

by iodoacetic acid. Carboxymethylation results in a complete loss of toxic activity. This shows that the toxic unit must be present in its secondary or even tertiary structure in order to display its activity.

#### **In vitro Activity of the Endotoxin of *Bacillus thuringiensis***

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The mode of action of the endotoxin formed by *Bacillus thuringiensis* is still unknown, mainly because no activity of the crystal protein could be demonstrated in any system, except within susceptible insects. Using primary cell cultures derived from gut epithelium and from hemocytes of *Pieris brassicae*, we were able to induce changes by the addition of endotoxin. Damaging effects were not limited to the culture of gut epithelial cells but occurred also within hemocytes.

The endotoxin was obtained by digesting purified crystal suspensions with gut juice proteases of *P. brassicae*. The resulting toxic unit with a molecular weight of 100,000 was isolated by gel filtration. The concentration of endotoxin added to the cell cultures amounted to 30 µg/ml. The first morphological changes of gut epithelial cells could be observed within 15 to 30 min following the addition of endotoxin. The cells doubled in size by forming bubble-like protrusions. High pH-values of the medium and the presence of proteases seemed to stimulate this reaction. The addition of endotoxin to hemocyte cultures caused identical morphological changes within 15 to 30 min. Vital staining 2 h after the addition of the endotoxin showed that 80 to 100% of the cells had lost their viability. Again, the presence of proteolytic enzymes enhanced the destruction of the hemocytes. Controls were conducted with heat inactivated endotoxin. In this case, no morphological alterations were observed and after 2 h, 95 to 100% of the insect cells had retained their viability.

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### PRAEMIA

#### **Preis der Schweizerischen Gesellschaft für Mikrobiologie, 1976**

Anlässlich der Jahresversammlung in Genf vom 17. bis 19. Juni 1976 hat die Schweizerische Gesellschaft für Mikrobiologie Herrn PD Dr. H. Bienz den Preis 1976 der Gesellschaft verliehen. Der Laureat, geb. 1940, arbeitet am Institut für Mikrobiologie und Hygiene der Universität Basel und hat sich durch seine Leistungen auf dem Gebiet der Virusforschung und der Mikrobiologieausbildung von Medizinern ausgezeichnet. Herr PD Dr. Bienz ist der erste Preisträger.

17. Juni 1976

Prof. Dr. R. Hütter, Präsident

#### **Prize 'Biochemical Analysis' 1978**

The prize of DM 10,000.— is donated from Boehringer in Mannheim, and is awarded every two years at the conference 'Biochemische Analytik' in Munich for outstanding work in the field of biochemical instrumentation and analysis. The donation will take place between 18 and 21 April during the 1978 conference. One or several papers concerning one theme each, either published or accepted for publication between 1 October 1975 and 30 September 1977, may be sent to: Prof. Dr I. Trautschold, Secretary of 'Biochemical Analysis', Medizinische Hochschule Hannover, Karl-Wiechert-Allee 9, D-3000 Hannover 61, Federal Republic of Germany.

### CONGRESSUS

#### **Italy The 4th International Symposium on Mass Spectrometry in Biochemistry**

at Riva del Garda, Lake of Garda, 20–22 June 1977

The Symposium will be devoted to topics such as: Gas chromatography-mass spectrometry, mass fragmentation, stable isotope measurements, field ionization, field desorption, chemical ionization, high resolution studies and data of acquisition and processing. The areas of application will include biochemistry, medicine, toxicology, drug research, forensic science, clinical chemistry and pollution.

Those wishing to present a communication (approx. 20 min) are requested to submit the title and an abstract of not more than 200 words written in English before 1 March 1977. Further details by: Dr Alberto Frigerio, Istituto di Ricerche Farmacologiche 'Mario Negri', via Eritrea 62, I-20157 Milano, Italy.

#### **Switzerland The 6th Annual Conference of the International Society for Experimental Hematology**

in Basel, 28–31 August 1977

Scientific program: Regulation and differentiation of hemopoietic stem cells; hemopoietic inductive micro environment; exogenous effects of hemopoiesis; experimental models of hematologic disorders. – Immunity: lymphocytes, monocytes, macrophages; histocompatibility testing; cell interactions; immune suppression and stimulation; immune deficiency states; immunotherapy; cellular engineering; clinical and experimental neoplasias of hemopoietic tissues. – Bone marrow transplantation: experimental models; clinical marrow grafts for immune deficiency syndromes; aplastic anaemia, malignant disease and other indications; grafts across MHC and ABO barriers. Further information by: Congress Secretariat, ISEH, P.O. Box 129, CH-4004 Basel, Switzerland.