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POSTER SUNUM ÖZETLERİ
[POSTER PRESENTATION ABSTRACTS]**PP-01****AN EXAMPLE OF A SPECIAL STUDY MODULE IN DOKUZ EYLUL SCHOOL OF MEDICINE: THE PROTECTIVE EFFECTS OF LIPOIC ACID VIA PI3K/AKT SIGNALING PATHWAY AGAINST ON CISPLATIN INDUCED TESTICULAR INJURY**

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Special Study Modules (SSMs) are a learning method which is given the students opportunity in order to search, study and carry out some experiments regarding their own concerns. Since 1997, SSMs are get off the ground in Dokuz Eylul University.

Here, we describe an example of a laboratory research SSM entitled "The Protective Effects of Lipoic Acid via PI3k/Akt Signalling Pathway Against on Cisplatin Induced Testicular Injury". The main purposes of this SSM to train the students about research methodology and practical laboratory work.

This SSM was planned as a mini-research project, and five second year medical students worked with together for it. They carried out western blotting and immunohistochemistry applications. They found total akt and p-akt protein expressions were decreased in the cisplatin induced damaged group compared to control group and the expressions were increased with the LA (p<0,05). Immunohistochemical findings was similar to western blot findings. It was showed that LA can be used as a supporting agent in the treatment of cisplatin.

In the end, they gave some feed-backs and prepared a scientific poster and scientific report. According to feed-back results, students thought that a scientific research was really hard, but exciting activity.

Keywords: special study module, medical education, wet-lab study

PP-02**INVESTIGATION OF MIDWIFERY STUDENTS' APPROACH TO LEARNING BIOCHEMISTRY**

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Background: Approach to learning can be defined how the intend, behavior and study habits of student evolve according to perception of the learning task. The object of the research was to investigate the approach of midwifery students to learning of Biochemistry.

Materials and Methods: Research was a descriptive and a cross-sectional study. The population of the research consisted from students of 2017-2018 season 1st and 4th class of Manisa Celal Bayar University Health Science Faculty Midwifery Department (n:170). The data was collected using face-to-face interview technique. 86.47% (n:147) of the volunteer students were reached in a random way. Data were collected by using the "Introductory Information Form" (11 items) and the "Learning Approach Scale" (20 items) and evaluated in the SPSS package program by performing number, percentile, mean, standard deviation, independent t test, correlation analysis.

Results: The mean age of the students were 20.82±1.81. It was found that 95.2% of students stated that biochemistry lesson was necessary, 59.9 % of students think that their biochemistry knowledge was inadequate; 87.8% of them believe that the lesson would benefit their professional career. Mean score of deep approach for Learning Approach Scale was 34.13±6.07 (min:19,00-max:50,00), and mean score of superficial approach for Learning Approach Scale was 26.94±6.37 (min:15,00-max:50,00). There was a significant relationship between thinking that biochemistry lessons could facilitate their professional life with deep approach scale score (p<0,05).

Conclusions: Students who thought that biochemistry is necessary for their professional career had a higher motivation for learning

biochemistry. It is proposed that creating effective and dynamic educational environment that supports deep learning is necessary for enhancing the output of learning of biochemistry.

Keywords: Midwifery Student, Biochemistry Lesson, Learning Approach

PP-03**ROLE AND LONG-TERM EFFECTS OF SPECIAL STUDY MODULES: RESEARCH TRAINING FOR MEDICAL STUDENTS**

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Special Study Modules (SSM) are integrated into the first three years of Dokuz Eylul University School of Medicine. The objectives of SSMs are to train the students in independent learning, team working, the basic principles of scientific methodology, and writing scientific report, preparing scientific poster and oral presentation for the results of scientific research.

Starting from this point, we designed a cross-sectional study to assess the role and long-term effects of SSMs on medical students. We chose five different wet-lab SSM that were carried out in Dokuz Eylul University Research Lab between years 2009-2014. We designed a survey that included 11 questions to assess long-term effects of SSMs and sent it via e-mail to totally 20 medical students who took these SSMs. The survey was focused on experimental and transferable skills.

Among 20 medical students, 16 of them (80%) participated in the study. Through this survey, contribution levels of SSMs on scientific and educational skills of students, current status of application of the competencies that during SSM, and their opinion regarding the SSMs were investigated. The most impressive data were related to their awareness of research techniques. 92.9% of participants thought that the SSM affected their awareness of research techniques. More than half of the participants indicated that they benefitted from SSM in the fields of writing a scientific report or paper, preparing an experimental plan, and doing oral presentation. 85.8% of students indicated that the SSMs made a significant contribution on their further educational life, for instance their specialist training.

In conclusion, we found that the SSMs that are designed for the medical students in Dokuz Eylul University Research Lab influenced the students positively in terms of scientific and educational skills not only when they were applied, but also in long-term period.

Keywords: special study modules; medical education; research culture; experimental skills; transferable skills

PP-04**HACETTEPE UNIVERSITY GRADUATE SCHOOL OF HEALTH SCIENCES BIOCHEMISTRY POST-GRADUATE PROGRAMME**

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Hacettepe University is one of the leading research universities in Turkey and Graduate School of Health Sciences is awarded by ORPHEUS since April, 2018. Biochemistry Post-Graduate Programme is a multidisciplinary programme conducted by the Department of Biochemistry of Medical and Pharmacy Faculties. Currently, there are 7 professors, 9 associate professors, 2 assistant professor, and 13 research assistants, 3 MSc. and 15 Ph.D. students are maintaining their education. During the first year of MSc, students take their courses and laboratory practice to evolve technical knowledge. Also, they learn how to prepare a research proposal. In the second year, they begin to carry out thesis experiments and complete MSc. programme. In the first year of Ph.D. training, the student starts to work with their supervisor, related to his/her own specific research interest. Ph.D. students are expected to undertake a formal programme of coursework to develop and enhance technical knowledge, in addition writing a research proposal for a grant and getting the approval of the ethical committee are major goals during the first 2 years. Following the defense exam, they start to work on thesis project. While doing interdisciplinary research, they are encouraged to apply for a grant to collaborate with other international

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research institutions. At the end of their Ph.D. training, publishing 3 scientific papers and attending at least 1 national / 1 international meeting is mandatory. The programme is designed to produce highly skilled and motivated biochemists that are suitable for employment in the life-sciences or for further academic research.

Keywords: Post-graduate, training

PP-05**THERE IS VALUE IN TAKING THE TIME TO TEACH DENTAL HISTORY AND ETHICS IN DENTISTRY CURRICULUM**

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Background: The Association for Dental Education in Europe (ADEE) defined the necessary hard (technical proficiency & scientific and clinical competence) and soft skills (personal values, ethical behaviour and social skills) that future dentists in Europe ideally should possess. However, the teaching and assessment of soft skills remains a challenge to dental schools. This paper oversees such a challenge by investigating how 'history of dentistry and ethics' course in dentistry curriculum of Cyprus Health and Social Sciences University, is taught and assessed.

Materials and Methods: The study included the students from Term 1 (n=78, teaching in Turkish language group) of Faculty of Dentistry, Cyprus Health and Social Sciences University. Dental history is taught for 1 hour (lecture) every week in the curriculum (theoretical and cases). Students' academic performance was evaluated with mid-term and final exams. Participants were assessed according to their level of success and failure. The data including the participants' success in the exams were transferred to the statistical program and evaluated with descriptive statistical methods.

Results: The students participated in the study 51.3% (n = 40) male and 48.7% (n = 38) were female. The success rate of the midterm exam was 78.34%, while the success of the final exam was 76.32%. Mid-term exam success was not statistically significantly different than final exam (p>0.215). When compared to basic science subjects the average success rate of dental history class was significantly increased (p<0.05). **Conclusion:** Studies examining the role and status, the delivery and assessment of the teaching of history of dentistry and ethics in the dental undergraduate curriculum, as well as the space that it is afforded in the curriculum are important. Teaching the history of dentistry and ethics to dental students can positively influence their sense of belonging to the discipline and improve their ethical conduct as dentists. However, this course must not be isolated to classroom lectures but also include "hands on" discussion of ethical dilemmas and scenarios. The interest and success of our students in the history of dentistry and ethics course are promising clues for us to propose that there is value in taking the time to teach the course in dental curriculum.

Keywords: History of Dentistry, Ethics, Qualitative Research

PP-06**FROM TISSUES AND CELLS TO UNDERSTANDING MOLECULAR BIOLOGY**

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Hacettepe University is a successful research university in Turkey. Histology and Embryology Department has different educating programmes which are training Ph.D. students related with Graduate School of Health Sciences and research assistants related with Ministry of Health. The aim is to train Ph.D. students and research assistants in basic laboratory techniques, cell biology, molecular approaches to cancer and developmental issues and in education skills. The training involves structural freedom, usefulness, equity and continuity that are essential basics for adult education.

In the first year, students take lessons that contain histology and embryology of cells, tissues and organs. In the second year, they gain more experience in laboratory techniques (cell culture,

immunocytochemistry, immunohistochemistry and transmission electron microscopy). They also take experimental animals' research course. In the end of second year students should pass the doctoral proficiency exam. During the training process, students can take part in different research and follow their own thesis experiments and research. Students can participate in advanced courses, necessary for their research. Hacettepe University, Graduate School of Health Sciences is involved in ORPHEUS Ph.D. training program. In this content, from beginning of the training, Ph.D. students and their advisors decide on thesis subject and start work on it.

Histology correlates with clinical sciences, molecular sciences, genetics and also regenerative medicine. Embryology is important for understanding the developmental processes of different organisms. As a scientist, beside running research we also have the task to train new scientists. The balance between education and research is so important in this respect.

Key Words: Histology, Education, Cell Biology

PP-07**"WHY SHOULD I GET A Ph.D. DEGREE AND HOW CAN I DO IT?"**

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A Doctor of Philosophy (Ph.D.) is the highest academic degree awarded by universities. A Ph.D. candidate must submit a project, thesis or dissertation often consisting of a body of original academic research, which is in principle worthy of publication in a peer-reviewed journal. Doing a Ph.D. would improve your abilities to understand and solve problems, increase your confidence, make yourself a better communicator and gain skills that may lead to a better job.

For a good Ph.D., students need to study at an academically successful university. Hacettepe University is one of the leading research universities in Turkey. Moreover, its Post-Graduate School of Health Sciences involves in privileged Orpheus Ph.D. program. At the end of this Ph.D. programme, publishing 3 scientific papers and attending at least one national/international meeting is mandatory. For this purpose, students are required to produce high-quality projects. There are various international programs to support these projects. Major international scholarships are TÜBİTAK, febs, Embo, Marie Curie, Fulbright and Aziz Sancar scholarships. Through these scholarships, the scientific competence of the researcher is increased by carrying out short/long-term studies abroad. Hacettepe University Biochemistry encourages Ph.D. students studying abroad during their Ph.D. studies. In this context, in 2018, 3 Ph.D. students were eligible to go to Sweden, Germany, and Israel for 1 year with Tübitak 2214-A International Research Fellowship programme.

Ph.D. is a vital step for a good career, good plan, and hard work play key roles to reach the top of academic achievement.

PP-08**EVALUATION OF THE THEORETICAL AND PRACTICAL COURSE ON DNA DAMAGE, REPAIR AND ITS MEASUREMENT BY TANDEM MASS SPECTROMETRY**

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Background and Methods: A theoretical and practical course on "DNA Damage, Repair and its measurement by Tandem Mass Spectrometry" has been held by Department of Molecular Medicine, Institute of Health Sciences Dokuz Eylül University, on June 5-8, 2018. The major trainer of this course, Prof. Dr. Miral DİZDAROĞLU (National Institute of Standards and Technology, Gaithersburg, MD, USA) has produced a large number of important data on DNA damage and repair, and has received over 25,000 citations with his studies on this subject. This four-