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### Personal Information

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### Education:

**Graduate:** Hacettepe University, Faculty of Medicine. (1990)

**PhD:** Ankara University, Faculty of Medicine, Dept. Pharmacology (1994)

### Academic Titles:

**Assoc. Professor** : 1999

**Professor** : 2006

### Publications :

1. Soydan S, Ugur M, Yazar O, Türker RK. Further studies on the potent positive chronotropic effect of (15S)-15-methyl-prostaglandin E1 on the guinea-pig isolated spontaneously beating right atrium. (1992) Gen Pharmacol,23(2):187-91.
2. Ercan ZS, Kılıç M, Yazar O, Korkusuz P, Türker RK. Endothelin-1-induced oedema in rat and guinea-pig isolated perfused lungs. (1993) Arch Int Pharmacodyn Ther,323:74-84.
3. Ercan ZS, Türker RK, Uluoğlu C, Yazar O, Zengil H. The effects of endothelin peptides in the rabbit isolated perfused kidney. (1994) Gen Pharmacol,25(7):1471-6.
4. Kuzu MA, Köksoy C, Alaçayır I, Yazar O, Kuterdem E. Thromboxane synthase inhibitor, UK 38485, prevents renal injury in the rabbit isolated perfused kidney exposed to cold ischemia. (1995) Transplantation,59:1096-1099.
5. Kuzu MA, Köksoy C, Alaçayır I, Yazar O, Kuterdem E. The effect of nicardipine on renal functions following 72-hour cold ischemia. (1995) Eur Surg Res,27(5):307-12.
6. Kuzu A, Alaçayır I, Köksoy C, Yazar O, Kuterdem E. The endothelium-derived relaxing factor-mediated acetylcholine response of the arterial perfusion pressure after cold storage of the isolated rabbit kidney. (1995) Transpl Int,8(3):226-8.
7. Ugur O, Onaran HO. Allosteric equilibrium model explains steady-state coupling of b-adrenoceptors to adenylate cyclase in turkey erythrocyte membranes. (1997) Biochem J,323:765-776.

8. **Mitra S, Ugur M, Ugur O, Goodman HM, McCullough JR, Yamaguchi H.** (S)-Albuterol Increases Intracellular Free Calcium by Muscarinic Receptor Activation and a Phospholipase C-Dependent Mechanism in Airway Smooth Muscle. (1998) Molecular Pharmacology,53:347–354.
9. **Demirel E, Ugur O, Onaran HO.** Ca<sup>2+</sup>-induced inhibition of adenylyl cyclase in turkey erythrocyte membranes. (1998) Pharmacology,57(4):222-8.
10. **Druey KM, Ugur O, Caron JM, Chen CK, Backlund PS, Jones TLZ.** Amino-terminal Cysteine Residues of RGS16 Are Required for Palmitoylation and Modulation of Gi- and Gq-mediated Signaling (1999) J Biol Chem,274:18836–18842.
11. **Ugur O, Jones TLZ.** A Proline-rich Region and Nearby Cysteine Residues Target XLAs to the Golgi Complex Region. (2000) Mol Biol Cell,11:1421–1432.
12. **Ugur O, Onaran HO, Jones TLZ.** Partial rescue of functional interactions of a nonpalmitoylated mutant of the G-protein Gas by fusion to the β-adrenergic receptor. (2003) Biochemistry-US,42:2607-2615
13. **Ugur O, Oner SS, Molinari P, Ambrosio C, Sayar K, Onaran HO.** Guanine nucleotide exchange-independent activation of Gs protein by β<sub>2</sub>-adrenoceptor. (2005) Mol Pharmacol,68:720-728.
14. **Ambrosio C, Molinari P, Fanelli F, Chuman Y, Sbraccia M, Ugur O, Costa T.** Different Structural Requirements for the Constitutive and the Agonist-induced Activities of the b<sub>2</sub>-Adrenergic Receptor. (2005) J Biol Chem,280:23464–23474.
15. **Cicek-Amber F, Ugur O, Sayar K, Ugur M.** Cell adhesion modulates 5-HT1D and P2Y receptor signal trafficking differentially in LTK-8 cells. (2008) Eur J Pharmacol,590:12–19.
16. **Sayar K, Ugur O, Liu T, Hilser VJ, Onaran O.** Exploring allosteric coupling in the α-subunit of heterotrimeric G proteins using evolutionary and ensemble-based approaches. (2008) BMC Struct Biol.
17. **Kaya Al, Ugur O, Oner SS, Bastepe M, Onaran HO.** Coupling of b<sub>2</sub>-adrenoceptors to XLAs and Gas: a new insight into ligand-induced G protein activation. (2009) J Pharmacol Exp Ther,329:350-359.
18. **Oner SS, Kaya Al, Onaran HO, Ozcan G, Ugur O.** b<sub>2</sub>-Adrenoceptor, Gs and adenylate cyclase coupling in purified detergent-resistant, low density membrane fractions. (2010) Eur J Pharmacol,630:42-52.
19. **Kaya Al, Onaran HO, Ozcan G, Ambrosio C, Costa T, Balli S, Ügür O.** Cell contact-dependent functional selectivity of b<sub>2</sub>-Adrenergic receptor ligands in stimulating cAMP accumulation and extracellular signal-regulated kinase phosphorylation. (2012) J Biol Chem,287:6362–6374.
20. **Onaran HO, Ambrosio C, Ugur O, Koncz EM, Grò MC, Vezzi V, Rajagopal S, Costa T.** Systematic errors in detecting biased agonism: Analysis of current methods and development of a new model-free approach (2017) Scientific Reports,7:44247, 1-17.
21. **Ugur M, Ugur O.** A Mechanism-Based Approach to P2X7 Receptor Action. (2019) Mol Pharmacol 95:442–450.

### Projects:

#### 1. Principal Investigator

1. Investigation of the molecular mechanism of ligand efficacy, using a receptor-G protein fusion. BAP Project, 2001-08-09-05 (2001-2003)
2. Investigation of the role of activation and fatty acid modifications in the interaction of G protein alpha subunits with the plasma membrane. BAP Project, 2002-08-09-088 (2003-2005)
3. Investigation of protein-protein interactions and intracellular trafficking of the G protein-coupled signalling components, using green fluorescent protein fusion constructs. A. U., Institute of Biotechnology Project, 123 (2003-2005)
4. Factors that determine the localization of G protein alpha subunits in the membrane: Effect of the activation on the Galphas-membrane interaction. TÜBİTAK Project, SBAG-2105 (1999-2000)
5. Investigation of Beta adrenergic receptor-Gs-Adenylate cyclase coupling in the caveola. TÜBİTAK Project, 104S472 (2005-2007)
6. Investigation of the functional selectivity of Beta 2-Adrenergic Receptor ligands in terms of receptor-activated adenylate cyclase activation and ERK phosphorylation responses. TÜBİTAK Project, 110S159 (2010-)

#### 2. Researcher

1. Production of monoclonal antibodies against human immunoglobulins. A. U., Institute of Biotechnology Project, 123 (2003-2005)

2. Investigation of receptor- G protein coupling in G protein-cupled receptor systems. TÜBİTAK Project, SBAG-1203 (1993-1995)
3. Investigation of molecular mechanisms of the ligand efficacy in receptor-G protein fusion.TÜBİTAK Project, 100S041 (2000-2002)
4. Investigation of the intramolecular allosteric network in G protein-coupled receptors and G proteins, using theoretical methods and mutational perturbations. TÜBİTAK Project, 107S086 (2007-2010)
5. Investigation of the molecular mechainsms of the modulatory effect of cell adherence on the G protein-coupled receptor-mediated signalling. TÜBİTAK Project, 108S344 (2009-2012)

**Memberships:**

Turkish Pharmacological Society

American Society of Pharmacology and Experimental Therapeutics (ASPET)