

## ÖZGEÇMİŞ

**1. Adı Soyadı** : ZEYNEP DOĞUSAN YAMALIOĞLU

**2. Doğum Tarihi** : 21 Mart 1965

**3. Ünvanı** : Yardımcı Doçent Doktor

**4. Öğrenim Durumu** :



Derece	Alan	Üniversite	Yıl
Lisans	Tıp Fakültesi	Ankara Üniversitesi	1988
Y. Lisans	Medical and Pharmaceutical Research	Vrije Universiteit Brussel (VUB), Brüksel, Belçika	1994
Doktora	Doktoraatopleiding in de Medische Wetenschappen (Tıp Araştırmaları)  (ÜAK Denklik: İmmünoloji- 17.05.2010/185)	Vrije Universiteit Brussel (VUB), Brüksel, Belçika	2001

### 4. 1. Yüksek Lisans Tezi Başlığı ve Tez Danışmanları :

Tez başlığı : "Tumor necrosis factor- $\alpha$  and interleukin1- $\alpha$  mediate cell death in process-bearing cells of the L3 cell line."

Tez danışmanları : Prof. Elisabeth Hooghe-Peters ve Dr. Liliane Tenenbaum

### 4. 2. Doktora Tezi Başlığı ve Tez Danışmanı :

Tez başlığı : "Contribution to the study of prolactin signaling in leukocytes."

Tez danışmanı : Prof. Elisabeth Hooghe-Peters

### 5. Görevler

Görev Unvanı	Görev Yeri	Yıl
Ar.Gör.	Department of Pharmacology, Faculteit Geneeskunde en Farmacie (Tıp ve Eczacılık Fakültesi), Vrije Universiteit Brussel (VUB), Brüksel, Belçika (Doktora öğrencisi)	1994 – 2001
Dr.Ar.Gör.	1) Department of Pathology and Laboratory Medicine, David Geffen School of Medicine at University California Los Angeles (UCLA), Los Angeles, CA, ABD (Doktora sonrası araştırmacı)  2) Laboratory of Experimental Medicine, Division of Endocrinology, Erasmus Hospital, Université Libre de Bruxelles (ULB), Brüksel, Belçika (Araştırma görevlisi)	2001 – 2004  2004 - 2008

## **6. Yayınlar**

### **6.A. Uluslararası hakemli dergilerde yayınlanan makaleler :**

- A1.** L. Tenenbaum, E. Teugels, Z. Dogusan, V. Avellana, and E. L. Hooghe-Peters, Plastic phenotype of human oligodendroglia tumor cells in vitro. *Neuropathol. Appl. Neurobiol.*, 22, 302-310 (1996).
- A2.** B. Velkeniers, Z. Dogusan, F. Naessens, R. Hooghe, and E. L. Hooghe-Peters, Prolactin, growth hormone and the immune system in humans. *Cell Mol. Life Sci.*, 54, 1102-1108, (1998).
- A3.** Z. Dogusan, M. L. Book, P. Verdoood, L-y Yu-Lee, and E. L. Hooghe-Peters, Prolactin (PRL) activates interferon regulatory factor-1 (IRF-1) expression in normal lympho-hematopoietic cells in the rat. *Eur.Cytokine Network*, 11, 435-442, (2000).
- A4.** Z. Dogusan, E. L. Hooghe-Peters, D. Berus, B. Velkeniers, and R. Hooghe, Expression of SOCS genes in normal and leukemic human leukocytes stimulated by prolactin, growth hormone and cytokines. *J. Neuroimmunology*, 109, 34-39, (2000).
- A5.** Z. Dogusan, R. Hooghe, P. Verdoood, and E. L. Hooghe-Peters, Cytokine-like effects of prolactin in human mononuclear and polymorphonuclear leukocytes. *J. Neuroimmunology*, 120, 58-66, (2001).
- A6.** R. Hooghe, Z. Dogusan, N. Martens, B. Velkeniers, and E. L. Hooghe-Peters, Effects of prolactin on signal transduction and gene expression: possible relevance for systemic lupus erythematosus. *Lupus*, 10, 719-727 (2001).
- A7.** Z. Dogusan, N. Martens, P. Stinissen, N. Hellings, N. Demotte, R. Hooghe, and E. L. Hooghe-Peters, Effects of prolactin on cloned human T-Lymphocytes. *Endocrine*, 20, 171-176 (2003).
- A8.** Z. Dogusan, E. Montecino-Rodriguez, and K. Dorshkind, Macrophages and stromal cells phagocytose apoptotic bone marrow derived B lineage cells. *J.Immunol.*, 172 (8), 4717-4723 (2004).
- A9.** I. Kharroubi, L. Ladrière, A. K. Cardozo, Z. Dogusan, M. Cnop, and D. L. Eizirik. Free fatty acids and cytokines induce pancreatic  $\beta$ -cell apoptosis by different mechanisms: role of NF- $\kappa$ B and endoplasmic reticulum stress. *Endocrinology*, 145 (11), 5087-5096 (2004).
- A10.** J. Rasschaert, L. Ladrière, M. Urbain, Z. Dogusan, B. Katabua, S. Sato, S. Akira, C. Gysemans, C. Mathieu and D. L. Eizirik. Toll-like receptor 3 and STAT-1 contribute for dsRNA+IFN- $\gamma$ -induced apoptosis in primary pancreatic  $\beta$ -cells. *J. Biol. Chem.*, 280 (40), 33984-33991 (2005).
- A11.** M. Cnop, L. Ladrière, P. Hekerman, F. Ortis A. K. Cardozo, Z. Dogusan, D. Flamez, M. Boyce, J. Yuan, and D. L. Eizirik. Selective inhibition of eukaryotic translation initiation factor 2 $\alpha$  dephosphorylation potentiates fatty acid-induced

endoplasmic reticulum stress and causes pancreatic  $\beta$ -cell dysfunction and apoptosis. *J. Biol. Chem.*, 282 (6), 3989-3997 (2007).

**A12.** Z. Dogusan, M. García, D. Flamez, L. Alexopoulou, M. Goldman, C. Gysemans, C. Mathieu, C. Libert, D.L. Eizirik, and J. Rasschaert. Double-stranded RNA induces pancreatic  $\beta$ -cell apoptosis by activation of the Toll-Like Receptor 3 and Interferon Regulatory Factor 3 pathways. *Diabetes*, 57, 1236-1245 (2008).

**A13.** M. García, Z. Dogusan, F. Moore, S. Sato, G. Hartmann, D. L. Eizirik, J. Rasschaert . Regulation and function of the cytosolic viral RNA sensor RIG-I in pancreatic beta cells. *Biochim Biophys Acta*, 1793 (11), 1768-1775 (2009).

#### **6.B. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (Proceedings) basılan bildiriler :**

**B1.** M. Spanoghe, J. Coremans, Z. Dogusan, J. Sterckx, E. L. Hooghe-Peters, R. Luypaert, and M. Osteaux, Proceedings of the International Society for Magnetic Resonance in Medicine, 4<sup>th</sup> Scientific Meeting and Exhibition, New York, USA, April 27-May 3, 1996. (*Proceedings of the International Society for Magnetic Resonance in Medicine*, 510 pp.).

Poster: "Blood-brain barrier disruption in Experimental Allergic Encephalomyelitis assessed by quantitative T1 maps, using a multislice turboflash technique."

**B2.** Z. Dogusan, M. Spanoghe, J. Coremans, and E. L. Hooghe-Peters, Belgische Vereniging voor Biochemie en Moleculaire Biologie, Leuven, Belgium, May 4<sup>th</sup>, 1996. (*Arch. Physiol. Biochem.*, 104/6, 787-787).

Abstract and poster: The visualisation of blood-brain barrier breakdown by using MRI technique in experimental autoimmune encephalomyelitis.

**B3.** J. Rasschaert, L. Ladrière, Z. Dogusan, S. Sato, S. Akira, and D. L. Eizirik. A Journal of the American Diabetes Association's, 65th Scientific Sessions, San Diego, California, USA, June 10-14, 2005. (*Diabetes abstract book*, P1748-A420 pp.).

Poster: "Role of Toll-Like Receptor 3 (TLR3) in the deleterious Effects of dsRNA on Pancreatic  $\beta$ -cells."

**B4.** J. Rasschaert, L. Ladrière, Z. Dogusan, S. Sato, S. Akira, C. Gysemans, C. Mathieu and D. L. Eizirik. 41st Annual Meeting of the European Association for the Study of Diabetes (EASD), Athens, Greece, September 10-15, 2005. (*EASD abstract book*, OP16-93 pp.).

Oral presentation: "Toll-like receptor 3 and STAT-1 contribute for dsRNA+IFN- $\gamma$ -induced apoptosis in pancreatic  $\beta$ -cells".

**B5.** J. Rasschaert, Z. Dogusan, D. Flamez, L. Alexopoulou, C. Mathieu, D. Eizirik. 42<sup>nd</sup> Annual Meeting of the EASD, Copenhagen, Denmark, 14-17 September 2006. (*EASD abstract book*, OP17-0098 pp.).

Oral presentation: "Molecular pathways underlying Toll like receptor 3 (TLR3)-induced beta cell apoptosis."

**B6.** J. Rasschaert, Z. Dogusan, M. García, D. Flamez, L. Alexopoulou, M. Goldman, C. Gysemans, C. Mathieu, C. Libert, D. L. Eizirik. 43<sup>st</sup> Annual Meeting of the EASD, Amsterdam, Netherlands, 18-21 September 2007. (*EASD abstract book*, PS22-0421 pp.).

Oral presentation: "Early mediators and downstream effectors of internal dsRNA-induced beta cell apoptosis: the role of IRF-3 and ER stress."

#### **6.C. Yazılan uluslararası kitaplar veya kitaplarda bölümler :**

**C1.** E. L. Hooghe-Peters, Z. Dogusan, and R. Hooghe, *In vitro effects of Prolactin on the lympho-hemopoietic system*. In: Horserman, N.D. (Ed.), *Prolactin*. Kluwer Academic Publishing, Boston, USA, pp. 317-339 (2001).

**C2.** R. Hooghe, S. Devos, Z. Dogusan, and E. L. Hooghe-Peters, Signal transduction and modulation of gene expression by prolactin in human leukocytes. In : Matera, L. and Rapaport R. (Ed.) *NeuroImmune Biology*, Vol. 2: Growth and Lactogenic Hormones, Published by: Elsevier Science, Amsterdam, Holland, pp. 123-126 (2002).

#### **6.D. Uluslar arası atıflar :**

Web of science değerlendirmesine göre : 1046 atıf, h-index 11 ve i 10-index 11.

#### **7. Bilimsel Kuruluşlara Üyelikler :**

Türk İmmünoloji Derneği

Türk Nöroendokrinoloji Derneği (TNED)

Türk Tabibler Birliği (TTB)

European Group for Blood and Marrow Transplantation (EBMT)

#### **8. Sertifikalar ve ödüller :**

1. Travel grant to participate at the 1st European Research Conferences, "Prolactin, Growth Hormon, Insulin-like Growth Factors and Thyroid Hormones in the Immune System", Obernai (Strasbourg), France. 1997.
2. Travel grant to visit Dr. Yu-Lee's lab, Baylor College of Medicine, Houston, TX, USA, 1998.
3. Grant to participate at the Gordon Research Conference on Prolactin, Colony Harbortown Resort, Ventura, CA, USA 1/30 - 2/4 2000.
4. İmmünoloji Kursu " Cell trafficking and migration", Katholieke Universiteit Leuven, Faculteit der Geneeskunde, Experimentele Immunologie, Leuven, Belçika, Şubat 17, 1995.
5. II. Ulusal Toksikoloji Kongresi, Belek, Antalya, Nisan 3-6, 1997.
6. Seminer "Mechanisms of disease: The model of diabetes", Vrije Universiteit Brussel (VUB), Brüksel, Belçika, Mayıs 5-6, 1997.

7. Pharmacia-Upjohn seminerleri "The neuro-endocrino-immunological axis" Vrije Universiteit Brussel (VUB), Brüksel, Belçika, Ekim 12-23 - Kasım 16-27, 1998.
8. Ziyaretçi araştırmacı, Department of Molecular and Cellular Biology, Baylor College of Medicine (Mart-Nisan 1998), Houston, TX, ABD.
9. Tehlikeli tıbbi atıkların işlenmesi ile ilgili eğitim, Office of Environment, Health and Safety, University of California (UCLA), Los Angeles, CA, ABD, Ağustos 2, 2001.
10. Deney Hayvanı Kullanım Sertifikası. University of California Los Angeles (UCLA) Chancellor's Animal Research Committee (ARC), CA, ABD, Şubat 4, 2003.
11. 2009-2010 öğrenim yılı, Marmara Üniversitesi Hematoloji İmmünoloji Bilimdalı'ndaki haftalık seminerlere katılım.
- 12.9. Ulusal Sinirbilimleri Kongresi, Yeditepe Üniversitesi, İstanbul, Nisan 13-17, 2010.
- 13.3. Otoimmün hastalıklarında klinik ve tanı kursu, İstanbul Üniversitesi Tıp Fakültesi, İstanbul, Nisan 28-29, 2011.
14. Primer İmmün Yetmezliklerde Klinik ve Moleküler Tanı Sempozyumu, İstanbul Üniversitesi ve Marmara Üniversitesi işbirliği ile, İstanbul Üniversitesi, Ocak 18-19, 2012.
15. Boğaziçi Üniversitesi Türkiye Genom Araştırması, "Genomiks çağında kişisel tanı ve tedavilere ilk adım", Boğaziçi Üniversitesi, Ocak 21, 2012.
16. 2013-2014 öğrenim yılı, Yeditepe Üniversitesi İmmünoloji Bilimdalı'ndaki haftalık seminerlere katılım.
17. Medical School Conferences 2012-2013 "The Uterine Environtment and Developmental Programing-Prof. Abigail Fowden Cambridge Üniversitesi" Yeditepe Üniversitesi, Şubat 27, 2013.
18. I. Biyomühendislik ve Genetik Günleri, Üsküdar Üniversitesi, Mayıs 3-4, 2013.
19. Seminar in Medicine "Controlling Immune responses: Recent Advances and Therapeutic Applications – Prof. Abul K. Abbas" Koç Üniversitesi Tıp Fakültesi, İstanbul, Mayıs 16, 2013.
20. "Symposium on Environmental Pollutants, Chemical Weapons and Human Health" Yeditepe Üniversitesi, Kasım 9, 2013.
21. Moleküler Biyoloji Derneği II. Uluslararası Kongresi, İstanbul Teknik Üniversitesi, Kasım 22-23, 2013.

- 22.TÜBİTAK 2237 proje eğitimi etkinliklerini destekleme programı "Sağlık bilimleri alanında proje hazırlama, yazma ve yürütme eğitimi" Yeditepe Üniversitesi, İstanbul, Ocak 17-19, 2014.
- 23."Göğüs hastalıklarında primer immün yetersizlikler: Tanı ve tedavi kursu", Amerikan Hastanesi, Koç Üniversitesi Tıp Fakültesi, İstanbul, Şubat 1, 2014.
- 24.3<sup>rd</sup> Hybrid Course in Next Generation Sequencing at the ESGM remote training center in Istanbul University, Mayıs 7-10, 2014.
- 25."Beta Cells in Health and Disease", Kocaeli Üniversitesi, Mayıs 21-22, 2014.
- 26.Mezenkimal kök hücre izolasyonu, kültürü ve kullanımına yönelik eğitim. Laboratory of Bone and Metabolic Biochemistry, Erasmus Hospital, Université Libre de Bruxelles (ULB), Brüksel, Belçika, Mayıs 2014.
- 27.Kordon Kanı ve Kök Hücre toplama, işleme, saklama ve kullanımına yönelik eğitim. Gent Kordon Kanı Bankası (Gent CBB) ve Department of Clinical Chemistry, Microbiology and Immunology, Ghent University, Gent, Belçika, Kasım 2014.

## **9. Diğer :**

### **A. Bilimsel Araştırma Bursları**

1. Research fellowship from the Belgian National Research foundation (Levenslijn) (1994-1997).
2. Ph.D. fellowship from the Free University of Brussels (1997-2001).
3. Research fellowship from the National Institutes of Health Grants (2001-2003).
4. European Foundation for the Study of Diabetes (EFSD) - JDRF - Novo Nordisk (2005-2008).

### **B. Uluslararası Bilimsel Toplantılarda Sunulan Bildiriler ve Poster Sunumları**

1. L. Tenenbaum, Z. Dogusan, J. L. Darling, and E. L. Hooghe-Peters, First Cardiff Neuroscience International Symposium, "Gene transfer into neurons: from basic applications to gene therapy", Cardiff, İngiltere, Ağustos 16-18, 1993.  
Poster: "Adeno associated virus (AAV) as a vector for gene transfer into glial cells of the human central nervous system."
2. Z. Dogusan, Apoptosis: Symposium organized by the Belgian Society for Cell Biology and the Belgian Immunological Society, Leuven, Belçika, Mart 25, 1995.  
Poster: "Tumor necrosis factor- $\alpha$  and interleukin1- $\alpha$  mediate cell death in process-bearing cells."

3. L. Tenenbaum, Z. Dogusan, and E. L. Hooghe-Peters, Perspectives for gene therapy of human glioma using AAV vectors. Neuro-Oncology Group meeting, Gand, Belçika, Nisan 29, 1995.
4. L. Tenenbaum, F. Rajas, E. Teugels, Z. Dogusan, and E. L. Hooghe-Peters, 7th Meeting of the European Neuroendocrine Society. Adams Workshop on gene transfer in the brain, Herzliya, İsrail, Ekim, 18-20, 1995.  
Poster: "Perspectives for gene therapy of human glioma using adeno-associated virus (AAV) vectors."
5. Z. Dogusan, R. Kooijman, L-y Yu-Lee, P. Verdoood, and E. L. Hooghe-Peters, 1st European Research Conferences, "Prolactin, Growth Hormone, Insulin-like Growth Factors and Thyroid Hormones in the Immune System", Obernai (Strasbourg), Fransa, Ekim 3-8, 1997.  
Poster: "Expression of prolactin and prolactin receptors in rat lymphoid cells."
6. G. Luo, M. L. Book, C. Downs, K. A. Sieger, Z. Dogusan, E. L. Hooghe-Peters, and L-y Yu-Lee, 2nd International Congress for Autoimmunity, Tel Aviv, İsrail, Mart, 1999.  
Abstract: "Prolactin signaling in leukocytes: Positive and negative regulation by Stats."
7. L-y Yu-Lee, G. Luo, M. L. Book, C. A. Bulaolac, K. A. Sieger, Z. Dogusan, E. L. Hooghe-Peters, The Endocrine Society's, 81st Annual Meeting, San Diego, CA, ABD, Haziran 12-15, 1999.  
Symposium Abstracts: "Prolactin signaling in cells of the immune system."
8. Z. Dogusan, M. L. Book, P. Verdoood, L-y Yu-Lee, and E. L. Hooghe-Peters, Gordon Research Conference on Prolactin, Colony Harbortown Resort, Ventura, California, ABD, Ocak 30-Şubat 4, 2000.  
Poster: "Prolactin (PRL) activates interferon regulatory factor-1 (IRF-1) expression in normal lympho-hematopoietic cells in the rat."
9. Z. Dogusan, L. Alexopoulou, C. Mathieu, D.L. Eizirik, J. Rasschaert. TONECA Coordination Action WP1 und WP4 Tandem Focus Workshops, Leiden (Hollanda), 9-12 Mart 2006.  
Sözlü sunum: "Molecular pathways underlying Toll like receptor 3 (TLR3)-induced beta cell apoptosis."

### **C. Akademik Sunumlar**

1. Ortadoğu Teknik Üniversitesi, Biyoloji Bilimdalı, Ankara, Nisan 10, 1997.  
Başlık : "Towards an understanding of experimental autoimmune encephalomyelitis."
2. Facultè de Médecine de l'Université de Liège, Belçika, Şubat 23, 1999.  
Başlık : "Prolactin receptor signal transduction in normal rat leukocytes."
3. Institut fur Biochemie, Rheinisch-Westfälische Technische Hochschule, Aachen, Almanya, Haziran 12, 1999.  
Başlık : "Prolactin activates IRF-1 expression in normal lympho-hematopoietic cells in the rat."

4. University of Gent, Laboratory of Molecular Biology, Belçika, Mart 13, 2000.  
Başlık : "Prolactin signaling in human leukocytes."
5. Marmara Üniversitesi Tıp Fakültesi, Hematoloji ve İmmünoloji Bilimdalı, Mayıs 21, 2010.  
Başlık : "Molecular pathways underlying dsRNA-induced beta cell apoptosis."
6. İstanbul Üniversitesi, Deneysel Tıp Enstitüsü (DETAE), Aralık 22, 2010.  
Başlık : "Early mediators and downstream effectors of dsRNA-induced beta cell apoptosis."
7. Yeditepe Üniversitesi Tıp Fakültesi, İmmünoloji Bilimdalı, Nisan 9, 2014.  
Başlık : External and internal dsRNA trigger pancreatic beta cell apoptosis by different mechanisms."