



George Liapakis, PhD

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Education

Year

- 1986 BS in Pharmacy
1994 PhD in Pharmacology
1997 Postdoctoral Fellow-Lab. of Pharmacology, School of Medicine, Univ. of Pennsylvania,
1998 Postdoctoral Fellow-Center for Molecular Recognition, Columbia University
2000 Associate Research Scientist-Center for Molecular Recognition, Columbia University

Research Interests

The laboratory of G. Liapakis aims to obtain information for the structure and function of G-protein coupled receptors (CRF, angiotensin GnRH, neurotensin and GLP-1 receptors) and to design receptor-selective antagonists and agonists, using receptor-based and molecule-based design approaches, in collaboration with computational and synthetic chemists and other scientists. These methods have been used successfully by G. Liapakis to determine the structure and function of other GPCRs, including adrenergic and somatostatin receptors.

Funding

Special Accounts for Research, University of Crete, Program 4373
Special Accounts for Research, University of Crete, Program 4845

Recent Publications or Selected Publications

- 1 Karampelas T, Argyros O, Sayyad N, Spyridaki K, Pappas C, Morgan K, Kolios G, Millar RP, **Liapakis G**, Tzakos AG, Fokas D, Tamvakopoulos C. (2014). GnRH-Gemcitabine Conjugates for the Treatment of Androgen-Independent Prostate Cancer: Pharmacokinetic Enhancements Combined with Targeted Drug Delivery. *Bioconj Chem.*, 25(4):813-823
- 2 Spyridaki K., Matsoukas M.T., Cordomi A., Gkountelias K., Papadokostaki M., Mavromoustakos T., Logothetis D.E., Margioris A.N., Pardo L., **Liapakis G.** (2014). Structural-Functional Analysis of the Third Transmembrane Domain of the Corticotropin-releasing Factor Type 1 Receptor: ROLE IN ACTIVATION AND ALLOSTERIC ANTAGONISM. *J Biol Chem.*, 289(27):18966-18977
- 3 Chepurny O.G., Matsoukas M.-T., **Liapakis G.**, Leech C.A., Milliken B.T., Doyle R.P., Holz G.G. (2019). [*Chepurny O.G. and Matsoukas M.-T. equally contributed to this work*]. Non-conventional glucagon and GLP-1 receptor agonist and antagonist interplay at the GLP-1 receptor revealed in high-throughput FRET assays for cAMP. *J. Biol. Chem.*, 294(10) 3514–3531
- 4 Ntountaniotis D., Andreadelis J., Kellici T.F., Karageorgos V, Leonis G., Christodoulou E., Kyriakidi S., Becker-Baldus J., Stylos E.K., Chatziathanasiadou M.V., Chatzigiannis C.M., Damalas D. E., Aksoydan B., Javornik U., Valsami G., Glaubitz C., Durdagi S., Thomaidis N. S., Kolocouris A., Plavec J., Tzakos A. G., **Liapakis G.**, Mavromoustakos T. (2018). Host-Guest interactions between Candesartan and its prodrug Candesartan Cilexetil in complex with 2-hydroxypropyl- β -cyclodextrin: On the biological potency for Angiotensin II antagonism. *Mol. Pharmaceutics* 2019, 16, 1255–1271
- 5 Magafa V, Matsoukas MT, Karageorgos V, Dermitzaki E, Exarchakou R, Stylos EK, Pardalos M, Margioris AN, Varvounis G, Tzakos AG, Spyroulias GA, **Liapakis G.** (2019). Novel stable analogues of the neurotensin C-terminal hexapeptide containing unnatural amino acids. *Amino Acids*, doi: 10.1007/s00726-019-02741-2. [Epub ahead of print]

