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Letters

Why immunosuppression?

"Interleukin-1's secret message to ACTH" (SN: 10/31/87, p.277) is nicely concluded with an interesting point quoted from Robert Sapolsky: "Why, during stress, should you want to suppress the immune system?"

A teleological or anthropomorphic inquiry into this question would tend to result in confusion. It appears the interleukin-1 may be involved in a gross feedback or regulatory system with ACTH. As interleukin-1 initiates a healing response it possibly stimulates a suppressive system — stress? Excess physiological or psychological stress would encourage an imbalance in the regulatory system. As follows, the imbalance would result in mild to severe immunosuppression.

To address the ultimate interpretation of the "why" question, immunosuppression from injury stress may have evolutionary significance: Who wants a rapid and painful

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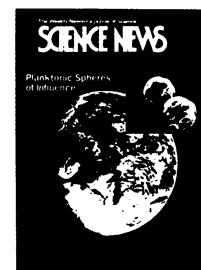
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362 The Plankton-Climate Connection

Cover: Scanning electron micrograph (inset) shows three individual coccolithophorids, one-celled plankton that measure about 6 microns in diameter. Scientists are discovering that these and other plankton species produce a chemical that can influence the reflectivity of clouds covering the world's oceans. As a result, these tiny spheres are helping to set the climate of the entire earth. (Image: NASA; Inset: Greta A. Fryxell/University of Oslo)



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immune response during escape from whatever may be causing an injury (e.g. during battle)?

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Stereotyped scientists

The distortion of the nature of psychiatry in movies, described in "Reel Psychiatry" (SN: 9/19/87, p.188), is part of the widespread misrepresentation of all branches of science by popular entertainment. The other sciences also appear to be seen through lenses of distrust and misunderstanding.

I suspect one could find superficial types of physical scientists in the movies, like Schneider's three types of psychiatrists. One that comes to mind is the supposed scientist who, working alone and rather casually, suddenly makes a wonderful discovery. The origin of this type is unknown to me, but it seems to have become, unfortunately, almost

a stereotype of modern culture. A classic example is Fred MacMurray in Disney's "The Absent-Minded Professor"; a contemporary one is the astronomer in "Roxanne" who discovers a comet between visits to bars and flirtations. I dub this type the "serendipitous loner." These are amiable characters for a movie, but a less appropriate picture of modern science could scarcely be devised.

There is no immediate harm in these characterizations — though, like Schneider and his colleagues, one wonders why the public should wish it so. However, the way science plays its role in society, as understood by the public, is seriously corrupted by these images, since the public seems to derive much of its information about society from films and TV. It would be well if science could devote some resources to giving a true picture of science to the general public. In the long run it would return dividends in the form of better new scientists and a more stable and supporting society.

Stuart Wier
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