

DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY - MS 170 WIESS SCHOOL OF NATURAL SCIENCES

19 Sept. 2003

Dr. Curt Lively
Microbial Ecology/Evolution Search
Department of Biology
Indiana University
1001 E. Third Street
Bloomington, IN 47405-3700

Dear Dr. Lively:

It is my pleasure to write a letter of recommendation for **Gregory Velicer** who has applied for a position in your department. Greg is everything you would want in a colleague and scientist. He is working on a fascinating organism, breaking substantial new ground in experimental social evolution, using a model system familiar to molecular microbial biologists. He is clearly very smart, creative, focused on important questions, and able to attract substantial funding for this work. He is a clear lecturer and good mentor, and so will be a great teacher. He is a kind, calm, and thoughtful colleague, in short, just the sort of person to succeed at the multiple tasks of a modern academic.

I have known Greg since 1999 when I became aware of his work on *Myxococcus xanthus* and its parallels with my own work on *Dictyostelium discoideum*. Since that time we have exchanged many emails discussing various issues of social evolution. I first met him at Michigan State University not long before he went to Germany, and was able to see his organism in its natural laboratory habitat. Since then I have also seen him at a Microbial Population Biology Gordon Conference in 2001, and at the American Society for Microbiology where I participated in a symposium he organized in May 2002.

Greg has been very productive in the 6 years since he got his Ph.D., publishing 13 papers in high profile journals on a wide variety of topics in microbial evolution and on *Myxococcus xanthus*. He has just published his second paper in *Nature*, a clever study demonstrating that when *M. xanthus* loses a gene for spreading, a mutation that allows for a different way of spreading arises. *M. xanthus* is a well-studied micro-organism, but no one besides Greg has used it for studying social evolution. Greg is also working on natural variation in wild clones, something that is very important to understanding sociality in this species. An indication of how well-received Greg's work is can be had from the number of talks he has given. He has also written a number of perspectives and reviews of the field.

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Clearly, Myxococcus xanthus is a very good organism for looking at social evolution. Many of the theoretical concepts developed originally for animals like vertebrates and social insects can now be tested in a situation where evolution can occur and be evaluated. This work is really exciting. Greg Velicer has the drive, the tools, and the system to become a leader in the next generation of evolutionary biologists. The department that succeeds in attracting him will be very fortunate.

Sincerely,

Joan E. Strassmann

Professor