

CURRICULUM VITAE

Name: Nedret Altıok, MD, PhD

Title: Professor of Pharmacology

Gender: Female

Citizenship: Turkish

E-mail: : altioknedret@gmail.com

Languages: Turkish, English, French

EDUCATION

Degree	Department/Program	University	Year
M.D.	Istanbul Faculty of Medicine	Istanbul University, Istanbul, Turkey	1985
Ph.D.	Medical Pharmacology	Karolinska Institute, Faculty of Medicine, Stockholm, Sweden	1993

ACADEMIC BACKGROUND

Title/Position	Department/ Program	University	Duration
Graduate student	Medical Pharmacology	Istanbul Faculty of Medicine, Turkey	1986-1988
Graduate student	Medical and Molecular Pharmacology	Karolinska Institute, Faculty of Medicine, Stockholm, Sweden, supervisor, Prof. Bertil Fredholm	1988-1993
Postdoctoral fellow	Biotechnologies/ <i>Neurobiologie Moléculaire</i>	Pasteur Institute, Paris, France, Prof. Jean-Pierre Changeux's laboratory	1993-1997
Instructor/ Research Associate	Neuroscience/ Neurology	Harvard Medical School, Children's Hospital Boston, MA, USA	1997-1999
Assistant Professor	Medical Pharmacology	Kadir Has University Faculty of Medicine Istanbul, Turkey	1999-2001
Associate Professor	Medical Pharmacology	Kadir Has University Faculty of Medicine Istanbul, Turkey	2001-2006
Professor	Medical Pharmacology	Bilim University Faculty of Medicine, Istanbul, Turkey	2006-2008

Professor	Medical Pharmacology	Namık Kemal University Faculty of Medicine, Tekirdağ, Turkey	2008-2009
Professor	Medical Pharmacology	Yeni Yüzyıl University Faculty of Medicine, Istanbul, Turkey	2010-2011
Professor	Medical Pharmacology	Istanbul Altınbaş University, Faculty of Medicine, Istanbul, Turkey	2013-2018
Consultant	Biotech Startup Company	Nilogen Oncosystems-Tampa, Florida, ABD	2018-2019
Professor	Medical Pharmacology	Istanbul Aydın University, Faculty of Medicine, Istanbul, Turkey	2020-

ADMINISTRATIVE BACKGROUND

Position	University	Duration
Chair, Department of Pharmacology	Kadir Has University Faculty of Medicine, Istanbul, Turkey	1999-2006
Director, Institute of Health Sciences	Kadir Has University Faculty of Medicine, Istanbul, Turkey	2002-2006
Director, Institute of Health Sciences Chair, Department of Pharmacology	Bilim University Faculty of Medicine, Istanbul, Turkey	2006-2008
Director, Institute of Health Sciences Chair, Department of Pharmacology Chair, Division of Medical Sciences Chair, Division of Basic Sciences	Namık Kemal University Faculty of Medicine, Tekirdağ, Turkey	2008- 2009
Chair, Department of Pharmacology	Yeni Yüzyıl University Faculty of Medicine, Istanbul, Turkey	2010-2011
Chair, Division of Medical Sciences Chair, Department of Pharmacology	Istanbul Altınbaş University, Faculty of Medicine, Istanbul, Turkey	2013-2018
Chair, Department of Pharmacology	Istanbul Aydın University, Faculty of Medicine , Istanbul, Turkey	2020-

VISITING SCHOLAR POSITIONS

01/2000-01/2001	Pasteur Institute, Paris, France.
08/2001-07/2002	Karolinska Institute, Stockholm, Sweden.
01-02/2005	Johns Hopkins University, Baltimore, USA.
12/2006-01/2007	Johns Hopkins University, Baltimore, USA.
07-08/2007	Moffitt Cancer Center, Tampa, Florida, USA.
04-07/2009	Moffitt Cancer Center, Tampa, Florida, USA.
06-07/2010	Hillman Cancer Center, Pittsburgh, USA
04-05/2017	Moffitt Cancer Center, Tampa, Florida, USA

SKILLS & EXPERTISE

Medical Pharmacology, Molecular Pharmacology, Molecular Neuroscience, Intracellular Signalling, Cancer Biology, Pharmacogenomics, Proteomics, Targeted Therapeutics, Personalized and Translational Medicine, Medical Education.

RESEARCH INTERESTS

- Molecular analysis of cell signaling networks in sensitivity and resistance to anti-cancer drugs.
- Development of molecular approaches to predict and assess tumour response to conventional, targeted drugs and immunotherapy in cancer.
- Molecular analysis of cell signaling networks in neurodegenerative diseases

NUMBER OF CITATIONS

Google scholar: 1111 h-index = 16

SCI: 782 h-index = 14

PUBLICATIONS

Selected Abstracts Presented at International Symposiums or Printed in Proceedings

Altıok N., Küçükçankurt F, Özalp VC. Differential Binding of a Novel HER2 Targeted Aptamer in Breast Cancer Cells. International Conference of Aptamers in Bordeaux, 22-23 September 2017, Bordeaux-France.

Küçükçankurt F, Özalp VC, Uçak S, **Altıok N.** Development of DNA aptamers against HER2 receptors in breast cancer. Turk J Biochem 2017, Volume 42, supplement 2, 71.

Koyuturk M. and Altıok N. , Hydrogen peroxide induces apoptosis of glioma cells via JNK activation, 12th International Congress of Histochem and Cytochem, 24-29 July 2004, Sandiego, USA.

Altıok N., Rosenberg P.A., Volpe J.J. Subcellular translocation of extracellular signal regulated kinases ERK1 and ERK2 during oxidative stress in oligodendrocytes. Society for Neuroscience, 28th Annual Meeting, Los Angeles, California, USA. November 7-12, 1998.

Altıok N., J.-L. Bessereau and J.-P. Changeux. ERbB3 and ErbB2/neu transduce the effect of heregulin on acetylcholine gene expression in muscle: differential expression at the endplate. Society for Neuroscience, 25th Annual Meeting, San Diego, California, USA. November 11-16, 1995.

Friedman W.J., Altıok N., Fredholm B. and Persson H. Mechanisms of IL-1 β action in hippocampal cultures. Society for Neuroscience, 21st Annual Meeting, New Orleans, Louisiana, USA. November 10-15, 1991.

Altıok N. & Fredholm B.B. Regulation of adenosine receptor induced cAMP changes in D384 astrocytoma cells by bradykinin. Scandinavian Physiological Society Meeting, 24-26 May 1991, Uppsala, Sweden.

Van der Ploeg I., Parkinson F., Altıok N., Duarte A., Fuxe K. and Fredholm B.B. Penetration of PTX in rat brain and poor effect on G-proteins coupled to adenosine A1 receptors. European Neuroscience Association Congress, September 8-12, 1990, Stockholm, Sweden.

Altıok N., Van der Ploeg I., Nordstedt C. and Fredholm B.B. The involvement of a pertussis toxin sensitive G-protein in the activation of adenylate cyclase in Jurkat cells. XIth International Congress of Pharmacology, Amsterdam, The Netherlands, July 1-6 1990.

Articles Published in Science Citation Index (SCI)

Altıok N., Ersoz M, Koyuturk M. (2011) Estradiol induces JNK-dependent apoptosis in glioblastoma cells. *Oncology Letters*, 2: 1281-1285.

Altıok N., Mezzadra H, Patel P, Koyuturk M, and Altıok S. (2008) A plant oxylipin, 12-oxo-phytodienoic acid, inhibits proliferation of human breast cancer cells by targeting cyclin D1. *Breast Cancer Res Treat*, 109(2): 315-323.

Altıok N., Koyuturk M, Altıok S. (2007) JNK pathway regulates estradiol-induced apoptosis in hormone-dependent human breast cancer cells. *Breast Cancer Res Treat*, 105:247-254.

Koyuturk M, Ersoz M, **Altiok N.** (2007) Simvastatin induces apoptosis in human breast cancer cells: p53 and estrogen receptor independent pathway requiring signalling through JNK. *Cancer Lett.* 250: 220–228.

Altiok N., Ersoz M., Karpuz V., Koyuturk M. (2005) Ginkgo biloba extract regulates differentially the cell death induced by hydrogen peroxide and simvastatin. *Neurotoxicology.* 27: 158-163.

Koyuturk M, Ersoz M, **Altiok N.** (2004) Simvastatin induces proliferation inhibition and apoptosis in C6 glioma cells via c-jun N-terminal kinase. *Neurosci Lett.* 11;370(2-3):212-217.

Altiok N. and Changeux J-P (2001) Electrical activity regulates AChR gene expression via JNK , PKC zeta and Sp1 in skeletal muscle. *FEBS Lett.* 487:333-338.

Altiok S., Batt D., **Altiok N.**, Roberts T.M., Downward J., and Avraham H. (1999) Heregulin induces phosphorylation of BRCA1 through PI-3K/AKT in breast cancer cells. *J. Biol. Chem.* 274(45):32274-32278.

Rosenberg P.A., Li Y., Ali S., **Altiok N.**, Back S.A., Volpe J.J. (1999) Intracellular redox state determines whether nitric oxide is toxic or protective to rat oligodendrocytes in culture. *J. Neurochem.* 73(2): 476-484.

Altiok N., Altiok, S. and J-P.Changeux (1997). Heregulin-stimulated acetylcholine receptor gene expression in muscle: requirement for MAP kinase and evidence for a parallel inhibitory pathway independent of electrical activity. *EMBO Journal*, 16(4):717-725.

Altiok N., Bessereau J-L., and J-P.Changeux (1995). ErbB3 and ErbB2/neu mediate the effect of heregulin on acetylcholine receptor gene expression in muscle: differential expression at the endplate. *EMBO Journal*, 14 (17): 4258-4266.

Fredholm B.B. and **Altiok N.** (1994) Adenosine A2B receptor signalling is altered by stimulation of bradykinin or interleukin receptors in astrogloma cells. *Neurochemistry International*, 25 (1): 99-102.

Altiok N. and Fredholm B.B. (1993) Bradykinin inhibits cyclic AMP accumulation in D384-human astrocytoma cells via a calcium-dependent inhibition of adenylyl cyclase. *Cellular Signalling*, 5(3): 279-288.

Altiok N., and Fredholm B.B. (1992) Bradykinin inhibition of cyclic AMP accumulation in D384 astrocytoma cells. Evidence against a role of cyclic GMP. *Neurochemistry International*, 21 (2): 209-213.

Friedman W.J., **Altiok N.**, Fredholm B.B. and Persson H. (1992) Mechanisms of nerve growth factor mRNA regulation by IL-1 β in hippocampal cultures: Role of second messengers. *Journal of Neuroscience Research*, 33 (1): 37-46.

Balmforth A.J., Parkinson F.E., **Altiok N.** and Fredholm B.B. (1992) Identification of a B2-bradykinin receptor linked to phospholipase C and inhibition of dopamine stimulated cyclic AMP accumulation in the human astrocytoma cell line D384. *Naunyn-Schmiedeberg's Archives of Pharmacology*, 346 (3): 303-310.

Altiok N., Balmforth A.J. and Fredholm B.B.(1992) Adenosine receptor mediated cAMP changes in D384 astrocytoma cells. *Acta Physiologica Scandinavica*, 144 (1): 55-63.

Van der Ploeg I., Cintra A., **AltioK N.**, Askelöf P., Fuxe K. and Fredholm B.B.(1991) Limited distribution of pertussis toxin in rat brain after injection into the lateral cerebral ventricles. *Neuroscience*, 44 (1): 205-214.

Van der Ploeg I., **AltioK N.**, Kvanta A., Nordstedt C. and Fredholm B.B.(1991) Role of a pertussis toxin sensitive G-protein in mediating the effects of phorbol esters on receptor activated cAMP accumulation in Jurkat cells. *Nauny Schmiedeberg's Archives of Pharmacology*, 344 (5): 611-617.

AltioK N., Van der Ploeg I., Nordstedt C. and Fredholm B.B.(1990) The involvement of a pertussis toxin sensitive G-protein in the activation of adenylate cyclase in Jurkat cells. *European Journal of Pharmacology*, 183(6): 2172.

Internationally published Books

Fredholm B.B., Fastbom J., Duner-Engström M., Van der Ploeg I., AltioK N., Gerwins P., Kvanta A. ve C. Nordstedt, "Mechanisms of adenosine action. *Purines in Cellular Signalling: Targets for New Drugs*. Ed. K. Jacobson, pp. 184-194, Springer Verlag, New York, 1989.

Fredholm B.B., Ahlberg S., AltioK N., Gerwins P., van der Ploeg I., Kvanta A., Nordstedt C. ve T. Dunwiddie, "Interactions between adenosine receptors and other membrane receptors. In: *Role of adenosine and adenine nucleotides in the biological system.*" Ed. Imai S. & Nakazawa M., pp 173-182. Elsevier, Amsterdam, 1991.

AltioK N., "Adenosine, dopamine, bradykinin and interleukin-1 receptors in astrocytes. Signal transduction mechanisms and interactions in D384 human astrocytoma cells and primary astrocyte cultures. (ISBN 91-628-08664), Karolinska Institutet, Stockholm, Sweden, 1993.

FELLOWSHIPS AND AWARDS

* Swedish Medical Research Council, Karolinska Institute, 1988-1993.

* Swedish Society for Medical Research, 1994.

* Centre National de la Recherche Scientifique (CNRS), College de France, The European Communities, 1993-1997.

* William Rundolph Hearst Fund, Basil O' Connor Fund, 1998-1999.

* TÜBİTAK-CNRS, Paris, 2000-2001.

* DPT-NKU-Infrastructure, 2009

* TÜBİTAK ARDEB 1001, 2014-2018

MEMBERSHIP TO PROFESSIONAL SOCIETIES

*American Society for Pharmacology and Experimental Therapeutics (Division for Molecular Pharmacology; Division for Pharmacology Education; Division for Integrative Systems, Translational and Clinical Pharmacology; Division for Neuropharmacology).

*Society for Neuroscience (SFN).

*Federation of American Societies for Experimental Biology (FASEB).

REVIEWER FOR SCIENTIFIC JOURNALS AND INTERNATIONAL ORGANIZATIONS

*Independent Expert, European Union Horizon 2020 Program, 2014-2020.

- Societal Challenges-Health
- Industrial Leadership-Nanotechnologies
- Excellent Science-Future and Emerging Technologies

*Independent Expert, European Union Sixth Framework Program (Life Sciences-Health) 2003-2006.

*Neuroscience Letters

*Oncogene

* Cancer Letters

* Breast Cancer Research and Treatment

* Pharmacological Reports

TEACHING AND MENTORING EXPERIENCE

- Development of teaching programs in medical pharmacology, preparing and teaching undergraduate and graduate courses in classroom and hands-on laboratory settings in English, supervising and mentoring undergraduate and graduate students (Kadir Has/Bilim and Kemerburgaz/Altınbaş Universities).
- Instructing and supervising graduate and post-graduate students in signal transduction techniques (Pasteur Institute and Harvard Medical School).

- Undergraduate teaching in group exercises in pharmacokinetics and receptor pharmacology (Karolinska Institute).
- University Teaching Certificate, 13-16 May 2002, Karolinska Institute, Stockholm, Sweden.