produced by anyone in the entire Metropolitan New York area, despite the fact that this area boasts some two dozen radio stations that duplicate many other kinds of broadcasts *ad nauseum*.

In its several years' existence, *Science for the People* has come to enjoy the respect and cooperation of many professional science associations as well as individual scientists and educators. As a consequence it has been able to present well over 100 distinguished scientists and educators in interviews and panel discussions. A list of topics discussed would include cancer, heart disease, polio, surgery, research to prevent blindness, research to prolong youth, care of the teeth, hypnotism, psychoanalysis, child psychology, rehabilitation of the disabled, social case work, narcotics, alcoholism, rainmaking, space travel, guided missiles, the solar system, microchemistry, fossils, ceramics, and many more.

Unlike more conventional science programs *Science for the People* has consistently exposed misleading advertisements, exaggerated science articles, pseudo-scientific books, and the literature of quacks, cultists, and faddists. It has endeavored to provide accurate science news, often including reports of the Federal Trade Commission and the Food and Drug Administration missing in the popular press. Finally, it has attempted, as far as possible, to act as a clearing house

for science information by answering questions submitted by listeners. In this respect it has often been able to help people with serious problems who knew not where else to turn.

WEVD has most generously donated the broadcast time. However, during the first 18 months Mr. Rázim financed all other operating expenses from his personal funds. Mr. Rázim also conducted all literature searches, gathered and checked news reports, arranged interviews, prepared scripts, conducted campaigns to publicize the series, answered all correspondence, and even did all the required typing. But in the summer of 1951, Mr. Rázim, faced with a siege of ill health, was forced to seek outside help. To prevent the demise of *Science for the People*, he persuaded a small nucleus of enthusiastic colleagues to join him in establishing a non-profit organization, *Science for the People Foundation*.

This foundation, with membership open to public-spirited scientists, educators, and laymen, has several basic objectives. It is seeking to expand the services of *Science for the People* and eventually to make transcriptions available to other stations throughout the country. It plans to renew attempts to initiate a second program on one of the major networks—hopefully, a television series. It would like to provide on the spot interviews, coverage of all major science conventions, and an adequate question bureau service to listeners. Finally, if funds permit, it hopes to make free literature available to the public and to publish an official organ.

Obviously the success or failure of this organization will depend in part upon the extent to which it can arouse the scientifically trained to contribute (time, money, or both) toward achieving these objectives. And so, perhaps the ultimate history of *Science for the People Foundation* will be of interest to the social scientist as a social experiment.

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Book Reviews

Handbuch der Pflanzenkrankheiten (Sorauer) Bd. VI, 1. Lief.: *Pflanzenschutz*. 2nd ed. O. Appel *et al.*, Eds. Berlin-Hamburg: Paul Parey, 1952. 448 pp. DM 78.

This book, the first part of volume VI of the *Handbuch*, is devoted to a presentation of the economic aspects and the problems of plant protection. The companion volume, dealing with control of plant diseases and insect injuries, will appear later. Twelve years have passed since the last revision of this well-known publication. This volume has a table of contents and an extensive index to help the reader in finding any

subject of interest. The statements made are conveniently documented by citations to the related literature in footnotes that frequently occupy more space than the text.

The first section, prepared with the cooperation of H. Morstatt, of Berlin-Dahlem, deals with the economic importance of plant protection, and discusses such topics as the kind and extent of damage caused by diseases and insects, the cost of plant-protective measures, results obtained, insurance against crop damage, and the government and plant protection.

The second section, by H. Braun of Bonn, deals