

Prof. Dr. Rashika A.F. El Ridi Curriculum Vitae



- **Last Name: El Ridi**

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- **Positions Held:**

1986- **Professor of Immunology**, Zoology Department, Faculty of Science, Cairo University, Tenure position.

.1981-1986 **Associate Professor of Immunology**, Zoology Department, Faculty of Science, Cairo University.

1976-1981 **Lecturer of Immunology**, Zoology Department, Faculty of Science, Cairo University.

1990-2000 **Director of Schistosomiasis Research**, Biomedical Research Center, Egyptian Organization for Sera and Vaccines, Cairo, Egypt.

April through October 1995, **Visiting Scientist** at the Department of Infectious Diseases, Harvard School of Public Health, Boston, MA, USA.

October 1995-July 1996, **Visiting Scientist** at the Department of Parasitology, Hirosaki University, Hirosaki, Japan

Responsibilities involved teaching the different branches of immunology to under- and post-graduate students; directing research in immunology funded by NIH, Sandoz Gerontological Foundation, Schistosomiasis Research Project (SRP), the Egyptian Academy of Scientific Research and Technology; the International Centre for Genetic Engineering and Biotechnology and the World Health Organization; the Arab Foundation for Science and Technology; supervising 60 M. Sc. and 30 Ph. D. Theses. Obtained for these continuous efforts the State

Award of Excellence in High-Tech Sciences, 2002, the Cairo University Award for Recognition in Applied Sciences, 2002, and the D. Sc. degree in Immunobiology, 2004.

• **Education:**

- D.Sc.
- 2004
- Immunobiology
- Faculty of Science, Cairo University

- Ph.D.
- 1975
- Immunobiology
- Institute of Molecular Genetics, Czech Academy of Science, Prague

Awards:

Egyptian State Award of Excellence in High-Tech Sciences, 2002.

The Cairo University Award for Recognition in Applied Sciences, 2002.

D. Sc. Degree in Immunobiology, 2004, by Cairo University, following positive evaluation of the D. Sc. Thesis by three independent Referees from the United Kingdom.

L'Oreal-Unesco for Women in Science 2010.

Egyptian State Award of Merit and Recognition in High-Tech Sciences, 2010.

Complete Publications List

A- Towards the Development of a Vaccine for Schistosomiasis

Compositions comprising omega-6 fatty acids for use in treating schistosomiasis
RASHIKA EL RIDI / HATEM, TALLIMA / MOHAMED, SALAH (ARAB SCIENCE & TECHNOLOGY FOUNDATION), **United Kingdom Patent Application, Nov 2009 patno:GB2460056**

Parasitic Diseases - Schistosomiasis | InTechOpen

www.intechopen.com/books/parasitic-diseases-schistosomiasis

Jan 16, 2013 – **Parasitic Diseases - Schistosomiasis**. Edited by: Rashika El Ridi. ISBN 978-953-51-0942-6, Published 2013-01-16.

El Ridi R, Tallima H. (2013) Solving the Riddle of the Lung-Stage Schistosomula Paved the Way to a Novel Remedy and an Efficacious Vaccine for Schistosomiasis" In: Parasitic Diseases-Schistosomiasis. Editor, R. El Ridi. Intech Open

<http://www.intechopen.com/articles/show/title/solving-the-riddle-of-the-lung-stage-schistosomula-paved-the-way-to-a-novel-remedy-and-an-efficaciou>

El Ridi RAF, Tallima HA-M. Novel therapeutic and prevention approaches for schistosomiasis. *J Adv Res* 2012 (in press).
<http://dx.doi.org/10.1016/j.jare.2012.05.002>

El Ridi R, Tallima H. (2012) Vaccine-induced protection against murine schistosomiasis mansoni with larval excretory-secretory antigens and papain or type-2 cytokines. *Journal of Parasitology In-Press*.
doi: <http://dx.doi.org/10.1645/GE-3186.1>

El Ridi R, Tallima H. Adjuvant selection for vaccination against murine schistosomiasis. *Scandinavian Journal of Immunology* 76(6):552-558, 2012.

El Ridi RAF, Tallima HA-M. Novel therapeutic and prevention approaches for schistosomiasis. *J Adv Res* 2012 (in press).
<http://dx.doi.org/10.1016/j.jare.2012.05.002>

El Ridi R, Tallima H, Salah M, Aboueldahab M, Fahmy OM, Farhan Al-Halbosiy M, and Mahmoud SS. Arachidonic acid efficacy and mechanism of action in treatment of hamsters infected with *Schistosoma mansoni* or *S. haematobium*. *Int J Antimicrobial Agents* 39: 232-239, 2012

Tallima H, Al-Halbosiy MF, El Ridi R. Enzymatic activity and immunolocalization of *Schistosoma mansoni* and *Schistosoma haematobium* neutral sphingomyelinase. *Mol Biochem Parasitol* 178(1):23-28, 2011.

El Ridi R, Aboueldahab M, Tallima H, Salah M, Mahana N, Fawzi S, Mohamed SH, Fahmy OM. In vitro and in vivo activities of arachidonic acid against *Schistosoma mansoni* and *Schistosoma haematobium*. *Antimicrob Agents Chemother* 54(8):3383-3389, 2010.

El Ridi R, Tallima H, Mahana N, Dalton JP. Innate immunogenicity and in vitro protective potential of *Schistosoma mansoni* lung schistosomula excretory-secretory candidate vaccine antigens. *Microbes Infect* 12(10):700-709, 2010.

Tallima H, Salah M, Guirguis FR, El Ridi R. Transforming growth factor- β and Th17 responses in innate resistance to murine schistosomiasis mansoni. *Cytokine* 48(3): 239-245, 2009.

El Ridi R, Tallima H. *Schistosoma mansoni* ex vivo lung-stage larvae excretory-secretory antigens as vaccine candidates against schistosomiasis. *Vaccine* 27(5): 666-673, 2009.

Tallima H, El Ridi R. *Schistosoma mansoni* glyceraldehyde 3-phosphate dehydrogenase is a lung-stage schistosomula surface membrane antigen. *Folia Parasitol (Praha)* 55(3): 180-186, 2008.

- Jezeq J, El Ridi R, Salah M, Wagih A, Aziz HW, Tallima H, El Shafie MH, Abdel Khalek T, Abo Ammou FF, Strongylis C, Moussis, V, Tsikaris V. *Fasciola gigantica* cathepsin L proteinase-based synthetic peptide for immunodiagnosis and prevention of sheep fasciolosis. *Biopolymers (Pept Sci)* 90(3): 349-357, 2008.
- El Ridi R, Salah M, Wagih A, Aziz HW, Tallima H, El Shafie MH, Abdel Khalek T, El Amir A, Abo Ammou FF, Motawi H. *Fasciola gigantica* excretory-secretory products for immunodiagnosis and prevention of sheep fasciolosis. *Vet Parasitol* 149(3-4): 219-228, 2007.
- Tallima H, Hamada M, El Ridi R. Evaluation of cholesterol content and impact on antigen exposure in the outer lipid bilayer of adult schistosomes. *Parasitology* 134(Pt 12): 1775-1783, 2007.
- Tallima H, El Ridi R. Re : Is actin the praziquantel receptor ? *Int J Antimicrob Agents* 30(6), 566-567, 2007.
- Tallima H, El Ridi R. Praziquantel binds *Schistosoma mansoni* adult worm actin. *Int J Antimicrob Agents* 29(5): 570-575, 2007.
- El Ridi R, Wagih A, Salem R, Mahana N, El Demellawy M, Tallima H. Impact of interleukin-1 and interleukin-6 in murine primary schistosomiasis. *Int Immunopharmacol* 6(7): 1100-1108, 2006.
- El Ridi R, Salem R, Wagih A, Mahana N, El Demellawy M, Tallima H. Influence of interleukin-2 and interferon-gamma in murine schistosomiasis. *Cytokine* 33(5): 281-288, 2006.
- El Ridi, R, Tallima H. Equilibrium in lung schistosomula sphingomyelin breakdown and biosynthesis allows very small molecules, but not antibody, to access proteins at the host-parasite interface. *J Parasitol* 92(4): 730-737, 2006.
- Tallima H, Salah M, El Ridi R. In vitro and in vivo effects of unsaturated fatty acids on *Schistosoma mansoni* and *S. haematobium* lung-stage larvae. *J Parasitol* 91(5): 1094-1102, 2005.
- Tallima H, El Ridi R. Methyl- β -cyclodextrin treatment and filipin staining reveal the role of cholesterol in surface membrane antigen sequestration of *Schistosoma mansoni* and *S. haematobium* lung-stage larvae. *J Parasitol* 91(3): 720-725, 2005.
- El Ridi R, Tallima H, Mohamed S, Montash M. Depletion of *Schistosoma mansoni* lung-stage schistosomula cholesterol by methyl- β -cyclodextrin dramatically increases specific antibody binding to surface membrane antigens. *J Parasitol* 90(4): 727-732, 2004.
- El Ridi R, Mohamed S, Tallima H. Incubation of *Schistosoma mansoni* lung-stage schistosomula in corn oil exposes their surface membrane antigenic specificities. *J Parasitol* 89(5): 1064-1067, 2003.

Veprek P, Jezek J, Velek J, Tallima H, Montash M, El Ridi R. Peptides and multiple antigen peptides from *Schistosoma mansoni* glyceraldehyde 3-phosphate dehydrogenase: preparation, immunogenicity and immunoprotective capacity in C57BL/6 mice. *J Pept Sci* 10(6): 350-362, 2004.

El Ridi R, Montash M, Tallima H. Immunogenicity and vaccine potential of di-peptidic multiple antigen peptides from *Schistosoma mansoni* glyceraldehyde 3-phosphate dehydrogenase. *Scand J Immunol* 60(4): 392-402, 2004.

Tallima H, Montash M, Veprek P, Velek J, Jezek J, El Ridi R. Differences in immunogenicity and vaccine potential of peptides from *Schistosoma mansoni* glyceraldehyde 3-phosphate dehydrogenase. *Vaccine* 21(23): 3290-3300, 2003.

El Ridi R, Mahrous A, Afifi A, Montash M, Velek J, Jezek J. Human and murine humoral immune recognition of multiple peptides from *Schistosoma mansoni* glyceraldehyde 3-P dehydrogenase is associated with resistance to *Schistosomiasis*. *Scand J Immunol* 54(5): 477-485, 2001.

El Ridi R, Shoemaker CB, Farouk F, El Sherif NH, Afifi A. Human T- and B-cell responses to *Schistosoma mansoni* recombinant glyceraldehyde 3-phosphate dehydrogenase correlate with resistance to reinfection with *S. mansoni* or *Schistosoma haematobium* after chemotherapy. *Infect Immun* 69(1): 237-244, 2001.

El Ridi R, Farouk F, Sherif M, Al-Sherbiny M, Osman A, El Gengehi N, Shoemaker CB. T and B cell reactivity to a 42-kDa protein is associated with human resistance to both schistosomiasis mansoni and haematobium. *J Infect Dis* 177(5): 1364-1372, 1998.

El Ridi R, Ragab S, Lewis S, Afifi A. Role of IgE in primary murine *Schistosomiasis mansoni*. *Scand J Immunol* 53(1): 24-31, 2001.

El Ridi R, Ozaki T, Kamiya H. *Schistosoma mansoni* infection in IgE-producing and IgE-deficient mice. *J Parasitol* 84(1): 171-174, 1998.

El Ridi R. Toward a complete immunity-inducing vaccine for schistosomiasis. *J Parasitol* 88(5): 1049-1050, 2002. Review.

El Ridi R, El Garem AA. Is an anti-*Schistosoma haematobium* vaccine necessary? *Int J Parasitol* 29(4): 651-653, 1999.

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El Gengehi N, El Ridi R, Tawab NA, El Demellawy M, Mangold BL. A *Schistosoma mansoni* 62-kDa band is identified as an irradiated vaccine T-cell antigen and characterized as calreticulin. *J Parasitol* 86(5): 993-1000, 2000.

El Ridi R, Ozaki T, Inaba T, Ito M, Kamiya H. *Schistosoma mansoni* oviposition in vitro reflects worm fecundity in vivo: individual-, parasite age- and host-dependent variations. *Int J Parasitol* 27(4): 381-387, 1997.

El Ridi R, Ozaki T, Sato H, Inaba T, Kamiya H. Immunization of mice with ultraviolet-attenuated cercariae of *Schistosoma mansoni* transiently reduces the fecundity of challenge worms. *Int J Parasitol* 27(5): 581-586, 1997.

Osman A, El Ridi R, Guirguis N, Dean DA. Identification of *Schistosoma mansoni* antigens recognized by spleen cells of C57B1/6 mice immunized with ultraviolet-irradiated cercariae. *Int J Parasitol* 24(7): 943-950, 1994.

Osman A, El Ridi R, Guirguis N, Dean DA. Identification of *Schistosoma mansoni* antigens recognized by T cells of C57BL/6 mice immunized with gamma-irradiated cercariae. *J Parasitol* 80(3) 421-431, 1994.

El Ridi R, Abdel Tawab N, Guirguis N. *Schistosoma mansoni*: identification and protective immunity of adult worm antigens recognized by T lymphocytes of outbred Swiss mice immunized with irradiated cercariae. *Exp Parasitol* 76(3): 265-277, 1993.

El Ridi R, Ismail S, Gaafar T, El Demellawy M. Differential responsiveness of humans with early-stage schistosomiasis haematobium to *Schistosoma haematobium* soluble adult-worm and egg antigens. *Parasitol Res* 83(5): 471-477, 1997.

Al-Sherbiny M, el Ridi R, Guirguis NI, Dean DA. Identification and characterization of *Schistosoma mansoni* antigens recognized by T and B lymphocytes of humans with early active intestinal and/or urinary schistosomiasis. *Int J Parasitol* 25(1): 113-121, 1995.

El Ridi R, Velupillai P, Harn DA. Regulation of schistosome egg granuloma formation: host-soluble L-selectin enters tissue-trapped eggs and binds to carbohydrate antigens on surface membranes of miracidia. *Infect Immun* 64(11): 4700-4705, 1996.

B- Towards the Development of an Immunodiagnostic Kit for Human Fasciolosis and Other Afflictions

Maher K, El Ridi R, Elhoda AN, El-Ghannam M, Shaheen H, Shaker Z, Hassanein HI. Parasite-specific antibody profile in human fascioliasis: application for immunodiagnosis of infection. *Am J Trop Med Hyg* 61(5): 738-742, 1999.

El-Demellawy M, El-Ridi R, Guirguis NI, Abdel Alim M, Kotby A, Kotb M. Preferential recognition of human myocardial antigens by T lymphocytes from rheumatic heart disease patients. *Infect Immun* 65(6): 2197-2205, 1997.

El Demellawy M, el Ridi R. Age-associated decrease in proportion and antigen expression of CD8+/CD4+ thymocytes in BALB/c mice. *Mech Ageing Dev* 62(3): 307-318, 1992.

Gaafar T, Lotfy M, el Ridi R. Peripheral blood lymphocyte subsets in urinary bladder carcinoma patients. *Arch Immunol Ther Exp (Warsz)* 39(5-6): 511-517, 1991.

C- Establishing Concepts and Changing Dogmas in Reptilian Immunology

El Ridi R. Reptilian Immune System. In: *Encyclopedia of Immunology*. I M Roitt (ed), Academic Press, Harcourt Brace Janovich:London, p. 2076-2081, 1998.

El Ridi R, Zada S, Afifi A, El Deeb S, El Rouby S, Farag M, Saad AH. Cyclic changes in the differentiation of lymphoid cells in reptiles. *Cell Differ* 24(1): 1-8, 1988. Review.

Muthukkaruppan VR, Borysenko M, El Ridi R. RES Structure and Function of the Reptilia. In: *The Reticulo-endothelial System. A Comprehensive Treatise*, vol 3, Phylogeny and Ontogeny. N Cohem, MM Sigel (eds), Plenum Press:New York, p. 461-507, 1982.

El Ridi R, El Deeb S, Zada S. The gut-associated lymphoepithelial tissue (GALT) of lizards and snakes. In: *Aspects of Developmental and Comparative Immunology*, J B Solomon (ed). Academic Press:London, p. 233-239, 1981.

Afifi A, El Rashdy M, El Ridi R. Seasonal conditions determine the manner of skin rejection in reptiles. *J Exp Zool* 265: 459-468, 1993.

Sherif M, El Ridi R. Natural cytotoxic cell activity in the snake *Psammophis sibilans*. *Immunobiology* 184(4-5): 348-358, 1992.

El Ridi R, Mansour M, Zada S. Immunoglobulins of the snake *Psammophis sibilans*. Studies using a monoclonal antibody. *Immunobiology* 184(1): 1-13, 1991.

Farag MA, El Ridi R. Functional markers of the major histocompatibility gene complex of snakes. *Eur J Immunol* 20(9): 2029-2033, 1990.

Saad AH, Khalek NA, El Ridi R. Blood testosterone level: a season-dependent factor regulating immune reactivity in lizards. *Immunobiology* 180(2-3):184-194, 1990.

Saad AH, El Ridi R. Endogenous corticosteroids mediate seasonal cyclic changes in immunity of lizards. *Immunobiology* 177(4-5): 390-403, 1988.

Saad AH, El Ridi R. Primary in vitro stimulation of antibody production by lizard splenocytes. *Vet Immunol Immunopathol* 18(4): 369-377, 1988.

El Moataz Bellah M, El Ridi R, Abou-Elela R, Cooper EL. Age related occurrence of natural agglutinins in the erisilkworm, *Philosamia ricini*. *Dev Comp Immunol* 12(4): 707-717, 1988.

- El Ridi R, Wahby AF, Saad AH, Soliman MA. Concanavalin A responsiveness and interleukin 2 production in the snake *Spalerosophis diadema*. Immunobiology 174(2): 177-189, 1987.
- Saad AH, El Ridi R, El Deeb S, Soliman MA. Corticosteroids and immune system in the lizard *Chalcides ocellatus*. Prog Clin Biol Res 233: 141-151, 1987.
- Farag MA, El Ridi R. Proliferative responses of snake lymphocytes to concanavalin A. Dev Comp Immunol 10(4): 561-569, 1986.
- Saad AH, El Ridi R, El Deeb S, Soliman MA. Effect of hydrocortisone on immune system of the lizard, *Chalcides ocellatus*. III. Effect on cellular and humoral immune responses. Dev Comp Immunol 10(2): 235-245, 1986.
- Saad AH, El Ridi R, Zada S, Badir N. Effect of hydrocortisone on immune system of the lizard, *Chalcides ocellatus*. II. Differential action on T and B lymphocytes. Dev Comp Immunol 8(4): 835-844, 1984.
- Saad AH, El Ridi R, Zada S, Badir N. Effect of hydrocortisone on immune system of the lizard, *Chalcides ocellatus*. I. Response of lymphoid tissues and cells to in vivo and in vitro hydrocortisone. Dev Comp Immunol 8(1): 121-130, 1984.
- El Deeb S, Zada S, El Ridi R. Ontogeny of hemopoietic and lymphopoietic tissues in the lizard *Chalcides ocellatus* (Reptilia, Sauria, Scincidae). J Morph 185: 241-253, 1985.
- El Deeb S, El Ridi R, Zada S. The development of lymphocytes with T- or B-membrane determinants in the lizard embryo. Dev Comp Immunol 10(3): 353-364, 1986.
- Farag MA, el Ridi R. Mixed leucocyte reaction (MLR) in the snake *Psammophis sibilans*. Immunology 55(1): 173-181, 1985.
- Saad AH, El Ridi R. Mixed leukocyte reaction, graft-versus-host reaction, and skin allograft rejection in the lizard, *Chalcides ocellatus*. Immunobiology 166(4-5): 484-493, 1984.
- Badir N, Afifi A, El Ridi R. Cell-mediated immunity in the gecko, *Tarentola annularis*. Folia Biol (Praha) 27(1): 28-36, 1981.
- El Ridi R, Badir N, El Rouby S. Effect of seasonal variations on the immune system of the snake, *Psammophis schokari*. J Exp Zool 216: 357-365, 1981.
- El Ridi R, Kandil O. Membrane markers of reptilian lymphocytes. Dev Comp Immunol 5 (Supl 1) 143-150, 1981.
- Mansour MH, El Ridi R, Badir N. Surface markers of lymphocytes in the snake, *Spalerosophis diadema*. II. Distribution of the snake lymphocyte subpopulations in different seasons. In: Aspects of Developmental and Comparative Immunology, J B Solomon (ed). Academic Press:London, p. 519-520, 1981.
- Mansour MH, El Ridi R, Badir N. Surface markers of lymphocytes in the snake, *Spalerosophis diadema*. I. Investigation of lymphocyte surface markers. Immunology 40(4): 605-611, 1980.

El Deeb S, El Ridi R, Badir N. Related Effect of seasonal and temperature changes on humoral response of *Eumeces schneideri* (Reptilia, Sauria, Scincidae). *Dev Comp Immunol* 4(4): 753-758, 1980.

Hussein MF, Badir N, El Ridi R, El Deeb S. Effect of seasonal variations on the immune system of the lizard, *Scincus scincus*. *J Exp Zool* 209; 91-96, 1979.

Hussein MF, Badir N, El Ridi R, El Deeb S. Effect of splenectomy on the humoral immune response in the lizard, *Scincus scincus*. *Experientia* 35(7): 869-870, 1979.

Hussein MF, Badir N, El Ridi R, Akef M. Lymphoid tissues of the snake, *Spalerosophis diadema*, in the different seasons. *Dev Comp Immunol* 3(1): 77-88, 1979.

Hussein MF, Badir N, El Ridi R, Charmy RA. Natural heterohaemagglutinins in the serum of the lizard, *Agama stellio*. *Dev Comp Immunol* 3(4): 643-651, 1979.

Hussein MF, Badir N, El Ridi R, Akef M. Effect of seasonal variation on lymphoid tissues of the lizards, *Mabuya quinquetaeniata* Licht. and *Uromastix aegyptia* Forsk. *Dev Comp Immunol* 2(3): 469-478, 1978.

Hussein MF, Badir N, El Ridi R, Akef M. Differential effect on seasonal variation on lymphoid tissue of the lizard, *Chalcides ocellatus*. *Dev Comp Immunol* 2(2): 297-309, 1978.

D- Publications Based on the Ph. D.

Bubenik J, Asfahani A, Sherif M, El Ridi R, Mach O, Machackova M, Jandlova T, Simova J, Hanus M, Hradec E, Malkovsky M. Human urinary bladder carcinoma cell line (T24): immunological studies and search for oncornavirus in T24 cell population and derived clones. *Neoplasma* 25(5): 513-522, 1978.

El Ridi R, Bubenik J. Tumour-associated transplantation antigen in sera of rats with large RSV-induced sarcomas. *Int J Cancer* 16(1): 83-90, 1975.

El Ridi R, Bubenik J. Tumour-associated antigen in the serum of rats with large Rous sarcoma virus-induced tumours. *Folia Biol (Praha)* 19(4): 273-280, 1973.

Bubenik J, Baresova M, Micheel B, Sovova V, El Ridi R, Keclikova M. Rous sarcomas induced by heterotransplantation of virogenic rat tumour cells in mice. *Int J Cancer* 10(3): 527-538, 1972.