

Bachelor of Science in Pharmaceutical and Medical Sciences v2

College of Pharmacy and Pharmaceutical Sciences

and

Elson S. Floyd College of Medicine

Table of Contents

A. Correcting inaccuracies in a table on page 11 of proposal..... 2

B. Perceived course duplication with SMB, updated..... 2

C. Perceived negative impact of proposed program on Pullman-based SMB degrees..... 4

D. Concerns of College of Arts and Sciences (CAS)—updated..... 4

E. Summary..... 5

A. Correcting inaccuracies in a table on page 11 of proposal

Transfer Equivalencies

SMB is concerned with inaccurate transfer equivalencies in a table on page 11 of our proposal. We agree, the table on page 11 contains inaccuracies. This table was included to illustrate how we would work with WSU and CCS to develop transfer equivalencies for this program, which links CCS and WSU. It was not intended to be a final determination of all transfer equivalencies between CCS and WSU, or between WSU and other community colleges or 4-year institutions in the Spokane area in the future, and we apologize for not making this clear in the proposal. SMB identified two specific concerns:

Concern 1: The equivalency for Biol 106 from Spokane Falls and Spokane CC is incorrect: it should be Biol 221 and Biol 223, not just Biol 223. Biol 223 is insufficient for Biol 106.

Response 1: We appreciate and concur with the above comment. We are working with both CCS and WSU to establish a transfer agreement and fit Biol 221, 222, and 223 into the student schedule for an AA or AS degree in the CCS students.

Concern 2: There are no equivalencies for Biol 315 and Biol 353 from any community college.

Response 2: We agree, the issue of transfer equivalency is complicated, even within the WSU system, and this requires a degree of flexibility on both sides. For example, we have the same anatomy and physiology pre-requisites for our PharmD program, WSU courses BIOL 315 and 353, respectively. However, we have accommodated students coming from WSU Tri-Cities to our PharmD program because BIOL 315 is not offered on that WSU campus. We accept BIOL 354 (Human Anatomy for Health Occupations), which is offered on the Tri-Cities campus, in place of BIOL315 for our WSU Tri-Cities students entering the PharmD program in Spokane or Yakima.

We envision a similar approach admitting CCS students into our undergraduate program. For example, we have worked with CCS to develop a pathway for AS-T students to our PharmD program that includes both anatomy and physiology. CCS faculty worked with CPPS faculty to develop coursework that met the needs of our professional program and we have been accepting CCS courses as substitutes for BIOL 315 and 353 in our PharmD program for several years. One may assume, as I once did, CCS graduates with the AS-T degree would not perform in our PharmD program as well as students coming to us with B.S. degrees from 4-year institutions. However, this is simply not the case; we cannot differentiate between students with the AS-T degree and students with a B.S. degree from 4-year institutions, including those within the WSU system, when considering academic performance in the PharmD program.

We will continue to work with both CCS and WSU to iron out details of the transfer agreement that underlies this relationship, which will serve both Spokane County and the WSU system.

B. Perception of course duplication, updated

We have now been informed of specific examples of perceived duplicity between newly developed courses for proposed B.S. program in Pharmaceutical and Medical Sciences and current offerings by SMB. We have already detailed the lack of duplicity between several of these courses and this update will focus only on courses we have not previously addressed. The latter category includes

the following courses on: Biomedical Literature, Ethics, Scientific Writing, and Directed Research. Each is described below.

1. PharMedS 315 – Biomedical Literature: Communicating Science [COMM]

This course, an already approved UCORE course for this major, will teach students to understand the organization of scientific journal articles, interpret figures, and provide constructive feedback, with an emphasis on the papers focusing on pharmaceutical and medical sciences.

Perceived overlap: MBIOS 201 [COMM], appears to be a UCORE course for MBIOS. There are several [COMM] courses spread across many units in the university. Our course focuses on articles from pharmaceutical and medical sciences journals whereas the MBIOS course focuses on "scientific communication skills in the molecular life sciences." The MBIOS course uses the structured "CREATE" method of pedagogy; the PharMedS course does not. Surely there will be some overlap between the two [COMM] courses but it is certainly not unusual for different programs to have [COMM] UCORE classes specific to their own areas. All [COMM] courses must meet specific criteria, and thus have much in common.

2. PharMedS 323 – Ethics: Conduct and Career Development

This course focuses on ethics in the context of responsible conduct of research, scientific writing with a heavy dose of biomedical ethics.

Perceived overlap: MBIOS 138—this is a seminar course that is very career-oriented, does not appear to be focused on Pharmaceutical/Medical Sciences, and does not cover responsible conduct of research or biomedical ethics. One portion of the course familiarizes students with the research of CVM faculty members. In contrast, PharMedS 323 includes topics required by NIH for Responsible Conduct of Research coursework (~1/3 of course), discusses aspects of scientific writing including the structure of manuscripts and their peer review, and the last third of the course addresses historical and current issues in biomedical ethics. The main "overlap" between courses concerns the writing of resumes and applications; this comprises three lectures in PharMedS 323. This topic is covered in most undergraduate curricula.

3. PharMedS 421 – Scientific Communication: Writing and Speaking [M]

This is primarily a writing in major [M] course with several foci, including scientific papers, critical reviews, and grant proposals, as well as communicating with the public about scientific topics. Oral presentations will include "elevator" talks, and presentation of scientific papers of pharmaceutical or medical significance.

Perceived overlap: MBIOS 494 [CAPS] [M]—is a senior project seminar class in which students present a written paper and a seminar describing their own work. This seems like a wonderful class but it is completely different from PharMedS 421. The latter is an [M] course and not a [CAPS] course. Again, the development of writing and speaking skills is critical in all undergraduate programs. This can be addressed in multiple ways in multiple courses, as is the case in the PharMedS curriculum and undoubtedly in MBIOS courses.

4. PharMedS 499 – Special Problems

This is an independent study course conducted under the supervision of an approving faculty member; may include independent research studies in technical or specialized problems in the pharmaceutical or medical sciences; selection and analysis of specified readings; development of a creative project; or field experiences.

Perceived overlap: MBIOS 498—this is the MBIOS version of a directed research project, which is very similar to our course PharMedS 499. Nearly every major at WSU has a directed research or special problems course, and all focus on their research projects in their particular areas of research. There is certainly overlap between our 499 course and the MBIOS 498 (and MBIOS 499) and every other 499 course in the university, in that all involve supervised research. This

overlap does not feel problematic. Our college has extensive experience in successfully introducing students to research through individual, faculty-directed research projects.

C. Perceived impact of Spokane B.S. degree program on Pullman-based SMB programs

SMB leadership clearly feels our proposed B.S. program in Pharmaceutical and Medical Sciences will negatively impact Pullman-based, pre-health science degree programs in SMB. However, the idea that our program will significantly decrease transfer students matriculating on the Pullman campus is contradicted by analyses performed by Drs. Bill Davis (SMB) and Samantha Gizerian (CVM), as stated summarized by College of Veterinary Medicine Dean Dori Borjesson. In her letter to Faculty Senate, Dean Borjesson cited these analyses and concluded the impact of our proposed program on SMB pre-health programs "will likely be minimal." Dean Borjesson also suggested that "data should be collected annually on the number of enrolled students and from where they are being recruited," and we will certainly do this and share it with all interested parties. Dean Borjesson concluded by stating "much of the concern for this proposal is precedent...if I were the Dean of the College of Pharmacy, I would want the opportunity to enhance UG enrollment and engage with Spokane. I genuinely hope this wil[l] be the outcome and it will be one step towards attracting more students, not shifting our current students."

D. Concerns of College of Arts and Sciences (CAS)--updated

We received a specific response about our proposed undergraduate program from CAS. The points raised by the anonymously written CAS correspondence, and our responses are below.

- 1. The title of our proposed program partially overlaps with the CAS degree in "Basic Medical Sciences."** As detailed in our first response (see exhibit), a precedent exists for "reusing" titles between majors and courses at WSU.
 - There are multiple courses with "Physiology" in the title offered throughout WSU. Courses with "Exercise Physiology" in the title are offered by Nutrition and Exercise Physiology (Spokane) and by Kinesiology (Pullman), and this does not seem to cause much confusion amongst students.
 - Integrative Pharmacology is currently taught in CPPS, and some version of Pharmacology has been taught in the College for over 100 years. Two courses in CVM have re-purposed the name "Pharmacology," and these are "Fundamentals of Pharmacology" and "Veterinary Pharmacology and Toxicology." This is normal and CVM should teach courses in Pharmacology from the veterinary angle.
 - We were strongly advised by President Schulz, Provost Chilton, Executive Vice President for Health Sciences DeWald, and the Registrar's Office to base the name of our program on what it is, i.e., "Pharmaceutical and Medical Sciences," using standard terminology, so it could be easily understandable by prospective students, advisors, employers, and all other interested parties.
 - CAS suggested we return to a name suggested in the earlier stages of this proposal, "Pharmaceutical Sciences and Molecular Medicine," which is a fine title for our graduate program but does not match our undergraduate curriculum because we are not offering much in the way of "molecular" medicine. This title was rejected by both CPPS and ESFCOM faculty.
- 2. Incorrect transfer equivalencies**—this was also a concern of SMB, which was addressed above.
- 3. Completing WSU UCORE requirements**—Candidates for this undergraduate program from CCS will have either the AS, or in rare circumstances, the AA degree. We do not

anticipate CCS students will enter our B.S. program with the AS-T degree, and the potential problem with UCORE transfer credits is a non-issue. We do accept several AS-T students from various community colleges into our PharmD program every year (see above), and the author of the CAS correspondence is correct, the AS-T degree is more than a two-year degree. This is not an issue for the proposed B.S. program.

4. Potential for expansion beyond the target demographic of CCS graduates to "residential" students

- This is a curious comment because we already have existing "3+4" agreements with programs on the Pullman campus, and more on the way, and we also have dual-degree programs with the Voiland College of Engineering and Architecture, the Edward R. Murrow College of Communications, and the Carson College of Business. In all cases, I believe we have been solid and reliable partners for our sister colleges on the Pullman campus. Students on the Spokane campus commute to campus; they reside throughout the Spokane area, often with their families.
- The 3+4 programs we have established are with SMB and the Honors College and neither has produced many PharmD students for our professional program, but the Honors College program only began in AY21-22. We are presently seeking Faculty Senate approval for a 3+4 program with CAS itself, jointly envisioned by Dean Todd Butler and myself. These students will leave WSU with a bachelor's degree in psychology and a PharmD degree in seven years, which will reduce the debt burden of our PharmD graduates. We are planning to develop a track within the PharmD program that gives students extensive training in behavioral health, or psychiatric pharmacy, which may be of interest to psychology majors. We received legislative funding to develop a post-graduate pharmacy residency program for training licensed pharmacists in behavioral health. In essence, we have created a pathway that builds on the psychology degree, provided by CAS, to produce health care professionals with excellent training in behavioral health and psychiatric pharmacy and focused on primary care. This is particularly timely as the need for behavioral health care professionals has exploded during the pandemic, particularly in rural areas of the State.
- CAS suggested limiting enrollment in our program to students with AA, AS, or AS-T degrees, presumably as a means of ensuring our program does not expand and/or cannibalize Pullman-based degree programs. While well meaning, this would also effectively prevent us from taking students from the three, 4-year institutions in Spokane county. The bottom line is we only have 50 seats per year for this program and that is dictated by the limited classroom infrastructure on the Spokane campus. Without meaningful classroom expansion on the horizon for the Spokane campus, growth of the proposed BS program in Spokane is a non-issue.

E. Summary

1. SMB and CAS leadership rightly identified errors in a table in our proposal describing transfer equivalencies. This is a work in progress and will continue to be so as we work with other community colleges around the State to establish similar agreements. We will continue to work with CCS and WSU officials develop transfer equivalency agreements that are acceptable to all and consistent with precedent of both institutions.
2. SMB leadership identified four additional courses in our proposed B.S. program as having overlap with existing courses in SMB. We had not anticipated these courses would be identified as overlapping in our first response, but we addressed this suggestion herein. Some of these identified courses bear the UCORE designation, which means that course objectives are overlapping with similar courses across many WSU programs. SMB also identified our

499 course, which is essentially a directed research class, as overlapping with their directed research class, as should be expected for all 499-type courses across all majors.

3. SMB leadership suggested place-bound students in Spokane could simply complete their B.S. degrees through Global campus. This is certainly true and there is nothing stopping those students—or any others—from doing that right now. Global will always be an important part of the mix of WSU course offerings but many students prefer the in-person experience, and those are the students we will recruit into this program. Based on our experience on an urban commuter campus, local students are willing and able to attend in-person courses. The Spokane area is home to many military personnel and veterans and their families; these potential students must attend courses in-person to retain full government benefits.
4. The perception that our proposed program will negatively impact SMB programs in Pullman is not consistent with analyses of transfer students done by our colleagues in SMB and CVM, and cited by Dean Borjesson of the College of Veterinary Medicine (see letter of support in exhibits). Nonetheless, we understand and respect the concern of SMB leadership and we will work with them and colleagues in CVM going forward to create a stronger, more collaborative effort across the breadth of the health sciences research.
5. The title of our proposed program does overlap partially with the "Basic Medical Sciences" degree in CAS, but there is precedent for re-using course and degree titles in the WSU system, and the unanimous opinion of WSU senior leadership and the Office of the Registrar supports our use of "Pharmaceutical and Medical Sciences" as the title for our proposed program.
6. CAS, like SMB (see #4 above), expressed concern about the perceived negative impact of our program on Pullman-based pre-health science programs. CAS went a step further and suggested limiting enrollment in our program to AA/AS graduates. However, this would also hinder our recruitment of qualified students from the three 4-year institutions in Spokane County. Again, we have a firm cap of 50 students per year in our Spokane-based program, which is the most effective safeguard against expansion of our program.
7. Finally, we have all heard a lot of concern from both SMB and CAS about perceived overlapping class offerings, the perceived negative impact of our proposed program on Pullman-based programs, and our attempted "money grab." All of this before the program even takes its first student. I believe I have completely addressed those concerns and I am happy to continue this discussion. However, we are losing sight of what is important here. Higher education is not about perceived overlap of courses, the effect of one program on enrollment in others, or turf wars between departments, programs, and colleges on different campuses. Students couldn't care less about any of this. They just want an education that is going to prepare them for a successful and rewarding career. The proposed program is designed to provide this opportunity to individuals who might not otherwise have the chance to complete a 4-year degree. Higher education is, or should be, about students, and it would behoove all of us and our employer if we could get back to making decisions about degree programs based on what is good for students because, in the end, this is all that matters.

Thank you for the opportunity to respond to additional questions raised by the leadership of SMB and CAS.



Mark Leid, PhD
Professor and Dean
College of Pharmacy and Pharmaceutical Sciences

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Date