



المعهد التقني /كوفة  
قسم تقنيات المختبرات الطبية  
2025-2024

الدراسة الصباحية

عناوين بحوث التخرج 2024-2025

**1- أ.م.د. أحمد فاضل الشاوي**

**Title: The Role of Fibroblast Activation Protein Alpha (FAP- $\alpha$ ) in Malignancy**

**Abstract:** Fibroblast activation protein  $\alpha$  has been linked to malignancy. It is a type II transmembrane serine protease belonging to the S9B prolyl oligopeptidase family. Here, we aimed to explore the relation between FAP- $\alpha$  with breast, colon, and pancreatic cancers. We search on Pubmed, Google scholar, Crossref for 12 published articles.

**2- أ.م.ميسون خضير عبد العباس**

**Title: Survey study of H.pylori in ALNajaf governorate**

**Abstract:** Background: Helicobacter pylori infection causes chronic gastritis, which can progress to severe gastroduodenal pathologies, including peptic ulcer, gastric cancer, and gastric mucosa-associated lymphoid tissue lymphoma. H. pylori is usually transmitted in childhood and persists for life if untreated. The infection affects around half of the population in the world but prevalence varies according to location and sanitation standards. aim: this research aims to survey the study of H. pylori spreading in Al Najaf and explore the causes, highlighting recent medical advancements. Materials and Methods: The current study relied on designing a special form that included the patient's name, age, gender, and type of disease, and determining the positivity or negativity of the test for H. pylori. Results: The current study proved that the rate of infection with H. pylori reached 24.07% of those visiting the medical clinic who were suspected of being infected with H. pylori. The study also proved that the rate of infection among women was higher than among men, as the infection rate reached 76.92% compared to 8.23% among men, and that the age group (31-40) years is the age group most affected by digestive system diseases, while the age group from 21-30 years is the age group most affected by H. pylori. Conclusion: We conclude from the current study that digestive system diseases are widespread in Najaf Governorate and that stomach bacteria is one of these diseases, which is considered an indicator of the high level of water and food pollution, and that women are more susceptible to infection with this bacteria, which is an indicator of weak immunity and psychological instability, which is associated with the pressure of life and difficult circumstances

3- أ.م.د. رسل عارف عبد علي

**Title: Relation urinary tract infection with pregnancy**

**Abstract:** Aim of study: this study aimed to determine relation of urinary tract infection with analysis data to pregnancy. Patients and Methods: Clinical data were obtained by medical patients attended Al-UroubaHealth Center in Najaf during January and March 2025. Results: fifty patients with urinary tract infection were included in this study. The result appears significant increase in PCV and WBC in pregnant woman as compared with non-pregnant and non-significant decrease in Hb level as compared with Non pregnant woman and significant elevate in glucose level in pregnant woman as compared with non-pregnant woman. Conclusions: urinary tract infection most common in pregnant woman due to hormonal and physiological change occur during pregnancy.

4- م.د. حيدر علي محمد

**Title: The Association between Gene Polymorphisms and Autism Spectrum Disorder**

**Abstract:** Autism Spectrum Disorder (ASD) is a neurodevelopmental condition that appears in early childhood and affects social communication, behavior, and interaction. Its severity and symptoms vary among individuals. Genetic factors are considered significant in its development, though results differ between populations. This study conducted a meta-analysis to investigate the association between specific gene polymorphisms and ASD. Studies were selected based on clear criteria: relevance to the topic, availability of statistical data, and publication in peer-reviewed journals. Data such as sample size and effect size were collected, and studies were categorized by region (Asia and Africa) to explore geographical differences. Statistical analysis was performed using SPSS, including tests for heterogeneity and publication bias. The results were RELN gene: SNP rs736707 showed significance in some studies. SNP rs2229864 showed strong significance ( $p = 0.001$ ), though results varied by region. GABRB3 gene SNPs rs2081648 and rs1426217 showed no statistical significance and no clear association with ASD. GABRB5 gene SNPs rs7173260 and rs35586628 also showed no significant role in ASD

**Title: Determining calcium levels in patients with type 2**

**Abstract:** The relationship between calcium and type 2 diabetes is complex. Calcium plays a crucial role in insulin secretion and glucose metabolism. Calcium plays a key role in insulin secretion and sensitivity, making it important in type 2 diabetes (T2D). It helps pancreatic beta cells release insulin, while its deficiency may contribute to poor blood sugar control and insulin resistance. Calcium absorption is closely linked to vitamin D, and low levels of both have been associated with a higher risk of T2D. While sufficient calcium intake may help reduce diabetes risk, excessive amounts can lead to vascular calcification and other complications. Proper calcium balance is essential for maintaining insulin function and overall metabolic health

**Title: Levels of Liver Enzymes in Patients with Hydatid Disease**

**Abstract:** Human hydatid cysts were surgically removed from 30 patients who underwent surgery for hepatic, pulmonary, spleen, heart, and peritoneal cavity cystic echinococcosis (CE) at hospitals from various provinces of Iraq, between March 2012 and January 2013. According to questionnaire sheet that used for demographic, epidemiology, and clinical data for each patients, the result showed the incidence of CE was higher in females than in males and most infections 33.33% were at the age group (21-30) year

**Title: A Study on the Influence of Major Health Factors on Lung Cancer Progression: Diabetes, Smoking, Age, and Gender**

**Abstract:** Lung cancer is one of the leading causes of cancer-related deaths worldwide, and its incidence is significantly influenced by a variety of risk factors, including smoking, diabetes, age, and gender. This study aims to evaluate the relationship between these risk factors and lung cancer among 189 patients diagnosed at the Oncology and Blood Diseases Hospital in Najaf, Iraq. Data were collected on variables such as smoking habits, the presence of diabetes and hypertension, as well as age and gender. The results indicate a significant correlation between smoking, hypertension, and diabetes with lung cancer. Additionally, age and gender were found to contribute to the development of the disease, with older individuals and males showing higher incidence rates. This research highlights the importance of early screening and preventive strategies to combat lung cancer, especially in high-risk populations

**Title: Effect of probiotic on human health**

**Abstract:** The human gastrointestinal tract is colonized by a complex ecosystem of microorganism Intestinal bacteria are not only commensal but also undergo a symbiotic co-evolution with their host. Beneficial intestinal bacteria perform numerous important functions, such as producing various nutrients for their host, preventing infections caused by intestinal pathogens, and modulating a normal immunological response. Therefore, modifying the intestinal microbiota to achieve, restore, and maintain a favorable balance in the ecosystem and enhance the activity of microorganisms present in the gastrointestinal tract is necessary for improving the host's health. The introduction of probiotics, prebiotics, or synbiotics into the human diet is beneficial for intestinal microbiota. These may be consumed .in the form of raw vegetables and fruits, fermented pickles, or dairy products

**Title: Association of NFkB1 gene polymorphism with inflammatory markers in patients of type 2 DM with and without renal involvements**

**Abstract:** Aims: To evaluate the association of nuclear factor kappa B1(NFkB1) gene polymorphism in patients of diabetes mellitus with or without renal involvement in Najaf province. Material and Methods: Consecutive Patients of Type 2 Diabetes Mellitus (DM) with or without microalbuminuria attending Al-sadder teaching hospital in between JAN. 2025 through February 2025 were recruited in this study. Patients were subjected to blood and urine investigations. DNA extraction and Restriction Fragment Length Polymorphism (RFLP) was done in Al-amin scientific lab. Controls were unrelated healthy attendants with no history of Diabetes Mellitus, Chronic Kidney Disease (CKD). Results: Mean Fasting Blood Glucose, urea, creatinine, HBA1c, were significantly higher in diabetes mellitus and diabetic nephropathy groups than control group. Urinary Albumin Creatinine Ratio, was higher in diabetes mellitus and nephropathy with p value ( $< 0.001$ ) respectively. In between DM and Diabetic Nephropathy groups nfkb1 gene expression, were significantly increased in Diabetic nephropathy with p value ( $< 0.01$ )

**Title: Survey Study of Breast Cancer in AL-Najaf governing 2024**

**Abstract:** Background: Breast cancer is a growing concern in Iraq, posing significant health challenges for Iraqi women. The objective of this study was to describe the demographic and clinical characteristics associated with breast cancer among Iraqi women, with a specific focus on gender& age-related differences. Materials and Methods Medical records of 540 patients diagnosed with breast cancer during 2024 were retrospectively analyzed. Demographic information, clinical history, presentation details, treatment modalities, and outcomes were

collected and analyzed. Results Among the studied cohort, 540 of breast cancer cases were diagnosed in men and women 10 (1.852 %) & 530 (98.149 %) respectively. Marital status correlated significantly with age 45 to 55 where (31.667 %) of those diagnosed before 50 being married compared to 74.7% of those diagnosed after 50. Notably, 122 (98.387 %) of patients diagnosed before 45 had breastfeeding duration of 1–3 months, contrasting with 115 (98.3 %) of those diagnosed after 55. Diabetes mellitus, hypertension, hypercholesterolemia, heart disease, and vitamin D deficiency were significantly more prevalent among patients diagnosed after 55. The findings emphasize the need for targeted public health campaigns, early detection initiatives, and treatment optimization to improve patient outcomes and mitigate the burden of breast cancer. Conclusion: The study's findings indicate that in 2024 Iraqi women residing in AL-Najaf now . (have a higher prevalence of breast cancer, among the age group of (45-55

-11 م.م. اقبال يوسف عبد

### **Title: Diagnosis the Thalassemia disease in Al Zahra educational Hospital**

**Abstract:** Identification purpose Thalassemia by a brief history and The extent of the impact of this disease on life , also learn about isolation methods , diagnosis and treatment of this disease and an examination facility to study the results practical tests for Al Zahra Teaching Hospital in Najaf Governorate for a month Fro 3/2/2025t4 /3/2025 until you are Able to know the incidence and Comparing it with the result of previous years for the purpose of determining levels From the injury and how high it is or For the purpose of counting and Address future plans to contribute to the reduction The spread of this disease through Awareness campaigns for the Ministry of Health and strict enforcement For help on sources you contribute to Transmission of this disease In the present study the statistical of date show the most age group undergo from the thalassemia disease is the child group means have (0\_12) years , while the little age group undergo from disease is the ten age group means have age between (12\_18) years ,The second parameter is the blood group with disease , the result show the first group have most infection is the O blood group , the second group is the A ,So B group is less and finally the most little group infected is the AB group ,The Rh factor also have Relation with infection the Results show .the Rh+ is more infected with thalassemia than Rh- in all blood group

-12 م.م. نور حسن ناصر

### **Title: Ganoderma lucidum pharmacological activity: Review**

#### **Abstract:**

غانوديرما لوسيدوم فطر ذو خصائص طبية عالية، استُخدم في الطب الشرقي لسنوات عديدة. يتميز بخصائص دوائية وعلاجية واسعة، وقد استُخدم لسنوات عديدة كمعزز للصحة. يحتوي على مركبات حيوية نشطة متنوعة تُحسّن جهاز المناعة، ولها خصائص مضادة للأكسدة، ومضادة للأورام، ومضادة للالتهابات، ومضادة للفطريات، ومضادة للميكروبات. تشمل المركبات النشطة التربينويدات والسكريات المتعددة، بالإضافة إلى البروتينات والدهون والفينولات والستيرويدات، وغيرها. في المراجعة التالية، نلخص بإيجاز أنشطتها البيولوجية، مثل مضادات الأكسدة، ومضادات البكتيريا، ومضادات الفطريات، ومضادات الأورام، ومضادات الفيروسات، ومضادات الالتهابات. على الرغم من أن غانوديرما له العديد من التأثيرات الطبية التي أكدتها الدراسات المخبرية والحيوية الموجزة في هذه المراجعة، إلا أن هناك بعض القيود. تواجه التجارب السريرية نقصاً كبيراً في المكونات النقية. كما أن التحديد الدقيق للمركبات الناتجة يمثل مشكلة. بالإضافة إلى ذلك، كانت معظم الدراسات المشمولة صغيرة، وكانت هناك مخاوف بشأن الجودة المنهجية لكل دراسة. وقد أظهرت الدراسات أن الجانوديرما يتمتع بإمكانيات قيمة للوقاية من السرطان وعلاجه. على أي حال، لا يمكن استخدام الجانوديرما لوسيدوم كعلاج أولي للسرطان.

**Title: Urinary tract infections and their impact on people with diabetes**

**Abstract:** Background: The study of urinary tract infections (UTIs) caused by various pathogenic bacteria in diabetic patients is one of the challenges of sustainable development, and these bacteria can cause serious harm to human health. Aim: The study aimed to distinguish between the bacterial types that cause urinary tract infections (UTIs) in people with and without diabetes of different ages, both males and females, to determine which are more severe. Methods: We conducted microscopic and macroscopic examinations of urine samples, along with cultures of bacterial samples, from (80) patients of both sexes and ages presenting with urinary tract infections (UTIs) Al Sadr Medical City laboratories in Najaf Governorate, Al-Sajjad Health Center laboratories, and several private laboratories in Najaf Governorate. The study included patients of both sexes and of different ages suffering from urinary tract infections (UTIs). The study was conducted between December 2024 and March 2025. Results: The results showed that women are more susceptible to urinary tract infections, especially those with diabetes, than those without the disease, and that the age group most affected is the elderly. Due to the weakened immune system, lifestyle, and heavy responsibilities women bear, bacteria were the most commonly cultured on various culture media. Conclusion: Given the importance of urinary tract infections (UTIs) in diabetic patients, their impact on individual health, and their implications for community health, it has become necessary to study which bacteria are most influential in UTIs and which cases are more severe, both in diabetic and non-diabetic patients



أ.م.د. أحمد فاضل الشاوي

رئيس قسم تقنيات المختبرات الطبية