available at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/biochempharm

Editorial

Advances in adrenergic and histaminergic pharmacology and therapeutics: Special issue in memory of Art Hancock

This special issue of *Biochemical Pharmacology* is dedicated to the memory of the late Arthur A. Hancock, Ph.D. (1946–2005) in honor of his many scientific contributions to receptor-based drug discovery research. Leading scientists in the field of α-adrenergic and histamine receptor research, many of whom were Art's colleagues and friends, have contributed authoritative overviews to this issue on recent advances in the molecular biology, biochemical pharmacology, and therapeutic potential of these two major classes of G-protein coupled receptors. This issue has evolved from the ASPET symposium entitled "*Advances in H_3 Receptor Research: Implications for Therapeutic Drug Development: Symposium In Memoriam: Arthur Hancock, Ph.D. (1946–2005)*" that was held during the 2006 Experimental Biology meeting in San Francisco. At that meeting, both academic and industrial colleagues presented timely updates of recent developments in the histamine H_3 receptor field and also shared their personal perspectives of the innovative and collaborative approach that so typified Art's drug discovery endeavors.

Early in his career, while working as a postdoctoral fellow at Duke University in the laboratory of Dr. Robert J. Lefkowitz, Art had a significant impact on the field of receptor pharmacology, publishing three now seminal papers in *Molecular Pharmacology* on the development of the first computer assisted methods for detailed analysis of receptor subtypes [1–3]. The methods that he developed while working with Dr. Lefkowitz quickly became the standard in the field and the underlying approaches continue to be used throughout the world today for the detailed analysis of ligand binding experiments.

Art subsequently went on to a highly successful career in the pharmaceutical industry, leading several research groups that generated numerous clinical candidates across a spectrum of human disease states including depression, benign prostatic hypertrophy (BPH), cognitive disorders, attention deficit hyperactivity and pain. Art used his broad pharmacological knowledge and his ability to forge highly effective research collaborations to correlate pathophysiological findings to molecular targets and to shepherd the development of important selective pharmacological tools and the advancement of new chemical entities into clinical trials. His research efforts contributed to a greater understanding of the contributory role of α_1-adrenoceptor subtypes to the pathology of BPH and the development of $\alpha_{1A/D}$-adrenergic receptor antagonist, fiduxosin [4]. Most recently, he had a major impact in the histamine H_3 receptor field, leading research efforts at Abbott in demonstrating the preclinical utility of H_3 antagonists to treat cognitive disorders and obesity, culminating in the development of a number of novel H_3 receptor antagonists including ABT-239 [5,6]. Art was a true drug hunter who was passionate about drug research and considered himself fortunate to be able to work at something he truly loved. Indeed, the last paper he wrote, a commentary in this journal [7], revealed his insights into the drug discovery process and illustrated his passion for advancing potential therapeutics through rigorous preclinical research.

Art combined his scientific expertise with the ability to lead and mentor scientists from multiple disciplines. He was an

internationally recognized scientist serving on the editorial board for numerous journals, including *Biochemical Pharmacology, Journal of Pharmacology and Experimental Therapeutics*, and others. He was the author or co-author of over 85 scientific articles and book chapters. Art was an active and involved member of the Society for Neuroscience, the European Histamine Research Society, and the American Society for Pharmacology and Experimental Therapeutics (ASPET).

The pharmacology and neuroscience communities have sustained a significant loss with Art's untimely death. All will miss his wise counsel, mentoring, character, wit, and grace. Art was a highly esteemed colleague, a valued and concerned mentor, and most especially a dear friend whose absence from scientific forums and associated social events has made these events that much less enjoyable. To memorialize the passion with which Art encouraged and mentored young scientists, Abbott Laboratories has sponsored the *Arthur A. Hancock Young Investigator Award* that is given out annually by the European Histamine Research Society.

The Guest Editors thank all of the contributors for their excellent and timely articles and Mike Williams who suggested that we undertake this Memorial Issue for Art. We are also deeply indebted to Sam Enna and Lynn LeCount for their support and guidance as this issue came together.

REFERENCES

[1] Hancock AA, DeLean AL, Lefkowitz RJ. Quantitative resolution of β-adrenergic receptor subtypes by selective ligand binding: application of a computerized model fitting technique. Mol Pharmacol 1979;6:1–9.
[2] Burgisser E, Hancock AA, Lefkowitz RJ, De Lean A. Anomalous equilibrium binding properties of high-affinity racemic radioligands. Mol Pharmacol 1981;19:205–16.
[3] De Lean A, Hancock AA, Lefkowitz RJ. Validation and statistical analysis of a computer modeling method for quantitative analysis of radioligand binding data for mixtures of pharmacological receptor subtypes. Mol Pharmacol 1982;21:5–16.
[4] Hancock AA, Buckner SA, Brune ME, Esbenshade TA, Ireland LM, Katwala S, et al. Preclinical pharmacology of fiduxosin, a novel alpha$_1$-adrenoceptor antagonist with uroselective properties. J Pharmacol Exp Ther 2002;300:478–86.
[5] Esbenshade TA, Fox GB, Krueger KM, Miller TR, Kang CH, Denny LI, et al. Pharmacological properties of ABT-239 [4-(2-{2-[(2R)-2-Methylpyrrolidinyl]ethyl}-benzofuran-5-yl)benzonitrile]: I. Potent and selective histamine H_3 receptor antagonist with drug-like properties. J Pharmacol Exp Ther 2005;313:165–75.
[6] Fox GB, Esbenshade TA, Pan JB, Radek RJ, Krueger KM, Yao BB, et al. Pharmacological properties of ABT-239 [4-(2-{2-[(2R)-2-Methylpyrrolidinyl]ethyl}-benzofuran-5-yl)benzonitrile]: II. Neurophysiological characterization and broad preclinical efficacy in cognition and schizophrenia of a potent and selective histamine H_3 receptor antagonist. J Pharmacol Exp Ther 2005;313:176–90.
[7] Hancock AA. The challenge of drug discovery of a GPCR target: analysis of preclinical pharmacology of histamine H_3 antagonists/inverse agonists. Biochem Pharmacol 2006;71:1103–13.

Timothy A. Esbenshade*
Michael F. Jarvis

*Tel.: +1 847 935 4727; fax: +1 847 937 9195
E-mail address: tim.esbenshade@abbott.com
(T.A. Esbenshade)

2 March 2007

0006-2952/$ – see front matter

doi:10.1016/j.bcp.2007.03.001