

Editorial introduction

A journal of understanding

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The noblest pleasure is the joy of understanding. Leonardo Da Vinci
Understanding brings control. Isaac Bonewits

The aim of *Self/NonselF—Immune Recognition and Signaling* is to be an interdisciplinary communications catalyst for fundamental and applied research in all areas of immunology. From molecular and structural immunology to immune imaging and therapy, our primary focus is the immune system and, more specifically, our understanding of how it works. We explore the central questions: how does the immune system distinguish self from nonself? How do immune receptors transduce recognition information across the cell membrane? How does that information initiate specific pathways and result in specific functional outcomes? Of particular interest is the understanding of the mechanisms underlying immune recognition and transmembrane signal transduction at the molecular, cell and functional level. Thus the title, *Self/NonselF*, and the subtitle *Immune Recognition and Signaling* naturally follows; consequently we have a “journal of understanding.”

With our understanding of the mechanistic basis of immune recognition and signaling comes the possibility of rational intervention and control of cellular and humoral immune responses, which suggests the possibility and capacity to prevent and treat a variety of immune-mediated diseases. Recent advances in our knowledge of viral modulation of immune receptor signaling have provided innovative strategies that may help the design of next generation autoimmune therapeutics.

Despite its immune-related title, *Self/NonselF* differs from other immunological journals in its breadth of general and interdisciplinary interest extending much beyond the formal definition of immunology and into all systems that contribute to or interact with the immune response of organisms. Molecular understanding of the triad consisting of recognition, signal transduction and functional outcome is the bread and butter of the journal and, as such, requires interdisciplinary expertise in many diverse fields such as biophysics, biochemistry, structural biology, molecular and clinical immunology. A good example is the recent discovery of a unique biophysical phenomenon—the ability of intrinsically disordered proteins to form specific dimers—that resulted in our understanding of a general biological mechanism of receptor-mediated transmembrane signaling and, furthermore, in the successful application of this knowledge toward the development of novel therapeutic strategies. Thus, within the aims and scope for *Self/NonselF*, we envision the journal as an interdisciplinary platform to exchange critical research findings, knowledge, ideas and experience between experts from seemingly unrelated fields.

On the other hand, research papers must of necessity be written for a restricted audience. This limitation may make it difficult for researchers to remain fully informed of work that, although perhaps not of immediate importance for their own research, may nonetheless be germane. The reviews, perspectives, opinions and commentaries in *Self/NonselF* will be sensitive to this circumstance. Regular reviews will have the traditional purpose of discussing a field in some depth, but without the restraints accompanying the presentation of original research results. These reviews should be recognized as scholarly by specialists in the relevant field, but should also be written with a view to informing readers who are not specialized there and should therefore be presented using simple prose. Shorter reviews, in general occupying about two pages of the journal, will have the complementary purpose of discussing in conceptual terms the recent advances of some topic, largely for the benefit of researchers in related fields. Perspectives, commentaries, and views will be brief, focused opinion articles, commentaries on papers recently published in *Self/NonselF* or elsewhere, or commentaries on significant conceptual changes, trends or new directions in the field. In our correspondence section we will publish thoughtful short contributions on policy, funding or immunology in general, and the comments of our readers on the papers that we publish, along with a response from the original author. Book reviews will permit an expansive discussion of issues, extending on occasion to general essays. Discussions of meetings will also allow the expression of views more usually confined to personal exchanges.

By consolidating worldwide interdisciplinary research findings and publishing papers of general and not just special interest in all of the areas contributing to the overall molecular understanding of the operations of the receptor, cell and entire system, and by including in the same issues review and commentary articles on a wide range of topics, *Self/NonselF* aspires to become a true “journal of understanding.”



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