

ÖZGEÇMİŞ VE ESERLER LİSTESİ

ÖZGEÇMİŞ

1. Adı Soyadı : Pınar Tulay

2. Doğum Tarihi: 8 Ekim 1985

3. Ünvanı : Doçent

4. Öğrenim Durumu:

Derece	Bölüm/Program	Üniversite	Yıl
Lisans	Kimya ve Matematik	University of Missouri	2006
Master	Biyokimya	Imperial College	2008
Master	Prenatal Genetik Tanı ve Fetal Tıp	University College London (UCL)	2009
Doktora	Tıbbi Genetik	University College London (UCL)	2013

Doktora Tezi/S.Yeterlik Çalışması/Tıpta Uzmanlık Tezi Başlığı (özetî ekte) ve Danışman(ları) :

Investigation of DNA repair gene expression and protein function in human oocytes and preimplantation embryos (İnsan yumurtası ve embriyolarında DNA onarım gen ekspresyon ve protein incelenmesi)

Doç. Dr. Sioban SenGupta, Prof. Dr. Joyce Harper

5. Akademik Ünvanlar:

Görev Unvanı	Görev Yeri	Yıl
Profesör Doktor	Yakın Doğu Üniversitesi, Tıp Fakültesi, Tıbbi Genetik Anabilim Dalı	Temmuz 2022
Doçent Doktor	Yakın Doğu Üniversitesi, Tıp Fakültesi, Tıbbi Genetik Anabilim Dalı	Aralık 2016
Yardımcı Doçent Doktor	Yakın Doğu Üniversitesi, Tıp Fakültesi, Tıbbi Genetik Anabilim Dalı	Mayıs 2014-Aralık 2016

6. Yönetilen Yüksek Lisans ve Doktora Tezleri

6.1 Tamamlanan Yüksek Lisans Tezleri

Ibtehal Abulgasssem Hassan Albadri 'THE EFFECT OF CHENOPODIUM QUINOA SAPONINS ON THE PROLIFERATION OF MCF-7 AND MDA-MB-231 BREAST CANCER'

Hulya Senol ‘CYTOTOXIC EFFECT AND APOPTOSIS INDUCTION OF VERBASCOSIDE IN MCF-7 AND MDA-MB-231’

Inci Nebih ‘The expression profile of the WNT/ β -catenin signalling pathway genes in human oocytes obtained from polycystic ovaries syndrome (PCOS) patients’

Bahez Altarda ‘THE EFFECT OF L-ASPARAGINASE OBTAINED FROM ESCHERICHIA COLI ON THE PROLIFERATION OF MCF-7 AND MDA-MB-231 BREAST CANCER CELLS’

Marwan “ Mohammad Saeed “ Naji Seder ‘The expression profile of the WNT/ β -catenin signalling pathway genes in human oocytes obtained from polycystic ovaries syndrome (PCOS) patients’

Abdulkadir Rabiu ‘The Investigation Of Allele Frequencies Of Polymorphic Variants In Genes That Are Related To Polycystic Ovarian Syndrome (PCOS)’

Gözde Öğütçü ‘ASTRAGALUS TÜRLERİNDEN ELDE EDİLEN SİKLOARTAN TİPİ SAPONİNLERİN MCF-7 VE MDA-MB-231 İNSAN MEME KANSERİ HÜCRELERİNE ETKİSİ’

Sana Muneem Madhher ‘ALLELIC FREQUENCIES OF GENES INVOLVED IN HORMONAL REGULATION OF POLYCYSTIC OVARY SYNDROME’

Sihad Salim Hakeem Alyousif ‘THE INVESTIGATION OF ALLELE FREQUENCIES OF POLYMORPHIC VARIANTS IN GENES THAT ARE RELATED TO POLYCYSTIC OVARIAN SYNDROME’

Zeina Al-Omar ‘Investigation of Steroidogenesis Related Gene Expression in Human Oocytes Obtained from Patients with Polycystic Ovaries’

Rebin Salah Ali ‘The Allelic Distributions of SNPs from Thrombosis Associated Genes in Patients with Miscarriages in Erbil, Iraq’
Senol, H. ‘Cytotoxic Effects of Verbascoside on MCF-7 AND MDA-MB-231’

Teleboshe Paul, L. ‘The effect of repeated controlled ovarian hyperstimulation cycles on oocyte and embryo development and the effect of thrombophilia associated polymorphisms on recurrent miscarriages’

Altarda, M. ‘The investigation of DNA methylation of ESTROGEN RELATED RECEPTOR ALPHA (ESRR α) and RECEPTOR ACTIVATOR OF NUCLEAR FACTOR KAPPA B LIGAND (RANKL) genes in menopause woman’ (Eş danışman)

6.2 Tamamlanan Doktora Tezleri

Nanyak Galam ‘In Vitro MCF-7 CELLS APOPTOSIS ANALYSIS OF CARBOPLATIN LOADED SILK FIBROIN NANOPARTICLES’

7. Yayınlar

7.1 Uluslararası hakemli dergilerde (SCI Kapsamında) yayımlanan makaleler :

1. Hafizi N, Ozbakir B, **Tulay P.** (2023) Expression of genes in the AKT signalling pathway in human oocytes from patients with polycystic ovaries Zygote doi: 10.1017/S096719942200048X.
2. Oyebode OD, **Tulay P.** (2023) Mesenchymal Stem Cells Applications in Alzheimer's Disease. *Glob Med Genet.* 2023 Dec 11;10(4):382-387. doi: 10.1055/s-0043-1777087
3. Ahmed M, Aytacoglu H, Coban O, **Tulay P.** (2023) Investigation of BAK, BAX and MAD2L1 gene expression in human aneuploid blastocysts. *Zygote.* 2023 Dec;31(6):605-611. doi: 10.1017/S0967199423000539.
4. Onal T, **Tulay P**, Vatansever HS. (2023) Does Pten have an impact on oogenesis of PCOS mouse models? *Zygote.* 2023 Feb;31(1):97-100. doi: 10.1017/S0967199422000661
5. Cobanoğulları H, Ergoren MC, Dundar M, Bertelli M, **Tulay P.** (2022) Periconceptional Mediterranean diet during pregnancy on children's health. *J Prev Med Hyg.* 2022 Oct 17;63(2 Suppl 3):E65-E73.
6. Adam AR, Ozbakir B, Ozay AC, **Tulay P.** (2023) Investigation of allele frequencies of polymorphic variants in genes that are related to polycystic ovary syndrome. *Rev Assoc Med Bras (1992).* 28;68(11):1558-1564
7. Ibrahim Z, **Tulay P**, Abdullahi J. (2022) Multi-region machine learning-based novel ensemble approaches for predicting COVID-19 pandemic in Africa. *Environ Sci Pollut Res Int.* 2023 Jan;30(2):3621-3643
8. Tuncel G, Ergoren MC, Baddal B, **Tulay P**, Ozverel CS, Guler E, Suer HK, Sayan M, Sanlidag T. (2022) Detection of SARS-CoV-2 N501Y mutation among SARS-CoV-2 variants of concern circulating in Northern Cyprus. *Future Virol.* Epub.
9. Ismail AB, Naji MMS, Nebih I, Tuncel G, Ozbakir B, Temel SG, **Tulay P**, Mocan G, Ergoren MC (2022) The expression profile of WNT/β-catenin signalling genes in human oocytes obtained from polycystic ovarian syndrome (PCOS) patients. *Zygote.* Epub
10. Kalem HH, **Tulay P**, Irez T. (2022) How does sperm apoptosis affect the outcome of intrauterine insemination and intracytoplasmic sperm injection? *Andrologia.* 54(5):e14381.
11. Dunar M,... **Tulay P**,...National Genetics Consortium Study. (2022) Clinical and molecular evaluation of MEFV gene variants in the Turkish population: a study by the National Genetics Consortium. *Funct Integr Genomics.* 22(3):291-315.
12. Tulay P, Onal T, Vatansever S. (2021) Molecular regulation of polycystic ovary syndrome: altered gene expression levels in mouse models pretreatment and post-treatment. *Zygote.* 3:1-6. doi: 10.1017/S0967199421000769. Online ahead of print
13. Ozbakir B, **Tulay P.** (2021) Should the fertile women quit drinking alcohol to produce better quality oocytes? *Zygote.* 20(29):2, 176-178
14. Şenol H, **Tulay P**, Ergören MC, Hanoglu A, Çalış İ, Mocan G. (2021) Cytotoxic Effects of Verbascoside on MCF-7 and MDA-MB-231. *Turk J Pharm Sci.* 28;18(5):637-644. doi: 10.4274/tjps.galenos.2021.36599.
15. Kopca T, **Tulay P.** (2021) Association of Assisted Reproductive Technology Treatments with Imprinting Disorders. *Glob Med Genet.* 2021 Mar;8(1):1-6. doi: 10.1055/s-0041-1723085. Epub
16. Ergoren, MC; **Tulay P** and Dundar, M. (2021) Are new genome variants detected in SARS-CoV-2 expected considering population dynamics in viruses? *EUROBIOTECH JOURNAL.* 5 (1): 1-3

17. **Tulay, P**; Ergoren, MC and Dundar, M. (2021) COVID-19 vaccines: Where do we stand? *EUROBIOTECH JOURNAL*. 5 (1): 13-16
18. Aslan I, Ozyigit S, Paul LT, Tosun O, **Tulay P**. (2020) Thrombophilia associated gene polymorphisms: Does use of medication, including anti-coagulants, minerals or folic acid, prevent the miscarriages? *J Reprod Immunol*. Epub
19. Ozbakir B, **Tulay P**. (2020) Does cigarette smoking really have a clinical effect on folliculogenesis and oocyte maturation? *Zygote*. 28(4):318-321
20. Al-Omar Z, Ozbakir B, **Tulay P**. (2020) Differential expression of genes involved in steroidogenesis pathway in human oocytes obtained from patients with polycystic ovaries. *J Reprod Immunol*. Epub
21. Mocan G; **Tulay P**; Ozkayalar H; Serakinci N. (2020) HPV: Obvious but Not Necessary Cause of Cervical Cancer. *CYPRUS JOURNAL OF MEDICAL SCIENCES*. 5 (2), 107-112
22. Galam N, **Tulay P**, Adali T (2020) In Vitro MCF-7 Cells Apoptosis Analysis of Carboplatin Loaded Silk Fibroin Particles. *Molecules*: 25(5)
23. **Tulay P**, Ergoren MC, Alkaya A, Yayci E, Sag SO, Temel SG. (2020) Inconsistency of Karyotyping and Array Comparative Genomic Hybridization (aCGH) in a Mosaic Turner Syndrome Case. *Glob Med Genet*. 2020 Dec;7(4):128-132
24. Paul LT, Atilan O, **Tulay P**. (2019) The effect of repeated controlled ovarian stimulation cycles on the gamete and embryo development. 27(5):347-349
25. **Tulay P**, Arslan H, Buran A, Koprulu Y. (2019) Assessment of successful pregnancy using granular oocytes in ICSI treatments. *Zygote*. 27(2):97-100.
26. Buran A, **Tulay P**, Dayioğlu N, Bakircioglu ME, Bahceci M, İrez T. (2019) Evaluation of the morphokinetic parameters and development of pre-implantation embryos obtained by testicular, epididymal and ejaculate spermatozoa using time-lapse imaging system. *Andrologia*. 51(4):e13217.
27. **Tulay P**, Temel SG, Ergoren MC. (2019) Investigation of KCNQ1 polymorphisms as biomarkers for cardiovascular diseases in the Turkish Cypriots for establishing preventative medical measures. *Int J Biol Macromol*. 124:537-540.
28. Ergoren MC, **Tulay P**. (2019) Investigation of potential biomarkers for thrombosis related diseases in Turkish Cypriot population. *Int J Biol Macromol*. 11.176.
29. **Tulay P**, Atilan O. (2018) Oocyte Donors' Awareness on Donation Procedure and Risks: A Call for Developing Guidelines for Health Tourism in Oocyte Donation Programmes. *J Turk Ger Gynecol Assoc*. 28;20(4):236-242
30. **Tulay P**, Galam N, Adali T. (2018) The Wonders of Silk Fibroin Biomaterials in the Treatment of Breast Cancer. *Crit Rev Eukaryot Gene Expr*. 28(2):129-134
31. Kalkan R, **Tulay P**. (2018) The Interactions between Bone Remodelling, Estrogen Hormone and EPH Family Genes. *Crit Rev Eukaryot Gene Expr*. 28(2):135-138
32. Pervaiz; R., **Tulay; P.**, Faisal; F., Serakinci; N. (2017) Incidence of cancer in the Turkish Republic of Northern Cyprus. *Turk J Med Sci*. 18;47(2):523-530.
33. **Tulay; P.**, Jaroudi S, Doshi A, SenGupta SB. (2016) Functional assessment for elimination of mismatches in nuclear and whole cell extracts obtained from mouse and human blastocysts. *Syst Biol Reprod Med*. 62(6):415-422.
34. **Tulay; P.**, Doshi; A., Serhal, P., SenGupta, SB. (2016) Differential expression of parental alleles of BRCA1 in human preimplantation embryos. *Eur J Hum Genet*. 25(1):37-42.
35. **Tulay P**, Gultomruk M, Findikli N, Bahceci M. (2016) PGD management scheme of older females with balanced translocations: Do older females have less chance of a balanced embryo transfer? *Journal of Turkish-German Gynecological Association*. 17(2):91-5.

36. Tulay; P. (2016) Ethical dilemmas for oocyte donations: slippery slope for conflicts of interest. *Critical Reviews In Eukaryotic Gene Expression*. 26(2):133-6.
37. **Tulay; P.**, SenGupta, SB. (2016) MicroRNA expression and miRNA association with DNA repair in human preimplantation embryos final (Review). *Developmental Biology*. 62(3):225-34.
38. Tulay; P., Serakinci; N. (2016) The route to HPV associated neoplastic transformation: a review of the literature (Review). *Critical Reviews In Eukaryotic Gene Expression*, 26 (1): 27-39.
39. Serakinci; N., Kalkan; R., **Tulay; P.** (2016) Double faced role of human mesenchymal stem cells and their role in cancer therapy and challenges. *Current Stem Cell Research and Therapy*. 11(4):343-51.
40. **Tulay; P.**, Naja; RP., Doshi; A., Serhal, P., SenGupta, SB. (2015) Investigation of miRNA expression with DNA repair in human oocytes and preimplantation embryos. *JARG*, 32 (12): 1757-64.
41. **Tulay P**, Gultomruk M, Findikli N, Bahceci M. (2015). Number of embryos biopsied as a predictive indicator for the outcome of preimplantation genetic diagnosis by fluorescence in situ hybridisation in translocation cases. *Zygote*, 24 (1): 107-14.
42. **Tulay P**, Gultomruk M, Findikli N, Bahceci M. (2014) Poor embryo development and preimplantation genetic diagnosis outcomes of translocations involving chromosome 10: Do we blame genetics? *Zygote*, 23 (5):778-84.
43. **Tulay P**, Gultomruk M, Findikli N, Yagmur E, Bahceci M. (2014) Is the interchromosomal effect present in embryos derived from Robertsonian and reciprocal translocation carriers particularly focusing on chromosome 10 rearrangements? *Zygote*, 23 (6): 908-15.
44. Bakircioglu, M.E., **Tulay; P.**, Findikli; N., Erzik, B., Gultomruk; M.,Bahceci; M. (2014) Successful testicular sperm recovery and IVF treatment in a man with Leydig cell hypoplasia. *JARG*, 7:817-21.
45. Kakourou; G., Jaroudi; S., **Tulay; P.**; Heath; C., Harper; JC.; SenGupta, SB (2013) Investigation of gene expression profiles before and after embryonic genome activation and assessment of functional pathways at the human metaphase II oocyte and blastocyst stage. *Fertil Steril*, 99(3):803-814

7.2 Uluslararası bilimsel toplantılarında sunulan ve bildiri kitabında (*Proceedings*) basılan bildiriler :

1. European Biotechnology Congress, Valencia, Italy, 2019. **Tulay, P.** Thrombophilia gene polymorphisms: can anti-coagulants prevent miscarriages?
2. Oral presentation. 52nd European Society of Human Genetics, Milan, Italy, June 2018. **Tulay, P.**, Atilan, O. Slippery slope for oocyte donations. Oral presentation.
3. European Biotechnology Congress, Dubrovnik, Croatia. 2017. Yavuz, HU, Tulay, P, Fuatli, T, Adali, T. Characterization studies of silk fibroin-eggshell microparticles. Poster presentation.
4. 65th Annual Clinical and Scientific Meeting of the American-College-of-Obstetricians-and-Gynecologists. San Diego, USA. 2017. Tulay, P., Gultomruk, M., Findikli, N., Bahceci, M. Should we offer PGS to poor prognosis patients undergoing IVF? Poster presentation.
5. 4th International Congress of Gynaecologyand Obstetrics, Barcelona, Spain, May 2016. Tulay, P. MiRNAs and DNA Repair Genes in Human Oocytes and Preimplantation Embryos. Oral presentation.

6. European Society of Human Genetics, Barcelona, Spain, May 2016 Tulay, P. Differential expression of parental alleles of BRCA1 in human preimplantation embryos. Oral presentation.
7. 1st International Meeting on Controversies in Preconception, Preimplantation and Prenatal Genetic Diagnosis (COGEN), Paris, France, September 2015 **Tulay, P.**; Kizilkanat, M.; Serakinci, N. Poster başlığı: “Thrombophilia: is it the cause of miscarriages?”
8. 13th Annual Meeting of the Preimplantation Genetic Diagnosis International Society (PGDIS), Canterbury, UK, May 2014 **Tulay, P.**; Findikli, N; Musul, B.; Aksoy, T. and Bahceci, M. Comparison of progression of embryo development and rate of anuploidy cultured in a time-lapse system and a conventional incubator. P42.
9. 69th American Society for Reproductive Medicine (ASRM) Annual Meeting 2013, Boston, USA, October 2013 **Tulay, P.**; Gultomruk, M.; Findikli, N; and Bahceci, M. Number of embryos to be biopsied is a strong predictive indicator for a successful preimplantation genetic diagnosis outcome in translocation cases. P-180
10. 69th American Society for Reproductive Medicine (ASRM) Annual Meeting 2013, Boston, USA, October 2013 **Tulay, P.**; Gultomruk, M.; Findikli, N; and Bahceci, M. There is no inter-chromosomal effect in the embryos derived from young carriers of reciprocal and Robertsonian translocations. P-187
11. 12th International Conference on Preimplantation Genetic Diagnosis (PGDIS), Istanbul, Turkey, 09-11 May 2013 **Tulay, P.**; Gultomruk, M.; Findikli, N; and Bahceci, M. There is no inter-chromosomal effect in the embryos derived from young carriers of reciprocal and Robertsonian translocations. Fertility and Sterility. Volume 100, Issue 3, Supplement, Page S202, September 2013.
12. 12th International Conference on Preimplantation Genetic Diagnosis (PGDIS), Istanbul, Turkey, 09-11 May 2013 Gultomruk, M.; **Tulay, P.**;Findikli, N; and Bahceci, M. Poor preimplantation genetic diagnosis outcomes of translocations involving chromosome 10: Do we blame on genetics? Human Reproduction (2013) 28 (suppl 1):i291-i311.
13. 29th Annual Meeting of European Society of Human Reproduction and Embryology (ESHRE), London, UK, 8-10 July 2013 **Tulay, P.**; Gultomruk, M.; Findikli, N; and Bahceci, M. July 2013 Segregation pattern of embryos from reciprocal translocation carriers involving chromosome 10. P-453. RBMOnline, volume 26, supplement 1, pS47.
14. 28th Annual Meeting of European Society of Human Reproduction and Embryology (ESHRE), Istanbul, Turkey, 1-4 July 2012 **P. Tulay.**, R.P. Naja, O. Cascales-Roman, S. Cawood, A. Doshi, P. Serhal, S.B. SenGupta (2012) Investigation of microRNA expression with DNA repair in human oocytes and preimplantation embryos. P-459. Hum. Reprod. (2012) 27 (suppl 2):ii286-ii302.
15. Annual Meeting of European Society of Human Genetics (ESHG), Nurnberg, Germany, 22-23 June, 2012 **Tulay, P.**, Jaroudi, S., Harper, J., SenGupta, S. “DNA repair”, June 2012
16. 11th International Conference on Preimplantation Genetic Diagnosis (PGDIS), Bregens, Austria, 16-19 May 2012 **Tulay; P.**, Doshi; A., Serhal, P., SenGupta, SB.(2012) Determining the parental origin of transcripts in human preimplantation

- embryos Reproductive BioMedicine Online Volume 24, Supplement 2, Pages i-v, S27-S76
17. 12th International Meeting on Human Genome Variation and Complex Genome Analysis, California, USA, 8-10 September 2011 **Tulay, P.**, SenGupta, SB. (2011)Strategy for determining the parental origin of transcripts in preimplantation embryos
 18. British Human Genetics Conference 2011, Warwick, UK, 17-19 September 2011 **Tulay, P.**, Jaroudi, S., Harper, J., & SenGupta, SB. (2011) Functional Assessment of Mismatch Repair. *Journal of Medical Genetics*, 48, S51

7.3 Yazılan Uluslar arası kitaplar veya kitaplarda bölümler.

- Tulay; P.**(2017) Control of Embryonic Gene Expression. *Embryo Cleavage*. *InTech*.
- Tulay; P.**(2017) Chromosomal abnormalities in preimplantationembryos and PGD.ChromosomalAbnormalities. *InTech*.
- Serakinci; N., **Tulay; P.**, Kalkan; R. (2015) Role of mesenchymal stem cells in cancer development and their use in cancer therapy. In Pham, Phuc Van (Ed.) Stem cells: clinical applications. *Springer*

7.4 Ulusal hakemli dergilerde yayımlanan makaleler :

- Tulay P**, Gultomruk M, Fındıklı N, Bahceci M. (2016) PGD management scheme of older females with balanced translocations: Do older females have less chance of a balanced embryo transfer? *Journal of Turkish-German Gynecological Association*. Accepted.

8. Projeler

- Danışman:** Meme kanseri hücre hattında karboplatin yüklü ipek fibroinin etkilerinin araştırılması
- Danışman:** Thrombofili ile ilişkili genlerdeki polimorfizmlerin düşükler ile ilişkisinin araştırılması
- Danışman:** Kontrollü over stimulasyonunun oosit rezervindeki rolünün araştırılması

9. İdari Görevler

YDÜ Tıp Fakültesi, Tıbbi Genetik AD Başkanı

10. Bilimsel Kuruluşlara Üyelikler :

- Preimplantation Genetic Diagnosis International Society
European Society of Human Reproduction and Embryology
Tıbbi Genetik Derneği

11. Ödüller

European Society of Human Genetics- Kongre katılım ödülü 2016

Yakın Doğu Üniversitesi- Genç Araştırmacı Ödülü 2016

Yakın Doğu Üniversitesi- Bilimsel Başarı Ödülü- 2016

Yakın Doğu Üniversitesi- Yayın Teşvik Ödülü- 2016

Yakın Doğu Üniversitesi- Yayın Teşvik Ödülü- 2015

12. Son iki yılda verdiği lisans ve lisansüstü düzeyindeki dersler

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı Teorik
			Teorik	Uygulama	
2018-2019	Güz	Teratology in prenatal development and counselling (İngilizce)	3	0	9
		Prenatal tanıda teratoloji ve danışmanlık (Türkçe)	3	0	5
		Developmental Genetics and In Vitro Fertilization- Doktora dersi (İngilizce)	3	0	2
		Tıp Fakültesi- Üroloji Stajı	2	0	100
		Tıp Fakültesi- KHD Stajı	2	0	100
		Tıp Fakültesi- Genel Cerrahi Stajı	2	0	100
		Tıp Fakültesi- Nöroloji Stajı	2	0	100
	Bahar	Embriyoloji, Gelişim Genetiği ve Teratoloji (İngilizce)	3	0	16
		Embriyoloji, Gelişim Genetiği ve Teratoloji (Türkçe)	3	0	7
		Reproduktif ve Rejeneratif Tıp(İngilizce)	3	0	11
2019-2020	Güz	Reproduktif ve Rejeneratif Tıp Türkçe)	3	0	11
		Cell Culture – Yüksek Lisans (İngilizce)	3	0	4
		Teratology in prenatal development and counselling (İngilizce)	3	0	9
		Prenatal tanıda teratoloji ve danışmanlık (Türkçe)	3	0	5
		Developmental Genetics and In Vitro Fertilization- Doktora dersi (İngilizce)	3	0	2

		Tıp Fakültesi- Üroloji Stajı	2	0	100
		Tıp Fakültesi- KHD Stajı	2	0	100
		Tıp Fakültesi- Genel Cerrahi Stajı	2	0	100
		Tıp Fakültesi- Nöroloji Stajı	2	0	100
Bahar		Embriyoloji, Gelişim Genetiği ve Teratoloji (İngilizce)	3	0	16
		Embriyoloji, Gelişim Genetiği ve Teratoloji (Türkçe)	3	0	7
		Reproduktif ve Rejeneratif Tıp(İngilizce)	3	0	11
		Reproduktif ve Rejeneratif Tıp Türkçe)	3	0	11
		Cell Culture – Yüksek Lisans (İngilizce)	3	0	4