

ASTECCA Laboratory

- **A**daptive **S**trategic **T**hinking & **E**xecutive **C**ontrol of **C**ognition and **A**ffect
- Uncertainty, interdependence, dynamics
- Behavioral game theoretic paradigms (e.g., trust)
- Coupled empirical-computational methodology
 - Integrated cognition, cognitive architectures, common model
- Forecasting, counterfactual thinking
- Effort allocation, interference resolution, affect

ECOLE Branch

- **E**nvironmental **C**ognition and **L**earning
- Basic & translational science (Pasteur’s quadrant)
- Embodied, embedded, extended, enactive, and ecological (E5) cognition
- Focus on interaction (interpersonal, human-machine, and human-environment)
- Peer-assisted learning, wisdom of crowds, collective & hybrid (human-machine) intelligence
- Sustainability, humanity-centered design

Teaching & Advising

- Computational Cognitive Modeling (ACT-R, Soar)
- Decision Making (DM), including *interactive* DM
- Experimental design (ANOVA, R)
- Psychological Game Theory (capstone)
- Mind and Environment (capstone)
- Cognition and Learning
- Human-AI Teaming (under construction)
- Secondary appointment in the Interdisciplinary Applied Science & Math (IASM) Ph.D. Program

Funding & Outreach

- Recovering the Sources of Individual Differences Unduly-named Errors, DARPA, 2019-21, PI.
- Theory and Research Unifying Social, game-Theoretical, Ecological, Cognitive & Comp. Approac. to Trust Dynamics, AFOSR, 2014-17, PI
- Hybrid Forecasting Competition, IARPA, 2017-19, Co-PI
- Freelance consultant for Kairos Research (AI company in Dayton, OH)