"FR2900359: nature's weapon and treasure trove for basic and translational research"

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Natural products have been a rich source of compounds for basic research and drug discovery given their exquisite specificity to interact with their cognate molecular targets. One such example is FR900359 (FR), a cyclic depsipeptide originally isolated from the ornamental plant Ardisia crenata. FR and its structurally close analog YM are highly selective inhibitors of Gq family proteins. Therefore, they offer the exciting perspective to interfere with Gq-dependent signaling in health and disease: in health to understand Gq contribution to complex signaling networks, in disease to treat pathologies caused by overactive Gq proteins. This talk will briefly introduce the fascinating molecule and provide an update into the gamut of attractive possibilities to utilize FR and its analogs for interfering with Gq-dependent signaling mechanisms.