



REGIONAL CENTRE FOR BIOTECHNOLOGY

Colloquium

Disruption by Design: Biological Open Source, its Origins and its Future

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12:00 noon

Seminar Room

In this talk, I will describe both the historical origins of biological open source innovation, and my own journey in developing it further in the context of modern biotechnology. I will describe our efforts to create an open, patent-based commons of tools for agricultural biotechnology, and the barriers we faced and the lessons we learnt. I'll describe the work that led to a prominent reporter gene system, GUS, its broad and unusual distribution and the disruptive effect this had. I will then go on to describe how this led to Transbacter - an open source gene transfer alternative to Agrobacterium - as well as other technologies created and shared under these open source norms and licenses. I will describe how the public sector's poor understanding of the innovation ecosystem profoundly constrained the opportunities and incentives for cooperative and efficient problem solving. To address this, I will describe our work to develop the first open, public cyberinfrastructure for navigating the innovation system and global patenting - The Lens. I will conclude with a comprehensive review of the concept of 'Innovation Cartography' as a nascent revolution in innovation system transparency and efficiency. I will demonstrate the new open web platform, The Lens, that is necessary if we're to shift the demographics of problem solving and to see life science-enabled innovation address the compelling problems of food and agriculture, health, environmental management and employment.



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Abstract

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