Law, Economics, Political Science, and Public Policy

Associate Professor F. Scott Kieff
School of Law
Thrust Objectives

• Study legal, economic, political, and social implications of Center's technical projects.

• Help design Center's technical projects *ex ante* to best facilitate their passage from laboratory to market.
Thrust Strategies

• Help design Center's technical projects to best avoid or mitigate public law, political, or social problems.
  - Privacy
  - Social identity
  - Etc.

• Help design Center’s technical projects to take best advantage of commercial law, economic, and management techniques:
  - Intellectual Property
  - Business Form
  - Etc.
Thrust Tools

- Intra-thrust workshops
- Inter-thrust workshops
- Formal research collaborations
  - Grant applications
  - Publications
- Informal collaborations
- External colleagues
- Thrust team members
Thrust Team

• Christopher Bracey (Law: race relations, procedure)
• Ronald Indeck (Engineering: magnetics, sorting)
• F. Scott Kieff (Law: intellectual property, economics)
• Andrew D. Martin (Political science: institutions, methods)
• Troy Paredes (Law: corporate/securities, economics)
• Robert Pless (Engineering: computer vision, finding/tracking)
• Andrew Rehfeld (Political science: theory and policy, ethics)
• Theodore Ruger (Law: constitution, healthcare)
Christopher Bracey

(Law: race relations, procedure)

CST-Related Research Interests:

- Complex interplay between advanced technology, constitutionally protected spheres of privacy, and core democratic values of fairness and equality.
- Issues of privacy, equal protection, and due process raised by the strategic deployment of video cameras and face-recognition technology by law enforcement officials in urban communities, especially communities in which the majority of residents are persons of color.
Ronald Indeck

(Engineering: magnetics, sorting)

CST-Related Research Interests:

• Fast searching of massive databases, the forensics of magnetic inks and magnetic recordings, coin and currency validation, and fingerprint biometrics.

• Co-investigator with Kieff on empirical project to study whether patent rights facilitate or frustrate exchanges among scientists.
F. Scott Kieff

(Law: intellectual property, economics)

CST-Related Research Interests:

• Law and economics of the patent system.
• Primary investigator on empirical project to study whether patent rights facilitate or frustrate exchanges among scientists.
Andrew D. Martin

(Political science: institutions, methods)

CST-Related Research Interests:

- Forecasting conflict with recurrent artificial neural networks by modeling machine coded event data generated in real time, supplementing it with other available covariates, and forecasting levels of conflict between a directed dyads (each containing a state) by constructing a multivariate time series that gauges levels international conflict, which will subsequently be modeled with recurrent artificial neural networks.
Troy Paredes

(Law: corporate/securities, economics)

CST-Related Research Interests:

- Human controlled security systems (such as airport passenger screening) in view of cognitive psychology and decision theory. People are boundedly rational with limited cognitive capabilities. People can only store, process, and interpret so much information. As the complexity of a given task increases, studies show that people tend to adopt heuristics — shortcuts — as a coping strategy for making choices.
CST-Related Research Interests:

• Extending algorithms for finding and tracking objects or people in a video sequence to scenes where there is significant unknown and variable background motion.

• Intelligent video surveillance systems designed to protect privacy interests by being switchable between modes of (1) finding and tracking a person by labeling an unknown; and (2) identifying a person by identifying an unknown.
Andrew Rehfeld

(Political science: theory and policy, ethics)

CST-Related Research Interests:

- The role that age and experience play in politics, particularly as the political sphere regulates areas (like security issues) that require increasing levels of technical sophistication.
Theodore Ruger

(Law: constitution, healthcare)

CST-Related Research Interests:

• [Waiting for input from Ruger].