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day course have provided the opportunity to understand the oxidative stress and DNA repair mechanisms; to learn about the methods of detecting this damage; and to find out the consequences of DNA damage to human diseases. Students, postgraduate students, post-doctoral young researchers and specialists studying in different departments who are interested in the topic attended from different universities all over Turkey. Besides DNA damage and repair, other topics from different approaches had been covered such as the gender of the brain in the field of neuroscience, design thinking, experimental models of oxidative stress and women in science.

Results and Conclusion: A hundred of scientists from 26 different cities had participated. Sixty of them who were master and PhD students was awarded with bursaries from TUBITAK. Upon completion of the written examination, graduate students of Institute of Health Sciences Dokuz Eylül University had enrolled this course as a credit lecture. "DNA Damage, Repair and its measurement by Tandem Mass Spectrometry" course was very efficient and productive in terms of education with a wide and in-depth perspective, as well as designing of research projects and new collaborations.

Note to the Scientific Committee: This course was supported by TUBITAK Scientific Meetings Grant Programs 2229 and 2237-A.

Keywords: Oxidative DNA Damage, DNA Repair, Tandem Mass Spectrometry, Theoretical and Practical Course, Education

PP-09**IMPROVING THE COUNSELING SYSTEM IN EGE UNIVERSITY MEDICAL FACULTY: IT'S WORTH IT!**

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Academic success is not the only challenge medical students face. Family & peer relationships, accommodation & financial issues, emotional & physical problems, adjustment to the university environment account for some of the other challenges of this period. Ege University Medical Faculty has a long history of searching and implementing some initiatives for an effective counseling system to support its students for these challenges. However, there is no ideal counseling system as all have their pitfalls. This study will report our new "Student Counseling System" (SCS) which was established in 2017 to support the students, to advice and counsel them for their individual, social, cultural, health, educational and scholarship needs, and also to guide them for their academic future.

The "Student Counseling Board" (SCB) which consisted of 20 faculty from basic and clinical sciences was established by the Dean's Office in June 2017. Related literature and counseling/mentoring systems all over the world were discussed and evaluated by SCB members. SCB interviewed student representatives as well as faculty, and focus group sessions were run to determine the needs and requirements of the students. A clear need for focused and specialized subunits in the organization of SCS was detected and these were established as 'Orientation', 'Scholarships', 'Health', 'Education Abroad', 'Socio-cultural Activities', 'Career Planning' and 'Personal Development' subunits with responsible faculty assigned from the SCB for each. Besides, a 'Quality Management subunit was founded to oversee that all subunits work effectively in a coherent way. Subunits of SCS started to work actively by September 2017. Students with specific issues were directed to related subunits and data was collected about frequently seen

problems/the progress and the outcome of each issue. At the same time, calls were made faculty wide to recruit volunteer researchers or clinicians to establish the volunteer counsel pool. Significant efforts were made for increasing awareness of the new system (announcements via email, GSm texts, brochures, posters, etc.). We also started collecting data about the use of the system. Continuous feedback is collected from all stakeholders.

Our biggest challenge in the new system is large number of students (around 350 in each class) and limited faculty time for counseling. However the new system is expected to bring positive impact such as more focused and faster solutions to problems, better quality of faculty-student relationship, improvement in academic performance, self-esteem, belonging and overall adaptation to the university, better participation in social activities.

In conclusion, the new system is voluntary (both from student and faculty perspective), includes specialized subunits, is supported by Students Affairs and a clear flow of working principles. In this system, the faculty is not left alone with the student in counseling but has the SCS subunits and also SCB for support. Finally the new system is open to monitoring and development which is the basis for continuous improvement.

Keywords: Medical student, medical education, mentoring, counseling, mentor, mentee, specialized mentoring

PP-010**HOW TO DEVELOP CURRICULUM IN MOLECULAR AND PERSONALIZED MEDICINE FOR MEDICAL STUDENTS?**

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Background: Molecular diagnostics is becoming an important analytical modality in research and clinical laboratories. With the increasing importance of molecular genetic testing, it is necessary to specify the areas of technical and training problems in medical faculty. Studies suggest that training in molecular technologies and their applications in clinics is still not adequate at all stages of medical education. This deficiency represents a major challenge to the use of molecular testing in clinical practice and research. Also studies have addressed doctors' limited experiences concerning molecular testing, including if, why, when, and how providers order such assays. Poor understanding of medical genetics is significant among clinicians, and education and training are among a number of important factors. Other factors include perceptions concerning patient confidentiality, insurance and ethical subjects. Studies assessing clinicians' attitudes toward adopting genome-guided drug prescribing have revealed a lack of awareness, as well as uneasiness in interpreting and applying genomic information. Many of the techniques are sophisticated tests rely and molecular biology methods are still new. The purpose of study is dealing with how to structure medical curricula into more molecular aspect, viewing molecular practices in our school and emphasizing the required practices, examining the integration of system biology approaches into molecular medicine education and examining the medical genetics education in Cerrahpasa Medical Faculty.

Conclusions: We urgently need a multidisciplinary curriculum on molecular medicine and personalized medicine, as a required component of medical students training at medical faculty. We have to encourage other practice programs in molecular medicine whole departments.

Keywords: Education in molecular medicine, personalized medicine, molecular diagnostics

PP-011**CORRELATION BETWEEN CLINICAL SELF-EFFICACY AND COURSES OF WOMAN AND HORMONE, VITAMINS IN PREGNANCY AND PREGNANT BIOCHEMISTRY**

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Background: Clinical skills acquisition is an important component of midwifery education of master degree. It is fact that need a reliable and valid external resource as students of post-graduate can not accurately assess their clinical skills competences.

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Materials and Methods: Research was a descriptive and cross-sectional study; data were collected from 31 midwifery students of post-graduate who trained between June 2018 and August 2018 in a Manisa Celal Bayar University, Institute of Health Sciences, Department of Midwifery. The data of the study were collected using the "Introductory Information Form" and the "Self-efficacy for Clinical Evaluation Scale". Data were evaluated by number, percentage, mean and correlation test.

Results: The mean age of the students were 29.83 ± 6.78 . It was found that 67.7% of midwifery students who took lessons were post-graduate students with thesis, 41% of them were working in secondary health services and 51.6% of them had clinical experience of five years or more. All of the students stated that the courses are necessary and that they contribute professionally. The total score of the self-efficacy perception subscale of the scale was 126.67 ± 14.72 (91-150), while the total score of the perceived confidence subscale was 137.22 ± 13.68 (98-150); it has been found that students with postgraduate abstinence are more confident in providing care for patients with chronic illnesses and pay enough attention to a given practice. There was a significant relationship between perceived confidence scores and clinical self-efficacy of students.

Conclusions: The lessons given in midwifery of post-graduate education have positively affected the clinical skills of the students. With self-efficacy theory, students can learn clinical skills more effectively so that they can incorporate these skills into clinical practice.

Keywords: Midwifery, post-graduate student, self-efficacy.

PP-012**DEVELOPING RESEARCH SKILLS IN BIOMEDICAL SCIENCES DURING UNDERGRADUATE MEDICAL EDUCATION**

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Background: While a physician should be an expert in a certain medical practice, a researcher should have a core of knowledge in his/her scientific area. However, for a clinical investigator, these areas overlap. Taking advantage of being in a centralized working environment with numerous faculty members with different expertise, we held two-step workshops to gather academics to share ideas and then, initiated a novel life sciences curriculum supported by biomedical research training for undergraduate medical education at İzmir University of Economics. This multidisciplinary program consists of two consequential core curriculums, focused lectures by experts and 3-semester mentored research activities called Research Track, which offers students a multidisciplinary scientific research environment.

Material and Methods: The program is designed to meet requirements of the Bologna Process (<http://www.ehea.info/>) to create a 'European Higher Education Area' of complementary national systems in 48 countries to ensure comparability of higher education qualifications. This process involves the implementation of three levels of a qualification framework across courses with standardized learning outcomes, all including aspects of research skills and related qualifications. The Tuning Project (<http://www.unideusto.org/tuning/>), indicating "a need for students to have developed skills related to using evidence to inform practice", was also considered in the curriculum.

Conclusion: Our program is expected to create an interactive research environment for medical, bio- and biomedical engineering students. Student's performances evaluated through a peer-reviewed process employing rubrics-driven assessment of research proposals will also determine each student's qualification for the Research Track.

Keywords: scientific research, education, curriculum

PP-013**INTRODUCING THE NEXT GENERATION MEDICAL EDUCATION FROM THE STUDENT'S PERSPECTIVE**

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Background: Every medical education system has similar goals in terms of teaching and improvement. In our medical school, İzmir University of Economics (IUE) Faculty of Medicine, the aim was to create a new and more effective system called "next generation medical education". This system was planned to provide us a modernized education, which can cover the students' needs, and to be able to be adjust itself according to the necessities. We prepare this poster to present how the students of the faculty perceive this system.

Materials and Methods: We searched for other educational systems in different faculties to determine what makes our education different and "the next generation medical education". We determined the central aim of the system and classified its characteristic features. Afterwards, to assess students' perspective on these characteristic features, we have carried out a survey for the students of IUE Faculty of Medicine.

Conclusion: As medical students, we believe the educational system of the faculty covers essential requirements to train professionals who can keep up-to-date with the latest developments in medicine and physicians who can see humans not only as biological systems but also as a whole with sociological and cultural aspects. We have classified the characteristic features of the educational system in five groups: E-Med (e-learning), learning to learn, advisory system, integrated lesson structure and feedback-based learning. Survey results as well as individual comments suggest that the system is effective in what it is designed for according to the students of the faculty.

Key words: medical education, integrated medical curriculum, learning to learn, student advisorship

PP-014**BIOINFORMATICS TOOLS IN THE DEVELOPMENT OF CANCER VACCINES: AN EASY, FREE AND INNOVATIVE WAY TO PROMOTE AWARENESS IN SCIENCE EDUCATION**

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Bioinformatics has developed in last decade and now it is considered as an important area for life sciences in the recent years. Many computational tools and databases have so far been developed to find solutions for the problems on the fast, accurate and robust evaluation of the increasing data in life sciences. Most of the bioinformatics tools are available online and requires no payment, therefore they can be implemented in the curriculum for little to no cost, if student computers are available. Introducing bioinformatics tools to the students who are interested in life sciences can be an effective way to get them more involved with the trending topics in science and motivate the students about how they can incorporate their knowledge and technology to find solutions for current questions and problems in life sciences such as cancer. One of the important tools in the bioinformatics has been developed for *in silico* designing of peptide based cancer vaccines that can reduce the time by filtering the unnecessary wet lab applications. In this study, developed *in silico* tools on designing of cancer vaccines are present and the results are compared on a sample study. In conclusion, as the integration of technology in education is essential in 21st century the tools developed for designing cancer vaccines might be included in life science based courses.

Key words: bioinformatics, cancer vaccines, MHC I and II.

*Elif Cireli is a high school student in Robert College, İstanbul. This study was based on a 3-months summer stage.