

VCU SOP Pharm.D., Ph.D. Program

Revised Document, November 30, 2016

(Approved by Pharm.D., Ph.D. SC on November 30, 2016)

Summary:

The VCU School of Pharmacy (SOP) sequential Pharm.D., Ph.D. program allows outstanding Pharm.D. students to obtain both a Pharm.D. and Ph.D. in Pharmaceutical Sciences degree sequentially. The program offers curricular efficiencies in both the Pharm.D. and the Pharmaceutical Sciences graduate programs, summer research opportunities and elective advanced pharmacy practice experiences (APPEs) in order to provide Pharm.D., Ph.D. students the opportunity to graduate with their Pharm.D. after four years and, subsequently, with their Ph.D. degree after two to three additional years.

Interested Pharm.D. students with documented research experience (e.g., Summer Research Fellowships (SRF), see below) and completed GREs apply after their P-1 or P-2 year at the latest for admission. Admission will be granted based on the student's academic record and likely success in completing the challenging Pharm.D., Ph.D. curriculum and a rigorous, hypothesis-driven Ph.D. dissertation research project. Students admitted into the Pharm.D., Ph.D. program are eligible for competitive Pharm.D. scholarships during their P-3 and P-4 years, as well as competitive Ph.D. assistantships that provide stipend, graduate tuition, and fees during full-time graduate years.

Students accepted in the Pharm.D., Ph.D. program will be reviewed semi-annually until their Pharm.D. graduation. When the students matriculate into the Ph.D. program, they will be reviewed by their respective home departments according to guidelines of the Pharmaceutical Sciences Graduate Program.

Oversight:

The **Pharm.D., Ph.D. subcommittee of the Combined Degrees Steering Committee** (Pharm.D., Ph.D. SC, reporting to the Associate Dean of Research and Graduate Studies) directs and oversees the Pharm.D., Ph.D. program and is charged the following responsibilities:

- Review of Summer Research Fellowship (SRF) applications for SOP funding during the P-1 summer (as one way of meeting a prerequisite for admission into Pharm.D., Ph.D. program).
- Review of Pharm.D. student applications for admission into the sequential Pharm.D., Ph.D. program and make scholarship and assistantship funding recommendations.
- Semi-annual review of Pharm.D., Ph.D. students for promotion from admission until graduation with their Pharm.D. degree.
- Overall program oversight such as curricular planning; review of any proposed course waivers/substitutions and long-term strategic planning.

Program Outline:

P-1 year: Competitive Summer Research Fellowship (SRF).

Application into Pharm.D. Ph.D. program.
(Students may also be admitted following their P-2 year)

P-2 through P-4: Full-time Pharm.D. student with some graduate core courses as Pharm.D. electives and two (2) elective APPEs (towards their Ph.D. research); eligible for designated Pharm.D., Ph.D. scholarships during P3 and P-4 year; designated SOP-funded Pharm.D., Ph.D. Summer Fellowships (SF) after P-2 and P-4 years.

Graduation with Pharm.D. degree.

G-1 through G-2: Full-time Ph.D. student employed as:
 a) Pharm.D., Ph.D. Scholar (funded by SOP and VCU Graduate School),
 b) Graduate Teaching Assistant (GTA; funded by SOP and Graduate School), or
 c) Graduate Research Assistant (GRA): funded by graduate advisor (PI) or self-funded.

Graduate course work and Ph.D. research; comprehensive exams (recommended for G-1 year).

**G-3 or longer:
 (if necessary):** Full-time GRA funded by PI, or self-funded.

Graduation with Ph.D. degree.

Admission:

Applications will be reviewed after the P-1 (or P-2 year) for possible admission starting in the respective P-2 or P-3 spring semester. Pharm.D., Ph.D. students will be admitted into the sequential Pharm.D., Ph.D. program after successful completion of Summer Research Fellowships, SRF, (or equivalent research experience) and identification of a prospective graduate advisor (PI) after their P-1 (or P-2) year.

Applications may be accepted for initial review in mid-August of each year to assess student eligibility for admission into the Pharm.D., Ph.D. program (applications without completed GRE scores will be accepted; however, admission will be contingent upon receipt of satisfactory GRE scores). Final review of the applications typically occurs in early December of each year, followed by final admission and funding decisions in the following spring semester (see below).

Students deemed eligible in the initial review will be provisionally admitted and permitted to take advantage of the P-3 course efficiencies (see below). Final admission letters will be sent by Graduate School Office to applicants in early January, prior to the start of the P-2 (or P-3) spring semester.

Applications will be evaluated according to the following criteria:

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- **Pharm.D. GPA:** ≥ 3.0 (required).
- **Personal interview** by two (2) Pharm.D./Ph.D. Subcommittee members (signed interview sheet) (required).
- **Research experience** (SRF or equivalent) is required.
- **GRE scores:** >300 (verbal and quantitative reasoning, post 2011) or $>1,150$, >4.0 (analytical writing) or equivalent (pre 2011), is preferred, though exceptions may be made; prior M.S. degree will waive GRE requirement.
- **Prospective graduate faculty sponsor letter** in SOP or PHTX (required)

Promotion:

While in the Pharm.D. program, Pharm.D., Ph.D. students will be reviewed separately by the Pharm.D., Ph.D. SC. In addition, students will be reviewed after each semester by the SOP Academic Performance Committee from P-1 through P-4.

The Pharm.D., Ph.D. SC criteria for promotion throughout the Pharm.D. program will include:

- **GPA:** ≥ 3.0
- **PI (Principal Investigator, i.e., Graduate Advisor) and Graduate Program Director of home department letters**, documenting satisfactory progress on Pharm.D., Ph.D. curriculum/research.

Starting with the G-1 year, the Pharm.D., Ph.D. students will be subject only to regular, annual graduate student performance reviews by their respective home departments.

Curricular Plan:

The graduate course requirements for individual students depend on the departmental requirements for each track, MEDC (Dept. of Medicinal Chemistry), PCEU (Dept. of Pharmaceutics), and PHAR (Dept. of Pharmacotherapy and Outcomes Science).

Depending on the background and training of the student, additional Pharm.D. and/or graduate core courses **may** be waived or substituted upon request, supported by the graduate advisor (PI) and upon formal review and written approval by the Pharm.D., Ph.D. SC.

The following table lists the approved curriculum (by semester in the Pharm.D., Ph.D. program):

P-1: Pharm.D. curriculum.

P-1, Summer: SRF; Research presentation at SOP summer luncheon and SOP Research and Career Day are required.

Application to Pharm.D./Ph.D. Program

P-2: Pharm.D. curriculum.

P-2 Summer: Pharm.D., Ph.D SF; Research presentation at SOP summer luncheon and SOP Fall Research and Career Day are encouraged.

(Application to Pharm.D./Ph.D. Program after P-2)

P-3: Pharm.D. curriculum. Maximum of a 3 credit graduate core course per semester (e.g., PSCI 607/608), counting as Pharm.D. electives. Need to obtain approval for P-4 APPE schedule/plan by OEE no later than P-3 Fall;

Application to Ph.D. Program Fall P-3 (GRE required, if not already applied)

P-3 Summer: n/a (APPE)

P-4: Approved APPE schedule (Summer/Fall), Research APPEs in P-4 Spring, Graduate core courses in P-4 Spring.

Matriculation into Ph.D. Program in P-4 Spring. Therefore, credits for PHAR 765 (research elective APPE #1, 5 credits) and PHAR 766 (research elective APPE #2, 5 credits) will count towards both degrees. The student's primary program will remain the Pharm.D. program, while the secondary program will be the Ph.D. program. Thus, tuition will be at the Pharm.D. rate.

Graduation with Pharm.D. degree

P-4 Summer: (Post –P4) Pharm.D., Ph.D SF; Research presentation at SOP summer luncheon and SOP Fall Research and Career Day are required.

G-1 through G-3 (or completion): Ph.D curriculum and research.

Doctoral dissertation defense and graduation with Ph.D. degree**Special Ph.D. Research Timelines:**

Pharm.D., Ph.D. students are expected to work diligently on their dissertation research throughout their tenure in the program; however, their available time for research will depend on their Pharm.D. and graduate coursework, especially during their P-2 through P-4 years. Nevertheless, their P-2 and P-4 summer fellowships (SF) as well as their P-4 spring semester will be dedicated towards making significant progress towards their dissertation research proposal - in close consultation with their graduate advisor (PI).

Pharm.D., Ph.D. students are expected to select their graduate advisory committee early in the G-1 year and should complete their comprehensive exams (and proceed to Ph.D. candidacy status) prior to their G-2 year. Pharm.D., Ph.D. students are expected to apply for an F30 individual training grant from NIH, and highly encouraged to submit their F30/F31 application prior to their G-1 year.

Funding:

During the P-1 through P-4 years, Pharm.D., Ph.D. students are self-funded and pay in-state or out-of-state tuition depending on their status. However, two (2) students may be selected competitively during admissions review as Pharm.D., Ph.D. Scholars to receive scholarships for their P-3 and P-4 years, which are provided by the SOP Dean's Office. Alternatively, the PI may

choose to fund their student (see below). In addition, designated summer fellowships (SF) after P-2 and P-4 will be provided by SOP to Pharm.D., Ph.D. Scholars; other Pharm.D., Ph.D. students will be provided SF funding by their PIs.

All Pharm.D., Ph.D. funding depends upon satisfactory progress in the program (see Promotion).

Starting with the G-1 year, upon matriculation as full-time Ph.D. students, students may be supported, after competitive review as:

- 1) Pharm.D., Ph.D. Scholars;
- 2) Graduate Teaching Assistants (GTAs);
- 3) Graduate Research Assistants (GRAs) and funded by their PI; or
- 4) self-funded GRAs.

Any funding beyond the G-2 year for Pharm.D./Ph.D. Scholars or GTAs will be provided by the PI, unless university funds or training grants have been awarded.

1. Funding as Pharm.D./Ph.D. Scholar:

In the final application review session in early December of each year, during the first step of the application review for admission, all Pharm.D., Ph.D. applicants will be reviewed for admission. During the second step of the admission review, **all applicants considered eligible for admission will be (competitively) reviewed** for selection as SOP Pharm.D., Ph.D. Scholars; these scholarships include \$5,000 for P-3 and P-4 years (\$10,000 total) to be applied to tuition, designated post-P-2 and post-P-4 SF (\$4,000 each), as well as stipend, graduate tuition, and fees support during their G-1 and G-2 years.

Using the admission criteria (see Admission), student applicants will be ranked on their merits, the top candidate(s) will be recommended for SOP-funding, as follows:

P-2 through P-4:

1. Self-funding at Pharm.D. in-state or out-of-state tuition rate, with \$5,000 Pharm.D., Ph.D. scholarships to be applied during P-3 and P-4 years.
2. Funding for Pharm.D., Ph.D. summer fellowship (SF) during P-2 and post P-4 summer (**\$4,000/3 months**) from SOP Deans Office.

G-1 and G-2*: Two (2)-year graduate tuition, fees and stipend from the Graduate School and SOP to provide teaching services (e.g., Foundation I and II, Experiential Education (APPE, logistics and basic clinical skills), Scholarship I/II mentoring).

G-3 (or longer if necessary)*: PI assumes funding for tuition, fees, and stipend, unless funds from university or training grants become available.

Continued funding of the student (i.e., scholarship, SF support, tuition, fees and stipend) depends on satisfactory progress throughout the Pharm.D., Ph.D. program (see Promotion)!

***Student may work part-time as a pharmacist, pending written approval from the PI and Graduate Program Director of the Home Department as outlined in the SOP Graduate Handbook.**

2. Funding as GTA/PI funded GRA:

Applicants who do not receive funding as Pharm.D., Ph.D. Scholars may be eligible to receive

stipend and tuition support from the SOP Pharmaceutical Sciences Graduate Program and/or graduate advisor (PI), as follows:

- P-1 through P-4:**
1. Self-funding at Pharm.D. in-state or out-of-state tuition rate (with possible AFPE gateway grants in P-4).
 2. Funding for the Pharm.D., Ph.D. SF during P-2 and/or post-P-4 summer (**\$4,000/3 months**) may be available from the PI.

G-1 and G-2*: Funding as either a GTA** through the Pharmaceutical Sciences Graduate Program or a GRA through the PI. GTAs provide departmental teaching services, while GRAs provide research services as part of sponsored research. GTAs and GRAs receive funding for tuition, fees, and stipends.

G-3 (or longer if necessary)*: PI covers funding as GRA for tuition, fees, and stipends.

Continued funding of the student (i.e., scholarship, SF support, tuition, fees and stipend depends on satisfactory progress throughout the Pharm.D., Ph.D. program (see Promotion)!

- * **Student may work part-time as a pharmacist pending written approval from the PI and Program Director of the Home Department as outlined in the SOP Graduate Handbook.**
- ** ***The GTA funding source is contingent upon approval by the VCU School of Graduate Studies.***

3 Self-funded GRA:

Applicants who do not receive funding as Pharm.D., Ph.D. Scholars, GTAs, or PI-supported GRAs, may be self-funded as follows:

- P-1 through P-4:**
1. Self-funding at Pharm.D. in-state or out-of-state tuition rate tuition rate.
 2. Funding for the Pharm.D./Ph.D. summer fellowship during P-2 and/or during P-4 summer (**\$4,000/3 months**) may be available from the PI.

G-1 through G-3 (or through completion)*: Self-funding at graduate tuition rate and fees (stipends are not provided through VCU entities)

Continued funding of the student (i.e., summer fellowships) depends on satisfactory progress throughout the Pharm.D./Ph.D. program (see Promotion)!

- * **Student may work part-time as a pharmacist pending written approval from the PI and Program Director of the Home Department as outlined in the SOP Graduate Handbook.**

Abbreviations:

Department of Medicinal Chemistry (MEDC);
 Department of Pharmaceutics (PCEU);
 Department of Pharmacology and Toxicology (PHTX);
 Department of Pharmacotherapy and Outcomes Science (PHAR);

Graduate Research Assistant (GRA): funded by PI/Ph.D. advisor for all graduate years or self-funded (denoted accordingly);

Graduate Record Examination (GRE);

Graduate Teaching Assistant (GTA): funded by the SOP and Graduate School during G-1 and G-2 years, and by the PI/Ph.D. advisor during subsequent years;

Pharm.D., Ph.D. subcommittee (Pharm.D., Ph.D. SC);

Principal Investigator (PI): mentor and Ph.D. advisor;

Summer fellowships (SF) occur following P-2 and P-4 years for Pharm.D., Ph.D. students only, funded by SOP or PI;

Summer research fellowship (SRF): available competitively following P-1 year for eligible Pharm.D. students.

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Note: This document is subject to change without further notice

**Sequential Pharm.D., Ph.D. Degree Program
OUTLINE
October 19, 2016**

Year	Status	Funding	Summer	Curriculum	Admission/Review Process
P-1	Pharm.D.	self-funded	(Post-P1) SOP-SRF	Pharm.D. curriculum	<i>SRF application (Spring) Identification of/support by prospective Ph.D. advisor (PI)</i>
P-2	Pharm.D.	self-funded	Designated (post-P2) SOP-SF (2/yr)	Pharm. D. curriculum	<i>Pharm.D., Ph.D. track application, GRE not required (Fall); <=4/yr Pharm.D., Ph.D. track admission (Spring)</i>
P-3	Pharm.D.	self-funded competitive SOP scholarship (2/yr)	n/a	Pharm.D. curriculum <=3 cr-electives toward grad. core courses (e.g., PSCI 607/608)	<i>Pharm.D., Ph.D. track review, GRE required (Fall); <=4/yr Review for P-3/P-4 scholarships (Fall); <=2/yr Review and approval of P-4 APPE schedule (Fall) Review and (provisional) admission into Ph.D. program (secondary degree)</i>
P-4	Pharm.D. (Ph.D.)	self-funded competitive SOP scholarship (2/yr)	Designated (post-P4) SOP-SF (2/yr)	Required APPEs (Summer/Fall) Research Elective APPEs in Spring Graduate core courses in Spring	<i>Hand-over from Pharm.D., Ph.D. SC to departmental GPD Research APPEs (10 cr) double-counted against Ph.D. minimum credits</i>
Graduation with Pharm.D. degree					
G-1	Ph.D.	Designated SOP-Scholar (2 GTW/yr) OR department/advisor (GTA or GRA) OR self-funded (GRA)	n/a	Ph.D. curriculum Ph.D. research	<i>Regular SOP/departmental Ph.D. student review Review of graduate course waivers (to achieve 60 credit Ph.D. minimum) Completion of comprehensive exams no later than G-1 Summer</i>
G-2	Ph.D.	Designated SOP-Scholar (2 GTW/yr) OR department/advisor (GTA or GRA) OR self-funded (GRA)	n/a	Ph.D. curriculum Ph.D. research	<i>Regular SOP/departmental Ph.D. student review</i>
G-3	Ph.D.	advisor (GRA) OR self-funded (GRA)	n/a	Ph.D. curriculum Ph.D. research	<i>Regular SOP/departmental Ph.D. candidate review</i>
(G-4)	Ph.D.	advisor (GRA) OR self-funded (GRA)	n/a	Ph.D. curriculum Ph.D. research	<i>Regular SOP/departmental Ph.D. candidate review</i>
Graduation with Ph.D. degree					