



School of Pharmacy Diversity Report

Please accept the following report from the School of Pharmacy. We are pleased to support the University's diversity efforts.

Student Access and Opportunities

The School of Pharmacy offers two different degree opportunities. One is the traditional graduate school pathway of a course of study leading to a Masters and/or a Doctor of Philosophy degree. The other is the professional pathway leading to the Doctor of Pharmacy degree.

The Doctor of Pharmacy Degree Program

Admission to the Doctor of Pharmacy degree program is highly competitive with an application to acceptance ratio of three to one or higher. Applicants must have completed at least two academic years of specific prerequisites, and around half of our successful applicants have bachelor's degrees or higher. We require an onsite interview for every applicant and interviews are offered based on the applicant's GPA. During the interview a panel of three faculty assess each student for such factors as character, leadership potential, ability to write, speak, engage, problem solve, and overall knowledge of the profession of pharmacy. The interview allows us to consider the applicant taken as a whole. Final admission is based on an aggregate of GPA, interview score, and onsite writing assessment.

The demographics and enrollment characteristics of our students is shown in the tables below.

Table 1: School of Pharmacy Student Demographics

Year	White		African-American		Hispanic		Asian		American Indian		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1997-1998	25	78	2	4	4	5	15	56	2	2	9	11	57	156
1998-1999	38	99	3	4	4	7	24	80	2	3	10	10	81	203
1999-2000	45	92	3	4	4	7	32	66	3	2	11	21	115	162
2000-2001	49	90	5	4	2	4	40	78	1	1	9	22	106	199
2001-2002	53	94	7	2	1	3	42	86	1	0	6	13	110	198
2002-2003	57	95	7	1	1	2	42	86	0	0	4	20	111	315
2003-2004	53	103	8	2	1	1	34	96	0	0	7	25	103	226

Table 2: Student Enrollment Characteristics

Year	Applicant/Enrolled Student Ratio	Mean GPA (Scale 1-4)	Age Range	WA Resident R	NR	Total Enrolled
1997	5.7:1	3.50	20-48	63	8	71
1998	6.0:1	3.40	21-45	52	20	72
1999	3.1:1	3.43	19-45	63	13	76
2000	3.0:1	3.40	20-42	60	18	78
2001	3.7:1	3.50	19-41	65	13	78
2002	4.0:1	3.48	21-36	63	23	86
2003	3.5:1	3.52	20-48	68	18	86

The School is pleased with the high caliber of our entering students. Favorable comments from faculty and preceptors regarding student performance in the classroom and practicums, competitiveness in winning national scholarships and awards, the low number of academic deficiencies, the superb leadership ability and professional involvement seen at the local, state and national level and the strong desire to help others in their community explain why we are so proud of students in our program. Several recruitment programs are in place to insure the continued quality of our entering students.

The School participates in several outreach projects to encourage youth to consider pharmacy as career. Our staff and faculty participate in middle school and high school career fairs, and community health fairs. Examples include the Nathan Hale High School Career Fair, the Roosevelt High School Career Fair, West Seattle High School Career Day, Math Day at the UW, and the UW Health Sciences Open House. A videotape and DVD highlighting pharmacy practice and educational opportunities in the State of Washington is available to high school counselors.

The School is involved in a number of recruitment initiatives designed to attract a talented and diverse student body. A prime example is the BRIDGES (Biomedical Research Identification of Graduate Education Successful Student Support Services) Program. It represents an effort of Health Sciences Schools to identify and recruit minorities. BRIDGES helps during the recruitment period to show prospective students that there is a strong commitment at the UW to support minority students. Once the students arrive, BRIDGES works to help retain them with academic advising and counseling, and professional development seminar. For undergraduates, BRIDGES invites all underrepresented minority students interested in the life sciences to attend a two-week "boot camp" before the start of their freshman year. During this time, they learn math and chemistry and learning skills in the morning, attend workshops, tours and advising in the afternoon and have mandatory study sessions with tutors in the evenings. This program helps students to prepare for the rigors of university life.

Other initiatives that introduce young students to research and professional opportunities includes the Minority Association of Pre-Health Students Conference, the Pre-Admission Workshop sponsored by the Association of American Indian Physicians, the Kids Into Health Careers program, and Biol 100 Introductory Biology.

Gear-Up (Gaining Early Awareness and Readiness for Undergraduate Programs) is an initiative that encourages middle school and high school students, particularly from disadvantaged backgrounds, to prepare for and attend college. Sponsored by the Governor's Office, the Higher Education Coordinating Board, the U.S. Department of Education and the University of Washington, this program offers a variety of activities for young students during the summer. Examples include, job shadowing, mentoring, visiting departmental units and a career fair. A few years ago, the School of Pharmacy received a grant to offer a course during Gear-Up's Summer Institute. The purpose of this course was to expose students to the scientific principles and processes used in developing medicines. Students learned what happens to medications inside the body, how they get to the site of action and how they work on the cellular and molecular level. They also learned how altering chemical groups can reduce toxicity, enhance absorption and prolong duration of action. Students had the opportunity to apply the principles they learned to create a "medicine" using a unique interactive computer program. Feedback on the course was very positive. Several of our faculty continue to lecture in the Gear-Up program.

The Youth Mentoring Project was created by the health sciences schools Community Health Advancement Program (CHAPS) in partnership with the Seattle School District in 1997. In preparation for becoming a youth mentor, health sciences students receive training on adolescent medicine issues, district teaching guidelines, and assisting ESL students of various proficiencies. Throughout the year the mentors work with health educators to create age-appropriate presentations and activities for middle school students. Through weekly meetings with the middle school students, mentors strive to provide information to young students about healthy lifestyle choices.

The Graduate Program

Successful recruitment of students from minority groups requires a joint effort by the university administration, departments, faculty, students and staff to identify, recruit and retain qualified applicants. Indeed, during the annual admissions process, applicants from minority populations are accorded particular attention by the faculty reviewer committees. All competitive minority applicants with a reasonable chance of successful completion of graduate studies in the respective programs are invited for a visit. During these visits, a number of social events are planned with current students so that prospective students have the opportunity to ask questions and discuss any concerns they may have with peers.

The Schools goals are to generate an interest in the opportunities of a biomedical research career by reaching students at the high school and undergraduate level (and thus enlarging the minority applicant pool), and to make greater efforts to reach and recruit minority applicants in the existing pool of undergraduate students. A number of institutional programs are in place to identify, recruit, and support individuals from underrepresented racial and ethnic groups. A majority of the programs seek to assist graduate students. These students comprise an important pool of candidates for support as graduate students in this training program. Efforts to accomplish these goals are coordinated through a number of UW programs and offices, including:

- *The Graduate Opportunities and Minority Achievement Program (GO-MAP)*. The program works to recruit and retain minority graduate students.
- *The Health Sciences Minority Student Programs*. The program works to increase minority graduate/professional student participation in all health related profession fields.
- *The Office of Multicultural Affairs*. The office facilitates the identification, recruitment and professional development of students interested in pursuing an MD or MD/PhD.
- *The Office of Minority Affairs*. The office primarily handles minority undergraduates, but also works to recruit minority graduate students and faculty.

Specifically, the School's efforts to identify and target prospective minority students are achieved through:

- Recruitment trips to universities and colleges with historically high numbers of students from African American, Hispanic and American Indian populations,
- Creation of the Western and National Name Exchanges, a cooperative system of exchanging names of prospective minority graduate students,
- Implementation of undergraduate summer research programs,
- Initiation of the EIP (Early Identification Program) which works closely with outstanding minority students for 3 years prior to graduation to encourage their application to graduate school,

- Hosting a Graduate and Professional Information Day for current undergraduate students, and
- Attendance at college fairs at institutions with large minority populations.

While these programs may directly help in attracting graduate students to the School, we recognize that in order to increase the number of underrepresented minorities at higher levels of leadership (faculty in universities and research institutes, research directors in industry, etc.), minority students must be encouraged at every educational level, from high school to postdoctoral training. Programs do exist that address such a possibility:

- Summer Undergraduate Research Program (SURE). A program to provide students with opportunities to conduct laboratory research with a mentor and attend a seminar lecture series.
- Native American Science Outreach Network (NASON). A program to maximize the potential for Native American students to succeed in the sciences and mathematics.
- Early Scholars Outreach Program (ESPO). A partnership program with several middle schools to increase minority sixth, seventh and eighth graders entering college preparatory course work.
- Upward Bound. A program which provides assistance to economically disadvantaged or first-generation college-bound students.
- Educational Talent Search (ETS). A program, which identifies, recruits and assists in placing minority and disadvantaged students from regional counties in post-secondary educational institutions.
- Presentations by faculty to high school students and undergraduate students in biomedical and basic science classes to generate interest in biomedical research as a career option.

In addition to the BRIDGES program (mentioned above), participation at symposiums and forums attended by students from underrepresented minority groups has been used as a mechanism for the encouragement of minority students in biomedical sciences. Recent attendance has included:

- Minority Access to Research Careers (MARC) Symposiums
- Minority Graduate Education Forums
- National Minority Research Symposiums
- Minority Biomedical Research Symposiums (MBRS)
- Annual conferences sponsored by American Indians in Engineering and Science and the Society for the Advancement of Chicanos and Native Americans in Science
- Stipends for Training Aspiring Researchers (STAR) Program.

Student Development and Retention

The Doctor of Pharmacy Degree Program

Retention of students in our professional degree program is close to one hundred percent; three students have been dropped for academic reasons since 2001. Our Office of Academic and Student programs offers and facilitates several opportunities for our students to obtain assistance with academic or personal problems. It is rare that a student who starts the program does not finish it.

The Graduate Program

Of primary concern to prospective minority pharmacy graduate students is a campus-wide infrastructure of support services available to students from minority groups. Programs available at the University of Washington include:

- *Academic Counseling and Career Planning*. Provides academic advising, personal counseling, assistance with financial aid and new student orientations.
- *Minority Education Division*. Provides counseling and assistance to minority students on financial aid opportunities, housing, academic concerns, and personal matters on a drop-in basis.
- *Instructional Center (IC)*. Offers a wide array of instructional services and computer, writing and study skills.
- *Ethnic Cultural Center (ECC)*. Houses a library of ethnic literature, multi-purpose rooms and offices for use by minority student organizations for meetings, study, social and cultural events.
- *Student Support Services*. Provides instructional assistance and counseling to academically marginal EOP students through tutoring, study groups, a writing center and study skills workshop.

Our graduate faculty have been actively involved in programs for the recruitment and support of minority scientists.

- Pharmacy and pharmacology programs at primarily minority institutions are sent information on the Pharmacological Sciences program each year. Our faculty has also visited some of these schools. We believe these face-to-face contacts provide greater understanding of our efforts at minority recruitment and are likely to yield greater success in the long run than more impersonal mailings about this program.
- Program Directors of the Minority Access to Research Careers (MARC) and Minority Biomedical Research Symposium (MBRS) programs receive graduate brochures with letters encouraging their students to apply and letters of support indicating that faculty would be willing to act as Summer Preceptors to qualified minority students.
- From the lists of the Western and National Name Exchange of 50 participating institutions, students are contacted on the basis of their interests.
- The Minority Graduate Student Locator Service also provides a large list of names used annually for mailing information about the program.
- MARC student summer training has been provided for minority students in our laboratories.
- Several faculty have all participated as mentors in the STAR program, which is designed to provide minority students with an opportunity to carry out research in a laboratory setting.
- Several BRIDGES students have been connected to opportunities in graduate education in the pharmacological sciences.

Engagement with the External Community

The Doctor of Pharmacy Degree Program

Our professional degree program is naturally connected with the greater community outside of the University of Washington campus. Our students must complete eight months of full-time experiential pharmacy learning in various community health care venues.

Within this experiential practicum, our students have opportunities focus their interests on projects some of which benefit our region's unique population. Following are some recent examples.

- Four bilingual pharmacy students developed video and information materials for Chinese, Korean, Cambodian, Filipino and Vietnamese patients with asthma. Their research showed that pharmacist interventions which address the communication and cultural barriers experienced by asthma patients improves medication use and treatment outcomes. Their project won the award for Best Clinical Education poster at the 2002 Pharmacy Research Conference.
- Pharmacy students chose to address the access, language and cost barriers that prevent "at-risk" populations from receiving the influenza vaccine. Students raised the funds necessary to provide approximately 90 vaccines to residents in three low-income areas of Seattle who by Center for Disease Control (CDC) definition were most susceptible to complications from the flu. Bilingual pharmacy students also provided educational seminars about immunizations in several languages. Their project won the national American Pharmacists Association Operation Immunization Award. Two students presented this project at the CDC national conference.
- A student is working with two faculty members in the International District to provide pharmacist directed education (language and culturally appropriate) to patients with diabetes. Research results are pending.
- Students in the Community (SITC) is an interdisciplinary group made up of students from all of the health sciences schools. They are working to identify key healthcare and social issues affecting underserved medical communities. By providing focused preventive and screening services, the students hope to assist existing community health resources by providing a primary care intervention through identifying disease risk factors and pre-existing illness, as well as eligibility for appropriate social services and referral. This project won a national award from the Secretary of Health and Human Services.
- A pharmacy student (along with her preceptor) received the Innovative Pharmacist Award from the Washington State Pharmacists Association for her role in developing a practice model involving pharmacists in the assessment of patients on methadone maintenance treatment.
- Two pharmacy students developed a unique interactive educational program on the dangers of substance abuse for young students. As a result of presenting their poster at the APhA Annual Meeting, interest has been generated by other school districts.
- Pharmacy students give substance abuse talks at juvenile detention centers, homeless shelters and local schools. Three students spoke to 40 high school educators in central Washington on this topic.
- Pharmacy student volunteers provide, weekly smoking cessation presentations at homeless teen shelters and local high schools including Shoreline, Shorecrest, Nathan Hale, Ingram, Cleveland, Franklin, South Lake, West Seattle, and Issaquah. The students provide information on the risks associated with smoking and facilitate discussions with teens and staff.
- Students lead many activities that promote health in the community. Through their award-winning projects, health fairs and educational programs they provide important information to the general public on medication safety and smoking cessation, body fat, diabetes detection and management, breast cancer, immunizations, emergency contraception and screenings for high blood pressure and osteoporosis. They also developed and distributed a refrigerator magnet that provides phone numbers to emergency services such as the Washington Poison Center, the King County Crisis Clinic, the Washington State Domestic Violence Hotline, the Alcohol and Drug 24-hour Help Line, and Teen Link.

Staff and Administrative Diversity

The School's 2003–2004 *Special Report for Diversity Assessment* lists the following figures:

All	Female	Male	Minority	Non-Minority
135	71	64	42	93
100%	53%	47%	31%	69%

Black Female	Black Male	Asian Female	Asian Male	Hispanic Female	Hispanic Male	American Indian Female	American Indian Male	White Female	White Male
0	1	18	19	1	3	0	0	52	41
0%	1%	13%	14%	1%	2%	0%	0%	39%	30%

Vietnam Veteran	Disabled Veteran	Disabled	40 and Over
2	0	2	67
1%	0%	1%	50%

Faculty Diversity

The School's 2003 *Workforce Profile* lists the following figures:

	All	Female	Male	Minority	Non-Minority
Ladder Faculty	31	8	23	7	24
Non-Ladder Faculty	5	5	0	1	4
Temp Teach Faculty	1	0	1	1	0
Research Faculty	29	13	16	15	14
Residents/Fellows	14	11	3	5	9
School Total	80	37	43	29	51
Percent	100%	46%	54%	36%	64%

	Black Female	Black Male	Asian Female	Asian Male	Hispanic Female	Hispanic Male	American Indian Female	American Indian Male	White Female	White Male
Ladder Faculty	0	0	1	6	0	0	0	0	7	17
Non-Ladder Faculty	0	0	1	0	0	0	0	0	4	0
Temp Teach Faculty	0	0	0	1	0	0	0	0	0	0
Research Faculty	0	0	5	9	0	1	0	0	8	6
Residents/Fellows	0	0	3	1	0	1	0	0	8	1
School Total	0	0	10	17	0	2	0	0	27	24
Percent	0%	0%	13%	21%	0%	3%	0%	0%	34%	30%

Curriculum and Research

Our faculty consider it important and essential that our graduates are culturally competent to practice pharmacy. The following core practice outcome statement has been approved by our faculty and addresses this issue:

“A graduate of the University of Washington School of Pharmacy should demonstrate the ability to place health care and professional issues within appropriate historical, cultural, social, economic, scientific, political, and philosophical frameworks, and demonstrate sensitivity and tolerance within a culturally diverse society.”

Where possible and relevant, instructors are asked to incorporate activities and learning material supporting this outcome statement into their courses. In our discipline, this issue seems to coalesce into two areas. One is the biological—pharmacogenetics—where a pharmacist identifies gender and ethnicity as necessary components of drug disposition, therapeutics, drug interactions and health systems, i.e., the pharmacist must understand and compensate for genetic differences in drug response and metabolism among individuals. The other is the psychosocial where a pharmacist must be able to provide culturally relevant pharmaceutical care. We have identified several courses in which these subjects are addressed.

Climate

We believe the climate for diversity within the School of Pharmacy is maturing. We welcome, encourage, and demand a diverse population, whether it is our student body, staff, or faculty. Our outreach activities focused on encouraging minorities to consider the profession of pharmacy have grown in the last several years.