

Amira I. Taman

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Amira Taman; MBBCh (1998, Mansoura), PhD (2011, McGill), TQM diploma (2015, Mansoura), CPHQ (2017, renewal 2019, National organization of competency assurance), Infection control diploma (2017, Mansoura), Basic certificate in Medical Education (2021, Cairo), Supervisor 30-H General safety Certification {2021, The International Association for Continuing Education and Training (IACET)}, is a scientist with expertise in medical molecular parasitology and research medicine. Currently an assistant Professor of Medical Parasitology, Member of Medical Education Department and Member of Measurement and Evaluation Unit at Faculty of Medicine, Mansoura University. She has authored 21 Scopus-indexed publications. She serves as a member of the Quality Assurance Unit since 2017, a reviewer for the IRB since 2014 and as a member of the Editorial Board of Mansoura Medical Journal and Parasitologists United Journal and an instructor of Measurement & Assessment Workshop for the health sector presented by Measurement and Assessment center, Ministry of Higher Education.

Employment history:

- Assistant professor of Parasitology: Department of Medical Parasitology, Faculty of Medicine, Mansoura University, Egypt 27-07-2016, to date.
- Lecturer of Parasitology: Department of Medical Parasitology, Faculty of Medicine, Mansoura University, Egypt July, 2011 to 26-07-2016.
- Graduate student: An external mission sponsored by the Egyptian ministry of high education, Institute of Parasitology, McGill University, Montréal, Canada from 2006-2011
- Assistant lecturer of Parasitology: Department of Medical Parasitology, Faculty of Medicine, Mansoura University, Egypt 2004-2006
- Demonstrator of Parasitology: Department of Medical Parasitology, Faculty of Medicine, Mansoura University, Egypt 2000 – 2004

Professional qualifications:

- Gene discovery and characterization: Cloning using RT-PCR and RACE techniques, Recombinant Expression of cDNAs in prokaryotic (*E. coli*), yeast (*Saccharomyces cerevisiae*) and eukaryotic (mammalian cells; HEK-293 and COS7) expression systems.
- Quantitative analysis of gene expression using Real-time PCR.
- ELISA and In situ localization using IFA and Confocal immunofluorescence techniques.
- Pharmacological characterization of receptors using different assays e.g. cAMP and Ca²⁺.
- Native and recombinant protein purification and quantification

- SDS-PAGE, gel staining, western-blot, dot-blot analysis and immunoprecipitation
- Radio-ligand binding assay.
- Stem cell manipulation.
- Sample preparation for Scanning Electron Microscopy.
- Advanced level of animal (mice) use for research and teaching.
- *Biomphalaria alexandrina* snails: maintenance and shedding.
- *Cercarial transformation*, culture of schistosomula and adult *Schistosoma mansoni*
- Maintenance of *Schistosoma mansoni* life cycle.
- Maintenance of *Toxoplasma gondii* (RH and Me49 strains) in mice.
- Antigen preparation from different stages of *S. mansoni*

Scientific activities:

Scopus ID 35075183900 (H-index = 9)

Google scholar (H-index= 11)

https://scholar.google.com/eg/citations?user=Tm_HmikAAAAJ&hl=ar

ORCID ID: 0000-0002-4965-449X

publons Research ID: B-3950-2019 : <https://publons.com/researcher/1797187/amira-taman/>

ResearchGate: https://www.researchgate.net/profile/Amira_Taman2

Web page:

<http://www1.mans.edu.eg/facmed/english/staff/amirataman/default.html>

<http://home.mans.eun.eg/FacMed/english/staff/amirataman/default.htm>

Patents

Discovery of three novel genes in *Schistosoma mansoni*.

These genes encode for neurotransmitter receptors, all are submitted to Genbank with the following accession numbers: a) **SmD2** (FJ985986), b) **SmGluR** (HM483389) and c) **SmGBP** (HM483390).

Publications

- 1- Heba A. El-Barabry, Lotfy Z. Habbak, Basem Mansour, Mona Youssef, **Amira Taman**, Mohamed L. Salem: Blocking angiotensin pathway induces anti-fibrotic effects in a mouse model of schistosomiasis by decreasing egg burden and granulomatous reaction. International journal of cancer and biomedical research (IJCBR), 2020.
- 2- **Amira Taman**, Samia El-Bardicy, Menerva Tadros, Magda Ayoub, Basem Mansour, Fouad El-Shehabi, Samar N. El-Beshbishi: In vitro efficacy of new synthetic benzimidazole-related compounds against *Schistosoma mansoni* adult worms. Asian Pacific Journal of Tropical Medicine, 2020.
- 3- **Amira Taman**, Basem Mansour, Mona younis, Samar Alhusseiny: Therapeutic efficacy of a newly synthesized benzimidazole compound BTP-OH against murine schistosomiasis mansoni. Journal of Helminthology, 2020.
- 4- **Amira Taman**, Samar M. Alhusseiny, Wafaa M. El-Zayady, Ayat A. Elblihy, Basem Mansour, Mohammed Massoud, Mona Younis Youssef, Nora E. Saleh: In vivo studies of the effect of PPQ-6, a quinoline-based agent against *Schistosoma mansoni* in mice. Experimental Parasitology, 2020.
- 5- **Amira Taman**, Samar M Alhusseiny: Exposure to toxoplasmosis among the Egyptian population: A systematic review. Egyptian Parasitologists United Journal, 2020.
- 6- Serry A. El Bialy, Basem Mansour, Waleed A. Bayoumi, **Amira Taman**, Hassan M. Eissaa: Novel 2-(5-Aryl)thiophen-2-yl)benzimidazoles; Design, Synthesis and In vitro Evaluation Against Cercarial Phase of *Schistosoma mansoni*. Letters in Drug Design & Discovery, 2020.
- 7- **Amira Taman**, Samar N. El-Beshbishi: Laboratory diagnosis of schistosomiasis mansoni: Current status and future trends. Asian Pacific Journal of Tropical Medicine, 2019.
- 8- **Amira Taman**, Samar Alhusseiny, Nora Saleh, Mona Youssef, Basem Mansour, Mohamed Massoud, Samar El-Beshbishi: Effect of a newly synthesized quinoline-based compound (PPQ-8) on murine schistosomiasis mansoni. Journal of Helminthology, 2019.
- 9- Hanan Abd Elgawad, Samar M. Alhusseiny, **Amira Taman**, Mona Younis Youssef, Basem Mansour, Mohammed Massoud, Aya Handous: Biological evaluation of newly synthesized quinoline-based compound PPQ-8 in acute and chronic toxoplasmosis: An experimental study. Experimental Parasitology, 2019.
- 10- El-Beshbishi, S.N., El Bardicy, S., Tadros, M., Ayoub, M., **Taman, A.**: Efficacy of artemisinin-naphthoquine phosphate against *Schistosoma haematobium* adult flukes: dose-effect relationship and tegumental alterations. Journal of Helminthology, 2019.

- 11- El-Beshbishi, S.N., Saleh, N.E., Abd El-Mageed, S.A., El-Nemr, H.E.E., Abdalla, H.A., Shebl, A.M., **Taman, A.**: Effect of omega-3 fatty acids administered as monotherapy or combined with artemether on experimental *Schistosoma mansoni* infection. *Acta Tropica*, 2019.
- 12- El-Beshbishi, S.N., El Bardicy, S., Tadros, M., Ayoub, M., **Taman, A.**: Biological activity of artemisinin-naphthoquine phosphate on *Schistosoma haematobium* stages and the vector *Bulinus truncatus*. *Transaction Royal Society of Tropical Medicine and Hygiene*, 2019.
- 13- Nora Saleh, Samar N. El-Beshbishi , salama abd el-mageed, hosam el-dein el nemr, Hussein abdalla, **Amira Taman**. Induced resistance to reinfection in experimental Egyptian schistosomiasis mansoni by artemether and omega-3. *Mansoura journal of basic and medical science* , 2016.
- 14- **Amira Taman**, Samar N. El-Beshbishi , Samia El Bardicy , Menerva Tadros , , Magda Ayoub , Basem Mansour , Serry El-Bialy. In vitro screening of BTP-Iso, on *Schistosoma mansoni* and its intermediate host *Biomphalaria alexandrina*. *Asian Pacific Journal of Tropical Disease* 2016.
- 15- Samar N. El-Beshbishi, Samia El Bardicy, Menerva Tadros, Magda Ayoub, **Amira Taman**. Spotlight on the *in vitro* effect of artemisinin-naphthoquine phosphate on *Schistosoma mansoni* and its snail host *Biomphalaria alexandrina*. *Acta tropica journal*, 2015.
- 16- **Amira Taman**, Manar Azab: Present-day anthelmintics and perspectives on future new targets. *Parasitology Research*, 2014.
- 17- **Taman A**, El-Tantawy N, Besheer T, Taman S, Helal R. *Schistosoma mansoni* infection in a fishermen community, the Lake Manzala region-Egypt. *Asian Pacific Journal of Tropical Disease* 2014.
- 18- **Amira Taman**, Samar El-Beshbishi, Nora El-Tantawy ,Manar Azab, Amira El-Hawary: Evaluation of the *in vivo* effect of ivermectin on *Schistosoma mansoni* in experimentally-infected mice . *Journal of Costal Life Medicine*; 2014.
- 19- El-Tantawy, N., **Taman, A.**, Shalaby, H.: Toxoplasmosis and Female Infertility: Is there a Co-Relation? *American Journal of Epidemiology and Infectious Disease*, 2014.
- 20- Hosam El-Nemr , Khaled Farid ,Saher Taman, Elham Farag , **Amira Taman**: Utility of serology in the diagnosis of amoebic hepatitis and hydatid disease among patients with benign hepatic cysts. *Mansoura Medical Journal*, 2014.
- 21- Serry A. El Bialy, **Amira Taman**, Samar N. El-Beshbishi, Basem Mansour, Mohamed El-Malky, Waleed A. Bayoumi, Hassan M. Essa: Effect of a novel benzimidazole derivative in experimental *Schistosoma mansoni* infection. *Parasitology Research*, 2013.

22- El-Beshbishi, S.N., **Taman, A.**, El-Malky, M., Azab, M.S., El-Hawary, A.K., El-Tantawy, D.A.: *In vivo* effect of single oral dose of artemether against early juvenile stages of *Schistosoma mansoni* Egyptian strain. *Experimental Parasitology*, 2013.

23- El-Beshbishi, SN, **Taman, A.**, El-Malky MA, Azab MS, El-Hawary AK, El-Tantawy DA: First insight into the effect of single oral dose therapy with artemisinin-naphthoquine phosphate combination in a mouse model of *Schistosoma mansoni* infection. *International Journal of Parasitology*, 2013.

This paper has been selected to be featured in the *World Biomedical Frontiers*, because of its innovation and potential for significant impact.

24- El-Shehabi, F., **Taman, A.**, Moali, L. and Ribeiro: A novel G protein-coupled receptor of *Schistosoma mansoni* (SmGPR-3) is activated by dopamine and is widely expressed in the nervous system. *PLoS Neglected Tropical Diseases*, 2011.

25- **Taman, A.** and Ribeiro, P: Characterization of a truncated metabotropic glutamate receptor in a primitive metazoan, the parasitic flatworm *Schistosoma mansoni*. *PLoS ONE*, 2011.

26- **Taman, A.** and Ribeiro, P: Glutamate-mediated signaling in *Schistosoma mansoni*: A novel glutamate receptor is expressed in neurons and the female reproductive tract. *Molecular Biochemical Parasitology*, 2011.

This paper was chosen by editors of *Molecular Biochemical Parasitology* as “paper of the year”.

27- **Taman, A.** and Ribeiro, P: Investigation of a dopamine receptor in *Schistosoma mansoni*: Functional studies and immunolocalization. *Molecular Biochemical Parasitology*, 2009.

Scientific books: (Chapter book)

1- **Amira Taman**, Hassan Salama, and EL-Sherbiny W. Neurognathostomiasis. In: *Neurology In Tropics* edited by Jagjit S. Chopra, and Inder M.S. Sawhney, ELSEVIER, 2016, p. 260-276.

Presentations:

1- **Amira Taman**: Tubulin as a target for anti-schistosomal agents. **The 35th annual congress faculty of medicine, 7th international congress, Tanta University** (2020).

2- Elham Farag, **Amira Taman**, Soha Awad, Samar El-Beshbishi: Perspectives of chronic toxoplasmosis on male fertility: an experimental study. **The 34th annual congress of faculty of medicine, Tanta University** (2019).

3- El-Beshbishi, S.N., El Bardicy, S., Tadros, M., Ayoub, M., **Taman, A**: Efficacy of artemisinin-naphthoquine phosphate against *Schistosoma haematobium* adult flukes: dose-

effect relationship and tegumental alterations. **The Vth conference of the Egyptian parasitologist united society** (2018).

- 4- **Amira Taman**, Paula Ribeiro: Glutamate signaling as a drug target. **The fourth annual scientific conference of medical biochemistry department. Mansoura Faculty of Medicine**, (2017)
- 5- **Amira Taman**, Paula Ribeiro: Dopamine signaling in schistosomes. **8th Annual Scientific Conference of Medical Physiology Department**. (2017)
- 6- **Amira Taman** , Samar El-Beshbishi , Nora El-Tantawy , Amira El-Hawary , Manar Azab (2014): The antischistosomal effect of ivermectin: an experimental study. **Egyptian Parasitologists United Society (EPU) 4th Conference, Cairo, Egypt** (poster).
- 7- **Amira Taman**, Khaled Farid, Elham Farag, Hosam EL-Nemr (2014): Diagnostic value of serology in benign hepatic cysts of parasitic origin. **The 20th International Conference of the Egyptian Society of Medical Microbiology (ESMM), Mansoura, Egypt** (poster).
- 8- **Amira Taman**, Samar El-Beshbishi and Ribeiro, P (2012): A novel dopamine receptor in *Schistosoma mansoni*: Cloning, Functional Characterization and Immunolocalization. **The 3rd Egyptian Parasitologist United Conference, Cairo, Egypt** (poster). Winner of “*The best poster award*” in the conference.
- 9- **Taman, A.** and Ribeiro, P. (2010) Characterization of a novel glutamate receptor in the bloodfluke *Schistosoma mansoni*. **10th Annual Molecular Parasitology Symposium, Montréal, Canada** (oral).
- 10- **Taman, A.** and Ribeiro, P. (2009) Functional analysis of a novel dopamine receptor in *Schistosoma mansoni*. **9th Annual Molecular Parasitology Symposium, Montréal, Canada** (oral).
- 11- **Taman, A.** and Ribeiro, P. (2008) Identification of a novel dopamine receptor in *Schistosoma mansoni*. **8th Annual Molecular Parasitology Symposium, Montréal, Canada** (poster).
- 12- **Taman, A.** and Ribeiro, P. (2007) Neurotransmitter receptors in *Schistosoma mansoni*. **46th Annual Meeting of the Canadian Society of Zoologists, Montréal, Canada** (poster).

Research interest:

- Drug repurposing in human parasitic diseases
- In field rapid diagnostic techniques for human parasitic diseases
- Alternatives of praziquantel in treatment of human schistosomiasis
- New medication for tropical diseases (schistosomiasis, toxoplasmosis, cryptosporidiosis)
- Toxoplasmosis and cancer
- Toxoplasma infection and neurological disorders

Other activities:

1- Teaching experience:

- A) Small group teaching
- B) Problem-based teaching (**tutor and coordinator, Mansoura-Manchester** Medical program from September 2011 to date, **Chief tutor of semester 6** from 2018 to 2020).
- C) Teaching Medical Parasitology to 3rd year medical students at **conventional program** and year 3 students at **the integrated program (Flipped classroom, blended learning)**.
- D) **Courses (+ developed; * taught): At Mansoura University:**
 - i- * **PAR** Medical parasitology for medical students, Faculty of Medicine, Mansoura University, 2012 to date
 - ii- *+ **PAR 608 MB** Molecular parasitology for MD students at Parasitology Department, Faculty of Medicine, Mansoura University, 2012 to date.
 - iii- + **PAR 608 AMB** Advanced molecular parasitology for MD students at Parasitology Department, Faculty of Medicine, Mansoura University, 2014.
 - iv- *+ **Quality improvement and patient safety (MP-ELC-QIPS)**, *+**People management (MP-ELC-PM)**, *+**Scientific writing (MP-ELC-ART)**, +**Communication skills**: elective courses for undergraduate students at Mansoura Manchester Program, 2021

2- Thesis supervision:

A) Master degree:

- 1- Utility of serology in the diagnosis of amoebic hepatitis and hydatid disease among patients with benign liver masses. By Elham Farag El-meniari, Parasitology Department, Faculty of Medicine, Mansoura University, 2012.
- 2- A quinoline - based agent as a novel therapy for toxoplasmosis, By Hanan Abdel gwad, Parasitology Department, Faculty of Medicine, Mansoura University, 2017

B) PhD degree:

- 1- Influence of chronic toxoplasmosis on gonadotropic-gonadal axis in male rats, By Elham Farag El-meniari, Parasitology Department, Faculty of Medicine, Mansoura University, 2019.
- 2- Efficacy of PPQ-8 combined with nitazoxanide against murine infection with cytogenic (Me49) strain of *toxoplasma gondii* , By Ahmed Gomaa, Parasitology Department, Faculty of Medicine, Mansoura University, 2019.

3- Invited Reviewer for:

- 1) Asian Pacific Journal of Tropical Disease (since March, 2013)
- 2) Asian Pacific Journal of Tropical Biomedicine (since June, 2013)
- 3) International Journal of Modern Biological Research (since September, 2014)

- 4) Veterinary World Journal (since January, 2015)
- 5) International Journal of Biodiversity and Conservation (since February, 2015)
- 6) Asian Pacific Journal of Tropical Medicine (since March, 2015)
- 7) Journal of Infectious Diseases and Therapy (since June, 2015)
- 8) African Journal of Biotechnology (since June, 2015)
- 9) Forensic Research (since July, 2015)
- 10) Bulletin of Egyptian Society for Physiological Sciences (since February, 2017)
- 11) Journal of Antimicrobial Agents (since March, 2017)
- 12) Experimental Parasitology (since September, 2017)
- 13) Journal of Medical Diagnostic Methods (since September, 2017)
- 14) Helminthologia (since June, 2019)
- 15) Journal of Taibah University Medical Sciences (since October, 2019)
- 16) Scientific Reports (since September, 2020)
- 17) BMC Infectious Diseases (since June, 2020)

Reviewer for competitive research projects:

- The Czech Science Foundation (June, 2020)

4- Member of the master control and undergraduate Mansoura Manchester program of education: since 2015 to date and vice president of the master control since 2020 to date.

5- Member of the Editorial Board of Mansoura Medical Journal since June 2020.

6- Member of the Editorial Board of Parasitologists United Journal since March 2021.

7- Invited speaker:

a) Scientific research workshop: Plagiarism and application of turnitin program for thesis and scientific papers, faculty of medicine, Mansoura University, since February, 2017 (held biannually).

b) Annual Manchester Program workshop, since 2016 (held annually).

7- Instructor of Measurement & Assessment Workshop, Basic Level of Assessment for Staff in Health Sector, Measurement and assessment sector, ministry of higher education

Attended workshops:

A) Scientific:

1. **Molecular biology techniques** (PCR, RFLP, real-time PCR) (2019): Faculty of Medicine, Mansoura University, Egypt.
2. **Cell apoptosis** (2014), Faculty of Medicine, Mansoura University, Egypt.
3. **Hands on nanotechnology** (2012), Faculty of Engineering, Mansoura University, Egypt.
4. **Stem cell training course** (2011), Medical Experimental Research Center, Mansoura University, Egypt.

5. **Mouse methodology workshop** (2007) McGill animal care center, McGill University, Canada.
6. **Advanced level of animal use for research and teaching** (2007) McGill animal care center, McGill University, Canada.
7. **Snail care and maintenance** (2006), Institute of parasitology, McGill University, Canada.
8. **Actively participating in the postgraduate** educational course of clinical immunology. The 9th Egyptian-French seminar & workshop on immunology & molecular biology titled: Advances in immune & cell therapy. Held in (Urology & Nephrology Center-Mansoura, Egypt) on March 5-17, 2005.

B) Medical Education:

- 1-**Basic certificate in medical education**, Cairo University, 2021
- 2- **Learning Management System, National E- Learning Center (NELS)**, Supreme Council of Universities, 2021
- 3- **Incorporating objective structured clinical examinations** within an integrated program of assessment, Egyptian Knowledge Bank, 2021
- 4- **Methods of evaluations**, Measurement & Assessment Center (MAC), 2020
- 5- **Training of Trainers (TOT)**, presented from International Board of Certified Trainers (IBCT), 2020. Available at https://www.edraak.org/course/course-v1:IBCT+TOT+T1_2020/
- 6- **Flipped classroom**, EDRAAK. Available at https://www.edraak.org/course/course-v1:Edraak+FC101+T2_2019/
- 7- **Blended learning**, EDRAAK. Available at [https://www.edraak.org/course/course-v1:UBC+TBLESP+2018_T2/\(2019\)](https://www.edraak.org/course/course-v1:UBC+TBLESP+2018_T2/(2019))
- 8- **Learning technology**, EDRAAK. Available at [https://www.edraak.org/specialization/specialization/edtechsp-vv1/\(2019\)](https://www.edraak.org/specialization/specialization/edtechsp-vv1/(2019))
- 9- **Electronic teacher** (2014), Scientific Calculation Center, Mansoura University, Egypt.
- 10- **Graduate teaching workshop** (2008), Macdonald innovations for teaching improvement, McGill University, Canada.

C) Quality:

- 1- **30 Hours General Safety Certification**, OSHA 360 training accredited by the International Association for Continuing Education and Training (IACET), 2021
- 2- **Certified Professional in Healthcare Quality (CPHQ)**: healthcare quality certification commission, 2017, Renewal 2019. Accredited by the national commission of certifying agencies, a division of the national organization of competency assurance.
- 3- **Self-assessment of educational programs**, NAQAAE, 2019
- 4- **Diploma in infection control**. 2017 Faculty of medicine, Mansoura University.
- 5- **Diploma in Total Quality Management in Medical Organizations**. 2015, Managerial Training Center & Consultations, Faculty of Commerce, Mansoura University.
- 6- **Certified professional in healthcare quality**, Dakahlia medical syndicate in collaboration with Mansoura international hospital, 25th November 2016 to 3rd March, 2017.

7- **Workplace hazardous material information system (WHMIS)** (2006 & 2010), McGill University, Canada.

8- **Principles of laboratory radiation safety (2006 & 2010)**, McGill University Environmental Health and Safety, McGill University, Canada.

D) Others:

1- **Strategic studies and national security**, Nasser Higher Military Academy, Mansoura University, 2021

2- **COVID-19 Awareness**, OSHA 360 training accredited by the International Association for Continuing Education and Training (IACET), 2021

3- **Digital citizenship and individual development for development of governmental institutions**. National Research Center (NRC), 2020

4- **General course on intellectual property**, World Intellectual Property Organization (WIPO) Academy, 2016

5- **Health and epidemiology in public health**, EDRAAK, Adaption of material from the HARVARD School of Public Health's classes in Epidemiology and Biostatistics, Online PH207x, 2016.

6- **Egyptian Knowledge Bank training workshops:**

- SciVal- Topics of prominence in science, 2021
- Professional manuscript writing, 2021
- Smart experimental design, 2021
- Professional poster presentation, 2020
- Professional preparation of the poster, 2020
- Peer review like professionals, 2020
- Comprehensive literature discovery& keeping updated using Scopus, 2020

Awards

- Scientific Publications Awards, Mansoura University, 2019.
- Scientific Publication Awards, Mansoura University, 2014.
- Best Poster Award, EPU Conference, Cairo- Egypt, 2014.
- Scholarship from Mansoura University- Egypt, 2006-2010.
- Recruitment excellence fellowship, McGill University, 2006.
- FORNT bridging award, Institute of Parasitology, McGill University, 2010.

Professional membership:

- The Egyptian Parasitologists United, Egypt, 2011 to date
- The Egyptian Medical Syndicate, Egypt, 2000 to date.

References

Available on request

