

Laboratoire Européen de Biologie Moléculaire  
European Molecular Biology Laboratory  
Europäisches Laboratorium für Molekularbiologie

EMBL

From the Director General  
Prof. Fotis C. Kafatos

15 May 1995

Dr. Jules Hoffmann  
Institut de Biologie  
Moléculaire et Cellulaire  
UPR 9022 du CNRS  
67084 Strasbourg Cedex

Dear Jules,

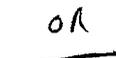
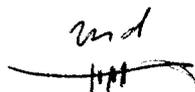
Here are the reviews of the Lemaitre *et al.* manuscript. I am pleased that they are positive and that consequently I can communicate the paper to the Proceedings after your modifications, as suggested by the longer of the two reviews. I do suggest that the control with non-challenged animals be done - it is important, and it can be done rapidly, I assume. The matter about isogenicity is not important for now.

Looking forward to the visit.

Yours sincerely,



Fotis C. Kafatos



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PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, U.S.A.

Request for opinion on manuscript by B. Lemaitre, E. Kromer-Metzger, L. Michaut, E. Nicolas,  
M. Meister, P. Georgel, J.M. Weichhart and J.A. Hoffmann

Title A novel mutation, immune deficiency, defines two distinct control pathways  
in the *Drosophila* host defense

The *Proceedings of the National Academy of Sciences, U.S.A.*, a multidisciplinary journal, publishes brief reports of original research of exceptional importance and novelty. I am writing to ask your opinion on the following points, together with any other comments you may offer. Please reply to all questions. The Editorial Board considers the first two the most important. Please note that the Editorial Policy states that the referees should remain anonymous.

1. Is this contribution of sufficient general interest to justify publication in the *Proceedings* rather than a specialty journal?  
 Yes  No  Don't know
2. Is the overall quality of this paper suitable for this journal?  Yes  No  Don't know
3. Does the evidence justify the conclusions drawn?  Yes  No  Don't know
4. Is this paper clearly written for a diverse audience of scientists?  Yes  No  Don't know
5. Are the procedures described sufficiently well that the work can be repeated?  Yes  No  Not relevant
6. Comments (use additional pages if necessary; send original and two copies): If the answers to questions 1 and 2 are Yes, please describe here the aspects of this paper that are novel and important:

The finding described in this paper, that there exist 2 distinct pathways one leading to the expression of antibacterial peptides and the other, of an antifungal peptide is novel and of wide general interest.

7. If the manuscript is revised, I would be prepared to rereview it.

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12/10/1998

PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, U.S.A.

Request for opinion on manuscript by B. Lemaitre, E. Kromer-Metzger, L. Michaut, E. Nicolas,  
M. Meister, P. Georgel, J.-M. Reichhart and J.A. Hoffmann

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See attached sheet.

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In this MS Lemaitre *et al.* describe a new mutation with a dramatic phenotype - the absence of an immune response of *Drosophila* to bacterial challenge. The result is both of general importance and will open up a new area of study of the invertebrate immune systems. The result also shows that *Drosophila* has at least two different immune responses, one to bacteria and one to fungi.

I have some minor comments:

line 5 of "Materials & Methods" ; "It is superimposable . . . "; do the authors mean "It is similar to . . ." ?

line 7 of "Materials & Methods" : Ref 19 does not describe 'lines' but mutations (by & large !).

Figure 2 legend. What age were the animals used for the experiment shown in panel c ?

Figure 4. '*imd*' - not '*Bc imd*' - extracts ? (All other experiments seem to be with the original *Bc imd* line).

I am somewhat concerned about the interpretation of the data in Figure 5. A control of non-challenged animals is *essential* - I could just say these data reflect differences in the survival of these genotypes under *any* circumstances. I am also concerned that the 4 genotypes used are far from isogenic. The first of these points the authors can answer now, the second is more problematic and perhaps the authors could point out that there is this residual problem in the interpretation of these data. More mutant alleles will tell ! (It is interesting that the authors seem more concerned about the lack of isogenicity for the interpretation of the *Bc* data than for the *imd* data).

I am not convinced that the experiments described in fig 6, and associated text, are really central to the point of this manuscript.