

## **Prof. dr n. przyr. Marian L. KRUZEL – informacja biograficzna**

### **WYKSZTALCENIE:**

Magisterium w zakresie biochemii (1972) Uniwersytet Wrocławski, Wrocław  
Doktorat w zakresie biochemii (1978); Uniwersytet Wrocławski, Wrocław

### **ZATRUDNIENIE I ZAJMOWANE STANOWISKA:**

- 1990 – Present Zakład Biologii Integracyjnej i Farmakologii (Profesor); Uniwersytet Teksanski, Akademia Medyczna w Houston, Teksas, USA; PharmaReview Corporation (Dyrektor Naczelnny) Houston, Teksas, USA.
- 1983–1990 Immuno-Modulators Laboratories, Inc. (Dyrektor d/s Nauki), Stafford, Teksas, USA.
- 1981–1983 Zakład Enzymologii (Visiting Professor), Roswell Park Memorial Institute, Buffalo, New York. USA.
- 1979–1981 Instytut Biochemii (Adjunkt), Uniwersytet Wrocławski, Wrocław, Polska.
- 1978–1979 Zakład Biochemii, State University of New York at Stony Brook, New York, USA.

### **UDZIAŁ I FUNKCJE W ORGANIZACJACH ZAWODOWYCH:**

- 1998–1999 Cancer Coalition of America – Prezes Zarządu
- 2000–2006 Member of the Editorial Board: Psychogeriatric Annual
- 2005–2006 Member of the Editorial Board: Journal of Alzheimer's
- 2007 – Present Member of the Editorial Board: Journal of Experimental Therapeutics and Oncology
- 2009 – Present Member of the National Institutes of Health Study Section, Bethesda, D.C., USA
- 1999 – Present Ad hock Reviewer: Clinical and Experimental Immunology; Cellular and Molecular Biology Letters, Immunology, Human Immunology, Journal of Infectious Diseases, Pediatrics Research, Journal of Experimental Therapeutics and Oncology; Postępy Higieny i Medycyny Doświadczalnej

### **UDZIAŁ I WYRÓŻNIENIA W ORGANIZACJACH SPOŁECZNYCH:**

- 2002 Krzyż Kawalerski Orderu Zasługi Rzeczypospolitej Polskiej nadany przez Prezydenta Rzeczypospolitej Polskiej Aleksandra Kwaśniewskiego
- 2003–2009 Kongres Polonii Amerykańskiej w Teksasie, Oddział w Teksasie (Prezes Zarządu)
- 2006 Nagroda Specjalna Konsula Rzeczypospolitej Polskiej w Teksasie za całokształt prac w środowisku polonijnym Teksasu.
- 2010–2012 Prezes Rady Nadzorczej przy Our Lady of Czestochowa, Houston, Teksas, USA

### **PATENTY:**

1. Kruzel M., Kurecki T., Gollnick P., Doyle D. 2000. Cloning expression and uses of human lactoferrin US Patent No 6,066,469.
2. Kruzel M., Kurecki T., Gollnick P., Doyle D. 2001. Human lactoferrin US Patent No 6,277,817.

3. Kruzel M., Kurecki T., Gollnick P., Doyle D. 2002. Human lactoferrin US Patent No 6,455,687.
4. Kruzel M, Gilbert Castro. 2003. Method for treating aseptic SIRS in humans and other animals. Patent No. 6,613,741 B2
5. Boldogh I, Stanton J, Georgiades J, Hughes K, Kruzel M. Use of colostrinin, constituent peptides thereof, and analogs thereof as modulators of intracellular signaling molecules US Patent No 7,119,064.
6. Georgiades J., Polanowski A., Wilusz T., Kruzel M. Purification of peptides from colostrum. US Patent No. 8,168,585 B2
7. J., Georgiades, JA., Hughes, TK., Kruzel, M. 2006. Use of colostrinin, constituent peptides thereof, and analogs thereof as inhibitors of apoptosis and other cellular damage. US Patent No 7,119,064

#### **WYBRANE PUBLIKACJE (2004–2012):**

1. Doursout, M.-F., Horton, H.N., Hoang, L., Liang, Y., Hwang, S.-A., Boyd, S., Actor, J.K., Kruzel, M.L. Lactoferrin Moderates LPS-Induced Hypotensive Response and Gut Injury in Rats. *Intern Immunopharm*. 2012 Dec 23;15(2):227-231.
2. Zimecki M, Artym J, Kocieba M, Kaleta-Kuratewicz K, Kruzel ML. Lactoferrin restrains allergen-induced pleurisy in mice. *Inflamm Res*. 2012; 2012 Nov;61(11):1247-55.
3. Hwang S-A, Welsh KJ., Boyd S., Kruzel M., Actor JK. Comparing efficacy of BCG/lactoferrin primary vaccination versus booster regimen. *Tuberculosis* 2011, 91:S90-S95.
4. Welsh KJ, Hwang SA, Boyd S, Kruzel ML, Hunter RL, Actor JK. Influence of oral lactoferrin on *Mycobacterium tuberculosis* induced immunopathology. *Tuberculosis*. 2011 Dec;91 Suppl 1:S105-13
5. Kruzel ML, Actor JK, Radak Z, Bacsi A, Saavedra-Molina A, Boldogh I. Lactoferrin decreases LPS-induced mitochondrial dysfunction in cultured cells and in animal endotoxemia model. *Innate Immun*. 2010;16(2): 67-79.
6. Hwang S-A, Wilk K, Kruzel ML, Actor JK. A Novel Human Recombinant Lactoferrin Augments the BCG Vaccine and Protects Alveolar Integrity upon Infection with *Mycobacterium tuberculosis* in mice. *Vaccine*. 2009, 18;27(23):3026-34.
7. Szaniszlo P, German P, Hajas G, Saenz DN, Kruzel ML, Boldogh I. New insights into clinical trial for Colostrinin in Alzheimer's Disease. *J Nutr Health Aging*. 2009 Mar;13(3):235-41.
8. Szaniszlo P, German P, Hajas G, Saenz DN, Woodberry MW, Kruzel ML, Boldogh I. Effects of Colostrinin on Gene Expression – Transcriptomal Network Analysis. *Inter Immunopharmacology*. 2009;9(2):181-193.
9. Choi, B-K, Actor, JK Rios, S, d'Anjou, M, Stadheim, TA, Warburton, S, Giaccone, E, Cukan, M, Li, H, Kull, A, Sharkey, N, Gollnick, P, Kocieba, M, Artym, J, Zimecki, M, Kruzel, ML, and Wildt, S. Recombinant human lactoferrin expressed in glycoengineered *Pichia pastoris*: Effect of terminal N-Acetylneurameric acid on in vitro secondary humoral immune response. *Glycoconj J*. 2008;25(6):581-93.
10. Boldogh I, Aguilera-Aguirre L, Bacsi A, Choudhury BK, Saavedra-Molina A, Kruzel M. Colostrinin Decreases Hypersensitivity and Allergic Responses to Common Allergens. *Int Arch Allergy Immunol*. 2008;146(4):298-306.
11. Boldogh I and Kruzel M. An Oxidative Stress Modulator for Prevention and Treatment of Age-related Disorders. *J Alzheimers Dis*. 2008;13(3):303-21.
12. Zimecki M, Kocieba M, Chodaczek G, Houszka M, Kruzel ML. Lactoferrin ameliorates symptoms of experimental encephalomyelitis in Lewis rats. *J Neuroimmunol*. 2007 Jan;182(1-2):160-6.
13. Bacsi A, Woodberry M, Kruzel ML, Boldogh I. Colostrinin delays the onset of proliferative senescence of diploid murine fibroblast cells. *Neuropeptides*. 2007 Apr;41(2):93-101.
14. Weber-Dabrowska B, Zimecki M, Kruzel M, Kochanowska I, Lusiak-Szelachowska M. Alternative therapies in antibiotic-resistant infection. *Adv Med Sci*. 2006;51:242-4.

15. Hwang SA, Wilk KM, Bangale YA, Kruzel ML, Actor JK. Lactoferrin modulation of IL-12 and IL-10 response from activated murine leukocytes. *Med Microbiol Immunol*. 2007 Sep;196(3):171-80.
16. Zimecki M, Kruzel ML. Milk-derived proteins and peptides of potential therapeutic and nutritive value. *J Exp Ther Oncol*. 2007;6(2):89-106.
17. Kruzel ML, Actor JK, Boldogh I, Zimecki M. Lactoferrin in health and disease. *Postepy Hig Med Dosw (Online)*. 2007;61:261-7.
18. Chodaczek G, Saavedra-Molina A, Bacsi A, Kruzel ML, Sur S, Boldogh I. Iron-mediated dismutation of superoxide anion augments antigen-induced allergic inflammation: effect of lactoferrin. *Postepy Hig Med Dosw (Online)*. 2007;61:268-76.
19. Zimecki M, Artym J, Chodaczek G, Kocieba M, Kuryszko J, Houszka M, Kruzel ML. Immunoregulatory function of lactoferrin in immunosuppressed and autoimmune animals. *Postepy Hig Med Dosw (Online)*. 2007;61:283-7.
20. Hwang SA, Wilk KM, Budnicka M, Olsen M, Bangale YA, Hunter RL, Kruzel ML, Actor JK. Lactoferrin enhanced efficacy of the BCG vaccine to generate host protective responses against challenge with virulent *Mycobacterium tuberculosis*. *Vaccine*. 2007 Sep 17;25(37-38):6730-43.
21. Bacsi A, Aguilera-Aguirre L, German P, Kruzel ML, Boldogh I. Colostrinin decreases spontaneous and induced mutation frequencies at the hprt locus in Chinese hamster V79 cells. *J Exp Ther Oncol*. 2006;5(4):249-59.
22. Bourhim M, Kruzel M, Srikrishnan T, Nicotera T. Linear quantitation of Abeta aggregation using Thioflavin T: reduction in fibril formation by colostrinin. *J Neurosci Methods*. 2007 Mar 15;160(2):264-8.
23. Boldogh I, Bacsi A, Aguilera-Aguirre L, GermanP, and Kruzel M. Colostrinin™ Increases the Lifespan and Neurological Performance of Mice. Proceedings, the 8th International Conference on AD/AP (New Trends in Alzheimer and Parkinson Disorders), Salzburg, Austria, March 2007, by MEDIMOND H314C0394 pp 283-287.
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25. Bacsi A, Aguilera-Aguirre L, German P, Kruzel ML, Boldogh I. Colostrinin decreases spontaneous and induced mutation frequencies at the hprt locus in Chinese hamster V79 cells. *J Exp Ther Oncol*. 2006;5(4):249-59.
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28. Bacsi A, Stanton J, Hughes T, Kruzel M, Boldogh I. Colostrinin-Driven Neurite Outgrowth Requires p53 Activation in PC12 Cells. *Cel and Mol Neurobiol*. 2005; 25(7):1123-1139.
29. Artym J, Zimecki M, Kuryszko J, Kruzel ML. Lactoferrin accelerates reconstitution of the humoral and cellular immune response during chemotherapy-induced immunosuppression and bone marrow transplant in mice. *Stem Cells Dev*. 2005;14(5):548-55.
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31. Hwang, S-A., Kruzel, M.L., Actor, J.K. Lactoferrin Augments BCG Vaccine Efficacy to Generate T Helper Response and Subsequent Protection against Challenge with Virulent *Mycobacterium tuberculosis*. *Intern Immunopharm*. 2005; 5( 3):591-599.
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33. Artym J, Zimecki M, Kruzel MK. Effect of lactoferrin on the methotrexate-induced suppression of the cellular and humoral immune response in mice. *Anticancer Res*. 2004;24(6):3831-6.
34. Zimecki M, Chodaczek G, Kocieba M, Kruzel ML. Lethality in LPS-induced endotoxemia in C3H/HeCr mice is associated with prevalence of proinflammatory cytokines: lack of protective action of lactoferrin. *FEMS Immunol Med Microbiol*. 2004 Oct 1;42(2):167-72.