studies in these areas are needed and should be encouraged.

Among the difficulties of unraveling these important interrelated factors are those of developing productive interdisciplinary efforts. Biochemistry and biophysics have developed after many years of unrelated work done by biologists, chemists, and physicists. Psychologists, anthropologists, and sociologists have increasing intellectual contact among themselves but carry on little intensive work with biochemists and biophysicists. I hope that the kind of cooperative study mentioned by Williams will be one of many which will pave the way for fruitful interdisciplinary work involving scientists from both biological and social fields.

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Postnatal Determination of Sex

It is a pity that John R. Baker could not have seen the 30 Mar. issue of *Science* before writing his excellent article on "English style in scientific papers," [*Science* **123**, 713 (27 Apr. 1956)]. I refer, of course, to the article on the detection of sex of fetuses [*Science* **123**, 542 (30 Mar. 1956)], specifically the sentence on page 543: "The sex of the newborn infant has been established on the basis of external physical examination." Out here, we use the colorimetric method: pink bootees = boy; blue = girl.

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To forestall other letters on this subject, the editors ask readers to note that the custom of using pink for boys and blue for girls is apparently not standardized: in some places, it is reversed.

Michurin, Vavilov, and Lysenko

As a supplement to G. L. Stebbins' recent report on the "New look in Soviet genetics" [*Science*, **123**, 721 (27 Apr. 1956)], I would like to draw attention to another article in *Botanicheskii Zhurnal* the Soviet Russian journal which also contained the material cited and discussed by Stebbins. This article [**40**, 752 (Sept.–Oct. 1955)] is written by P. A. Baranov and D. V. Lebedev on the occasion of the 100th anniversary of the birthday of Michurin and bears the title "Forgotten pages from the biography of I. V. Michurin: I. V. Michurin and N. I. Vavilov."

It is generally known to those who have followed the development of the "Soviet genetics" that Lysenko and his followers have claimed Michurin as their spiritual forerunner and have insisted that Michurin's work was not appreciated and was even suppressed by the "professional" geneticists. According to their story, it took the personal interest and intervention of Lenin to provide Michurin with adequate support for his work, and it later took the genius of Lysenko himself to recognize fully the significance of this work.

Baranov and Lebedev, however, show in their article that Michurin's breeding work not only had attracted the attention of "professional" botanists as early as the time of Czarist Russia, but that it was none other than N. I. Vavilov who initiated the support Michurin received in the last 12 or 15 years of his life. The two men first met in 1920, and Vavilov was sufficiently impressed with Michurin's achievements in fruit breeding to request a report and induce the government—quite likely Lenin personally, who at that time indeed took great interest in the improvement of plant breeding in Russia—to provide Michurin with an experiment station of his own and with adequate funds. The two men remained in contact for the rest of Michurin's life. Shortly before the latter's death, Vavilov sponsored his election to honorary membership in the Soviet Academy of Science.

Baranov and Lebedev emphasize that Vavilov did not agree with all of Michurin's ideas. There can indeed be little doubt that he had no use for the Lamarckian concepts in Michurin's theoretical work or for such notions as the "mentor theory," according to which compatibility of species, and so on, can be modified by graft union. But he was attracted by two features in Michurin's breeding work in which Michurin was without question ahead of most plant breeders of that time, namely, the use of species hybrids and the utilization of the world's resources of cultivated plants. The latter, of course, was one of Vavilov's own main interests, and Vavilov was ready from the first to recognize Michurin's practical accomplishments, such as the breeding of fruit varieties that could be grown in regions that nobody had ever considered for raising fruit.

On the other hand, Baranov and Lebedev cite passages from the writings of Michurin which show that Michurin was far from considering his theoretical contributions as something incontrovertible and final. On the contrary, he stated specifically, and on more than one occasion, that he did not claim to have refuted the laws of Mendel or the results of other geneticists, and that he might have made mistakes in interpreting these results. Somewhat naively, he added that he did not consider this very serious, since such mistakes would be corrected by future investigators.

Michurin died in 1935. In that year, Lysenko, although in the ascendancy, was still a long way from his peak of power. There is no evidence that he has rendered Michurin any actual service, direct or indirect. The only "service" he did render him was to elevate his theoretical notions—proposed in all sincerity, but not supported by any conclusive evidence—to the rank of Soviet biological gospel, thus making Michurin one of the bogus theoreticians of the Soviet system. For the support that Michurin, the successful plant breeder, received in the later part of his life, he was indebted to Vavilov, the man for whose death Lysenko bears the ultimate responsibility. The fact that Vavilov's part in Michurin's career can again be reported in a Soviet Russian journal is another proof of the "new look" in Soviet genetics.

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Role of Teachers in Scholarship Programs

On behalf of the Chicago Section of the American Chemical Society, I should like to comment on the letter from H. J. Bennett *et al.* on the "Role of teachers in scholarship programs" [*Science* **123**, 942 (25 May 1956)].

The Chicago Section has for the past 2 years sponsored a scholarship program in which high-school chemistry teachers, at least, far from being "completely overlooked," are recognized along with their students. The program consists of an annual competitive examination in chemistry for high-school students. Not only do the first five winners receive sums ranging from $100 to $700 that are applicable to college tuition and fees, but the teacher of each prize winner receives a cash award of $100. The funds for the awards are obtained through solicitation from industry by the section's Endowment Committee, and the examination itself is administered by the section's Education Committee.

No complicated entry forms or screening tests are involved. The teacher merely sends the names of not more than two of his students to the Chicago Section. About 200 students, representing about 150 teachers, have taken the examination each time.

We hope that the number of entrants and the size of the awards can be increased in the near future.

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