# Documenting Lysenkoism

TWO STATEMENTS MADE BY U. HOSSFELD and L. Olsson in their essay on Lysenkoism, the spurious genetic teachings that held sway in the Soviet Union for many years (Science's Compass, Historical Essay, 5 July, p. 55), require clarification. First, contrary to their statement that "no comprehensive account yet exists in languages other than Russian," there are two early books published in English (1, 2). Thus, long before the mid-1990s. Russian geneticists worked and published in English on the Lysenko affair. Second, the fact that Lysenkoism could not gain a foothold in East Germany was, to a great extent, due to the fact that there were professors at East German universities who, contrary to the opinion of Hossfeld and Olsson, did teach classical genetics in the 1950s, among them, e.g., R. Bauch, J. Buder, W. R. Müller-Stoll, U. Nürnberg, and H. Wartenberg at the universities of Greifswald, Halle, Potsdam, East Berlin, and Jena, respectively (3). To put the record straight and to do justice to these uncompromising scientists, I must take

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issue with part of Hossfeld and Olsson's account.

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#### References

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### Response

We thank Malke for his comments on our essay on Georg Schneider and the development of Lysenkoism in the GDR, which give us an opportunity to discuss further the admittedly complex issues surrounding the history of Lysenkoism. Lysenkoism was not limited by political and geographical borders and must therefore be treated in an international context (1-3). Z. A. Medvedev, D. Joravsky, and others have published important studies on Lysenko and Lysenkoism, but they were written during the Cold War, and a certain degree of censorship was applied. These more than 30-years-old studies also did not make comprehensive international comparisons,

and some of their conclusions have been challenged by later research, based in part on new archival material not available in the 1960s (4). For these reasons and because of space limitations, we did not mention these studies and many other sources.

We used the development in Jena as our example and limited our story to only one protagonist from the Lysenko era, although other Lysenkoists were active at universities in the GDR, e.g., Werner Rothmaler (Halle, Greifswald), Clemens Fritz Werner (Leipzig), and Rudolph Gottschalk (Berlin) (5, 6). Our main goal was to draw attention to this relatively unknown (outside of the former GDR) chapter in the history of 20th century evolutionary biology and also to questions about the social and political responsibilities of scientists today. Malke also complains that we do not mention some further opponents to Lysenkoism in the GDR. We had to choose carefully which people to mention in the limited space available, and we chose to tell the story of how Stubbe and his co-workers in Gatersleben made an important contribution by executing experiments that showed beyond a reasonable doubt that Lysenkoism cannot be correct. We are fully aware that many others (some of whom are mentioned in the essay) made

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important contributions to the resistance to Lysenkoism in the GDR. In Jena itself, the botanist Hans Wartenberg (mentioned by Malke), as well as the biology historian Georg Uschmann—who worked in parallel with Schneider in the Ernst Haeckel House—turned against this pseudoscience in their lectures and seminars.

Important new work on the history of science in the Lysenko era started in the 1990s, following the political changes in eastern Europe. Russian and German researchers have made important contributions (1–3, 7–9). We believe that access to previously unavailable material in archives—in Russia in particular—will contribute to solving many of the remaining questions in this complex area of historical research (4). Our hope is that political influence on the development of scientific disciplines like what happened in Lysenkoism will not recur (10).

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References and Notes

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#### **CORRECTIONS AND CLARIFICATIONS**

NEWS OF THE WEEK: "Ethicists fault review of children's study" by J. Kaiser (30 Aug., p. 1461). The article erroneously stated that the University of Washington is among institutions where clinical trials recently have been shut down because of ethical concerns. Human subjects research has been under review at another Seattle institution, the Fred Hutchinson Cancer Research Center, that is affiliated with the University of Washington but is a separate organization. Furthermore, trials have not been shut down at the Hutchinson Center as a result of this review.

**PERSPECTIVES:** "Of clusters and galaxies" by C. M. Clement (26 July, p. 532). The color luminosity plot shown in the third figure was adapted from (15), rather than (16). The background in this figure, showing the core of the globular cluster Omega Centauri, was lightened from the original of A. Cool et al. In reference (1), the reference cited for Chaboyer should have been (16), not (15).

**NEWS FOCUS:** "Versatile cells against intractable diseases" by C. Holden (26 July, p. 500). The affiliation of Mark Mattson was incorrect. He is at the National Institute on Aging Gerontology Research Center in Baltimore, Maryland.

## Letters to the Editor

Letters (around 300 words) discuss material published in *Science* in the previous 6 months or issues of general interest. They can be submitted by e-mail (science\_letters@aaas.org), the Web (www.letter2science.org), or regular mail (1200 New York Ave., NW, Washington, DC 20005, USA). Letters are not acknowledged upon receipt, nor are authors generally consulted before publication. Whether published in full in or in part, letters are subject to editing for clarity and space.

