CAN A SYNTHETIC CHEMIST BECOME A MEDICINAL CHEMIST AND CONTINUE BEING BOTH?

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In their work, synthetic chemists are motivated by such aspects as practicality, ingenuity of the methods they develop. Broad substrate scope, atom economy, rapid buildup of molecular complexity are too the major synthetic chemist's 'turn-ons'. The beautiful and fairly complex molecules produced by synthetic chemistry artisans may eventually lure them into investigating their molecules' biological activity and even starting subsequent optimization programs. However, the excruciating complexity of the drug discovery information field and the risky decision-making may also draw chemists away from the complex molecule realm into working on fairly simple, if not primitive, chemotypes.

On the contrary, medicinal chemists who maintain their genuine interest in the synthetic innovation, who continue finding their drug discovery inspiration in the unique synthetic methodology or chemotypes originating therefrom, will likely enjoy a special position in terms of competitive advantage and intellectual property protection.

This talk will share several recent examples of medicinal chemistry projects that originated from pure synthetic methodology development efforts in our laboratories [1-3].

References

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