To: Dr. R. Cropf, professor, POLS 6330 Public Finance Theory, Saint Louis University

From: Malcolm S. Townes, student, POLS 6330 Public Finance Theory, Saint Louis University

Date: February 12, 2020

Re: Outline for Literature Review on the Role of Development Stage in University Technology Transfer

1. Introduction
   1. Why technology transfer policy is worthy of serious scholarly study in a social and public policy doctoral program.
   2. Why university technology transfer is of specific interest.
   3. Motivations for studying the role of development stage in university technology transfer.
   4. The primary research questions to be answered.
      1. Does development stage help explain why companies choose not to pursue university-created technologies that seem to align with their missions and profit motives even when the companies appear to have the resources to do so?
         1. How the answer to this question relates to the premise of current federal policy related to university technology transfer.
         2. Implications for public policy if development stage is found to be explanatory.
      2. How is development stage factored into federal public policy related to university technology transfer?
   5. Expected time for completing the research.
   6. Approach for studying the role development stage in university technology transfer.
      1. Why the primary nature of the research topic can be viewed as an issue of impure public goods, market failure, and organizational decision making.
         1. Why university-created technology can be viewed as a good whose consumption is   
            non-rivalrous excludable.
         2. Why university technology transfer is dependent on how private sector organizations function.
         3. Why university technology transfer can be viewed as an exercise in organizational decision making.
      2. The perspectives through which the research topic will be analyzed.
         1. Public sector economics to understand why government involvement and intervention is necessary in the market for university-created technology.
         2. Organization theory and behavior to understand technology transfer as an organization activity.
         3. Descriptive decision theory to understand how organizations make decisions to acquire university-created technology.
   7. Structure of the literature review.
2. Literature related to defining technology.
3. Literature related to defining technology transfer.
   1. Literature related to technology transfer taxonomy.
   2. Literature related to defining university technology transfer.
4. Literature related to the role of the federal government in university technology transfer.
   1. Literature related to understanding the market for university-created technology.
   2. Literature related to examining market failure in the market for university-created technology.
5. Explanatory factors of successful university technology transfer identified in the literature.
   1. Approaches used to study university technology transfer found in the literature.
   2. Exogenous factors associated with successful university technology transfer.
   3. Endogenous factors associated with successful university technology transfer.
   4. Gaps in the literature about factors associated with successful university technology transfer.
6. Literature related to organization decision making about acquiring university-created technology.
   1. Conceptualization of organizations.
   2. Approach to understanding decision-making in an organizational context.
7. Literature related the role of development stage in university technology transfer.
   1. Literature related to measuring the development stage of university-created technology.
   2. Literature that directly examines development stage in university technology transfer.
   3. Literature about the “Valley of Death” in technology commercialization.
8. Literature related to development stage as a component of federal policy connected to university technology transfer.
   1. Literature about federal objectives related to university technology transfer.
   2. Literature about major legislation related to university technology transfer.
   3. Literature about major programs and activities related to university technology transfer.
   4. Literature about federal government expenditures related to university technology transfer.
9. Concluding remarks
   1. Contributions of the reviewed literature to the conceptual and theoretical framework for studying the role of development stage in university technology transfer.
   2. Weaknesses and gaps in the literature related to the role of development stage in university technology transfer.
   3. Proposed next steps to address weaknesses and gaps in the literature related to the role of development stage in university technology transfer.