CROSSTALK

Last Word from Nevin A. Lambert and Jonathan A. Javitch

Nevin A. Lambert¹ and Jonathan A. Javitch²,³
¹Department of Pharmacology and Toxicology, Medical College of Georgia, Georgia Regents University, Augusta, GA, 30912-2300, USA
²Departments of Psychiatry and Pharmacology, College of Physicians and Surgeons, Columbia University, New York, NY, 10032, USA
³Division of Molecular Therapeutics, New York State Psychiatric Institute, New York, NY, 10032, USA

We thank all of our colleagues for their willingness to engage in what we feel is an important conversation. Although a universal consensus has not been reached, and may be too much to hope for, on the whole there is as much agreement as there is disagreement. One issue that lurks in the background of this debate is semantic – what sort of assembly deserves to be called an ‘oligomer’? Although it is tempting to avoid semantic arguments in favour of more substantive issues, perhaps some progress might be made by addressing this issue here. Most would probably agree that class A protomers contact one another within the plane of the membrane. Many would also agree that such interactions could indeed affect receptor function in a way that evolution would conserve, and some argue that such interactions have already been discovered. Even the most diehard dimer skeptics would likely be comfortable with the idea that class A protomers can ‘interact’ and form ‘complexes’ with one another, perhaps acting as scaffolds, chaperones, or modulators of signalling. However, for many the terms ‘dimer’ and ‘oligomer’ connote a degree of structural stability that has not yet been demonstrated for class A GPCRs. These terms are clearly appropriate for constitutively associated complexes that do not exist as monomers (e.g. the Gβγ heterodimer or iGluRs) or that dissociate only under certain conditions (e.g. the Gαβγ heterotrimer). Historically these terms have not been applied to comparatively transient complexes, even if such interactions have great functional significance (e.g. Gα-effector complexes).

Competing interests
None declared.
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