Annual Report for UTCoP Drug Discovery Center

Year 4: 6/1/2020-6/8/2021

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

Advisory Board

Director

Administrative Support Staff

Faculty Members in COP

DPS and DCP Department Chairs

Key Equipment, Facilities and Resources

Faculty Members Outside of COP

MRC, LACU, Other Campus Cores

Vice Chancellor for Research office

Research Administration

UT Research Foundation

Spin-off Companies

Venture Capital Investors

Big Pharma and Biotech Companies
UTCoP DDC Advisory Committee

- Dr. Richard Magid, VP of UTRF

- 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 4

• Current DDC members (8, in alphabetic order)
  • Hevener, Kirk; Jiang, Jianxiong; 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: $5,967,248 (see the table Bernd helped to make for details).
  • Average per DDC member: $552,395 direct cost/member; $745,906 total cost/member.
  • Contribute to UTCoP NIH ranking: $4,886,006 by DDC members (from various NIH institutions)
Other Major Accomplishments

• Submitted a number of additional grant applications among DDC members

• Anticipated the starting of an NCI R01 grant (MPIs: Li and Miller) in Sept of 2021.

• The UTHSC spin-off company, SEAK Therapeutics LLC, received a second NCI SBIR Phase 1 grant in the amount of $399k in Sept of 2020. Two additional Phase 1 applications totally $1.1 million will be reviewed in June, for which a significant portion of the budget is proposed for UTHSC subcontract (subcontract PI: Jianxiong Jiang).

• A number of high-impact papers published by DDC members
Advices from Advisory Committee members from last year’s meeting and their implementations

• **Advice**: Provide slides and presentations at least one week ahead of time for review by EAB members.
• **Implementation**: DDC members who want to present slides should email the slides by **May 31, 2021** to Drs Georg and Magid directly.

• **Advice**: For presentations, suggest to follow a common template:
  - a. Background (2~3 slides, 3~5 minutes)
  - b. Key progress and achievements over the past 12 months (5~10 minutes)
  - c. Active work and near-term goals (5 minutes)
  - d. Challenges, specific requests for guidance, discussion (5~10 minutes)
• **Implementation**: suggest DDC members to follow the template if possible.

• **Advice**: Prepare Target Product Profiles (TPP) for late-stage drug discovery projects.
• **Implementation**: most projects in the DDC are early-stage projects; but encourage DDC members to think about TPP early on.

• **Advice**: Enlarge external advisory EAB by two members, one with clinical translational expertise - former or current Pharma expert, have EAB provide a written report, or have someone take minutes.
• **Implementation**: due to COVID and the preference of face to face interactions instead of via zoom, we hold off the expansion until next year when COVID situation will improve.
Plan for Year 5

• Work together to secure additional funding from various funding agencies, especially from the NIH which contributes to CoP’s NIH ranking.

• Continue to publish high impact papers

• Have the 5th meeting with Advisory Board members to report on progress and obtain their advice in May-June, 2022.

• Discuss with administrations on strategies to sustain the DDC operation after year 5.