# Division of Pharmacotherapy and Experimental Therapeutics

# STRATEGIC PLAN

2021-2024



# **PREAMBLE**

The Division of Pharmacotherapy and Experimental Therapeutics (DPET) within the UNC Eshelman School of Pharmacy consists of faculty with expertise in clinical pharmacology, drug toxicity, drug development, education, and practice innovations. Our Division houses the majority of translational, bench-to-bedside research efforts. We generate new knowledge in drug treatment through our research, and accelerate its application to improve patient care.

DPET holds a differential advantage in combining practicing faculty with clinically trained researchers. This will allow us to be global leaders in integrating clinical pharmacology discoveries into precision medicine. We have unique collaborations with the drug development industry, the U.S. Food and Drug Administration (FDA), renowned health science centers, and global partners. We also have innovative teachers and mentors, committed to educating and training the next generation of pharmacists and translational scientists.

Our vision statement summarizes our aspirational goal, while our mission defines how our members will invest their time and energy to achieve our vision. Our core values critically define who we are and what we believe in, and are consistent with the aspirational goals of our Division.

The development of this plan is an important achievement for DPET. It was crafted to carefully align with the School's 2021-2024 strategic plan. Our faculty and staff identify with the strategic initiatives that compose the plan, and understand that they form the compass for defining our future. As such, we are committed to the significant effort required to implement and execute our plan.

DPET has accomplished much in the 20 years since it was re-engineered from Pharmacy Practice. We will continue to work together in realizing our new shared vision, and together we will accomplish great things.

#### **OUR VISION**

To improve lives by leading the world in translating experimental and clinical pharmacology discoveries into precision medicine.

Our key indicators include:

- Our faculty lead multidisciplinary collaborations.
- Our research findings become global best practices in patient care, regulatory guidance, and drug development.
- Our faculty are highly sought after by funding agencies, national/international organizations, academic institutions, regulatory agencies, and others for their expertise.
- Our faculty have sustained global training collaborations.
- Our faculty, alumni, and trainees are in impactful leadership positions globally.
- International and clinically trained scholars continually seek our exceptional training and research environment.
- Our alumni are highly sought after for their broad training and unique skill sets.

# **OUR MISSION**

To generate and disseminate new knowledge in pharmacotherapy and accelerate its application to improve patient care.

We will accomplish this by:

• Delivering innovative education and training the next generation of leaders and innovators to solve the world's most pressing health care challenges.

- Integrating experimental and clinical pharmacology discoveries into the practice of precision medicine.
- Achieving global impact through unique collaborations with industry, regulatory agencies, renowned health science centers, and international entities.
- Leading and participating in local, state, national, and programs, international organizations, and communities.

# **OUR CORE VALUES**

We aspire to foster an environment that is:

<u>W</u>elcoming, inclusive, and embodies a sense of belonging <u>Equitable</u>, with equal opportunity for all and resources to support the success of all members.

<u>C</u>ommitted to a relentless passion for impact to society <u>A</u>ccountable, with all individuals responsible for their actions <u>R</u>espectful of every member of our School community, and <u>E</u>xcellent and preeminent in all that we do.

# REVOLUTIONIZE MEDICAL PRACTICE THROUGH PRECISION PHARMACOTHERAPY.

Current Situation: DPET faculty are a diverse, highly productive group that represents many leaders in their respective disciplines. This cadre of world-renowned clinical scientists has translational research as a common focus. Our faculty conduct state-of-the-art basic and clinical research and also provide high-level care in multiple practice settings. Many faculty members are involved in collaborative research relationships locally, nationally, and internationally consistent with precision pharmacotherapy. Our faculty practice clinically in the area of precision medicine, and we collaborate to develop projects and models that lead to more precise dosing of medications. However, we need to continue to strengthen our ability to work collaboratively within the Division, within the School, and across the health sciences campus to ensure we are well-positioned to help lead precision medicine initiatives nationally and globally. This strategic initiative aligns with the School's strategic priorities 1 (create the most diverse, inclusive, and engaging culture) and 2 (accelerate innovation and transformational change in pharmacy).

#### STRATEGIC DIRECTION 1.1

Align and integrate faculty expertise to foster synergy in new discoveries and applications.

- Obj. 1.1.1 Promote and optimize the Division seminar series to regularly convene faculty to share expertise, interests, ideas, and potential areas of collaboration.
- Obj. 1.1.2 Expand the role of DPET faculty in the clinical setting to embrace unique clinical specialty areas (cardio-oncology, precision medicine, pharmacogenomics) that will lead to collaborations that drive discovery and advance pharmacy practice.
- Obj. 1.1.3 Align expertise between DPET faculty, in close collaboration with other UNC Eshelman School of Pharmacy divisions and UNC Health, to advance DPET research initiatives, including precision dosing.

#### STRATEGIC DIRECTION 1.2

Optimize the impact of our discoveries in clinical care by facilitating their application into practice through multidisciplinary collaborations.

- Obj. 1.2.1 By August 2022, engage external collaborators and stakeholders to develop at least two research initiatives to prioritize at the division level.
- Obj. 1.2.2 Evaluate the results of these collaborations or projects on clinical care.
- Obj. 1.2.3 Facilitate the application of our discoveries and best practices related to precision pharmacotherapy into clinical practice through support of our research-focused faculty and education/training opportunities for clinicians and learners.
- Obj. 1.2.4 Continue active engagement in the Partnership for Patient Care Initiative with UNC Health with an emphasis on providing support to clinicians in research, patient care, and education.

#### STRATEGIC DIRECTION 1.3

Develop and implement strategies to influence clinical and research community awareness regarding the role and benefits of precision pharmacotherapy.

- Obj. 1.3.1 Leverage the national and global educational efforts of DPET faculty to reach out to untapped research and medical communities to increase awareness and advocate for the role of precision pharmacotherapy.
- Obj. 1.3.2 Collaborate with diverse stakeholders within the UNC Eshelman School of Pharmacy, other UNC health science schools, UNC Health, and beyond to develop best practices focused on dissemination and clinical implementation of precision pharmacotherapy findings.
- Obj. 1.3.3 Through collaboration with external stakeholders, apply implementation science approaches to ensure application of our precision pharmacotherapy findings.

ACHIEVE AND SUSTAIN NATIONAL AND INTERNATIONAL RECOGNITION FOR HAVING THE WORLD'S LEADING PROGRAMS IN CLINICAL PHARMACOLOGY AND PRECISION PHARMACOTHERAPY

Current Situation: The UNC Eshelman School of Pharmacy is recognized as the #1 Professional Degree Program in the United States. Our Division, DPET, is best known nationally for our Graduate Program that focuses on training Ph.D. candidates to conduct translational science research; collaborative clinical and translational research programs, with a particular emphasis on developing world-class programs in pharmacogenomics, quantitative pharmacology, and experimental therapeutics; and our clinical and T32 Fellowship Programs. We seek to serve as the leading academic group in the United States and the world focused on advancing best practices and research in clinical pharmacology and precision pharmacotherapy. Strategies to increase national and international recognition will require leveraging opportunities that exist with our PharmAlliance partners, strategic private-public partnerships, and communication of our successes to the scientific community (presentations, publications) and society (social media). This strategic initiative aligns with the School's vision to serve North Carolina, the United States, and the world.

#### STRATEGIC DIRECTION 2.1

Identify and pursue strategic private-public partnerships sponsored by the federal and state government, and the pharmaceutical and healthcare technology industries, facilitating new discoveries in experimental therapeutics and clinical implementation of clinical pharmacology and precision pharmacotherapy findings.

Obj. 2.1.1 Continue to develop strategic partnerships around our Division's core research areas, and to actively engage key partners in the government and pharmaceutical and healthcare technology industries.

Obj. 2.1.2 Develop a strategy to routinely convene and implement recommendations received by the DPET Board of Visitors, which comprises industry, regulatory, National Institutes of Health, and foundation representatives.

Obj. 2.1.3 Annually perform a portfolio analysis on existing collaborations.

#### STRATEGIC DIRECTION 2.2

Maximize awareness and visibility of our programs and successes locally, nationally, and internationally with both professional and lay audiences.

Obj. 2.2.1 By August 2022, work with the Communications and Marketing Office, and the Office of Global Engagement, to develop an optimized strategy for maximizing exposure of our accomplishments.

STRATEGICALLY IDENTIFY AND PURSUE INTRAMURAL AND EXTRAMURAL FUNDING OPPORTUNITIES TO SUPPORT HIGH IMPACT RESEARCH PROGRAMS IN PRECISION PHARMACOTHERAPY.

Current Situation: Although all DPET faculty have a desire to fund their scholarship activities, we do not have universal funding success for faculty. Important issues include the lack of a forum to vet ideas for funding, identifying the right funding opportunities, and limited assistance with grantsmanship. Additionally, success with more traditional funding sources (e.g., NIH) is becoming more difficult to achieve, which also affects our training programs. There are many opportunities for enhanced intramural and extramural funding for DPET faculty and learners that we can aggressively pursue. There are also opportunities to work with potential donors to increase scholarship and training funds that could be available to faculty. This strategic initiative is in line with the School's strategic priorities 2 (accelerate innovation and transformational change in pharmacy) and 3 (improve operating efficiency to invest in strategic areas).

#### STRATEGIC DIRECTION 3.1

Leverage unique intramural funding opportunities to develop strategic collaborations with regional, national, and international partners.

Obj. 3.1.1 Submit at least two new funding proposals each year to demonstrate sustained success obtaining intramural funding through the PharmAlliance, Eshelman Institute for Innovation awards, and Creativity Hub mechanism.

# **STRATEGIC DIRECTION 3.2**

Strategically identify and pursue extramural funding opportunities to optimize the impact of our research and training programs.

Obj. 3.2.1 Continue to pursue extramural funding from the National Institutes of Health, foundations, and the pharmaceutical industry to accelerate innovation and transformational changes that align with DPET's strengths, including in precision medicine/pharmacogenomics, quantitative pharmacology, and experimental therapeutics.

Obj. 3.2.2 Develop and implement mechanisms to obtain extramural funding to support graduate students (e.g., diversity supplements for R01 level grants, external fellowship awards).

Obj. 3.2.3 Create a strategy to expand DPET's focus on neuroscience drug discovery/development and therapeutic applications.

#### STRATEGIC DIRECTION 3.3

Identify and pursue collaborative program grants that leverage DPET faculty expertise and infrastructure in the areas of clinical pharmacology and precision pharmacotherapy.

Obj. 3.3.1 By February 2022, identify collaborative program grants that are of interest to DPET faculty and form at least one collaborative program grant writing team.

Obj. 3.3.2 By 2023, develop a grant strategy and apply to establish a U.S. Food and Drug Administration (FDA) Center of Excellence in Regulatory Science and Innovation (CERSI).

# STRATEGICALLY POSITION OUR TRAINING PROGRAMS TO ACHIEVE GLOBAL IMPACT AND RECOGNITION IN THE FUTURE.

Current Situation: The UNC Eshelman School of Pharmacy seeks to be a global leader in pharmacy and pharmaceutical sciences and DPET can continue to establish its international reputation and presence. Individual members of DPET participate in the global engagement programs of the School; however, a more systematic approach is warranted. There are current activities in the areas of clinical education, experiential training, and academic fellowships. There are additional avenues and resources to explore for attracting international scientists and clinicians to train in DPET programs and to develop additional collaborations and exchanges (through Eshelman Institute for Innovation, PharmAlliance, and the Office of Global Engagement). This is in line with the School's strategic priorities 1 (create the most diverse, inclusive, and engaging culture) and 2 (accelerate innovation and transformational change in pharmacy).

#### STRATEGIC DIRECTION 4.1

Provide strong leadership for development and improvement of the key components of the curricular development of our professional program.

- Obj. 4.1.1 Annually provide leadership in the dissemination of educational research, scholarship of teaching and learning, and the use of innovative instructional strategies.
- Obj. 4.1.2 Annually lead the school in the number and quality of scholarly opportunities for students in the Research and Scholarship in Pharmacy (RASP) program.

#### **STRATEGIC DIRECTION 4.2**

Strategically position the DPET Graduate Program to be the global leader in clinical pharmacology training.

- Obj. 4.2.1 Transform our graduate program curriculum to ensure our trainees are well positioned to become leaders in the field of clinical pharmacology and translational research, and to provide relevant professional development and research topics for our graduate students.
- Obj. 4.2.2 Develop a strategy to ensure that all of our graduate students pursue funding support from competitive internal or external sources, and attain professional honors, awards, or other recognitions as we continue to expand the strength and diversity of our graduating student body.
- Obj. 4.2.3 Continue to serve as a leader in the recruitment and training of clinically-trained scientists within the pharmaceutical sciences.

#### **STRATEGIC DIRECTION 4.3**

Strategically position our post-doctoral fellowship programs to sustain excellence.

- Obj. 4.3.1 Annually develop new collaborative relationships to grow training and funding opportunities.
- Obj. 4.3.2 Annually identify and establish new strategic international relationships to support fellowship training.
- Obj. 4.3.3 Develop a plan to expand the strength and diversity, as defined in the broadest sense, of our post-doctoral fellowship programs.

# **STRATEGIC DIRECTION 4.4**

Enhance global exchanges in research, education, and practice to maximize our impact on global health.

Obj. 4.4.1 Develop new collaborations with clinical and international scholars and partner with the Office of Global Engagement to enhance global exchanges.

# ENHANCE THE PROFESSIONAL DEVELOPMENT OPPORTUNITIES FOR OUR FACULTY AND STAFF.

Current Situation: Our faculty and staff are central to the mission of DPET. We seek to foster an environment of professional growth to maximize the full potential of our team members. Through the Campbell Mentoring Program, tenure-track junior faculty members, and fixed-term faculty with a clinical focus, have a formal mechanism by which they can obtain guidance and support from more senior members within our School and University. We would like to continue to ensure that there are professional development and leadership opportunities for all faculty and staff within our Division, including developing a mechanism by which faculty are encouraged to take sabbaticals that would promote their professional growth and giving staff the support and capacity needed to flourish. This strategic initiative is in line with the School's strategic priority 1 (create the most diverse, inclusive, and engaging culture).

#### **STRATEGIC DIRECTION 5.1**

Enhance opportunities to promote faculty development and career paths.

Obj. 5.1.1 Annually identify faculty who want to participate in leadership or other professional development opportunities and facilitate their participation.

Obj. 5.1.2 Annually facilitate and support faculty opportunities for sabbaticals.

#### **STRATEGIC DIRECTION 5.2**

Aspire to 100% of DPET faculty attaining professional honors, awards, or other recognitions as well as strategic prestigious leadership roles locally, nationally, and internationally.

Obj. 5.2.1 Annually collaborate with the School's Full Professor's Committee to facilitate nomination of DPET faculty, staff, and trainees for appropriate recognition.

#### **STRATEGIC DIRECTION 5.3**

Formalize opportunities for staff advancement and retention.

- Obj. 5.3.1 Annually develop opportunities for collaboration with staff in other Divisions.
- Obj. 5.3.2 Annually identify staff who want to participate in skill and leadership development opportunities (within the School and University) and facilitate their participation.
- Obj. 5.3.3 Annually develop a plan for all of our staff pursuing School and University awards or other recognition.

ENHANCE THE TEACHING, SERVICE, AND ADMINISTRATIVE EFFORTS OF FACULTY WHILE ENHANCING OUR SCHOLARLY PRODUCTIVITY AND WELL-BEING.

Current Situation: DPET faculty participate significantly in all aspects of the School's mission, including research, teaching, and service. Our heterogeneous Division coordinates or teaches in most of the professional courses offered, contributes significantly to our grant/contract funding base, and participates heavily in school committee work. This high workload and demand can stress faculty who do not have the appropriate infrastructure to assist them in their efforts. Additionally, the staff supporting DPET's activities could easily become over-committed without the proper School infrastructure or alignment, which can lead to a significant amount of stress and lower job satisfaction. This high intensity environment can make faculty and staff development and career planning lower priority. Opportunities exist to ensure DPET has the correct infrastructure in place to support faculty and staff and to ensure that their development needs are being met. This strategic initiative is in line with the School's strategic priority 1 (create the most diverse, inclusive, and engaging culture) and 3 (improve operating efficiency to invest in strategic areas).

#### **STRATEGIC DIRECTION 6.1**

Ensure DPET's workload balance and demand on faculty time allows us to meet our mission while ensuring the well-being of our faculty.

Obj. 6.1.1 Working with the Office of Organizational Effectiveness, Planning and Assessment, assess current needs and identify opportunities for enhancing faculty productivity and well-being.

Obj. 6.1.2 Develop strategies to enhance integration of new faculty into our division, including opportunities to connect personally, collaborate professionally, and enhance overall well-being.

#### STRATEGIC DIRECTION 6.2

Ensure DPET's workload balance and demand on staff time allows us to meet our mission while ensuring the well-being of our staff.

Obj. 6.2.1 Annually, complete a comprehensive analysis that clearly defines the administrative workload as compared to other Divisions.

Obj. 6.2.2 As required, strategically identify, procure, and allocate additional new resources or reassign duties to facilitate staff productivity.

Obj. 6.2.3 Develop strategies to enhance integration of new staff into our division, including opportunities to connect personally, collaborate professionally, and enhance overall well-being.

# ENHANCE DIVISIONAL DIVERSITY, EQUITY, AND INCLUSION.

Current Situation: While DPET faculty, staff and trainees currently represent a somewhat diverse population, we recognize that further improvement, and its associated benefits, are needed. In addition, recent Culture Survey results suggest that our Division members desire a more diverse, equitable, and inclusive environment where each individual feels that they belong and is respected and accepted for who they are. This strategic initiative aligns with the UNC Eshelman School of Pharmacy (strategic initiative 1 [create the most diverse, inclusive, and engaging culture] and the Office of Organizational Diversity and Inclusion (ODI) strategic plans.

#### STRATEGIC DIRECTION 7.1

Increase and retain the compositional diversity of our students, faculty and staff to reflect the demographics of citizens in North Carolina.

- Obj. 7.1.1 Embed and assess dimensions of cultural awareness and responsiveness into the Multiple Mini Interview prompts for the PhD program.
- Obj. 7.1.2 Collaborate with Human Resources, the Office of Research and Graduate Education, the Office of Organizational Diversity and Inclusion, and other stakeholders to develop an evidence-based recruitment and retention strategy to cultivate a diverse pool of faculty, staff, graduate students, and fellows.
- Obj. 7.1.3 Continue to work with the Associate Dean for Organizational Diversity and Inclusion to engage North Carolinian historically black colleges and universities (HBCUs) and minority serving institutions (MSIs) to stimulate interest in pharmacy and pharmaceutical sciences careers and develop partnerships.
- Obj. 7.1.4 Participate in the School's implementation of visiting tours to every HBCU and MSI in North Carolina to increase student access to the knowledge and tools for graduate and professional education at the School.

# **STRATEGIC DIRECTION 7.2**

Prepare graduate students, fellows, and professional students to be culturally intelligent to meet societal healthcare needs and examine racial health disparities where appropriate.

- Obj. 7.2.1 Include social equity and cultural intelligence education within the curricula of the graduate, fellowship, and professional programs.
- Obj. 7.2.2 Faculty will participate in an annual faculty development training for facilitating inclusive classroom and mentoring practices in collaboration with the Center for Innovative Pharmacy Education & Research (CIPhER).

#### **STRATEGIC DIRECTION 7.3**

Create and maintain a sense of community within the Division where everyone is educated, connected, valued, and has an opportunity to contribute.

Obj. 7.3.1 Identify opportunities for engagement of DPET faculty, staff, and trainees to cultivate a welcoming and inclusive culture.

- Obj. 7.3.2 Continue to offer and encourage faculty, staff, graduate students, and fellows to attend bias management, microaggressions, harassment and discrimination and inclusion training.
- Obj. 7.3.3 Include social equity and cross-cultural education in new graduate student and fellow orientation and new hire orientation.
- Obj. 7.3.4 Embrace and disseminate core values with an accountability framework for all, including a safe space for anonymous reporting.