

2010 : March 2010 - Fast Moving Fronts : Kenneth Söderhäll Talks About the So-Called "Melanization Reaction"

## FAST MOVING FRONTS - 2010

March 2010



**Kenneth Söderhäll talks with *ScienceWatch.com* and answers a few questions about this month's Fast Moving Fronts paper in the field of Immunology.**



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**Article: The prophenoloxidase-activating system in invertebrates**

Authors: Cerenius, L; Soderhall, K

Journal: IMMUNOL REV, 198: 116-126 APR, 2004

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**SW: Why do you think your paper is highly cited?/ Does it describe a new discovery, methodology, or synthesis of knowledge?**

This paper is a review summarizing the research on one important innate immune process in invertebrates, namely the so-called melanization reaction, which involves the synthesis of melanin to encapsulate pathogens.

This reaction in invertebrates has received interest because it is very easy to observe in, for example, insects, as a response to pathogens. Recent research has shown that this reaction is an important innate immune response in many invertebrates.

Since our article summarizes and synthesizes the knowledge about the system it has received several citations.

**SW: Would you summarize the significance of your paper in layman's terms?**

This reaction also is present in mammals; for example, it is responsible for the darkening of skin. It is also important in the eye and the brain.

We hope that our article will have induced more interest and more research on this melanization reaction in mammals, which, in our opinion, needs much more attention because of its tentative importance in mammals.

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KEYWORDS: PRO-PHENOL-OXIDASE; FRESH-WATER CRAYFISH; HOLOTRICHIA-DIOMPHALIA LARVAE; SERINE PROTEINASE HOMOLOG; VECTOR ANOPHELES-GAMBIAE; MOSQUITO ARMIGERES-SUBALBATUS; PATTERN-RECOGNITION PROTEIN; MASQUERADE-LIKE PROTEIN; IN-VITRO ACTIVATION; MOLECULAR-CLONING.

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