



University  
October University for  
Modern Sciences and Arts  
Established by Dr. Nawal El Degwi in 1996



Faculty of  
Pharmacy

Graduation Projects Book  
2016/2017

# Organization Committee

**Prof. Dr. Hanan El Laithy**

Dean of Faculty of Pharmacy

## Graduation Project Coordinators

**Dr. Ghada Refaat**

**Dr. Maha Kamal**

**Assoc. Prof. Dalia Mamdouh**

**Edited By**

**Souha Hussam**

**Sherine Gamal**

*“MSA University would like to recognize and celebrate the outstanding achievements of pharmacy students and their great participation in the development of the pharmaceutical field. We are very proud of our students. They excelled in their field and positively contributed to their community.”*

Graduation Project Committee  
Spring 2017

Dear Graduating Students,

“Congratulations Dear Pharmacy seniors, it is such a pleasure to celebrate your success and outstanding achievements. You have set the highest goals and realized great progress. As you start your journey, the first thing you should do is throw away that store-bought map and begin to draw your own. Wishing you all a future filled with brightest blessings.



**Dr. Nawal El-Degwi**  
Head of board of trustees of  
MSA University

Now it's time for you to move on to what's next. But you must not let anything deter you from taking those first steps. Don't spend so much time trying to choose the perfect opportunity, that you miss the right opportunity. Recognize that there will be failures, and acknowledge that there will be obstacles. But you will learn from your mistakes and the mistakes of others, for there is very little learning in success.

This year, you have completed your journey as a students, but the journey will never end at MSA University, as we support our graduated students and will always be there celebrating your success. Your success makes MSA's worldwide recognition a reality; as you will all be receiving a British equivalent degree from our partner “University of Greenwich”, you have undoubtedly took a leap and have an edge over your counterparts. MSA University is so proud of your hard work and great achievements therefore we decided to launch an abstract book for graduation project. A book that includes essence of your hard work,, and documents your progress to encourage future seniors.

At MSA University there are no Goodbyes, as we wholeheartedly looking forward to witness your success. All the best my dear students, we are so proud of you!”

Dear Graduating Students,

“On the behalf of all MSA University and all of you lecturers and teaching assistants, I congratulate you deeply on your approaching graduation. Our focus here has been to enable you to succeed on all aspects that a multitude of hardware and software technologies, exclusive to MSA Pharmacy students, have been readily available to you, along with our well-equipped facilities and highly qualified staff that has helped us bolster your skills and post your capabilities.



**Prof. Dr. Khayri Abd El Hamid**  
President of MSA University

We’d also like to sincerely thank all of our faculty members who are always there, not only to handle the academic aspect of student life, but also to tackle social issues and offer there whenever needed. I have to say they have been working tirelessly to ensure your success.

Our mission is to ensure that the latest trends are applied to core curricula and the academic facilities. MSA also takes pride in its diversified cultural accomplishments that aim to help new graduates after graduation. I truly believe you will witness a great demand due to the quality of your education and hands-on experience.

I’m very proud of all of you and of all your achievements, and am confident that there are more achievements to come from you.”

Dear Seniors 2017,

“I am honored to witness the end of an educational journey and the beginning of a new one. We share a bitter sweet moment. Not long ago our graduates came here for the first time as freshmen students and we watched them grow into responsible young adults.



**Prof. Dr. Hanan El-Leithy**  
Dean of Faculty of Pharmacy  
MSA University

Class of 2017, you will be greatly missed.

Our graduates have worked hard throughout 5 years to reach the level we are proud to present in this year’s graduation projects. MSA curricula provide the latest scientific theories alongside the necessary practical training. We were also keen on enhancing computer, presentation and communication skills through interactive assignments, awareness campaigns and scientific events. What our students have done in their projects resembles what many postgraduate programs offer.

I believe that our graduates leave us armed with the knowledge, the experience and the drive to make an impact.

Finally, I would like to say to class 2017, Follow your passion, proceed with confidence, your future awaits. You have made your parents, university and yourself proud, CONGRATULATIONS!”

**CLASS OF 2017**



**CONGRATULATIONS**  
congratulations

# Acknowledgments

On Behalf of MSA University, we wish to thank the following respectable institutes for their generous contributions to the graduation projects. We are indeed grateful to you for your enthusiastic support.





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# Guests' Quotes

“The students here are well trained, they are well educated, and they are taught in some impressive facilities and engage in some world leading research which is of relevance to the Egyptian people. Overall, it has been a very interesting visit and we are looking forward to coming back in future times.”



**Prof. Peter Griffiths**

Head of Department for Chemical, Pharmaceutical and Environmental Sciences, University of Greenwich



**Dr. Samer El Daher**

Link tutor for MSA collaboration with University of Greenwich and Head of Life Sciences & Sports Department in the University of Greenwich

“Our Collaboration extends for a number of years. Ten years now and I have been involved with MSA all that time since the collaboration. What we like to do is complement that by involving them in a large number of research projects. Up to date, they have improved very much and they have contributed greatly to our Key Performance Indicators both in MSA and University of Greenwich. Overall, I am extremely impressed with the students, the staff and everybody in MSA.”

“I am impressed with the quality of work, standard of education and the care the students get here in the University, whether it is facilities, faculties, available shops, libraries, labs, Wi-Fi services, etc... I am very impressed.”



**Dr. Maan Al Gaillani**

Resident Representative of the University of Greenwich in MSA



“I am very proud of what I’ve seen, and I’ve noticed a gradual progression over the years that have shown excellent quality students that are graduating from MSA, Cairo.”

**Dr. Andrew Mendham**

Senior Lecturer, University of Greenwich

“I am really enjoying being here as an external examiner. I liked the quality of the course and I’ve really enjoyed watching some of the absolutely excellent presentations on research projects. So I am looking forward to coming back.”



**Dr. Nik Buurma**

Lecturer, Cardiff University



“I was impressed with their performance and skills, whether it being preparing posters or doing oral presentations. In fact, this is something special for MSA University and it is a great privilege. I appreciate all the staff members’ efforts to bring such an eventful day that was strongly impressive to all attendees”

**Prof. Dr. Khaled Abouzid**

Professor of Pharmaceutical chemistry, Vice dean of learning and students affairs, Faculty of Pharmacy – Ain Shams University

I am impressed by the presented projects; the students are skilled and well-educated. It’s a unique and fruitful experience at Faculty of Pharmacy, MSA to incorporate graduating students in a real research practice to solve out issues that are currently exposed to Egypt or worldwide. Moreover, MSA is keen on linking the students’ projects with pharmaceutical companies which boost the quality of their research.



**Prof. Dr. Hossam About Enein**

CEO, SEDICO Pharmaceutical Company



**Dr. Mahmoud Sakr**

President of the Academy of Scientific  
Research & Technology

“The detection of viruses mainly depends on genetic engineering and molecular biology. The “National Conference on Biochemistry and Molecular Biology” is an annual conference held this year in MSA, for the university’s leading role in research and medical advancements.”

“I’m overwhelmed with the sophisticated performance shown by students. I never expected that students would be able to show quality, organization, discipline and outstanding presentation skills. Based on the presentations that I’ve witnessed, I believe that MSA Pharmacy students have a distinctive future in the Egyptian Pharmaceutical market.”



**Dr. Yosry Abdallah**

Director of Training Department,  
SEDICO Pharmaceutical Company



**Dr. Hadeer Rostom**

Director of the Egyptian Pharmaceutical  
Vigilance Centre

“MSA, as usual, cares about modern science and new Pharmaceutical fields in Egypt.”

“I appreciate the positive attitude of MSA in collaborating with different Pharmaceutical Companies, which provides the students with courses and trainings that are important to the faculty, the patient and the pharmaceutical industry in general.”

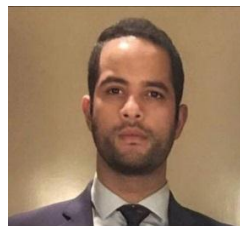


**Dr. Azzam Mahran**

Medical Director, SEDICO Pharmaceutical  
Company

# Alumni's Quotes

“Years at MSA, faculty of pharmacy, were meant to be experienced not captured! And the most beautiful, important part of MSA's culture was its people!”



**Mohamed El-Tabei, 2015**  
Marketing specialist assignee at Eva Pharma



“The Faculty of Pharmacy at MSA University is a light house amidst the turbulent ocean of academia. It is a beacon of guidance for those who seek it, and a place which allows you to harness your raw talents and develop skills that will surely contribute to your success in life.”

**Mohammed Ali Hassan, 2016**  
King Faisal Specialist Hospital and  
Research Centre - KSA

“Nobody graduated from our faculty not wishing to go back. We take every opportunity to visit the faculty and the friendly staff members. I wish I could go back and spend all this time all over again.



**Iman Elkhashab, 2011**  
ElMostakbal Medical Center, AlShorouk



**Ibrahim Abo-El magd, 2014**

Owner & Manager of Community Pharmacy  
MSc student of Analytical Chemistry

“MSA acquires us most of qualifications and skills required to improve our characters and participate through the community in ideal efficient way. Whether it being marketing, managing, consulting or research field, MSA made us able to compete with other graduates in different fields. Continuous learning, consulting, development, and communication made its graduates feel that MSA is not just a university, but it is a real family who stand with us through each step in our career. We feel proud to be graduated from MSA.”

“I applied for a project manager assistant position in an NGO called Egyptian college for critical care physicians. And there I met Prof. Dr. Sherif Mokhtar, the god father of the critical care medicine in Egypt and the Middle East. On the day I was presenting my new approaches, I recalled every presentation I did on the faculty’s campus. In the middle of my presentation, that Kasr AlAiny critical care department professors and doctors were attending, Prof.



**Lina Omar, 2012**

Project manager of Egyptian cardiac arrest project, ECCCP

Dr. Sherif interrupted me saying, “Where have you graduated from again Dr. Lina?” I replied spontaneously, “MSA”. He smiled back and said, “It looks like a great place to learn at. Welcome to my team as our new project manager.” I can’t describe the happiness, pride and the overwhelming feelings of success and gratitude I felt to MSA at this moment.”

Congratulations!

# Honors

*“Intellectuals solve problems. Geniuses prevent them”*  
Albert Einstein

**Fady Danial, Feras Abusunawber,  
Mariam Beshara, Mohamed  
Deabes and Nada Mahmoud**

**“Synthesis and characterization of  
multifunction gold nanoparticles for diagnosis  
and therapy”**

**“Synthesis of Resveratrol Gold NanoParticles  
(GNPS) as Anticancer Drug Delivery Carrier”**

*The two graduation projects participated in the “3rd Research Coordination Meeting of Coordinated Research Project” under the title: “Nanosized Delivery System on Radiopharmaceuticals” in International Atomic Energy Authority (IAEA), UN, Vienna, Austria.*





## Janset Safwat, Nehal Essam and Hend Essam

### In-Vitro Study of Combined Therapy of Thymoquinone and 5-Fluorouracil against Colon Cancer Cell Lines (CACO-2) and (HCT-116)

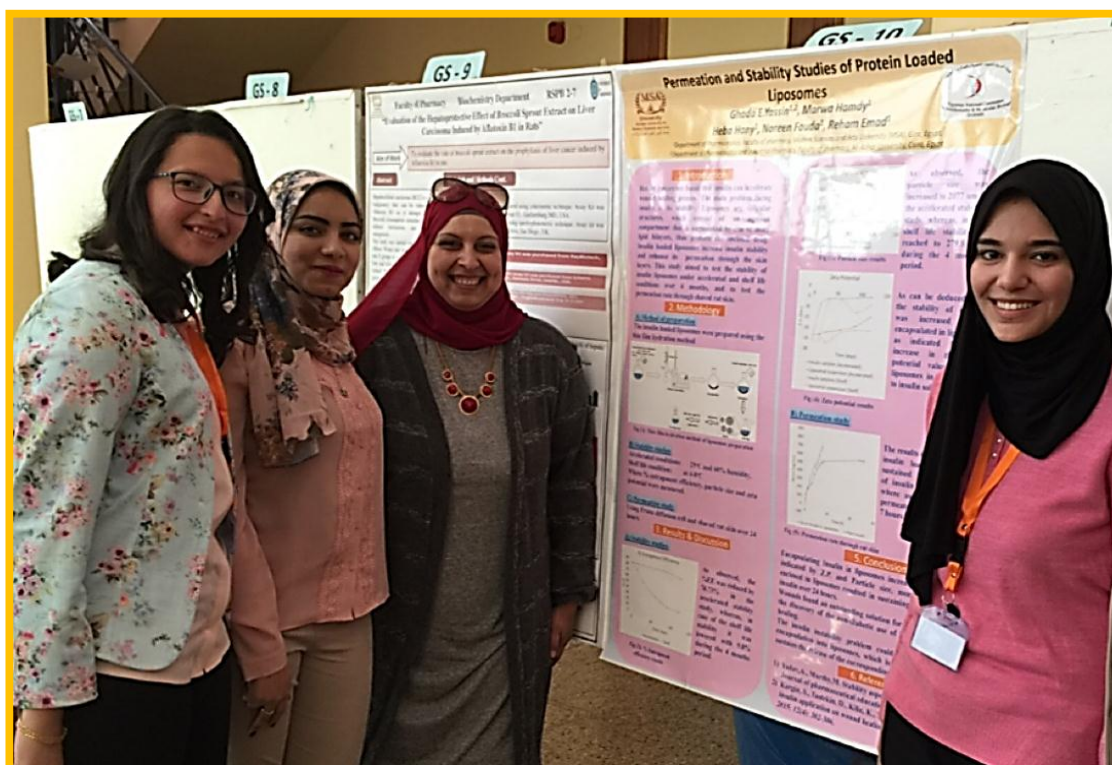
Participated in “14<sup>th</sup> National Conference on Biochemistry and Molecular Biology, under the title: “Advances in Biomarkers, Genetic Diagnosis and Laboratory Medicine of Diseases”. The poster won first place in the best poster competition.



# Heba Hany, Nourreen Hesham and Reham Emad

## Permeation and Stability Studies of Protein Loaded Liposomes

Participated in “14<sup>th</sup> National Conference on Biochemistry and Molecular Biology, under the title: “Advances in Biomarkers, Genetic Diagnosis and Laboratory Medicine of Diseases”. The poster won second place in the best poster competition.



# Hend Waheed, Menna Mohamed and Omar Ahmed

## Green Analysis of Binary Mixture Used in Common Cold by Multivariate and Univariate Spectrophotometric Methods

Participated in “8<sup>th</sup> International Scientific Conference of Faculty of Pharmacy, Cairo University, under the title: "Pharmacy in Egypt: Ensuring Access to Health".



# Greenwich Scholarships

Five MSA Pharmacy graduates were awarded MSc and PhD scholarships to the University of Greenwich this year.



**Mohamed Abdelghany, 2016**  
PhD in Clinical Pharmacy scholarship

“During the journey of our life, we come across by some exceptional experiences that leave positive marks on our personality. Being one of MSA family members is considered the most unique mark in my life. So I would never be thankful enough to my University for building up my personal and educational skills starting from being one of MSA students ending up being a

successful postgraduate who has the ability to utilize my skills in a professional manner.

“Grateful for the exceptional learning journey I spent in MSA. Thank you MSA for the innumerable opportunities that you always provide us with.



**Nada Kotrob, 2016**  
MSc in Pharmacognosy scholarship



“Faculty of pharmacy, MSA University, helped us to incorporate in real research practice. It gave us the opportunity to use advanced techniques and methodologies in our graduation projects which helped us reach our outstanding results in different pharmaceutical fields.”

**Hadeer khayal, 2016**

PhD in Clinical Pharmacy scholarship



“MSA offered me with incredible experiences and I will remain forever grateful for the lessons learned and the influences set before me. I was really blessed by caring staff and inspiring environment at MSA.

**Maha Alhadad, 2016**

MSc in Biochemistry scholarship



“MSA is not just my university; it’s a second home to me, where over the past five years I started to develop skills that have proven to support developing the person I am today.”

**Nourhan Alaa, 2016**

PhD in Clinical Pharmacy scholarship

# Top 9 Graduation Projects

*A spectacular achievement!*

*Your determination, hard work, and skills  
have paid off. Keep up your good work and  
continue to strive for perfection!*

*“It always seems impossible until it’s done”*

**NELSON MANDELA**

Analytical  
Chemistry

- **Current Trends in Chromatographic Techniques for the Determination of Certain Pesticides in Food**
- Supervisors: Dr. Sarah Salah & TA. Amr Mansour
- Ireeni Nabil - Marleen Micheal - Mostafa Khaled

Biochemistry

- **In-Vitro Evaluation of Lapatinib and Beta-ionone on MCF-7 Human Breast Cancer Cell Line**
- Supervisors: Dr. Ahmed Bader & A.L. Samer Atef
- Amira Sayed - Mennet-Allah Abubakr - Sohila Mahmoud

Clinical Pharmacy

- **Evaluation of the Use of Steroids vs. New Therapy in Idiopathic Pulmonary Fibrosis in Egypt**
- Supervisors: Dr. Soheir Aboelazm & T.A Salma Wagih
- Heba Allah Ashraf - Hagar Khaled - Nada Salah

Microbiology &  
Immunology

- **Surveillance of Enteric Viruses in Water from Ground Water, Reclaimed, Sprinkler Irrigation Systems and Water Drained In Nile River From Upper Egypt And Delta Region**
- Supervisors: Prof . Dr. Faten Bayoumi
- Rana Abd El-Tawab - Sara Ahmed

Organic Chemistry

- **Synthesis of Certain Pyrazolopyrimidine Derivatives as Antitumor Agents**
- Supervisors: Prof. Azza Taher & TA.Rania Mohamed
- Aziza Abd Elnaser - Nesma Essam - Rana Fawzy

Pharmaceutical  
Chemistry

- **Synthesis of Resveratrol Gold NanoParticles (GNPS) as Anticancer Drug Delivery Carrier**
- Supervisors: Assoc. Prof. Tamer Mostafa & TA. Nourhan Alaa
- Fady Danial - Mariam Beshara - Nada Mahmoud

Pharmaceutics

- **Evaluation of a Nose to Brain Targeting Nano-Formulation for an Anti-Migraine Drug**
- Supervisors: Dr. Gina El Feky & AL. Lamis Helmy
- Abdelrahman Ehab - Andrew Alber - Hesham Taha

Pharmacognosy

- **A Comparative Study between Different Essential Oils Used in the Treatment of Acne**
- Supervisors: Dr. Mahitab Helmy & TA. Nariman Ali
- Mariam Adly - Sara El Sayed - Samah Anwar

Pharmacology

- **Effect of Sulfuraphane on D-galactose Induced Renal Aging in Experimental Rats**
- Supervisors: Dr. Mona El Naa & AL. Maha Shouman
- Mayada Mohamed - Mirna Mohamed - Nourhan Abdel Hamid



## Current Trends in Chromatographic Techniques for the Determination of Certain Pesticides in Food (RSPAC2-13)



**Ireeni Nabil**



**Marleen Micheal**



**Mostafa Khaled**

**Dr. Sarah Salah  
TA. Amr Mansour**

Pesticides are substances which have shown beneficial effects of destruction of any pests or insects, but they also produce severe side effects that could harm human health including skin and eye irritation, certain tumors, pulmonary defects and liver, kidney damage in high doses. This project studied the analysis of different pesticides applied for different vegetables and fruits crops cultivated in Egypt. The selected pesticides were: Propamocarb hydrochloride, a fungicide used for the treatment of diseases caused by oomycetes to leaves, roots and soil; Thiamethoxam, a systemic insecticide in the class of neonicotinoids. Both pesticides were applied to cucumber crop and sampling was done over two weeks. In order to determine the trace analysis of both pesticides present in cucumber using advanced chromatographic techniques, a quick, easy, cheap, effective rugged (QuEChERS) was applied for preparation of the vegetable containing pesticide sample by using acetonitrile as solvent for extraction, then this extract was cleaned up using primary secondary amine (PSA). The extraction procedure was followed by the analysis using gas chromatography for thiamethoxam and HPLC-mass spectroscopy for promocarbHCl. By the end of this work, the proper duration and maximum residual limit (MRL) of the selected pesticides treatment were recommended for cucumber crops which agreed with FAO limits requirement.

## In-Vitro Evaluation of Lapatinib and Beta-ionone on MCF-7 Human Breast Cancer Cell Line. (RSPB2-2)



**Amira Sayed   Mennet-Allah Abubakr   Sohila Mahmoud**

**Prof. Ahmed Bader  
AL. Samer Atef**

Breast cancer occurs mainly due to mutation in PI3k/AKT and RAS/MEK/ERK pathways or mutation of BRCA1, BRCA2 and P53 genes. Tyrosin kinase inhibitors as lapatinib inhibit HER2 receptor which prevents the phosphorylation and activation of the signal transduction pathways to decrease cellular proliferation and induce apoptosis mechanism. Beta-ionone is a terpenoid antioxidant found in many plant oils which has antioxidant, antimutagenic, chemopreventive and antiproliferative activity. This study was done to investigate the effect of lapatinib and beta-ionone combination on MCF-7 human breast cancer cell line. MTT-based assay showed that lapatinib exhibited cytotoxic effect on MCF-7 cell line ( $IC_{50}=326.60 \mu M$ ) after 72 hrs. Beta-ionone showed a very low cytotoxic effect on MCF-7 cell lines ( $IC_{50}=38.95 mM$ ) after 72 hrs. The combination showed a decrease in the cytotoxic effect compared with lapatinib with an  $IC_{50}=429 \mu m$  after 72 hrs. Detection of apoptosis by annexin V/PI showed an apoptotic index of 11.34% for lapatinib, 6.31% for beta-ionone and 17.33% for the combination on MCF-7 cell line. Cell cycle analysis showed pre  $G_1$  apoptosis and cell cycle arrest at  $G_2/M$  phase for lapatinib, beta-ionone, and their combination. qRT-PCR results showed a more significant downregulation in HER2 gene expression using the combination rather than using lapatinib or beta-ionone alone. It can be concluded that the combination therapy showed a reduced cytotoxic effect, pre  $G_1$  apoptosis and cell cycle arrest at  $G_2/M$  phase, and downregulation in HER2 gene expression. Accordingly, the combination of lapatinib and beta-ionone may be more effective than the single use of any of them.

## Evaluation the Use of Immunosuppressant Vs Antifibrotic in Idiopathic Pulmonary Fibrosis in chest department El Kasr El Einy Hospital (RSPL2-7)



**Heba Allah Ashraf**



**Hagar Khaled**



**Nada Salah**

**Dr. Soheir Abo El Azm  
TA. Salma Wagih**

**Background:** Idiopathic pulmonary fibrosis (IPF) is a large and varied collection of pulmonary disorders due to an unidentified cause. Pirfenidone and nintedanib are recently approved treatments for IPF. Studies on these drugs showed promising results for reducing IPF progress. Though, limited studies have focused on monitoring symptoms and also recommendations are mostly concluded from evidence in other chronic diseases. **Aim of the work:** Evaluation of management regimen and clinical response of patients to the therapy and detecting all side effects and drug interactions caused by misuse of the new treatment strategy of IIPs and apply the role of clinical pharmacist in improving the patient outcome. **Patients and methods:** This study is prospective conducted for 9 months from the start of October 2016 to the end of June 2017 in chest department in El Kasr El Einy Hospital. Sixty patients of both sexes with age range (50-70) years with exclusion criteria Pregnant, Idiopathic Lung disease patients receiving drugs that may cause Idiopathic Lung Disease, and patients with chronic diseases. Diagnosed as IPF underwent detailed history taking, clinical examination, spirometry, HRCT and bronchoscopy. **Results** About 50% of patients developed IPF above age of 50. About 80% patients were males. About 70% patients had significant tobacco smoke exposure. Dyspnea was present in (95 %) patients and the majority had grade 3 and 4 dyspnea. Ninety percent of patients had cough. Clubbing of fingers was present in 70 %. The FVC range was  $52.5 \pm 15.2\%$ . One third of patients (33.3%) had corpulmonal. These patients treated with perfindone (60 %) and corticosteroids (40 %). Outcome measurements were equal for both treated groups of patients. **Conclusion** In our locality IPF patients age of presentation and other demographic, clinical and physiological features were more or less similar to those recorded worldwide. Pirfenidone is a novel antifibrotic agent which preserves VC and improves PFS has equal outcome as other line of treatment with less side effects.

## Surveillance of Enteric Viruses in Water from Ground Water, Reclaimed, Sprinkler Irrigation Systems and Water Drained In Nile River From Upper Egypt And Delta Region (RSPM2-13)



Rana Abd El-Tawab



Sara Ahmed

Prof. Dr. Faten Bayoumi

About 3.4 million people especially children die every year as a result of diseases related to water. Absence of treatment in most sources of used water led for producing human enteric viruses. There are more than 100 viral species that are the main cause of infection to human. Among the many viruses discharged are such pathogens as HAV, Polio virus, and Adeno virus. The significance of these viruses in human ranging between hepatitis, gastrointestinal, and poliomyelitis. Most of these agents transmitted via fecal oral rout or person to person contact. The aim of this article is to review and determine the sources of endemic viruses by using specific techniques. Polymerase chain reaction, real time, plaque viral inclusion and sample concentration using electronegative or positive membrane are some application for detection the enteric viruses that are considering as main source for contaminating water.

## Synthesis of Certain Pyrazolopyrimidine Derivatives as Antitumor Agents (RSPOC2-1)



**Aziza Abd Elnaser**



**Nesma Essam**



**Rana Fawzy**

**Prof. Azza Taher  
TA. Rania Mohamed**

Understanding cancer classifications, causes and detailed study of its line of treatment has enabled the identification of potential drug targets; one of the most promising drugs that have an effective anticancer activity is pyrazolopyrimidine. The heterocyclic fused ring pyrazolopyrimidine has drawn a huge consideration owing to its expanded applications in the field of pharmaceutical chemistry. Its derivatives synthesize in heterocyclic compounds containing active substitutions that can develop antagonism against malignant cell metabolism and have many mutagenic activities against the tumor cells. This review focused on the antitumor activity of the pyrazolopyrimidine containing compounds as well as the definition, classification, and treatment of cancer. Moreover, it summarizes the recent advances in the synthesis and biological activities investigations of pyrazolopyrimidine derivatives. Based on the previous review, the aim of this study is to synthesize a series of novel pyrazolopyrimidine containing compounds expected to have certain antitumor activity. The preliminary methods of synthesis of the pyrazolopyrimidine derivatives were include using reflux water condenser, filtration procedures, re crystallization process and drying (ovens, air drying). Finally, all the synthesized compounds will be biologically tested in vitro using different cell lines at the national cancer institute as antitumor agents.

## A Comparative Study Between Different Essential Oils Used in the Treatment of Acne (RSPG2-15)



**Mariam Adly**



**Sara El Sayed**



**Samah Anwar**

**Dr. Mahitab Helmy**  
**TA. Nariman Ali**

The volatile oils obtained from the barks of *Cinamomum aromaticum*, the dried flowers of *Lavendula dhofarensis* and fresh leaves of *Rosmarinus officinalis* collected from Egypt, in addition to a new herbal formula, were evaluated for their chemical composition and antimicrobial activity against the acne-causing bacteria aiming at finding an effective treatment for acne. The gas chromatography-mass spectrometry analyses revealed that linalool (32.55%) and lavendulyl acetate (11.84%) are the major constituents of *L. dhofarensis* volatile oil while 1,8-cineole (36.75%) and alpha pinene (20.52%) were found to be the major constituents of *R. officinalis* volatile oil and it was found that cinnamaldehyde represents about (89.53%) of the *C. aromaticum* volatile oil. Also, the GC/MS analysis revealed that the major constituents of the formula were cinnamaldehyde (34.59%) and 1,8-cineole (34.26%). The antimicrobial activity was assayed using the Kirby-Bauer method while the MIC test was carried using microwell dilution assay method. The three volatile oils along with the formula displayed an effective antimicrobial activity against *Staphylococcus epidermidis*. In addition, the volatile oils and the formula showed an effective antimicrobial activity against *Propionibacterium acnes* except the volatile oil of the rosemary. Also, by observation the formula showed the highest activity compared to each oil individually. This work has identified the effectiveness of candidates of volatile oil and their formula against bacteria causing acne.

## Effect of Surlforaphane on D-Galactose Induced Renal Aging in Experimental Rats (RSPO2-15)



**Mayada Mohamed**



**Mirna Mohamed**



**Nourhan Abdel Hamid**

**Associate Prof. Mona El Naa  
AL. Maha Shouman**

Aging is one of the biological phenomena that attract scientific research as it is a major risk factor for most common chronic diseases that affects most vital organs. Aging is remarked by changes inside the cell as oxidative stress, decrease in the level of antioxidant substance, high level of lipid peroxidation, inflammation and deterioration of DNA and RNA of the cell. Aging of the kidney means loss of function which marked by reduction in glomerular filtration rate (GFR) and renal blood flow (RBF) and is associated with narrowing of the arteries that supply the kidney which reduces the ability of nephron to excrete wastes. The aim of the present study is to investigate the effect of sulforaphane (SF; 10, 20 and 40 mg/kg body weight; p.o.), a broccoli extract, on D-galactose-induced renal changes associated with aging. Aging was induced in rats by subcutaneous injection with D-galactose (300 mg/kg/day for 5 days a week) for six consecutive weeks. Thirty albino rats were allocated into five groups (6 rats each). Group I served as a negative control group, group II served as positive control which will receive the D-galactose for 6 weeks while groups III, IV and V received D-galactose for 6 weeks then were injected with SF (10, 20 and 40 mg/kg; p.o.), respectively for 2 weeks. Twenty-four hours after the last dose of the SF, blood samples were collected, animals were sacrificed; kidneys were isolated. Sera were used to measure renal functions parameter *viz*, urea and creatinine. Renal tissue homogenate was used to assess the renal oxidative stress biomarkers and inflammatory mediators. Kidney tissues were also is fixed in 10% formalin for further histopathological examination. Results of the present study revealed that D-galactose-induction of renal aging is accompanied by an increase in sera renal function parameters, renal oxidative stress biomarkers; malondialdehyde (MDA) and glutathione (GSH), as well as renal inflammatory mediators. Moreover, renal aging is associated with elevation of the expression of nuclear factor like-2 (Nrf2). Treatment of D-galactose-injected rats with SF (10, 20 and 40 mg/kg; p.o.), for two weeks showed a amelioration in the distorted serum renal parameters as urea and creatinine, renal oxidative stress biomarkers as MDA and GSH, renal inflammatory biomarkers as TNF- $\alpha$  and interleukin-1 $\beta$  as well as Nrf2. Finally, our result proves that SF restores renal aging induced by D-galactose as it activate the release of Nrf2 which enhances the expression of antioxidant genes thus, overcomes oxidative stress.

## Evaluation of a Nose to Brain Targeting Nano-Formulation for an Anti-Migraine Drug (RSPT2-5)



**Abdelrahman Ehab**



**Andrew Alber**



**Hesham Taha**

**Dr. Gina El Feky**  
**AL. Lamis Helmy**

This study aims at enhancing the bioavailability of the anti-migraine drug; almotriptan; through designing a drug loaded lipid based nanoparticle formulation for its delivery through the nasal route directly to the brain. The nasal route excels itself over other routes, through its rapid onset of action, avoidance of hepatic first pass metabolism and enhanced patient compliance and above all direct targeting abilities to the brain. Migraine drugs work centrally and are mainly administered through the oral route which leads to decreased bioavailability in addition to the use of more frequent larger doses. Twelve different nanostructured lipid formulations were prepared using different lipids and surfactants. All formulations were assessed for their particle size, PDI, zeta potential and entrapment efficiency. Formula F7; composed of 1:1 Compritol: Labrafil as lipid phases, Labrasol and Tween 80 as surfactants showed the best combined physicochemical properties (PS 225.1 nm, PDI 0.273, ZP -22.9 V and entrapment efficiency of 61.81%) therefore, it was selected for the *in vitro* release profile determination in nasal conditions versus unformulated drug.



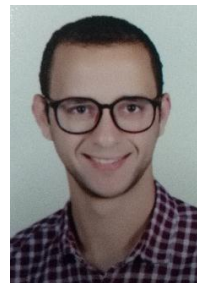
## Synthesis of Resveratrol Gold NanoParticles (GNPS) as Anticancer Drug Delivery Carrier (RSPHC2-6)



**Mariam Ashraf**



**Nada Mourad**















**Fady Nageh**



















**Associate Prof. Tamer Mostafa  
TA. Nourhan Alaa**



















Nanotechnology one of the most interesting fields as it's a new revolutionary aspect in many sciences. The field of 'Nano medicine' is widely distributed nowadays to treat and prevent the traumatic diseases. Also, the metallic Nano medicine has been made a great shift in the treatment of cancer by the use of the resveratrol gold nano particles (R-GNPs) using the green synthesis that allow the formation of non-toxic and biocompatible drug delivery carrier. R-GNPs showed a good stability in saline and other buffers mimicking the physiological PH. Loading the R-GNPs with doxorubicin as anti-cancer agent will form the under investigated drug. The DLS of the R-GNPs loaded with doxorubicin was  $\sim 58.9$  nm which is the optimum size to penetrate cancer cell. The MTT assay using both MCF-7 and HepG-2 cell lines under the experimental condition determined the biocompatibility of R-GNPs and R-GNPs loaded with doxorubicin. Inhibitory activity of R-GNPs and doxorubicin loaded R-GNPs against hepatocellular carcinoma cell lines (HepG-2) was  $IC_{50}=66.7\mu m$  and  $IC_{50}=24.4\mu m$  respectively. Inhibitory activity of R-GNPs and doxorubicin Loaded R-GNPs against breast carcinoma cell lines (MCF-7) was  $IC_{50}=79.8\mu m$  and  $IC_{50}=40.78\mu m$  respectively. So, the cytotoxic activity of doxorubicin loaded R-GNPs against hepatocellular carcinoma cell line (HepG-2) and breast carcinoma cell line (MCF-7) showed the suitability of R-GNPs as a carrier for anti-cancer drug.

# Analytical Chemistry Department












Project Code	Project Title & Supervisors	Students		
RSPAC2-1	Development of a method for simultaneous estimation of metformin HCl and suxagliptin in a pharmaceutical dosage form  Dr. Maha Kamal TA. Nehal Fawzy	 Khloud Mohamed	 Mohamed Abd Elnaser	 Rehab Mohamed
RSPAC2-2	Determination of different chemical pollutants in industrial wastewater and in Nile River  Prof. Safaa Riad AL. Heba Tarek	 Asmaa Magdy	 Eman Ibrahim	 Gehad Mohamed
RSPAC2-3	Simultaneous determination of sitagliptin and metformin in pure form and in their pharmaceutical dosage form  Dr. Maha Kamal TA. Hadeer Khayal	 Miriam Ashraf	 Nourhan Ramadan	 Yasmin Nagi
RSPAC2-4	Membrane electrodes for determination of some topical pharmaceutical preparations  Dr. Omnia Ali TA. Mohammed Abdel Ghany	 Abanoub Asaad	 Basma Hossam	 Marina Mamdouh


















RSPAC2-5	Simultaneous determination of drugs in their binary mixture	 Hayat Eldesoky	 Yara Essam	 Yasmien Ibraheem
	Prof. Manal Fouad TA. Souha Hosam			
RSPAC2-6	Determination of pesticides residue in some fruits or vegetables cultivated in Egypt.	 Abd-Allah Hesham	 Diana Samir	 Youssef Samir
	Dr. Omnia Ali TA. Mohamed Abdel Ghany			
RSPAC2-7	Validated chromatographic techniques for determination of multiple components in common cold preparations	 Menna Tallah Rady	 Naira Salah	 Rana Waleed
	Dr. Omnia Ali TA. Nehal Fawzy			
RSPAC2-8	A novel HPLC-MS/MS method for quantitative determination of paracetamol, pseudoephedrine HCl and brompheniramine maleate in plasma	 Ahmed Samy	 Nada Hashem	 Omar Hassan
	Ass. Prof. Dalia Mamdouh AL. Souha Hosam			
RSPAC2-9	Spectrophotometric determination of certain preparations used for treatment of respiratory tract	 Ahmed M.Nabil	 Ahmed M. Zaki	 Mina Makin
	Dr. Sarah Salah TA. Dina Atef			
RSPAC2-10	Spectrophotometric determination of certain common cold preparations	 Hend Waheed	 Menna Mohamed	 Omar Ahmed
	Dr. Omnia Ali TA. Amr Mansour			



















RSPAC2-11	Ion selective membrane electrode for determination of some anti-bacterial drugs	Dr. Christine Maged TA. Nourhan Ossama			
			Aya Ahmed	Lekaa Mohamed	Sara Magdy
RSPAC2-12	Electrochemical determination of certain nasal pharmaceutical preparations	Dr. Sarah Salah AL. Heba Tarek			
			Asmaa Ahmed	Basant Ashraf	Merna Khaled
RSPAC2-13	Current trends in chromatographic techniques for the determination of certain pesticides in food	Dr. Sarah Salah TA. Amr Mansour			
			Ireeni Nabil	Marleen Micheal	Mostafa Khaled
RSPAC2-14	Analysis of certain cough preparations using chromatographic technique	Dr. Sarah Salah TA. Amr Mansour			
			Merna Wahed	Mirette Medhat	Mora Lewiz
RSPAC2-15	Analytical study of binary mixture used for gastrointestinal disorders	Dr. Sarah Salah TA. Amr Mansour			
			Ahmed Adel	Ahmed Atef	Ahmed Mohamed
RSPAC2-16	Spectrophotometric and chromatographic methods for determination of gastrointestinal drugs combination	Dr. Christine Maged TA. Hadeer Khayal			
			Hossam Mahmoud	Karim Mohamed	Mohamed Amin

# Biochemistry Department



Project Code	Project Title & Supervisors	Students		
<b>RSPB2-1</b>	<p>Cytotoxic, genotoxic biochemical effects of gemcitabine, carboplatin and epigallocatechin gallate on prostate cancer PC3 cells</p> <p>Prof. Ahmed Bader TA. Ahmed Ossama</p>			
		Radwa Sameh	Yasser Towfik	Youusra Mustafa
<b>RSPB2-2</b>	<p>In-Vitro evaluation of lapatinib and beta-ionone on MCF-7 human breast cancer cell line.</p> <p>Prof. Ahmed Bader AL. Samer Atef</p>			
		Amira Sayed	MennetAllah Abubakr	Sohila Mahmoud
<b>RSPB2-3</b>	<p>Oxidative stress and other biochemical markers in hypertension of male smokers</p> <p>Prof. Ahmed Bader TA. Mariam Sabry</p>			
		Andrew Tharwat	Mahmoud Abd ElSalam	Mohamed Tharwat

<b>RSPB2-4</b>	Correlating H <sub>2</sub> S with inflammation in a model of brain ischemia			
	Dr. Ahmed Maher Dr. Amr Abdel Hamid	Alaa Atif	Alaa El Gamil	Mohamed Tarek
<b>RSPB2-5</b>	The prevalence of polymorphism of h <sub>2</sub> s secreting enzymess among acute myocardial infarction patients			
	Dr. Ahmed Maher TA. Amira Khalil	Mohamed Fouad	Mohamed Wagdy	Shadi Abdel Fady
<b>RSPB2-6</b>	Measurement of biochemical markers linked to myocardial infarction susceptibility			
	Dr. Ahmed Maher TA. Amira Khalil	Ali Mousa	Mahmoud Abou Alwafa	
<b>RSPB2-7</b>	Investigation of the relationship between hydrogen sulphide and diabetes mellitus			
	Dr. Mohamed Farouk AL. Zainab Abdel Hamid	Keroles Nagy	Mahmoud Hassan	Shenoda Michael
<b>RSPB2-8</b>	Protective effect of hydrogen sulphide in gentamycin-induced nephrotoxicity in rats			
	Dr. Mohamed Farouk TA. Radwa Saeed	Alaa Ahmed	Nassra Mohamed	Ramy Amr
<b>RSPB2-9</b>	Investigating the relationship between hydrogen sulphide and acute myocardial infarction			
	Dr. Mohamed Farouk Dr. Amr Abdel Hamid	Areej Mohmed	Hisham Abdel Ghany	Hussein Gamal

<b>RSPB2-10</b>	Genetic polymorphism in women infertility induced by type 2 diabetes mellitus			
	Dr. Mohamed Hafez TA. Toqa Ayman	Enas Ibrahim	Mahmoud Mohamed	Samiha Ashraf
<b>RSPB2-11</b>	ABCB1/RAAS polymorphism in Egyptian diabetic nephropathy patients			
	Dr. Mohamed Hafez TA. Mariam Sabry	Ahmed Adel	Ahmed Yasser	Hossam Badowy
<b>RSPB2-12</b>	Apoptosis induced by hepatitis C virus in Egypt			
	Dr. Mohamed Hafez TA. Amira Khalil	Aly Mohamed	Karim Hamdy	Mohamed Khaled
<b>RSPB2-13</b>	The prophylactic effect of Glycyrrhiza glabra extract on liver fibrosis induced by carbon tetrachloride in-vivo and in-vitro			
	Dr. Nora Abo Rehab TA. Radwa Saeed	Essraa Mohamed	Nada Abbas	Nouran Emam
<b>RSPB2-14</b>	The prophylactic effect of Cupressus sempervirens extract on liver cancer induced by aflatoxin B1 in rats			
	Dr. Nora Abo Rehab TA. Mariam Sabry	Eslam Mahmoud	Margo Rafik	Seif Gamal
<b>RSPB2-15</b>	Evaluation of the biochemical effect of Nigella Sativa extract on liver cancer induced by aflatoxin in rats			
	Dr. Nora Abo Rehab Dr. Amr Abdel Hamid	Emran Omar	Kirolos Agabny	Mohamed Hamed

**RSPB2-16** Genetic polymorphism and risk of diabetes mellitus

Dr. Sherine Mahmoud  
TA. Ahmed Osama



Abdelrahman  
Muhamed

Farouk  
Ahmed

Khaled  
Mohsen

**RSPB2-17** Association of genetic polymorphism with susceptibility of type 2 diabetes mellitus

Dr. Sherine Mahmoud  
TA. Ahmed Osama



Eman  
Essam

Mai Nagi

Mohamed  
Mostafa

**RSPB2-18** Association of gene variation with diabetes mellitus and its complications

Dr. Sherine Mahmoud  
AL. Zeinab Mohamed



Basem  
Wageh










Fatma  
Allaitly













Heba  
Hassan



# Clinical Pharmacy Department






























Project Code	Project Title & Supervisors	Students
RSPL2-1	<p>Studying the effects of sofosbuvir(Sovaldi) on the heart via estimation of BNP</p> <p>Dr. Nada Farrag TA. Salma Wagih</p>	   <p>Amira kasban    Mariam Hussien    Mentallah Ali</p>
RSPL2-2	<p>The role of clinical pharmacist in the monitoring of anticoagulant therapy</p> <p>Prof. Soheir Abol Azm TA. Fatma Ahmed</p>	   <p>Asma hassan    Mentallah Ahmed    Heba Abu Bak</p>
RSPL2-3	<p>Role of clinical pharmacist in gestational diabetes management</p> <p>Dr. Abdel Aziz Mohsen TA. Nada Ezz</p>	   <p>Alyaa Mahmoud    Rehab Amer    Dina Reda</p>















<p>RSPL2-4</p>	<p>Studying the effect of long term use of proton pump inhibitors (PPIs) on the quality of life and kidney function of patients with peptic ulcer and gastroesphgyal reflux (GERD)</p> <p>Dr. Abdel Hamid El Hawary TA. Farah Mokhtar</p>	 Andro Essam	 Rania Awa	 Magda Adel
<p>RSPL2-5</p>	<p>Assesment of sudden cardiac death risk factors prevelance in Egypt</p> <p>Dr. Abdel Hamid El Hawary TA. Farah Mokhtar</p>	 Hadeer Mossa	 Shaimaa Abdallah	 Rania Mohamed
<p>RSPL2-6</p>	<p>Effect of Sofosbuvir(Sovaldi) on kidney</p> <p>Dr. Nada Farag TA. Fatma Ahmed</p>	 Asmaa Ramadan	 Shereen Fawzy	 Mirna Girgis
<p>RSPL2-7</p>	<p>Evaluation the use of steroids vs. new therapy in idiopathic pulmonary fibrosis in Egypt</p> <p>Dr. Soheir Abo El Azm TA. Salma Wagih</p>	 Heba Allal Ashraf	 Hagar Khaled	 Nada Salah

# Microbiology Department












Project Code	Project Title & Supervisors	Students		
RSPM2-1	<p><b>Biofilm Related Genes: Analysis of Multi-Antibiotic Resistant Acinetobacter Baumannii isolates from Egypt.</b></p> <p>Dr. Ahmed Khairulla AL. Karim Talaat</p>			
		Abanoub Nabil	Hamdy El Sayed	Heba Allah Mohamed
RSPM2-2	<p><b>Evaluation of the antivirulence effect of selected indole derivatives against pathogenic bacterial isolates</b></p> <p>Dr. Reham Wasfi AL. Mai Abdel Wahed</p>			
		Abdel Rahman Mohamed	Kadidja Mohamed	Sherif Ali
RSPM2-3	<p><b>Isolation and characterization of mercury-resistant bacteria from dental settings as candidates for future bioremediation applications</b></p> <p>Dr. Ahmed Khairulla TA. Toqa Mostafa</p>			
		Abdelrahman Magdy	Esraa Hassan	Reem Badr
















RSPM2-4	PCR-based detection of some virulence traits encoding genes in the “accidental” pathogen – Staphylococcus epidermidis	  
	Dr. Mahmoud Tawfick AL. Nada Samir	Ahmed Marzouk Eriny Kamal Nancy Ali
RSPM2-5	Investigating the incidence of bacterial contamination in cosmetic tools	  
	Dr. Ghada Refaat TA. Hadeel Darwish	Arwa Ashraf Aslam Ashraf Reem Ahmed
RSPM2-6	Surveillance for microbiological contamination of bathroom settings in MSA University.	  
	Dr. Soha Hussein AL. Karim Talaat	Asmaa Atef Shorouk Yousef Mohamed Waleed
RSPM2-7	Detection of hypermucoviscosity associates genes in diverse K. pneumonia isolates from cancer patients.	  
	Dr. Mahmoud Tawfick AL. Dina Osama	Dina Refaat Malaka Sayed Mayar Medhat
RSPM2-8	A study on the lipid degrading ability of bacteria in our environment	  
	Dr. Ghada Refaat TA. Yousra Abdel Salam	Hala Gamal Hedaya Ayman Saher Abd-El-Miged
RSPM2-9	Antibacterial activity of selected commercially available mouth-care products and certain herbal extracts against Streptococcus mutans	  
	Dr. Ahmed Khairulla TA. Toqa Mostafa	Amany Mahmoud Ingi Fauzi Mickel Awad

RSPM2-10	Surveillance for MRSA among university athlete students.			
Dr. Soha Hussein TA. Zeinab Kamel		Nada Ahmed	Ramy Helmy	Rana Mohamed
RSPM2-11	Analysis of water from groundwater, reclaimed, sprinkler irrigation systems and water drained in Nile River from in Upper Egypt and Delta region			
Prof. Faten Bayoumi AL. Lamia Ismail		Ayman Mohamed	Nora Essam	Shimaa Elmorsy
RSPM2-12	Microbiological quality of drinking water from different household filter systems in Egypt			
Dr. Mahmoud Tawfick TA. Zeinab Kamel		Norhan Ibrahim	Omnia Ahmed	Yasser Mohamed
RSPM2-13	Surveillance of enteric viruses in water from ground water, reclaimed, sprinkler irrigation systems and water drained in Nile River from Upper Egypt and Delta region			
Prof. Dr. Faten Bayoumi		Rana Abd El-Tawab		Sara Ahmed
RSPM2-14	Microbiological quality of tap water in 10 different geographic regions in Egypt.			
Prof. Faten Bayoumi TA. Nehal Assem		Omar Tarek	Rana Khaled	Shorouk Mohamed

# Organic Chemistry Department















Project Code	Project Title & Supervisors	Students		
RSPOC2-1	<p>Synthesis of certain Pyrazolopyrimidine derivatives as antitumor agents</p> <p>Prof. Azza Taher TA. Rania Mohamed</p>	 Aziza Abd Elnaser	 Nesma Essam	 Rana Fawzy
RSPOC2-2	<p>Synthesis and anticancer evaluation of some pyrazole derivatives</p> <p>Dr. Mahmoud Nabil TA. Mareena NASHaat</p>	 Ahmed Mohamed	 Esraa Adel	 Zahraa Osama
RSPOC2-3	<p>Synthesis and biological activity of some benzothiazole derivatives</p> <p>Prof. Azza Taher AL. Enas Galal</p>	 Abdullah Mosaad	 Mohammed Ali	 Omar Adel















RSPOC2-4	Phenylthiazole derivatives with potential biomedical applications			
	Dr. Ahmed Hajaj TA. Mostafa El Awamy	Ahmed Gamal	Ahmed Tarek	Peter Nazeeh
RSPOC2-5	Chalchones as an active intermediate for the preparation of some bioactive heterocyclic rings			
	Dr. Samar Radwan T.A Aliaa Hamdy	Hazem Mohammed	Michael Gerges	Mohamed Assem
RSPOC2-6	Synthesis of pyrimidine using a conventional and green chemistry methods			
	Associate Prof. Nadia Abdou AL. Rana El Masry	Fatma Kassem	Omnia Mostafa	Rana Alaa
RSPOC2-7	Preparation of pyridazine derivatives as antitumor agents			
	Dr. Mahmoud Nabil TA. Hamsa Yehia	Ahmed Hany	Ahmed Tarek	Mohamed Ahmed
RSPOC2-8	Synthesis and antimicrobial activity of sulphonamides			
	Dr. Mahmoud Nabil AL. Heba Teba	Reem Omar	Shaimaa Abd-el-Hakim	Shrouk Saleh

# Pharmaceutical Chemistry Department












Project Code	Project Title & Supervisors	Students		
RSPHC2-1	<p>QSAR and Molecular Docking Studies of Novel Carbonic Anhydrase Inhibitors as Potential Antitumor agents</p> <p>Dr. Ahmed Kerdawy AL. Emad Seif</p>			
		Mariem Hesham	MenaAllah Medhat	Salma Mohamed
RSPHC2-2	<p>Synthesis and Anti-Microbial Evaluation of Some Substituted Thiazole Derivatives</p> <p>Assoc. Prof. Yassin Nissan TA. Zeinab El Fakharany</p>			
		Ibrahim Abd El Hady	Islam Sayed	Marawan Ramadan
RSPHC2-3	<p>Synthesis and Antitumor Evaluation of Some Substituted Pyrazolotriazine Derivatives</p> <p>Dr. Rana Refaey TA. Ahmed Sedky</p>			
		Diana Mosa	Mohamed Fedaei	Nourhan Yousry
RSPHC2-4	<p>Synthesis and Antitumor Evaluation of Some Pyrazolopyrimidine Derivatives</p> <p>Assoc. Prof. Yassin Nissan AL. Dina Adel</p>			
		Ahmed Adel	Ahmed Mohamed	Bessey Nabil



















RSPHC2-5	<p>Synthesis and Characterization of Multifunction Gold Nanoparticles for Diagnosis and Therapy</p> <p>Associate prof. Tamer Mostafa TA. Sherine Gamal</p>			
		Feras Abd El Hafiz	Mohamed Fouad	
RSPHC2-6	<p>Synthesis of Resveratrol Gold NanoParticles (GNPS) as Anticancer Drug Delivery Carrier</p> <p>Associate Prof. Tamer Mostafa TA. Nourhan Alaa</p>			
		Mariam Ashraf	Nada Mourad	Fady Nageh
RSPHC2-7	<p>Structure-Based Design, Synthesis and Biological Evaluation of New Furosemide Analogs Carry Carbonic Anhydrase-2 Inhibition Activity</p> <p>Dr. Mohamed El Araby AL. Mai Saeed</p>			
		Mohamed Hesham	Mohamed Hossam	Mohammed Abd Elbaset
RSPHC2-8	<p>Molecular Dynamics Simulations of Approved and Novel Orexin 2 Receptor Antagonists</p> <p>Dr. Mohamed El Araby AL. Ramy Ramsis</p>			
		Ahmed Abd El-Gaber	Mostafa Mahmoud	Zahra Badr
RSPHC2-9	<p>Computation of Selectivities of a Series of NSAIDs to COX-1 and COX-2 Receptors Using Molecular Dynamics Simulations</p> <p>Dr. Mohamed El Araby TA. Nourhan Alaa</p>			
		Ibrahim El-Syed	Marco Hany	Mohamed Abdel Aal

# Pharmaceutics Department












Project Code	Project Title & Supervisors	Students		
RSPT2-1	<p>Formulation and Evaluation of Bambuterol Hydrochloride Fast Dissolving Oral Films</p> <p>Dr. Amal Saber AL. Omar El Kady</p>			
		Adel Mohamed	Omar Nabil	Sarah Farag
RSPT2-2	<p>A Novel Vesicular Lipid Carrier Systems to Enhance Acyclovir Delivery through the Skin.</p> <p>Associate Prof. Amal Youssef AL. Eman Ashmouny</p>			
		Ahmed Mohamed	Khaled Mohamed	Mohamed Ahmed
RSPT2-3	<p>Permeation and Stability Studies of Protein Loaded Liposomes</p> <p>Dr. Ghada Ehab AL. Marwa Hamdi</p>			
		Heba Hany	Noreen Hisham	Reham Emad



















<p>RSPT2-4</p>	<p>Liquisolid Technology for Enhancing the Dissolution Profile of a Poorly Soluble Drug</p> <p>Dr. Amal Saber AL. Nihal El Mahdy</p>			
		<p>Fatma Ali</p>	<p>Hossam Hassan</p>	<p>Medhat Ibrahim</p>
<p>RSPT2-5</p>	<p>Evaluation of a Nose to Brain Targeting Nano-Formulation for an Anti-Migraine Drug</p> <p>Dr. Gina El Feky AL. Lamis Helmy</p>			
		<p>Abdelrahman Ehab</p>	<p>Andrew Alber</p>	<p>Hesham Taha</p>
<p>RSPT2-6</p>	<p>Formulation and evaluation of Novel Brain Targeting Drug Loaded in Lipid Based Nanoparticles Through Intranasal Route for Alzheimer's</p> <p>Associate Prof. Amal Youssef TA. Amira Essam</p>			
		<p>Aya Sayed</p>	<p>Fade Hesham</p>	<p>Mahmoud Eldssouky</p>
<p>RSPT2-7</p>	<p>A 32 Full Factorial Design for Development and Characterization of Antifungal-Loaded Nanosponge for Topical Delivery</p> <p>Dr. Reham Amer TA. Dalia El Khiat</p>			
		<p>Dina Mohamed</p>	<p>Madonna Sedhom</p>	<p>Nermeen Yousry</p>
<p>RSPT2-8</p>	<p>Formulation and Evaluation of Wafers Dosage Forms</p> <p>Dr. Dalia Abdel Aty AL. Heba Hamdy</p>			
		<p>Aya Mahmoud</p>	<p>Elshymaa Tarek</p>	<p>Shaimaa Mohame</p>
















RSPT2-9	Formulation and Evaluation of a Novel Nano-Vesicular Carrier System for Ocular Delivery	Dr. Shereen Hamdy TA. Pakinam Zikry			
			Ahmed Mohamed	Aya Hamdy	Shaimaa Talat
RSPT2-10	Development and Evaluation of Proniosomal Gel of an Antifungal Drug	Dr. Amal Saber TA. Nancy Nabil			
			Marina Raafat	Shimaa Alaa	Shymaa Emad
RSPT2-11	Formulation and Evaluation of nanostructured lipid carrier loading with anti-inflammatory drug	Dr. Dalia Farrag TA. Radwa El Masry			
			Ahmed Abdallah	Basant Mohamed	Mariam Samir
RSPT2-12	Formulation And Evaluation of Nanovesicular Systems for Transdermal Drug Delivery	Dr. Ibrahim El Sayed AL. Islam Manaa			
			Ahmed Hany	Mina Atef	Sherif Maher
RSPT2-13	Formulation of Microcomposite Pellets for Sustained Release of an Anti Inflammatory Drug	Dr. Ibrahim El Sayed AL. Dina Saeed			
			Elaref Ibrahim	Omer Abd El-Hafiz	Yahya Refat
















# Pharmacognosy Department



Project Code	Project Title & Supervisors	Students		
RSPG2-1	<p>Phytochemical and Biological Studies of <i>Duranta</i> species cultivated in Egypt</p> <p>Dr. Reham Regaie TA. Salma Khaled</p>			
		Maysoon Mostafa	Salma Ayman	Hend Tarek
RSPG2-2	<p>Phytochemical and Biological Studies of <i>Ailunthus altissima</i> Swingle cultivated in Egypt</p> <p>Dr. Reham Regaie TA. Salma Khaled</p>			
		Lamice Mohamed	Shimaa Adel	Alaa Osama
RSPG2-3	<p>Phytochemical and Biological Screening of Certain <i>Ammannia L.</i> Species Family Lythraceae</p> <p>Dr. Marwa Batanony TA. Esraa Adel</p>			
		Ahmed Hosam	Amr Ahmed	Arwa Ahmed

RSPG2-4	Phytochemical and Biological Investigations of Different Ipomea Spp. Family Convolvulaceae			
	Dr. Marwa Batanony TA. Esraa Adel	Hadil Atif	Nancy Karam	Noha Ahmed
RSPG2-5	Phytochemical and Biological Investigation of Different Species of Cynanchum Family Apocynacea			
	Dr. Riham Omar TA. Mai Gohar	Ezzat Hatim	Mahmoud Yasser	Omar Ahmed
RSPG2-6	Phytochemical and Biological Investigation of Eclipta prostrata Family: Asteraceae Cultivated in Egypt			
	Dr. Iman Abdel Khalek TA. Mai Gohar	Nada Mohammed	Nada Mahmoud	Nada Ayman
RSPG2-7	Phytochemical and Biological Investigation of Certain Trianthena Species Growing in Egypt			
	Dr. Riham Omar TA. Nada Aly	Kholoud Mohamed	Maha Mahmoud	Mayada Mohamed
RSPG2-8	Phytochemical and Biological Investigation of Certain Callistemon Species Cultivated in Egypt			
	Dr. Riham Omar TA. Nada Aly	Lina Moawad	Alyaa Ibrahim	Mayar Muhammed
RSPG2-9	Comparative Phytochemical and Pharmacological study between Rosmarinus officinalis and Eriocephalus africanus cultivated in Egypt.			
	Dr. Tarek Eissa AL. Ibrahim Ezz	Paula Girgis	Monica Raafat	Mohammed Essam










RSPG2-10	<p>A study of antioxidant and cytotoxic activity of <i>Lycium shawii</i> from Matrouh, Egypt.</p> <p>Dr. Tarek Eissa AL. Ibrahim Ezz</p>			
		Baraa Emad	Nagdat Majd	Muhammed AbdEl Mon'em
RSPG2-11	<p>Phytochemical and Pharmacological Analysis of <i>Lophophora williamsii</i> Family Cactaceae.</p> <p>Dr. Tarek Eissa AL. Mohamed Abd El Aal</p>			
		Nourhan Samy	Mona Ibrahim	Hadir Khaled
RSPG2-12	<p>Characterization of the Antioxidant, Antimicrobial and Cytotoxic Properties of <i>Ruta graveolens</i></p> <p>Dr. Tarek Eissa AL. Mohamed Abd El Aal</p>			
		Saher Safwat	Mahmoud Mostafa	Marwan Mostafa
RSPG2-13	<p>Comparative Study of Anticancer, Antimicrobial and Antifungal of <i>Origanum majorana</i> Collected from Egypt</p> <p>Dr. Tarek Eissa AL. Mohamed Abd El Aal</p>			
		Philip Fanous	Andrew Ibrahim	Marina Magdy
RSPG2-14	<p>Evaluation of the Effects of the Addition of Different Fixed Oils to the Normal Diet of Healthy Rats on Their Lipid Profiles</p> <p>Dr. Mahitab Helmy TA. Nariman Ali</p>			
		Mai Medhat	Lamiaa Ahmed	Omar Elsayed
















RSPG2-15	<p>A Comparative Study Between Different Essential Oils Used in the Treatment of Acne</p> <p>Dr. Mahitab Helmy TA. Nariman Ali</p>			
		Mariam Adly	Sara El Sayed	Samah Anwar
RSPG2-16	<p>The Role of Polyphenolic Compounds in Human Health</p> <p>Dr. Sabah Hussein AL. Heba El- Kammar</p>			
		Evet Nabil	Hayam Ali	Bassant Mohammed
RSPG2-13	<p>Antidiabetic Natural Drugs</p> <p>Dr. Sabah Hussein AL. Heba El- Kammar</p>			
		Shahd Hassan	Noha Fikry	Shady Medhat
RSPG2-18	<p>Immunodulator Natural drugs</p> <p>Dr. Sabah Hussein</p>			
		Hasnaa Nabel	Asmaa Hassan	Khaled Ahmed
RSPG2-19	<p>Phytoestrogen Containing Herbs</p> <p>Dr. Sabah Hussein</p>			
		Shima Gamal	Omnia Rabea	Emad Hakeem


















# Pharmacology Department



Project Code	Project Title & Supervisors	Students
RSPHO2-1	<p>The Role of Nicorandil in Alleviation of Chronic Kidney Injury by Amphotericin B in Rats.</p> <p>Dr. Dina Farouk AL. Reem El Sayed</p>	   <p>Fatima Aliyu      Halima Sadiya      Mohamed Ahmed</p>
RSPO2-2	<p>The Effect of Allicin on Thioacetamide-Induced Hepatic Encephalopathy in Rats</p> <p>Dr. Dalia Osama AL. Ahmed Samir</p>	   <p>Nora Abd Altef      Radwa Mohamed      Shima Abdel Rahman</p>
RSPO2-3	<p>Possible Effects of Ginseng in Aluminium Chloride Induced Alzheimer Disease</p> <p>Dr. Ahmed Fayez AL. Raghda Hamed</p>	   <p>Ahmed Mohamed      Amir Shebl      Mohamed Mostafa</p>

RSPO2-4	Investigation of Cardioprotective Effects of Some Natural Compounds on Doxorubicin-Induced Cardiotoxicity in Rats			
	Dr. Dina Farouk AL. Reem El Sayed	Amal Mohammed	Jenny Atef	Walaa Nabil
RSPO2-5	Possible Renoprotective Effects of Chitosan and Aminophylline Against Cisplatin-Induced Nephrotoxicity in rats			
	Dr. Dina Farouk TA. Maha El Shahat	Haidy Daa	Howieda Fawzy	Sandy Nader
RSPO2-6	Potential Protective Activity of Ginkgo biloba Extract Against Methotrexate-Induced Gastrointestinal Toxicity			
	Dr. Dina Farouk AL. Lobna Taher	Aya Khaled	Dina Hosni	Nouran Mohamed
RSPO2-7	Investigation of the Toxicological Effects of Some Anticancer Drugs on Rat Model of Liver Cirrhosis			
	Dr. Dina Farouk AL. Lobna Taher	Mahmoud Ahmed	Peter Sameh	Tarek Ahmed
RSPO2-8	Protective Effect of Curcumin Against Paracetamol-Induced Hepatotoxicity			
	Dr. Rehab Hegazy TA. Maha Al Shahat	Alaa Sharawy	Bissan Mohamed	Yasir Mahmud

RSPO2-9	The Potential Protective Effects of Pumpkin Seed Oil Against Methotrexate-Induced Acute Hepatotoxicity in Rats			
	Dr. Rehab Hegazy TA. Mohamed Sofian	Mostafa Alsaid	Naema Khalaf	Yasmine Kamel
RSPO2-10	The Effect of Resveratrol in the Anti-Inflammatory Activity of Diclofenac in Rat Model of Carrageenan-Induced Inflammation			
	Dr. Rehab Hegazy TA. Heba Hosam	Karim Abdel Aleem	Mostafa Ahmed	Taha Adel
RSPO2-11	Influence of Low Dose Capsicum on Indomethacin Induced Gastric Ulcer in Rats			
	Dr. Omneya Galal TA. Ola Essam	Aisha Ibrahim	Doaa Hesham	Karima Ismail
RSPO2-12	Effect of Alpha Lipoic Acid on Chemically-Induced Hepatocellular Carcinoma			
	Associate Prof. Mona El Naa AL. Maha Shouman	Ahmed Mosad	Mai Mohamed	Mohamed Mostfa
RSPO2-13	Effect of Zafirlukast and Piracetam on Dementia Induced by L-Methionine			
	Dr. Ahmed Fayez AL. Omnia Farouk	Hanaa Mohamed	Mahmoud Morad	Rania Romhi

RSPO2-14 Effect of Epigallocatechin Gallate on D-Galactose-Induced Hepatic Aging in Albino Rats

Dr. Dalia Osama



Esraa  
Gamal



Mai  
Ramadan



Nourhan  
Mahmoud

RSPO2-15 Effect of Surlforaphane on D-Galactose Induced Renal Aging in Experimental Rats

Associate Prof. Mona El Naa  
AL. Maha Shouman



Mayada  
Mohamed



Mirna  
Mohamed



Nourhan  
Abdel  
Hamid

RSPO2-16 Influence of High Dose Capsicum on Indomethacin Induced Peptic Ulcer in Rats

Dr. Ahmed Fayez  
AL. Omnia Farouk



Mareham  
Vector



Mariam  
Yousry



Marina  
Rafik

RSPO2-17 The Effect of Erythropoietin on Doxorubicin - induced hepatotoxicity in rats

Dr. Heba Samy  
AL. Maha Taher



Amr Saeed









Miada  
Saleh






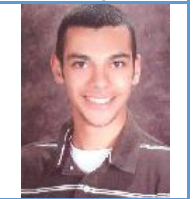











Mosaad Abd  
El Aleem



# FALL 2016

Project Code	Project Title & Supervisors	Students		
RSPAC2-1	<p>Tracing of Pharmaceutical Pollutants in Waste Water</p> <p>Prof. Safaa Riaad AL. Heba Tarek</p>			
		Al-Zahraa Saad	Aya Amr	Eslam Mohamed
RSPAC2-2	<p>Contribution to the Analysis of Lidocaine and Ceftriaxone Sodium as Co-Administered Drugs</p> <p>Associate Prof. Dalia Mamdouh TA. Souha Hosam</p>			
		Yohanna Nehad	Cathreen Youssef	Samar Helal
RSPAC2-3	<p>Simultaneous Determination of Dantrolene Sodium and Paracetamol in Dantrelax Compound Capsules</p> <p>Associate Prof. Dalia Mamdouh TA. Nourhan Osama</p>			
		Mariam Shafik	Metha Tharwat	Fadeel Gomah

<p>RSPAC2-4 Simultaneous Determination of Clidinium Bromide and Chlordiazepoxide in their Binary Mixture</p> <p>Prof. Manal Fouad TA. Dina Atef</p>			
	Asmaa Nabil	Marina Maged	Martina Gerges
<p>RSPM2-2 Detection of Antibiotic Resistance Markers From Different Sources of Tap and Bottled Water</p> <p>Dr. Heba Magdy</p>			
	Dima Mohammed	Wessam Sameh	Ahmed Ehab
<p>RSPHO2-2 Effect of Omega 3,6,9 and Vitamin E on Doxirubicin Induced Cardiotoxicity in Rats</p> <p>Dr. Ahmed Fayez</p>			
	Arwa Osama	Amal Abdel Rahman	Toqa Zaki
<p>RSPB2-1 In-Vitro Study of Combined Therapy of Thymoquinone and 5-Flurouracil against Some Colon Cancer Cell Lines</p> <p>Associate Prof. Ahmed Bader AL. Samer Atef</p>			
	Hend Essam	Janset Safwat	Nihal Essam
<p>RSPB2-2 The Prophylactic Effect of Bacopa Monnieri Extract in Rats with Alzheimer's disease Induced by Aluminum Chloride</p> <p>Dr. Nora Abo Rehab TA. Radwa Saeed</p>			
	Amr Samir	Aya Nabil	Eman Zaghloul









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# Faculty of Pharmacy



**WE ARE SO PROUD OF YOU!**

**"Let's go invent tomorrow instead of worrying  
about what happened yesterday."**

**Steve Jobs**

