

## BIOGRAPHICAL SKETCH

**Name: Kosta Y. Mumcuoglu**

**Date of Birth: 3.2.46**

### **EDUCATION**

BSc 1972 Dept. of Zoology, University of Basel, Switzerland

PhD 1975 Dept. of Zoology and Dept. of Dermatology, Medical School, University of Basel.

### **EXPERIENCE**

1975 Visiting Scientist. Dept. of Medical Entomology, Hebrew University, Jerusalem

1975-1980 Research Biologist. Dept. of Dermatology, Medical School, University of Basel

1978 Visiting Scientist. Pest Control Dept., Agricultural College of Teheran University

1980-1983 Research Biologist. Dept. of Parasitology, University of Zurich, Switzerland

1983-1985 Research Biologist. Dept. of Zoology, Hebrew Univ. Jerusalem

1985-present Senior Research Scientists, Dept. of Parasitology, Hadassah Medical School, Jerusalem

2004- Adjunct Professor of Parasitology at the Cumhuriyet University, Sivas, Turkey

2006- Associated Professor of Parasitology, Turkey

### **TEACHING**

1980-1983 Lecturer in the course "Veterinary parasitology" for veterinary students in University of Zurich, Switzerland

1980-1983 Lecturer in the course "Medical parasitology" for medical students in University of Zurich, Switzerland

1985-1996 Lecturer in the course "Immunopathology of parasites" for MSc and PhD students in the Hebrew University, Jerusalem

1988-1996 Lecturer in the course "Parasitology" for BSc students in Bar-Ilan University, Tel-Aviv

1985-present Lecturer in the BSc or MSc course "Medical entomology" for biology students in Hebrew University, Jerusalem

1988-2004 Lecturer in the course "Parasitology" for the Hadassah Community College of Technology in Jerusalem

1995-present Lecturer in the course "Seminars in molecular microbiology" for biology students in Hebrew University, Jerusalem

1997-present Lecturer in the course "Seminars for students in medicine", Institute of Microbiology, Hebrew University, Jerusalem

1997-present Lecturer in the course "Pest control" for pest control managers in the National Training Center, Tel-Hashomer, Ministry of Health

1997-present Lecturer in the course "Over the counter pharmaceutical remedies" in the School of Pharmacy

2006-present Lecturer for the course "Veterinary Entomology" in the Koret School of Veterinary Medicine, Hebrew University, Rehovot

2006-present Senior lecturer for the course "Medical Parasitology" for the Hadassah Community College of Technology in Jerusalem

## **OTHER SCIENTIFIC ACTIVITIES**

- I. Author of the book "Dermatological Entomology. The medical importance of insects and mites in Central Europe" (in German) together with T. Ruffli. Perimed, Erlangen, 1982.
- II. Coauthor of the book "Allergy and asthma" (in German) together with Dvorak, J., U. Venetz & M. Waelti. Birkhaeuser, Basel, 1988
- III. Described three new mite species
- IV. Special studies:
  - 1965-1972 Tropical medicine and parasitology (Tropical Institute Basel)
  - 1979 Allergy and clinical immunology (University Hospital Zurich)
  - 1981-1982 Teaching methods for lecturers (University of Zurich)
  - 1993 Biology of diseases vectors (Colorado State University)
  - 1994 Advanced methods in medical and veterinary vector control (Imperial College and London School of Hygiene & Tropical Medicine)
- V. Diagnostic experience: Extensive hands-on diagnostic experience with arthropods of medical, veterinary and economic importance
- VI. Consultant for the Ministry of Health in Israel as well as for hospital clinics on subjects related to head lice, scabies and house dust mites.
- VII. Commercial experience. Contracts with major national and international companies to test compounds against house dust mites and human lice
- VIII. Memberships in Professional Organizations:
  - Entomological Society of America
  - Entomological Society of Israel
  - Israel Society for Parasitology, Protozoology and Tropical Diseases
  - Swiss Society for Dermatology and Venereology
  - Israel Society for Skin Research
  - International Society on Biotherapy

## **AWARDS**

The Wilhelm-Lutz Award (1983) by the Swiss Society of Dermatology and Venereology  
Outstanding Teachers Award for the years 2003/2004 from the School of Medicine,  
Hebrew University, Jerusalem

## **APPOINTMENTS**

- Secretary of the Israel Society for Parasitology (1990-1994)
- Secretary of the Israel Society for Protozoology (1994-1995)
- Secretary of the Israel Society for Parasitology, Protozoology and Tropical Diseases (2000-today)
- Member of the National Committee on Allergy and Clinical Immunology, section: Indoor allergies (1992-present)
- Representative of the Israel Society for Protozoology in the Federation of the Israeli Societies of Experimental Biology (1994-present)
- Member of the committee on head lice and scabies of the Ministry of Health in Israel (1997-today)
- Member of the executive board of the International Society of Biotherapy (1996-1999), since June 1999 president of the Society
- Chair of the Organizing Committee of the Third International Conference on Biotherapy (1998) in Jerusalem, Fifth International Conference on Biotherapy (2000) in Wurzburg, Germany, Sixth International Conference on Biotherapy (2002) in Sivas, Turkey and Seventh International Conference on Biotherapy (2007) in Seoul, Korea

Executive member of the Organizing Committee of the Fifth International Conference on Phthiraptera (2006) in Buenos Aires, Argentine and chair of the Scientific Program Committee.

Member of the International Organizing Committee of the 10th. European Multicolloquium of Parasitology, Paris, France (2008)

Corresponding member of the Swiss Society of Dermatology and Venereology (2002)

Associated Editor of the PLoS Neglected Tropical Diseases (2006)

Member of the Editorial Panel of the International Journal of Pest Management (2006)

Member of the Consultation Board of the American-Eurasian Journal of Scientific Research (2006)

Member of the Consultation Board of the Turkish Journal of Hygiene and Experimental Biology (2006)

Member of the Consultation Board of the Turkish Journal of Parasitology (2006)

**LANGUAGES:** English, German, French, Hebrew, Greek and Turkish

### **REPRESENTATIVE PUBLICATIONS OF MORE THAN 160 PUBLISHED OR IN PRESS**

- Mumcuoglu, K.Y., K. Frish, B. Sarov, E. Manor, E. Gross, Z. Gat and R. Galun. 1993. Ecological studies on the brown dog tick *Rhipicephalus sanguineus* in Southern Israel and its relationship to spotted fever group rickettsiae. *J. Med. Entomol.* 30:114-121.
- Mumcuoglu, K.Y., I. Burgan, I. Ioffe-Uspensky & O. Manor. 1993. *Rhipicephalus sanguineus*: Observations on the parasitic stage on dogs in the Negev Desert of Israel. *Appl. Exp. Acarol.* 17:793-798.
- Weiss, M., I. Glazer, K.Y. Mumcuoglu, Y. Elking & R. Galun. 1993. Infectivity of steinernatid and heterorhabditid nematodes for the human body louse *Pediculus humanus humanus* (Anoplura: Pediculidae). *Fundam. appl. Nematol.* 16: 489-493.
- Mumcuoglu, K.Y., Y. Abed, B. Armenios, S. Shaheen, J. Jacobs, S. Bar-Sela & E. Richter. 1994. Asthma in children of refugee camps in Gaza and its relationship with house dust mites. *Ann. Allergy* 72:163-166.
- Kivity, S., A. Solomon, R. Soferman, Y. Schwarz, K.Y. Mumcuoglu & M. Topilsky. 1993. Mite asthma in childhood: A study of the relationship between exposure to house dust mites and disease activity. *J. Allergy Clin. Immunol.* 91:844-849.
- Ben-Yakir, D., K.Y. Mumcuoglu, O. Manor, J. Ochanda & R. Galun. 1994. Immunization of rabbits with a midgut extract of the human body louse (*Pediculus humanus humanus*); the effect of induced resistance on the louse population. *Med. Vet. Entomol.* 8:114-118.
- Mumcuoglu, K.Y., J. Hemingway, J. Miller, I. Ioffe-Uspensky, S. Klaus, F. Ben-Ishai & R. Galun. 1995. Permethrin resistance in the head louse *Pediculus capitis* from Israel. *Med. Vet. Entomol.* 9:427-432.
- Mumcuoglu, K.Y., E. Rahamim, D. Ben-Yakir, J.O. Ochanda & R. Galun. 1995. Localization of immunogenic antigens on the midgut of the human body louse *Pediculus humanus humanus* (Anoplura: Pediculidae). *J. Med. Entomol.* 33:74-77.
- Ochanda, J.O., K.Y. Mumcuoglu, D. Ben-Yakir, J.K. Okuru, V.O. Oduol & R. Galun. 1996. Characterization of body louse midgut proteins recognized by resistant hosts. *Med. Vet. Entomol.* 10:35-38.
- Mumcuoglu, K.Y., D. Ben-Yakir, S. Gunzberg, J.O. Ochanda & R. Galun. 1996. Immunogenic proteins in the body and faecal material of the human body louse,

- Pediculus humanus humanus*, and their homology to antigens of other lice species. Vet. Med. Entomol. 10:105-107.
- Mumcuoglu, K.Y. 1996. Control of head louse (Anoplura: Pediculidae) infestations: Past and present. Amer. Entomol. 42: 175-178
- Guberman, D., K.Y. Mumcuoglu, A. Keysari, I. Ioffe-Uspensky, J. Miller & R. Galun. 1996. Prevalence of spotted fever group rickettsiae in ticks from Southern Israel. J. Med. Entomol. 33:979-982.
- Mumcuoglu, K.Y., R. Galun, Y. Kaminchik, A. Panet & A. Levanon. 1996. Anti-hemostatic activity in salivary glands of the human body louse, *Pediculus humanus humanus* (Anoplura: Pediculidae). J. Insect Physiol. 42: 1083-1087.
- Mumcuoglu, K.Y., D. Ben-Yakir, J.O. Ochanda, J. Miller & R. Galun. 1997. Immunization of rabbits with faecal extract *Pediculus humanus*, the human louse: effects on louse development and reproduction. Med. Vet. Entomol. 11: 315-318.
- Mumcuoglu, K.Y., M. Lipo, I. Ioffe-Uspensky, J. Miller, I. Turkeltaub & R. Galun. 1997. Maggot therapy for the treatment of gangrene and osteomyelitis. Harefuah 132: 323-325.
- Kassis, I., I. Ioffe-Uspensky, I. Uspensky & K.Y. Mumcuoglu. 1997. Human toxicosis caused by the tick *Ixodes redikorzevi* in Israel: A case report. Isr. J. Med. Sci. 33: 760-761.
- Mumcuoglu, K.Y., A. Ingber, L. Gilead, J. Stessman, R. Friedman, H. Schulman, H. Bichucher, I. Ioffe-Uspensky, J. Miller, R. Galun & I. Raz. 1998. Maggot therapy for the treatment of diabetic foot ulcers. Diabetes Care, 21:2030-2031.
- Hemingway, J., J. Miller & K.Y. Mumcuoglu. 1999. Pyrethroid resistance mechanisms in the head louse *Pediculus capitis* from Israel: implications for control. Med. Vet. Entomol. 13: 89-96.
- Mumcuoglu, K.Y. 1999. Prevention and treatment of head lice in children. Pediatr. Drugs 1:211-218.
- Mumcuoglu, K.Y., A. Ingber, L. Gilead, J. Stessman, R. Friedmann, H. Schulman, H. Bichucher, I. Ioffe-Uspensky, J. Miller, R. Galun & I. Raz. 1999. Maggot therapy for the treatment of intractable wounds. Intl. J. Dermatol. 8: 623-627.
- Mumcuoglu, K.Y., Z. Gat, T. Horowitz, J. Miller, R. Bar-Tana, A. Ben-Zvi & Y. Naparstek. 1999. Abundance of house dust mites in relation to climate in contrasting agricultural settlements in Israel. Med. Vet. Entomol. 13: 252-258.
- Ochanda, J.O., E.A.C. Oduor, R. Galun, M.O. Imbuta & K.Y. Mumcuoglu. 2000. Partial purification of the aminopeptidase from the midgut of the human body louse, *Pediculus humanus humanus*. Physiol. Entomol. 25: 242-246.
- Mumcuoglu, K.Y., I. Ioffe-Uspensky, S. Alkrinawi, B. Sarov, E. Manor & R. Galun. 2001. Prevalence of vectors of the spotted fever group rickettsiae and murine typhus in a Bedouin town in Israel. J. Med. Entomol. 38: 458-461.
- Mumcuoglu, K.Y., J. Miller, M. Mumcuoglu, M. Friger & M. Tarshis. 2001. Destruction of bacteria in the digestive tract of the maggot of *Lucilia sericata* (Diptera: Calliphoridae). J. Med. Entomol. 38: 161-166.
- Mumcuoglu, K.Y., M. Friger, I. Ioffe-Uspensky, F. Ben-Ishai & J. Miller. 2001. Louse comb versus direct visual examination for the diagnosis of head louse infestations. Pediatr. Dermatol. 18: 9-12.
- Mumcuoglu, K.Y., I. Ioffe-Uspensky, S. Alkrinawi, B. Sarov, E. Manor & R. Galun. 2001. Prevalence of vectors of the spotted fever group rickettsiae and murine typhus in a Bedouin town in Israel. J. Med. Entomol. 38: 458-461.
- Mumcuoglu, K.Y. 2001. Clinical applications for maggots in wound care. Am. J. Clin.

- Dermatol. 2: 219-227.
- Sherman, R. A., J. M-T Sherman, L. Gilead, M. Lipo & K.Y. Mumcuoglu. 2001. Maggot debridement therapy in outpatients. Arch. Phys. Med. Rehabil. 82: 1226-1229.
- Mumcuoglu, K.Y., A. Keysary & L. Gilead. 2001. Mediterranean spotted fever in Israel: a tick borne disease. Isr. Med. Ass. J. 4: 44-49.
- Leo, N.P., N.J.H Campbell, X. Yang, K.Y. Mumcuoglu & S.C. Barker. 2002. Evidence from mitochondrial DNA that the head lice and the body lice of humans (Phthiraptera: Pediculidae) are conspecific. J. Med. Entomol. 39: 662-666.
- Akilov, O.E. & K.Y. Mumcuoglu. 2003. Association between human demodicosis and HLA class I. Clin. Exp. Dermatol. 28: 70-73.
- Mumcuoglu, K.Y., J. Zias, M. Tarshis, M. Lavi & G.D. Stiebel. 2003. Body louse remains in textiles excavated at Massada, Israel. J. Med. Entomol. 40: 585-587.
- Lee, S.H, J.-R. Gao, K.S. Yoon, K.Y. Mumcuoglu, D. Taplin, J.D. Edman, M. Takano-Lee & J.M. Clark. 2003. Sodium channel mutations associated with knockdown resistance in the human head louse, *Pediculus capitis* (De Geer). Pest. Biochem. Physiol. 75: 79-91.
- Mumcuoglu, K.Y. & J. Miller. 2004. The relevance of head louse comb and nits to head louse infestations. Trends in Entomol. 3: 113-117.
- Akilov, O.E. & K.Y. Mumcuoglu. 2004. Immune response in demodicosis. J. Eur. Acad. Dermatol. Venereol. 18: 440-444.
- Mumcuoglu, K.Y, N. Galilli, A Reshef, P. Brauner & Hanita Grant. 2004. The use of human lice in forensic entomology. J. Med. Entomol. 41: 803-806.
- Mumcuoglu, K.Y., S. Magdassi, J. Miller, F. Ben-Ishai, G. Zentner, V. Helbin, M. Friger, F. Kahana & A. Ingber. 2004. The in vivo repellency of a citronella formulation for the human head louse, *Pediculus humanus capitis*. Isr. Med. Assoc. J. 6: 756-759.
- Mumcuoglu K.Y., C. Banet-Noach, M. Malkinson, U. Shalom & R.Galun. 2005. Argasid ticks as possible vectors of West Nile virus in Israel. Vector Borne Zoonot. Dis. 5: 65-71.
- Mumcuoglu, K.Y. & O.E. Akilov. 2005. The Role of HLA A2 and CW2 in the pathogenesis of human demodicosis. Dermatology 210: 109-114.
- Akilov, O.E., Y.S. Butov & K.Y. Mumcuoglu. 2005. A clinico-pathological approach to the classification of human demodicosis. JDDG 8: 607-614.
- Mumcuoglu, K.Y., T. Meinking, C.N. Burkhart & C.G. Burkhart. 2006. Head louse infestation: the “no-nit” policy and its consequences. Intnt. J. Dermatol. 45: 891-896.
- Daeschlein, G., K.Y. Mumcuoglu, O. Assadian, B. Hoffmeister & A. Kramer. 2007. In vitro antibacterial activity of *Lucilia sericata* maggot secretions. Skin Pharmacol. Physiol. 20:112–115 (DOI: 10.1159/000097983).
- Huberman, L., N. Gollop, K.Y. Mumcuoglu, C. Blockc & R. Galun. 2007. Antibacterial properties of the whole body extracts and hemolymph of *Lucilia sericata* maggots. J. Wound Care 16: 123-127.
- Huberman, L., N. Gollop, K.Y. Mumcuoglu, E. Breuer, S.R. Bhusare, Y. Shai & R. Galun. 2007. Antibacterial substances of low molecular weight isolated from *Lucilia sericata* (Diptera: Muscidae). Med. Vet. Entomol. 21: 127-131.
- Mumcuoglu, K.Y., S.C. Barker, I.F. Burgess, C. Combescot-Lang, R.C. Dagleish, K.S. Larsen, J. Miller, R.J. Roberts & A. Taylan-Ozkan. 2007. International guidelines for effective control of head louse infestations. J. Drugs Dermatol. 6: 409-414.
- Keysary, A., R. Massung, M. Inbar, A. Wallach, U. Shanas, K.Y. Mumcuoglu & T. Waner. 2007. First direct evidence of the prevalence of *Anaplasma phagocytophilum* in Israel. EID (in press).