Annual Report for UTCoP Drug Discovery Center

Year 5: 6/1/2021-6/14/2022 (Funding summary 5/1/2021-4/30/2022)

Wei Li, Ph.D. on behalf of all DDC members

DDC Mission and Short-term Goals

• DDC Missions:

- Support drug discovery research by securing major external funding especially from NIH, although other external funding sources are welcomed
- Support innovative drug discovery research in UTHSC and ultimately clinical translation of new drugs for the diagnosis and therapy of human diseases with spin-off companies or commercial partners
- Attract leading faculty in drug discovery to UTCOP, and train students and postdoctoral fellows in the science of drug discovery

Short-term Goals:

- Using our existing strength and expertise, focusing on an advanced project with the goal to develop and compete for an NIH Program Project Grant in small molecule drug discovery.
- At the same time, develop and secure other types of external grants from NIH, DOD, Foundations, and other sources of funding agencies.

UTCOP Drug Discovery Center Organization Structure Executive Director Dean, UTCOP Vice Chancellor for Spin-off Administrative Research office **Advisory Board** Director Companies **Support Staff Venture Capitals** Research Administration **Investors** Key Equipment, **Faculty Members DPS and DCP** Facilities and in COP **Department Chairs** Resources **Big Pharma and UT Research** Foundation **Biotech Companies Faculty Members** MRC, LACU, Other **Outside of COP Campus Cores**

UTCoP DDC Advisory Committee

- Dr. Richard Magid, VP of UTRF
 left UTHSC as 5/1/2022
- Dr. Gunda Georg, Chair of Dept of Med Chem; Director of Institute for Therapeutics Discovery and Development (ITDD), University of Minnesota





Accomplishment of the DDC in the year 5

- Current DDC members (10, in alphabetic order)
 - Hevener, Kirk; Jiang, Jianxiong; Kumar, Santosh; Leo, Dennis; Li, Wei; Meibohm, Bernd; Miller, Duane; Palmer, Glen; Singh, Udai; Yang, Chao-Yie



- New awarded funding brought in during this year by DDC members (exclude any internal funds, no cost extension, etc)
 - Total funding brought as PIs, Co-Is, or subcontractor PIs: \$6,977,955 (see the table Bernd helped to make for details).
 - Average per DDC member: \$512,581 direct cost/member; \$697,796 total cost/member.
 - Contribute to UTCoP NIH ranking: \$6,097,123 by DDC members (from various NIH institutions)

Other Major Accomplishments in Year 5

- At least two new R01 equivalents will be awarded by August 1, 2022
- The UTHSC spin-off company, SEAK Therapeutics LLC, submitted several new SBIR grant applications and will be reviewed in late June.
- High-impact papers are continually published by DDC members

Summary accomplishments for the first five years

- DDC members collectively brought in significant amount of federal funding each year. On average about \$500k/member per year. Contributed to UTCoP NIH ranking.
- Even though we did not get A grant with total cost over \$1M/year, and thus did not get the 50% indirect cost returns. Combined new grants are well over this \$1M/year threshold.
- Assist the department Chair recruited several R01 funded new faculty (Drs Jiang and Yang), who continued to be highly productive faculty
- Published extensive high impact papers
- Established a spin-off company for commercialization of UTHSC invented technology and successfully obtained multiple grants
- Several compounds have been licensed to commercial partners, with one (sabizabulin) holding great promise for the FDA EUA approval as of today.
- Trainees from DDC members received multiple awards in campus, regional and national competitions
- Well-recognized by the campus and in the 2021-2026 campus Operational Strategic Plan for Research
- Overall, the DDC has been very successful in achieving its stated goals for the past five years.