



STEM and Social Sciences: Technology Partnerships for Thriving Rural Communities



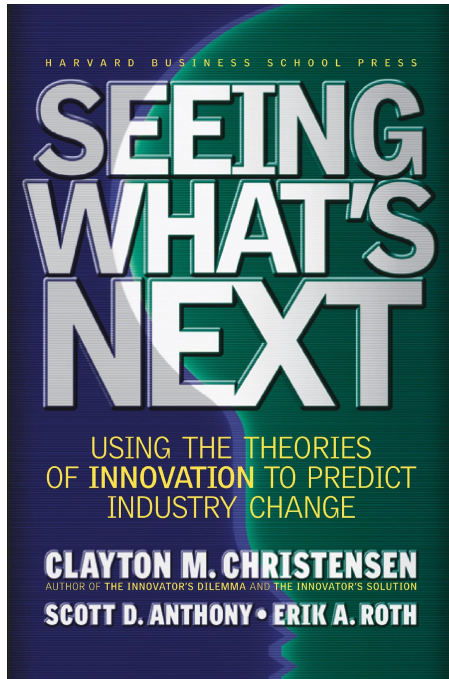
Dr. Nadilia Gomez

Dr. Marie-José Montpetit



Dr. Max Zhang

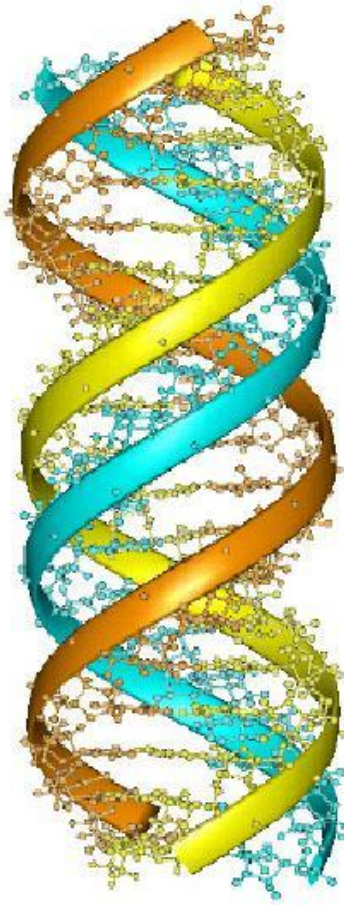
Innovation Theory & Telecom Megatrends



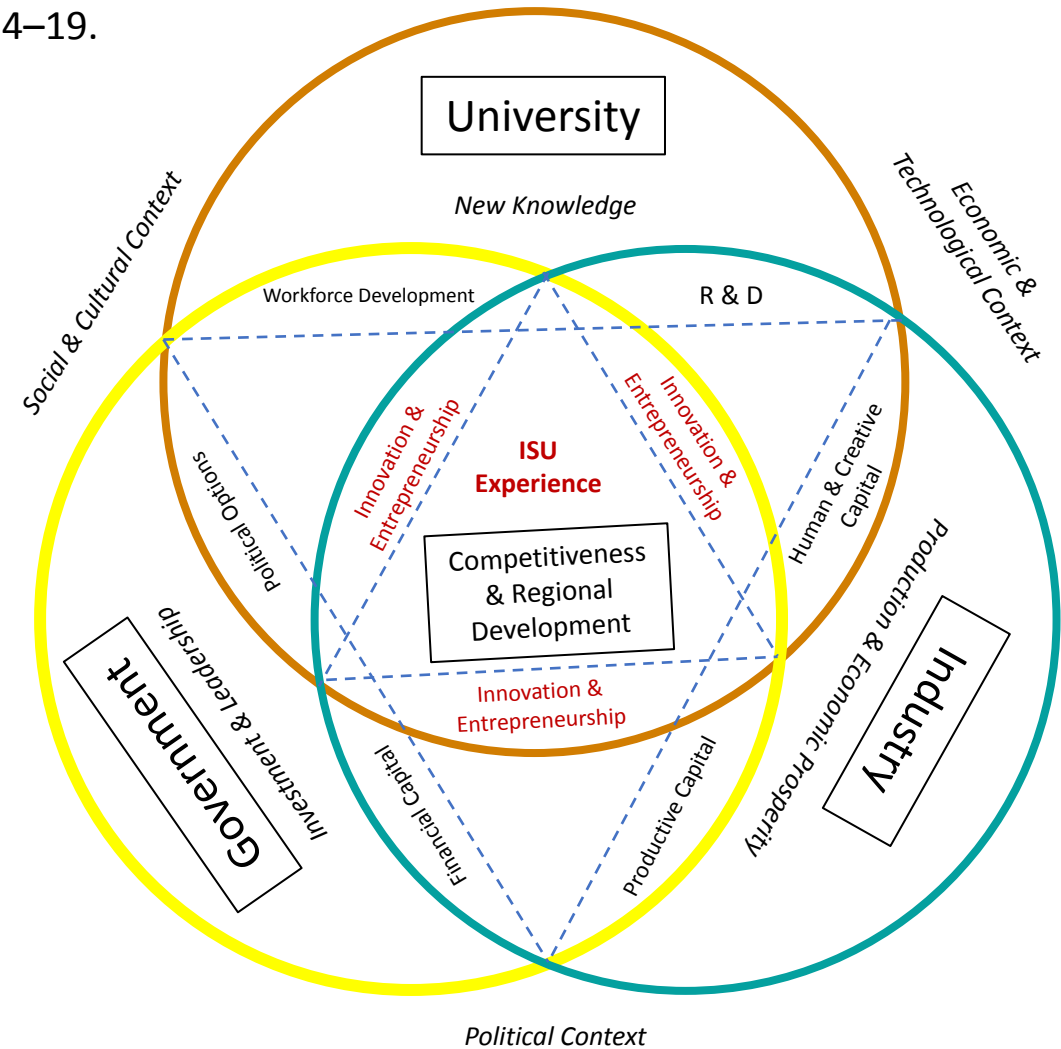
From leading agriculture and rural industries to leading broadband innovation

- Wireless-application co-design & customization
- Rural-urban nexus
- Connected Communities & Internet of Things
- Telecom innovation democratization
- Distributed energy systems

Etzkowitz H, Leydesdorff L (1995) “The Triple Helix—university–industry–government relations: a laboratory for knowledge-based economic development.” *EASST Review* 14: pp.14–19.



Triple helix of DNA – more unstable than the double helix but holds more information.

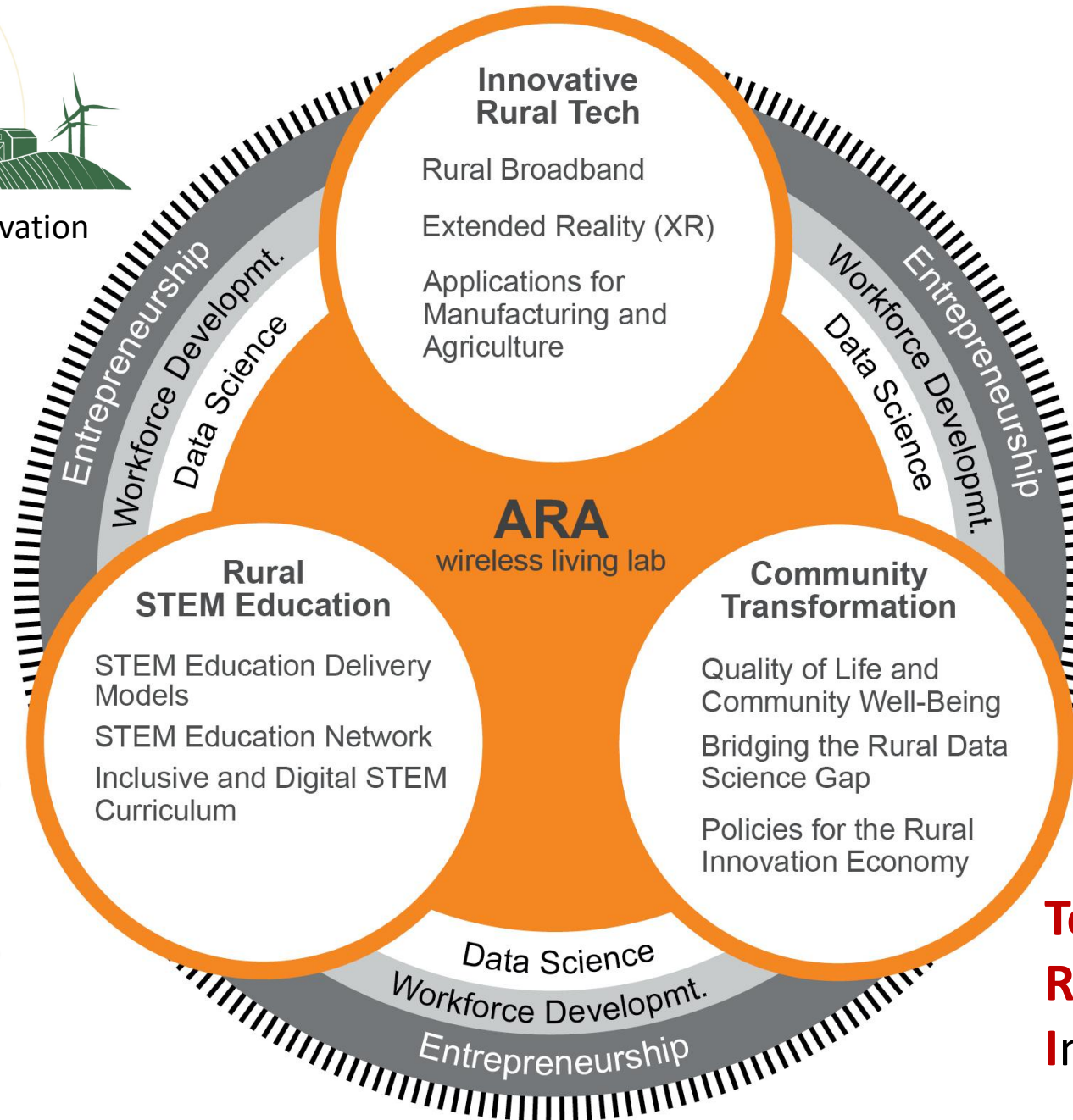


Farinha, J. and Farinha, L. (2013) “Triangulation of the Triple Helix: a Conceptual Framework”, *Triple Helix Association*, pp. 1-21. Dorhout’s edits/additions.

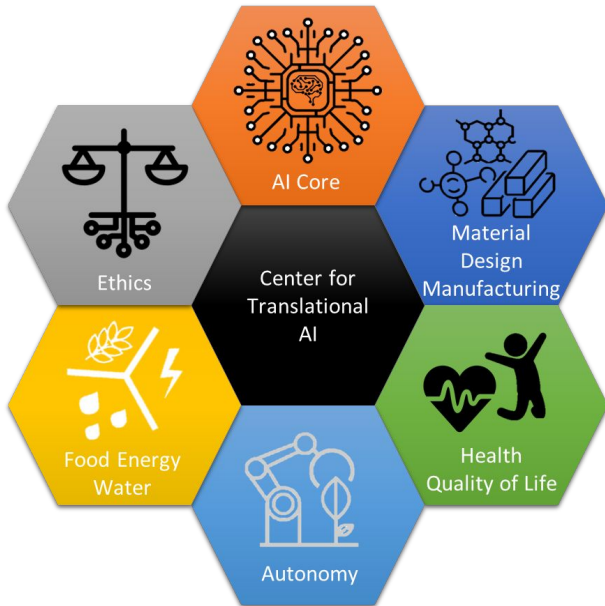


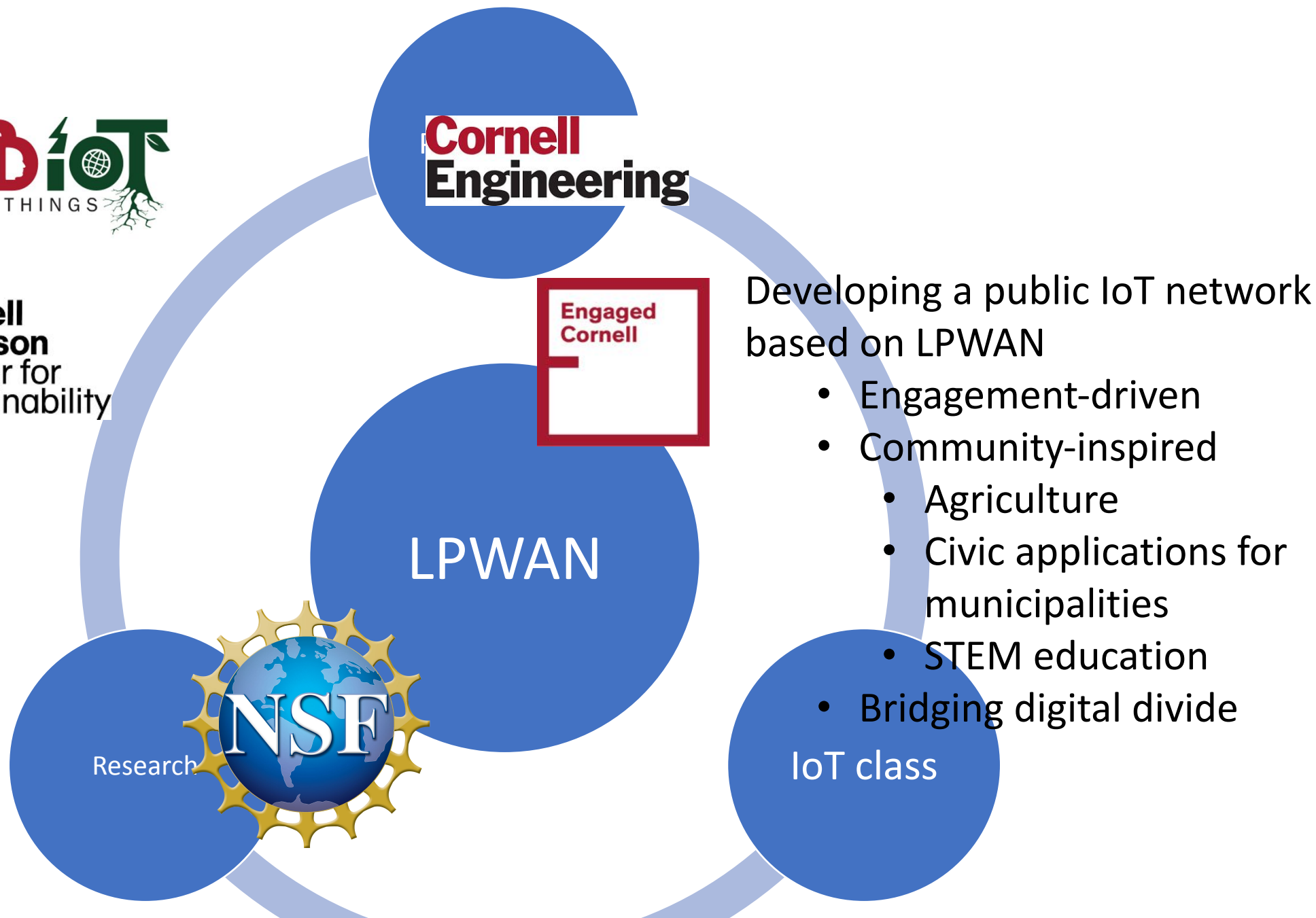
Wireless, Communities, & Innovation

AI Institute for Resilient Agriculture: **AIIRA**



TechTHRIVE: THRiving Rural communities in an InnoVation Environment





**Cornell
Engineering**



Developing a public IoT network based on LPWAN

- Engagement-driven
- Community-inspired
 - Agriculture
 - Civic applications for municipalities
 - STEM education
- Bridging digital divide

IoT class

Research

NSF

LPWAN



STEM and Social Sciences: Technology Partnerships for Thriving Rural Communities



Dr. Nadilia Gomez

Dr. Marie-José Montpetit



Dr. Max Zhang