



## **Medical Parasitology Department Research plan (2020-2024)**

## الخطة البحثية الخمسية ٢٠٢٠-٢٠٢٤

### كلية الطب - جامعة المنيا قسم الطفيليات الطبية

#### أولا: نبذة عن القسم:

قسم الطفيليات الطبية هو احد الاقسام الاكاديمية الهامة بكلية الطب وللقسم اسهامات علمية ومشاركات في تطوير الكلية وخدمة المجتمع المحلي واعداد كوادر من حملة الماجستير والدكتوراة في علم الطفيليات الطبية .

وفقا للائحة الداخلية لكلية الطب يشمل علم الطفيليات الفروع الاتية:

١- علم الديدان

٢- علم الكائنات الاولية

٣- علم المفصليات

\*يقع القسم بالدور الثالث بالمبنى الحديث لكلية الطب خلف متحف الفن الحديث بالحرم الجامعي

\*يضم القسم سبعة استاذا واثنين استاذا مساعدا واثنين مدرسين واربعة من معاوني اعضاء هيئة التدريس (اثنين مدرس مساعد واثنين معيدين).

\*يشارك عدد من اعضاء هيئة التدريس بالقسم مشاركات جوهرية للنهوض بالكلية منها الاشراف علي بعض الدورات التدريبية لاعضاء هيئة التدريس بالكلية للاعداد لبرنامج الطب التكاملي وكذلك المشاركة في اعمال الجودة والاعتماد للكلية.

#### ثانيا: رؤية القسم:

أن يحتل قسم علم الطفيليات الطبيه مكانا مرموقا بين اقسام علم الطفيليات الطبية علي المستوى المحلي وأن يرتقي بالبحث العلمي خاصة في مجال مكافحة العدوى والامراض المعدية.

#### ثالثا: رسالة القسم:

يهدف قسم علم الطفيليات الطبية بكلية الطب جامعة المنيا الي تعليم الطلاب الطرق المختلفة للعدوى بالامراض وكذلك طرق التشخيص المختلفة لتلك الامراض وطرق الوقاية والحماية من تلك الامراض المعدية.

#### رابعا: فريق اعداد الخطة:

إد| عزة كمال احمد

أ.م.د| نها حامد عبد الجليل

ط|سهاام ابراهيم محمد

ط|منار مجدى سيد

#### خامسا: آلية اعداد الخطة البحثية:

١- الاطلاع علي الخطة البحثية السابقة.

٢- الاطلاع علي الخطة البحثية للجامعة.

٣- استبيان اعضاء هيئة التدريس في الخطة البحثية ومقترحاتهم

٤- حلقات نقاشية بالقسم حول الخطة

٥- عرض مقترح الخطة علي اعضاء القسم لابداء آرائهم ومقترحاتهم.

سادسا: تقرير مفصل عن الخطة البحثية السابقة:

## **Medical Parasitology Department research plan of (2015-2019) Report**

### **A-Objectives that are not yet achieved:**

1- Development of new vaccines against some parasites (*Leishmania*, *Malaria*, *Schistosoma*, and *Toxoplasma*).

Cause of not achievement: Protocol of this research have not been selected by the Scholarships general administration.

2-Address the influence of intestinal parasitic infection and their associated risk factors in iron deficiency anemic children in Minia city: done but was not published

3- Detection of Scabies by different methods **including PCR.**

Cause: No candidates were available for this thesis.

### **B-Achieved objectives in next table:**

Objectives of plan 2015-2019	Achievement form	Form title
<p><b>1-Estimate the incidence of different food-borne parasitic diseases</b></p>	<p>Master thesis</p> <p>Published paper from the thesis in national journal</p>	<p>*Parasites transmitted to human by ingestion of different types of meat, El-Minia city, El-Minia governorate, Egypt.</p> <p>Ekhlas H.Abdelhafeez,Amany M. Kamal, Noha H. Abdelgelil and Mohamed Mahmoud Abdelfatah. Parasites transmitted to human by ingestion of different types of meat, El-Minia city, El-Minia governorate, Egypt.J.Egypt.Soc.Parasitol (JESP), 45(3),2015:671-680.</p>
<p><b>2- Estimate the incidence of different parasites causing appendicitis.</b></p>	<p>Journal published paper (National journal)</p>	<p>*Manal Z.M. Abdellatif Ekhlas Abel-hafeez UsamaS Belal RabieM Mohamed Noha H Abdelgelil, Nissreen</p>

		<p>Abdel-Tawab Ahmed M Atiya (2015) Identification of parasitic infections in appendectomy specimens using histopathological and faecolith examinations Parasitologists United Journal 8:101–106.</p>
<p><b>3- Estimate the incidence of <i>Toxoplasma gondii</i> infection among the high risk pregnant and normal pregnant females patients</b></p>		<p>*Amany M. Kamal, Azza K. Ahmed, Manal Z. M. Abdellatif1, Mohamed Tawfik, Eptesam E. Hassan (2015) Seropositivity of Toxoplasmosis in Pregnant Women by ELISA at Minia University Hospital, Egypt .Korean J Parasitol. 53(5): 1-6.</p>
<p><b>4- Investigate the effect of some herbal antioxidant on some protozoan and helminthic infection (invitro and invivo).</b></p>		<p>*Ekhlal H Abdel-Hafeez, Azza K Ahmad, Amany M Kamal, <u>Manal Z M Abdellatif</u>, Noha H Abdelgelil (2015). In vivo anti protozoan effects of garlic (<i>Allium sativum</i>) and ginger (<i>Zingiber officinale</i>) extracts on experimentally</p>

		<p>infected mice with <i>Blastocystis</i> spp. <i>Parasitol Res.</i> 114: 3439-3444.</p> <p>*Ekhlas H Abdel-Hafeez, Azza K. Ahmad, Noha H Abdelgelil, <u>Manal Z M Abdellatif</u> , Amany M Kamal, Rabie M Mohamed (2015). In vitro effect of some Egyptian herbal extracts against <i>Blastocystis hominis</i>. <i>J. Egypt. Soc. Parasitol.</i> 45(1): 93 -100</p> <p>* Ekhlas H Abdel-Hafeez ,Azza K Ahmed, Manal ZM Abdellatif,___Amany M Kamal and Nisreen DM Toni(2016) The Efficacy of Pomegranate (<i>Punica granatum</i>) Peel Extract on Experimentally Infected Rats with <i>Blastocystis</i> Spp <i>J Infect Dis Preve Med</i> .4:11</p>
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**5- Studies on host-parasite interaction and strategies of iron and glucose acquisition by some protozoa and helminthic**

Journal published paper

(International journal)

\*Noha H. Abdelgelil,  
Manal Z.M. Abdellatif,  
Ekhlal H. Abdel-Hafeez,  
Usama S. Belal, Rabie M.  
Mohamed, Abdel-Razik H.  
Abdel-Razik, Kamel M.A.  
Hassanin, Ahmed Abdel-  
Wahab (2019). Effects of  
iron chelating agent on  
Schistosoma mansoni  
infected murine model.  
Biomedicine &  
Pharmacotherapy 109 28–  
38

(National journal)

(International journal)

<p><b>6-Studies on human wound (traumatic) myiasis in Minia city, Egypt</b></p>	<p>Journal published paper  (International journal)</p>	<p>*Ekhlas H. Abdel-Hafeez<sup>1</sup>, Rabie M. Mohamed<sup>1*</sup>, Usama S. Belal<sup>1</sup>, Ahmed .M. Atiya<sup>2</sup>, Masaya Takamoto<sup>3</sup>, and Fumie Aosai<sup>3</sup>. Human wound myiasis caused by <i>Phormia regina</i> and <i>Sarcophaga haemorrhoidalis</i> in Minia Governorate, Egypt. (2015). Parasitol Res October 2015, Volume 114, Issue 10, pp 3703-37091</p>
<p><b>7 Studies on histopathological changes induced by some protozoa and helminthic infection</b></p>	<p>Journal published paper  (International journal)</p>	<p>*Azza K. Ahmed , Ekhlas H. Abdel-Hafeez and Amany M. Kamal. some studies on spontaneous <i>Hymenolepis diminuta</i> infection in laboratory rats. J. Egypt. Soc. Parasitol. (JESP), 45(1), 2015: 115 - 124</p> <p>* Detection and molecular</p>



		<p>identification of free living amoeba (Acanthameba and Negleria spescies) from differen soources in Minia Governorate,Egypt</p> <p>* Isolation and identification of pathogenic Acanthamoeba spescies from air conditioning systems ,Egypt</p>
<p><b>8-Research of new molecular targets for the development of new treatment strategies</b></p>	<p>Journal published paper (National journal)</p> <p>MD thesis</p>	<p>*Noha H. Abdelgelil, Manal Z.M. Abdellatif, Ekhlash H. Abdel-Hafeez, Usama S. Belal, Rabie M. Mohamed, Abdel-Razik H. Abdel-Razik, Kamel M.A. Hassanin, Ahmed Abdel-Wahabd (2019). Effects of iron chelating agent on Schistosoma mansoni infected murine model. Biomedicine &amp; Pharmacotherapy 109 28–38</p>

	Published paper from thesis	
<p><b>9- Biological and molecular diagnostic studies of some prevalent protozoan and helminthic parasites</b></p>	<p>Journal published paper (International journal)</p>	<p>*Blastocystis spp. Infection among IBS patients: various diagnostic and epidemiological study.</p> <p>*Detection and molecular identification of free living amoeba (Acanthameba and Negleria species) from different sources in Minia Governorate, Egypt</p> <p>*Prevalence and identification of some Cryptosporidium species in human fecal specimen by PCR-Restriction Fragment length polymorphism analysis in Minia Governorate.</p> <p>* Nabil S. Gabr, Manal Z. M. Abdellatif, Rabie M. Mohamed, Usama S. Belal, Manar M. Sanadeki and Wael M. Abdel-Ghany Blastocystis spp. Infection among IBS</p>

		<p>patients: various diagnostic and epidemiological study. J Soc Egyp Parasitol, 48(1).2018:117-126.</p> <p>* Molecular characterization of Cryptosporidium isolates from humans by nested polymerase chain reaction - restriction fragment length polymorphism (nPCR-RFLP) analysis in Egypt” by Gabr N.S.1, Ahmed A.K., Belal U.S., Abd Rabou R.A.M., Ahmed R.F. and <b><u>Abdel-Hafeez E.H.</u></b> has been accepted for the publication in <b>Tropical Biomedicine March Issue Volume 36 No 1, 2019.</b></p>
<p><b>10- Factors associated with the prevalence and incidence of helminthic and protozoan infection.</b></p>	<p>MD thesis</p> <p>MD thesis</p>	<p>*Parasites detected in immunocompromised children in Pediatric Minia University Hospital</p> <p>* Manal Z. M. Abdellatif, <b>Amany M. Kamal</b>, Noha H. Abdelgelil and Manar M. S.A. Nasr Parasites Detected in Immunocompromised Children in Pediatric Minia University Hospital. MJMR, 29 (3): 111-123</p>

	<p>Paper published from thesis (National journal)</p> <p>Paper published from thesis (International journal)</p>	
<p><b>11- Some studies on storage Mites and Ticks.</b></p>	<p>Master thesis</p> <p>Paper published from thesis</p>	<p>A. K. Ahmed, A. M. Kamal, N. M. E. Mowafy and E. E. Hassan (2020): "Storage mite infestation of dry stored food products and its relation to human intestinal acariasis in the city of Minia, Egypt" Journal of Medical Entomology. 57(2):329-335</p>

سابعاً أهداف الخطة البحثية لسنة ٢٠٢٠-٢٠٢٤ بناء على ما سبق ذكره:

**Objectives of research plan of medical parasitology department for years (2020-2024):**

- 1- Estimate the prevalence and epidemiological Factors of parasitic infection immunocompromised patients.
- 2- Address the influence of intestinal parasitic infection and their associated risk factors in iron deficiency anemic children in Minia city.

3-Genotyping of some protozoal diseases (e.g *Blastocysts*...).

4-Prevalence of some emmerging protozoa causing diarrhea.(e.g:Cyclospora ,Microspora....).

5-Effect of parental and oral hypoglycemic drugs on experimentally infected mice with *S.mansoni*.

6-Evaluation of using some herbal medicinal plants and their combination with chemical drugs in the treatment of parasitic infections.

ثامنا :الجدول الزمني للخطة البحثية ٢٠٢٠-٢٠٢٤:

Time table	Success indicators	Activities	Expected results and output	Objectives
2020	1-Achieving of Master research on time	Master thesis	List of parasites in renal patients in Minia city	Estimate the prevalence and epidemiological risk Factors of parasitic infection immunocompromised patients.
2021	Publish of research in local and international journals of parasitology	Journal published paper	List of parasites causing diarrhea in adults' patients in Minia city	Prevalence of some emerging protozoa causing diarrhea. (e.g:Cyclospora ,Microspora...)
	Publish of research in local and international journals of parasitology	Journal published paper	Introducing of combined treatment of PZQ and oral hypoglycemic drugs in <i>S mansoni</i> infection	Effect of parental and oral hypoglycemic drugs on experimentally infected mice with <i>S.mansoni</i> .

2022	Achieving of MD research on time	MD thesis	List of subtypes of Blastocyst in immunocompetent and immunocompromised patients	Genotyping of some protozoal diseases (e.g. Blastocysts...)
	Publish of research in local and international journals of parasitology	Journal published paper	Using of some herbal plants as a treatment or adjuvant treatment in parasitic infections	Evaluation of using some herbal medicinal plants and their combination with chemical drugs in the treatment of parasitic infection
2023	Publish of research in local and international journals of parasitology	Journal published paper	Use of herbal extracts as alternative antiparasitic therapy	- Effect of some planet extract on invitro and in vivo parasitic infections
2024	Achieving of Master research on time	Master thesis	List of parasites in patients with iron deficiency anemia in Minia city	Address the influence of intestinal parasitic infection and their associated risk factors in iron deficiency anemic children in Minia city.