

Chemical Physiology of Antibody Conjugates and Natural Products

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Abstract:

Our research uses chemistry principles to address questions of importance in life sciences and molecular medicine. This lecture will cover recent examples of emerging areas in our group in:

- (i) methods developed for site-selective chemical modification of proteins at cysteine, disulfide and lysine and their use to build stable and functional protein conjugates for in vivo applications [1–4]
- (ii) bioorthogonal cleavage reactions for targeted drug activation in cells [5,6]
- (iii) by identifying on- and off-targets for anti-cancer entities using our own machine intelligence platform, unveiling the underlying molecular mechanisms of target recognition and linking drug target binding to modulation of disease, we explore the use of natural products as selective cancer modulators [7]

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