may astronautics do in the future. It appears, however, that "programs," whether for the development of a vaccine, an atomic bomb, or a space vehicle, produce less scientific "fallout" than is optimistically assumed. On the contrary, they are based upon preexisting basic scientific knowledge.

Technologies may seem to offer favorable nutrition and incubation for the scientific culture, but it is doubtful that they can alter the basic shape of the growth curve of this culture (Price, *ibid.*, p. 17). The autocatalytic growth of science as well as of discreet scientific disciplines is plausibly the result of a chain reaction of ideas, that is, it is self-perpetuating as well as inherent in and intrinsic to the active system under consideration. The "inoculum" of molecular biology was probably the demonstration in 1936 (W. M. Stanley, *Phytopathol.* **26**, 305) of the nature of tobacco mosaic virus as a macromolecular entity containing the instructions for its identical replication by cells. The "lag period" lasted to 1953, and the Watson-Crick-Wilkins model marks, perhaps, the beginning of the exponential phase of growth of the field. This growth has, at present, all the characteristics of a chain reaction of discoveries. One may hope that the body of knowledge and generalization so acquired will permit of medical applications, but such hope neither has generated the field nor is sustaining its growth.

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Information Exchange

The problem of timeliness in making research information available, discussed by Garvey and Griffith in their interesting article "Scientific information exchange in psychology" (25 Dec. 1964, p. 1655), is not peculiar to the field of psychology but exists throughout all of science. The authors might well have mentioned the role of the Science Information Exchange (SIE) of the Smithsonian Institution in providing psychologists with information concerning who is doing what research. Many have found this service useful in bridging the hiatus between the start of a research project and the eventual publication of its results. SIE answers almost 1000 questions a year in the field of psychology and has approximately 6300 grants or contracts registered for this field.

SIE answers questions, without charge, from any scientist at a recognized research institution, about who is currently working on any specific segment of scientific research [see M. E. Freeman and D. F. Hersey, *Science* **149**, 119 (1963)]. The more specific the question, the more carefully the information can be selected to meet the needs of the inquirer. Requests for information should be directed to the address given below.

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The Stumptail Macaque as a Laboratory Subject

Inasmuch as we have received several inquiries concerning the stumptail macaque as a laboratory subject since the publication of Kling and Orbach's reports [*Science* **139**, 45 (1963); *Animal Behavior* **12**, 343 (1964)], and because many of the people inquiring have had little or no previous experience with primates, we would like to call the attention of investigators considering use of the stumptail macaque to our experiences with these animals.

Whereas the young animals, in the age ranges used by Kling and Orbach, are generally docile and friendly, as they mature their potential for inflicting injury increases, and some may become resistant to handling and dangerous both to laboratory personnel and to subordinate cagemates. In maintaining a group of these animals, all of which had at least partially erupted canines and hence may be considered to have been 4 years of age or more, we found that certain individuals resisted handling by even our most experienced and successful monkey handlers. These individuals when captured would struggle and attempt to bite their captor and inflicted cuts even through heavy protective gloves. Furthermore, when the animals were housed together in a large cage there was persistent fighting, and attacks on subordinates resulted in multiple bite wounds on the extremities, producing large necrotic lesions requiring extensive treatment. When housed with monkeys of other taxa the stumptail macaques were ordinarily quite peaceable when with more dominant partners, but, when with subordinate monkeys, some persistently attacked and injured their cagemates.

It is our conclusion that, whereas the stumptail macaque (*Macaca speciosa*) is certainly more tractable than the rhesus (*Macaca mulatta*), it is not the most docile laboratory subject. We have individuals of the taxa *Cynopithecus niger, Ateles* spp., *Cebus albifrons, Macaca maurus,* and *Macaca nemestrina* which we can freely handle at some ages, even to the point of obtaining blood samples without restraining the animals. Some individuals of other taxa also permit free handling as juveniles, but some individuals of all taxa named may resist all efforts to win their confidence.

Investigators should make final selection of subjects on the basis of specific experimental requirements, and should always bear in mind that, aside from harboring many contagious diseases, at least the larger individuals of even the generally more tractable taxa are often difficult to handle and may require as many precautions as must be taken with most rhesus and other less tractable monkeys.

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Molecular Mimicry in Biological Adaptation

In the spirit of G. G. Simpson's incisive appeal for a synthesis of molecular and organismal viewpoints toward the greater understanding of biological adaptations (18 Dec. 1964, p. 1535), I should like to call attention to the phenomenon of molecular mimicry [*Am. Naturalist* **98**, 129 (1964)]. In this situation natural selection can lead to the mimicking of antigenic determinants of hosts by their parasites, with the possible subsequent development of antigenic polymorphisms in the parasitized host population as a defensive adaptation. Furthermore, it is possible that ecologically related but phylogenetically diverse parasites could develop similar "eclipsed antigens," which would truly be convergent evolution at the molecular (or submolecular) level.

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