

## **Underserved Pathway Annual Report August 10, 2011**

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The Underserved Pathway (UP) provides curricular focus and support for students interested in health care for underserved populations and individuals. It is entering its sixth year of student participants. The UP recognizes that students' interests vary. We provide a broad range of offerings coupled with individual mentoring and UP staff and faculty support for each student's design and completion of a pathway tailored to his or her interests and career goals.

Since its inception, 215 students have enrolled and 48 students have completed the Underserved Pathway. In June 2011, the UP awarded 15 students certificates of completion. Students may enroll in the pathway and meet all the requirements of completion to earn a certificate or they may simply participate in the various components depending on their interest and educational needs. A HRSA Title VII grant to the Department of Family Medicine supported the creation and initiation of the UP. (D54HP05261, Academic Administrative Unit in Primary Care, PI Drs Berg/Losh, 09/01/05 - 08/31/08) Currently, the program faculty receive funding from the Dean of the School of Medicine. The Department of Family Medicine provides staff, administrative, and web management and development support. The 2010-2011 academic year was notable for its integration as a major curricular component of the Targeted Rural/Underserved Track (TRUST).

In addition to activities with the 138 students enrolled in the UP in the 2010-2011 academic year, the Pathway team also completed the materials for a non-clinical selective, revised and updated all modules including enhancing interactivity, produced five new modules, began research on the association of the UP with residency choice, was accepted to present nationally, and has two publications accepted or in submission.

This report summarizes the demographics of our students, evaluation data, the achievements of the past year, and plans for the coming year. The components of the UP are in Appendix A. The sections of this report are:

- A. Participants
- B. Evaluation
- C. Initiatives

## **A. Current Participants**

- 138 students were enrolled in the UP in the 2010-2011 academic year. (See Appendix B for those not yet graduated, Appendix C for 2011 graduates)
  - 44 (32%) are male, 94 (68%) are female.
  - 52% of students spent or are spending their first year of medical school at a WWAMI region campus:
    - Alaska: 10
    - Wyoming: 1
    - Montana: 25
    - Idaho: 12
    - Eastern WA (WSU Pullman and Spokane): 24
    - Seattle: 66
- Anticipated new enrollment during 2011-12 is approximately 30-45 students.
- 15 students graduated in June 2011, earning UP certificates. Another five from the graduating class were enrolled but did not complete the requirements. (Appendix C)
- 84 physicians have volunteered to be mentors for students in the UP. Of these, 29 are mentoring more than one student. UP mentors are physicians in the community, the student's college mentor, preceptors, or other physicians working with underserved populations.
  - 62% are located in Western Washington (rural and urban).
  - 38% are located throughout the WWAMI region, primarily in rural areas.
    - Alaska: 4
    - Wyoming: 0
    - Montana: 9
    - Idaho: 3
    - Eastern WA: 7
    - Western WA: 52
- The current 38 TRUST scholars, including the 15 TRUST scholars entering in Autumn 2011, are enrolled in the UP. The 15 TRUST scholars entering Autumn 2011 also completed the Public Health Epidemiology module as part of their TRUST First Summer Experience.

## **B. Evaluation**

### *1. Outcome measures*

We are currently studying the relationship of UP participation and residency selection to determine if there is an association between completing the UP and selecting a primary care residency or a residency with an underserved focus. Working with the Office of Medical Education, we are linking student data with data from the UP.

Very preliminary analysis of the data suggests that students completing the UP are more likely to enter primary care specialties, particularly family medicine, compared their peers. (Table 1)

<b>Table 1</b>						
<b>Residency Choice of Underserved Pathway Graduates</b>						
Year	2008	2009	2010	2011	Total	Specialty
Specialty	(Number)	(Number)	(Number)	(Number)	(Number)	(Percent)
<b>Family Medicine</b>	<b>1</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>17</b>	<b>35.4</b>
<b>Pediatrics</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>9</b>	<b>18.8</b>
<b>Primary Care IM</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>6.2</b>
Internal Medicine	0	1	2	1	4	8.3
Ob-Gyn	0	1	2	2	5	10.4
Surgery	0	1	1	1	3	6.2
Other	0	2	2	3	7	14.6
Total	1	13	19	15	48	
<b>Primary Care Total (FM, PCIM, Peds)</b>	<b>1</b>	<b>8</b>	<b>12</b>	<b>8</b>	<b>29</b>	<b>60.4</b>

The match rate to primary care specialties (Family Medicine, Pediatrics, or Primary Care Internal Medicine) was 60.4% for all students completing the Underserved Pathway, compared with 32.5% of the UWSOM graduating students from 2008-2011 who did not complete the UP. The overall UP match rates to Family Medicine and Pediatrics, but not General Internal Medicine, were also higher for UP graduates than for other students. (Table 2) Further analyses are planned, including whether there is a relationship with choosing a residency with an underserved focus.

<b>Table 2</b>		
<b>Primary Care Residency Match, Students Graduating 2008-2011; UP Graduates Compared With Other Graduates</b>		
<b>Residency match</b>	<b>% of UP Graduates</b>	<b>% of Graduates not completing UP</b>
Family Medicine	35.4	14.3
Pediatrics	18.8	9.9
General Internal Medicine	6.2	8.3
Primary Care total	60.4	32.5

2. Qualitative evaluation measures

Process measures included annual meetings with individual students and exit surveys with graduating students. Ten out of this year’s 15 graduates completed the exit survey. Results are presented below by theme. Topics of inquiry included, but weren’t limited to, the feasibility of fulfilling the requirements of the UP, suggestions for improvements to the curriculum and program overall, and components of the UP that they thought were most and least beneficial. Overall, students were pleased with their experience, and provided constructive feedback. A common sentiment among responses was student appreciation that the Underserved Pathway served as a way to expand their knowledge and provide a framework for customizing their medical education.

### Underserved Pathway Curriculum

The diversity of feedback about the benefits of UP participation is consistent with the diversity of interests among our participating students.

Specifically, students enjoyed the guiding framework afforded by the UP, noting that it helped them stay committed to caring for underserved and vulnerable populations. One student, initially undecided about her specialty, identified the UP as highly influencing her decision to enter family medicine.

Graduating students who responded to the exit survey thought that the number and complexity of requirements was reasonable for certification. Depending on their interests, 1<sup>st</sup> year campus, and other factors, students had varying levels of ease in completing all the requirements.

### Mentorship: Value and Challenges

Students expressed variable benefit from the connection with their UP mentor. Five students noted that the mentoring was the most valuable component for them. Overall, students valued mentors who were easy to reach, had time to meet, and who were engaged in the individual student's process.

Numerous students identified various benefits, including help with residency applications and the ability to shadow and talk with a physician working in an underserved community. One student suggested that increasing the structure of the mentorship would provide a framework for more productive discussions.

The option for students to work with a mentor with whom they already have a relationship is usually more successful, as we have learned in past years. Matches made purely on shared interest and proximity can be just as successful. Three students that fall in the latter category noted in this year's survey that their mentorships were highly beneficial. Three students felt being allowed to select their own mentor(s) was important to them.

### Web Based Curriculum

Moodle tracks module participation. Viewing and completion of online modules appears to be fairly consistent over the course of the calendar year (Appendix D).

Of the eight students who provided feedback about the modules, five students identified the modules as a great addition to the UWSOM curriculum. Three felt much of the module content was already covered in classes they took. One student felt that attending a lecture or other events in lieu of modules would be more "active."

### Community Service

UP Students often bring personal histories rich in community service. Four students cited the community service component as one of the most rewarding pathway components. One student noted specifically that she did not encounter any trouble completing the required hours and that it is a vital part of the pathway.

### WWAMI-Specific Issues

One WWAMI regional student who responded to the exit survey noted difficulty fulfilling the required two credits of non-clinical selectives that focus on underserved issues; fewer course options are available to WWAMI first year students than are available to Seattle-based first year students. Two WWAMI students expressed the desire to have more access to Seattle UP events such as in-person module sessions and seminars. We continue to seek ways to address this issue.

Two students expressed the need for the UP to continue the work with the other pathways and the clerkship directors to facilitate opportunities to complete clerkships in underserved settings.

### Activities and Events

The eight students who commented on UP activities and events all felt the seminars, and other in-person educational sessions were valuable. Three students noted difficulty attending events because of their clinical schedules. Two students reported difficulty attending because they spent their first year and much of their clinical time in the WWAMI region. Because of these barriers, webcasting or podcasting may be desirable. One student suggested initiating a journal club.

### Student Resources

Two students suggested having a centralized webpage with materials and resources related to care of underserved populations, including information specific to WWAMI states.

### Additional Comments

“Overall, I thought it was a fantastic experience! It’s too bad more students decide not to participate because it really enriched my medical education and will hopefully help me provide better care to my patients.”

“It [the UP] was wonderful! I particularly appreciated the breadth of experiences available. Thank you for making this possible!”

“Thank you for all your guidance and help. It was a great experience.”

## **C. Initiatives 2010-2011 and Looking Forward**

### **Curricular Development**

All modules are revised annually; this process includes a survey of existing curriculum to avoid duplication. Over the last 4 years, for example, the School has approved at least 5 new non-clinical selectives on topics important to care of the underserved.

Collaboration with TRUST and first year campuses has resulted in prioritizing which modules they may choose to use as a focus for a group discussion.

This past year we did a major rewrite of every module, updating content and references, and adding new activities. Evaluation components are being added to every module as a part of the activity, reflection, or quiz. Four in-person module sessions were held. These will continue once per quarter in conjunction with TRUST. We continue to explore ways to web-cast in the future as a way to bring students together, particularly TRUST scholars. It can involve multiple sites and result in the creation of podcasts and other archived and accessible tools. Web conferencing can be used to share course work, develop new materials, and to evaluate the program.

#### **New modules include:**

- a. Medicaid 101
- b. Selected Topics in Rural Health: Part One, Medical Conditions more Prevalent in Rural Areas; and Part Two, Public Health Issues and System Challenges in Rural Areas
- c. Introduction to Substance Abuse
- d. Introduction to Homelessness
- e. Health Literacy

#### **Modules currently in development are:**

- a. Immigrants and Refugees
- b. Self-Paying Patients
- c. Health Care Policy and Advocacy
- d. Women's Health
- e. Elder health
- f. Comparative Health Systems–International
- g. Incarcerated Populations

- h. Health Care among American Indian and Alaska Native (AI/AN) Populations
- i. Mental Illness
- j. GLBTQ Community
- k. Community Health Centers
- f. Human Trafficking
- g. Sex Workers
- h. Youth and Young Adults
- i. Ethical Issues and the Underserved

Web Modules can be accessed using UW NetID at the following website:

<https://depts.washington.edu/fammed/online/anytime/course/view.php?id=124>

### **Mentor Relations**

Based on the evaluations by students and mentors, the quarterly Mentor Memo, initiated five years ago, was revamped to provide more ideas for structuring the relationship. It will be accompanied by calls as needed to the mentors to help enhance conversations with the students. We will also develop conversation prompts of useful topics for students to consider at various times in medical training.

### **Web Development**

With the support of the Department of Family Medicine, development of our website continues to further link the UP to the Service Learning Website for the School of Medicine, to other service sites, and to the TRUST site. Moodle facilitates tracking of module use, mentor relations, and completion of course work.

### **The Underserved Pathway-TRUST Interface**

The UP is responsible for providing key components of the medical school curriculum for TRUST scholars. Students enrolled in TRUST (year one until graduation) will also be enrolled in the UP. The UP Director serves on the TRUST Steering Committee and works closely with TRUST faculty to ensure that the UP meets the needs of TRUST scholars.

As a select community of students within the UP, their curriculum will be enriched further with enhanced mentoring, web-based modules, and learning sessions. In addition, the UP will work to support them as a community with a goal to sustain their desires to choose careers with the underserved.



We have added or are planning the following:

1. We have collaborated to create a second tier rural class to bring TRUST scholars together during the second year, when they are all in Seattle. In 2012, this course will be offered for the third year.
2. TRUST assigns each TRUST scholar to a continuity community site with a specified physician mentor. TRUST scholars have their First Summer Experience at their sites during the summer before Autumn quarter of their first year of medical school. This TRUST continuity mentor is the UP mentor for each given student. The UP team solicits this agreement and works with the regional deans, mentors and their students to encourage a meaningful longitudinal relationship, including return visits.
3. The UP/TRUST team hosts a welcome dinner for all TRUST scholars when they arrive in Seattle.
4. The UP works with regional faculty to ascertain which non-clinical selectives could be made available to first year students on those campuses via webinar or podcast etc.
5. The UP will work with regional faculty to assist in identifying or creating service learning opportunities for first year students.
6. TRUST scholars of all years will have two to three sessions per quarter (in person or live/virtual) that will be a journal club, a career-relevant presentation, or a group session to complete a web-based module.

**The Underserved Pathway in Collaboration with other School of Medicine Pathways**

1. Working with the Indian Health Pathway, the Global Health Pathway and the Hispanic Health Pathway, the UP team shares leadership of the All Pathways Working Group.

This collaboration among the pathways demonstrates how a shared purpose results in an effective partnership that benefits all of the participating students, and maximizes meaningful experiences targeted to each individual student's interest.

2. There is shared leadership in the annual Pathways Kickoff for all campuses, again planned for Fall 2011.

**Dissemination**

1. The UP team has presented to various student and faculty groups, including the Pre-Matriculation program of OMCA, AWARE retreat participants, and UWSOM College Faculty.
2. We are proposing two presentations for the Society of Teachers of Family Medicine (STFM) Annual Conference in Spring 2012. Proposals will also be made to The Association of American Medical Colleges (AAMC).
3. We are currently conducting, and plan to present and publish research on UP participation and career choice. Presentation of the first project will occur at the STFM Conference on Medical Student Education in February 2012.
4. Publications:  
Waterman SU, Kost A, Lazzar R, Dobie S. Medical Education. The Underserved Pathway; Fostering Medical Student Interest in the Care of Vulnerable Populations. *Virtual Mentor*. 2011; 13:539-543. <http://virtualmentor.ama-assn.org/2011/08/medu1-1108.html>. Accessed Aug. 2, 2011.  
  
Kost, A and Ruegg, D. A Recipe for Addressing Health Literacy. *STFM Messenger*, submitted 8/1/11.

## **Appendix A: Requirements**

The Underserved Pathway supports medical students interested in working with underserved populations through mentorship, academic and experiential activities, service learning, and advising. Underserved Pathway students must complete the following requirements longitudinally through medical school (Figure 1):

### **Mentorship**

- Students are matched with a mentor with shared interests who is a healthcare provider working in an underserved setting.
- They establish a long-term mentoring relationship with this mentor and meet a minimum of once per quarter for duration of time in the Pathway.
- They obtain career and educational counseling, support, and advice and are introduced to work in an underserved setting.

### **Web-based learning modules**

- Students must complete eight online modules that are discussions and presentations of various aspects of underserved medicine.
- Modules focus on specific issues affecting underserved populations.
- Students complete the online activity or quiz and module evaluation associated with the module to get credit for the module. Some modules require participation in an online discussion with UP faculty.
- Activity is tracked by UP faculty who respond to all reflections and discussion posts.

### **Preclinical Activities:**

- Students complete R/UOP and/or a preclinical preceptorship with a physician working in a medically underserved community.

- Students earn 2 credits of non-clinical selectives that focus on topics affecting underserved populations.
- Students complete their Independent Investigative Inquiry (III) with a focus on care for the underserved and/or underserved populations. It can be in any of these categories:

Literature review

Research project

Community-based project (completed via RUOP or IHOP)

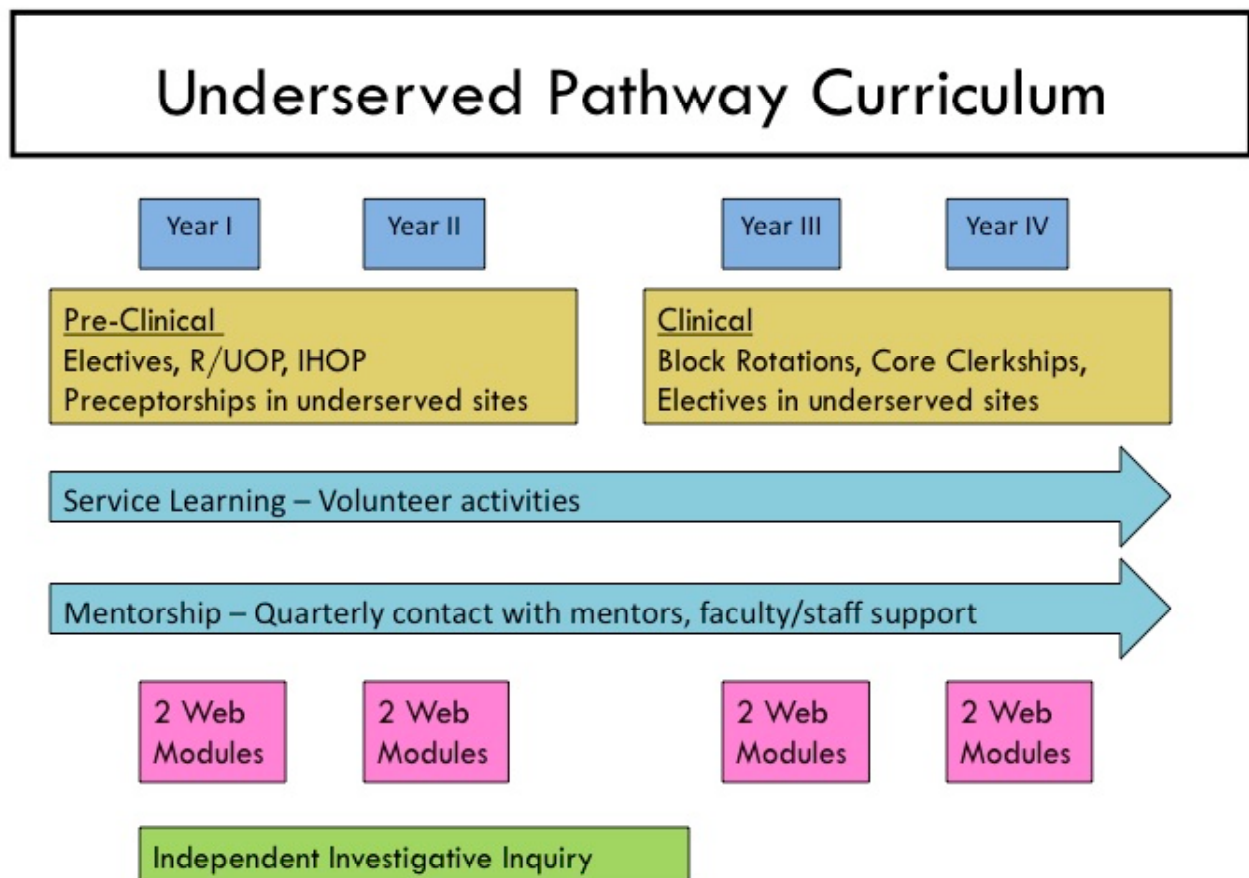
### **Clinical Activities:**

Students complete least 12 credits of approved clinical courses (required or elective clerkships, advanced preceptorships, or sub-internships) at a site serving a large proportion of underserved patients.

### **Community Service:**

Students are required to complete average of two hours of community service per quarter. They may work with any number of organizations, directly related to health or not. CHAP, SPARX, Al-Shifa, and SITC are several UW organizations where volunteer students are vital.

Figure 1



**Appendix B: Current Underserved Pathway Students**

	Last Name	First Name	Entry Year	Grad Year	Areas of Interest	Year 1 Campus	TRUST	UP Mentor	Add'l P'ways
1	Anderson	Kial	E-11	2015	Rural Family Medicine	WSU-Spokane	Yes	Geoff Jones	
2	Andrade	Ria	E-09	2013	Poverty, immigrants, homeless populations	Seattle	No	Jill Watanabe	
3	Angel	Joseph	E-07	2012	Urban, Latino, LGBTQ populations	Seattle	No	Chris Gaynor	
4	Barahimi	Mitra	E-09	2013	Chronic poverty, immigrants	Seattle	No	Michelle Terry	
5	Barnes	Christopher	E-09	2013	Rural Emergency Medicine	MSU	No	Laurel Desnick	
6	Barnhill	Caleb	E-11	2015	Rural Underserved	WSU-Spokane	Yes	Martin Clements	
7	Bautista	Eric	E-10	2014	LGBTQ, urban, immigrant populations	WSU-Spokane	No	not matched	
8	Beheim	Erika	E-09	2013	Underserved geriatrics	UAA	No	Carla Ainsworth	
9	Benedict	Joseph	E-10	2014	Family Medicine	Seattle	No	not matched	GHP, IHP, HHP
10	Bingham	Matthew	E-10	2014	Sub-surgery, underserved	UI	No	not matched	
11	Blaskovich	Teresa	E-10	2014	Rural Primary Care	MSU	No	not matched	
12	Blechinger	Derek	E-10	2014	LGBTQ, HIV prevention	Seattle	No	Chris Gaynor	
13	Bogges	Kylie	E-08	2012	Urban Underserved, refugee populations	UI	No	Susan Powell	
14	Bovee	Laura	E-07	2013	Rural or Urban Underserved	Seattle	No	Gabrielle O'Sullivan	HHP

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15	Budak	Jehan	E-08	2012	Latino populations	Seattle	No	Ruth Michaelis	GHP, HHP
16	Burzo	David	E-10	2014	Family Medicine - underserved	WSU-Spokane	No	not matched	
17	Butler	Sharlay	E-10	2014	African American, Latino, Native American	UI	No	Mick Storck	IHP, HHP
18	Castro	Nina	E-10	2014	Rural Montana, Native American populations	MSU	No	not matched	IHP
19	Chohlas-Wood	Rebecca	E-11	2015	U.S. general underserved	Seattle	Yes	Bertha Safford	GHP, HHP
20	Chon	Christine	E-10	2014	Asian-American populations, pediatrics	Seattle	No	Freddy Overstreet	
21	Chowchuvech	Bryn	E-09	2013	Refugee populations	Seattle	No	Diane Timberlake	GHP
22	Christiaens	Brooke	E-09	2013	Rural Montana	MSU	Yes	Will Snider	
23	Clark	Elizabeth	E-09	2013	Global and Domestic Underserved	Seattle	No	Jill Watanabe	GHP
24	Clement	Rachel	E-09	2013	Rural NW, Family Medicine or OB/GYN	Seattle	No	Raye Maestas	
25	Connell	Jacob	E-10	2014	Primary Care, Hospitalist medicine	Seattle	No	not matched	GHP, HHP
26	Cook	Nathan	E-09	2013	Rural Underserved, minorities and elders	MSU	No	Jay Erickson	
27	Cunningham	Morgan	E-11	2015	Rural Family Medicine	MSU	Yes	Laura Bennett	
28	Das Gupta	Jaideep	E-11	2015	Rural, Urban, Minorities	Seattle	Yes	Rob Epstein	
29	Deacon-Marvinsmith	Bridget	E-09	2013	Primary care, advocacy, immigrants and refugees	Seattle	No	Freddy Chen	
30	Diaz	Claudia	E-08	2013	LGBTQ, Latino populations	Seattle	No	Jennifer Vanderleest	GHP

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31	Embick	Elizabeth	E-09	2013	Rural Family Medicine	UAA	No	David Baines	
32	Fairchild	Sarah	E-09	2013	Rural Family Medicine	WSU-Spokane	Yes	Geoff Jones	
33	Farah	Samira	E-09	2013	Primary care, immigrant and refugee populations	Seattle	No	Freddy Overstreet	
34	Fong	Kelly	E-10	2014	Urban Underserved	Seattle	Yes	TRUST Mentor	
35	Fox	Nicole	E-07	2012	Rural or Urban Underserved	Seattle	No	Judd Walson	
36	Gardner	KayCee	E-08	2012	Rural Primary Care	MSU	Yes	Laura Bennett	
37	Garrity	Jessica	E-08	2012	Rural Primary Care, Latino populations	Seattle	No	Misbah Keen	HHP
38	Gayman	Anne	E-10	2014	General Underserved	Seattle	No	Erika Goldstein	
39	Geyer	Leah	E-07	2012	Academic medicine, OB, internal medicine	Seattle	No	Mark Doescher	
40	Gloe	Paul	E-08	2012	Rural Primary Care - Alaska	UAA	No	Julie Sicilia	
41	Goulet	Denny	E-09	2013	Policy, public health, research	WSU-Spokane	No	not matched	
42	Hadlock	Jennifer	E-10	2014	Rural Underserved	WSU-Spokane	Yes	Geoff Jones Rob Epstein	
43	Hale	Natalie	E-09	2013	Advocacy, Global health	UAA	No	Freddy Overstreet	GHP MD/MPH
44	Handran	Chauncy	E-11	2015	Rural Underserved	MSU	Yes	Charles Marler	
45	Hatlen	Tim	E-09	2013	Rural, Peds	WSU-Spokane	Yes	Geoff Jones Rob Epstein	
46	Heinrich	Demetra	E-10	2014	General Underserved	MSU	Yes	Will Snider	



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47	Herron	Kacy	E-11	2015	Rural Primary Care	MSU	Yes	Susan Gallo	
48	Hess	Mailee	E-08	2012	Rural Family Medicine	WSU Pullman	No	Mary Barinaga	
49	Hikida	Reiko	E-09	2013	National health Service Corps, global health	UI	No	Margaret Isaac	
50	Hikida	Abigail	E-08	2012	Urban homelessness	Seattle	No	Nancy Sugg	
51	Ho	Lilian	E-10	2014	Urban Underserved, youth, women's health	Seattle	No	not matched	
52	Huck	Michael	E-08	2012	CHCs, homeless populations	MSU	No	John McCarthy	
53	Hunziker	April	E-09	2013	Primary Care, homeless populations	Seattle	No	Lyn Tonelli	
54	Hurt	Hans	E-09	2013	Rural Montana	MSU	Yes	Greg Rice	
55	Isherwood	Annaliese	E-11	2015	Rural Underserved	WSU-Spokane	Yes	Mark Larson	
56	Iutzi	Brian	E-09	2013	Rural Alaska, urban immigrant populations	UAA	No	Genevive Pagalilauan	GHP
57	Jardine	Brooke	E-08	2013	Rural or Urban Underserved	UI	No	Lynn Oliver	
58	Jesperon	Forrest	E-10	2014	Native American populations, immigrants	Seattle	No	Erika Goldstein	IHP
59	Johnson	Serena	E-11	2015	Rural Family Medicine	MSU	Yes	Burke Hanson	
60	Julien	Daniel	E-10	2014	Rural, poor, minority populations	UI	No	not matched	
61	Kah	John	E-08	2012	Central and South America, immigrants	Seattle	No	Jeff Lee	GHP
62	Kelly	Karla	E-08	2013	Primary care, CHCs	Seattle	No	Joe Merrill	GHP, HHP

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63	Kelly	Abby	E-09	2013	Rural Family Medicine	MSU	Yes	Laura Bennett	
64	Kim	Nicole	E-10	2014	Public health, CHCs	Seattle	No	not matched	
65	Knappe	Adam	E-10	2014	American Indian/Alaska Native	Seattle	No	not matched	IHP
66	Knox	Jennifer	E-10	2014	Urban Underserved	Seattle	Yes	Genevieve Pagalilauan	
67	Kopa	Justin	E-08	2012	Primary care, general underserved	Seattle	No	Mary Curiel	
68	Laky	Devin	E-10	2014	Primary care, homeless, incarcerated populations	UI	No	not matched	
69	Lang	James	E-10	2014	Primary care, Latinos, rural or urban	WSU Pullman	No	not matched	HHP
70	Lasby	Stephanie	E-09	2013	Urban underserved, CHC	Seattle	No	Tim Joos	
71	Le	Thao Phuong	E-09	2013	Primary care, urban, Asian Americans, CHCs	Seattle	No	Jeff Lee	
72	Lee	Teresa	E-08	2012	Urban Underserved	Seattle	No	Jeff Huebner	GHP
73	Lewis	Brenna	E-08	2012	Alaskan underserved, Alaska Native	UAA	No	Shannon Wiegand	GHP
74	Lin	Michelle	E-06	2012	Urban Underserved	Seattle	No	Alan Chun	
75	Lorenz	Talya	E-09	2013	Rural Primary Care	MSU	Yes	Mark Zilkoski	
76	Mackay	Katie	E-08	2012	Underserved Women and Children	WSU	No	Deb Harper	
77	Martin	Glenna	E-09	2013	Family Medicine	Seattle	No	Margaret Isaac	HHP

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78	Martin	Katie	E-10	2014	Rural Underserved	WSU-Spokane	Yes	Mark Larson	IHP
79	Mast	Brigitta	E-11	2015	Rural Underserved	Seattle	Yes	Bertha Safford	
80	Maupin	Jesse	E-11	2015	Rural or Urban Underserved	Seattle	Yes	Molly Hong Todd Carlson	
81	Maycumber	Vanessa	E-10	2014	Rural Primary Care	MSU	Yes	Mary DesRosier	
82	McElwain	Kate	E-08	2012	Urban Underserved	Seattle	No	Jane Huntington	
83	McGuffin	Sarah	E-10	2014	Urban Underserved	Seattle	Yes	Michael Lippman	
84	Michel	Eriberto	E-10	2014	Immigrants, CHC setting	Seattle	No	not matched	HHP
85	Miller	Maria	E-09	2013	Urban Underserved	MSU	No	Tim Joos	
86	Mirza	Shalina	E-10	2014	Rural, homeless, incarcerated, immigrants	MSU	No	not matched	
87	Mooney	Nicole	E-10	2014	Family Medicine, peds	Seattle	No	not matched	
88	Myers	Ryan	E-10	2014	General Underserved, Latinos	Seattle	No	not matched	HHP
89	Nguyen	Jeannie	E-08	2013	Urban Underserved, Peds	Seattle	No	Lynn Oliver	GHP
90	Nielsen	Jaime	E-09	2013	Rural Underserved	WSU-Spokane	No	Sharon Dobie	
91	Olsgaard	Jens	E-08	2012	Urban Underserved	MSU	Yes	Diane Timberlake	
92	Olson	Tara	E-11	2015	Rural Primary Care	Seattle	Yes	Andrew Castrodale	
93	Ordonez	Nemesio	E-11	2015	Rural or Urban Underserved	WSU-Spokane	Yes	Hollie Matthews	

	Last Name	First Name	Entry Year	Grad Year	Areas of Interest	Year 1 Campus	TRUST	UP Mentor	Add'l P'ways
94	Orme	Lindsay	E-10	2014	Rural Underserved	WSU-Spokane	Yes	Hollie Matthews	
95	Parden	Kristin	E-09	2013	Rural Underserved	UI	No	Andrew Gilbert	
96	Pascoe	Phaedra	E-09	2013	Underserved youth	Seattle	No	Mick Storck	
97	Paul	Kathleen	E-08	2012	Family Medicine, OB, Rural	WSU Pullman	No	Sarah Hufbauer	
98	Pennell-Walklin	Ian	E-08	2012	Rural Alaska, global health	UAA	No	Barb Doty	GHP
99	Pfahl	Annie	E-10	2014	Rural Family Medicine	Seattle	Yes	TRUST Mentor	
100	Preus	Eve	E-08	2012	Rural, Latino populations	Seattle	No	Francisco Saavedra	
101	Pudwill	Linnea	E-09	2013	Primary care, rural, Latinos	UAA	No	David Acosta	GHP, HHP
102	Quaynor	Karen	E-06	2012	Underserved Elders, people of color	Seattle	No	Carla Ainsworth	
103	Ragland	Margaret	E-09	2013	Public health research	Seattle	No	Freddy Chen	GHP
104	Ruffatto	Ben	E-08	2012	Rural or Urban Underserved	MSU	Yes	Burke Hanson	
105	Safran	Rachel	E-08	2012	Urban Underserved	WSU-Spokane	No	John McCarthy	
106	Sampson	Blake	E-09	2012	Rural Underserved	UI	No	Tom Call	
107	Samuelson	Rachel	E-08	2012	Rural Alaska	UAA	No	David Baines	
108	Schmitt	Michael	E-11	2015	Rural Montana	MSU	Yes	Greg Rice	
109	Scott	Rachel	E-07	2012	Primary care, immigrant and refugee populations	Seattle	No	Sharon Dobie	

	Last Name	First Name	Entry Year	Grad Year	Areas of Interest	Year 1 Campus	TRUST	UP Mentor	Add'l P'ways
110	See	Wade	E-10	2014	Rural Montana and Global	MSU	Yes	Greg Rice	GHP
111	Seimears	Tracy	E-10	2014	Underserved youth	Seattle	No	not matched	
112	Shipe	Maren	E-10	2014	Rural or Urban Underserved	Seattle	No	not matched	
113	Shubin	Corinne	E-09	2013	Underserved women and children	Seattle	No	Jennifer Vanderleest	
114	Smith	Joshua	E-10	2014	Family Medicine, Idaho	UI	No	Mary Barinaga	
115	Smith	Kyle	E-09	2013	Latino pops., CHC setting	Seattle	No	Ruth Michaelis	GHP
116	Spencer	Alex	E-11	2015	Rural or Urban Underserved	Seattle	Yes	Albert Keep	
117	Stout	Catherine	E-10	2014	Rural Family Medicine	WSU-Spokane	Yes	Andrew Castrodale	
118	Sung	Deborah	E-09	2013	Asian-American, immigrant and refugee populations	Seattle	No	Alan Chun	GHP
119	Sunshine	Jake	E-07	2012	Urban Underserved, policy, health disparities	Seattle	No	Carl Morris	
120	Svec	Megan	E-09	2013	African Immigrant populations	WSU Pullman	No	Amanda Kost	GHP
121	Tea	Julie	E-07	2012	Rural and urban immigrants	Seattle	No	Chinda Roach	
122	Teraski	Dale	E-09	2013	Asian, African immigrants	WSU Pullman	No	Shin-Ping Tu	
123	Turner	Megan	E-10	2014	Urban underserved women	Seattle	No	not matched	
124	Vasquez	Veronica	E-06	2012	Health policy	Seattle	No	Grace Wang	
125	Visscher	Paul (Gus)	E-10	2014	Rural Underserved	MSU	Yes	Sandra McIntyre	

	Last Name	First Name	Entry Year	Grad Year	Areas of Interest	Year 1 Campus	TRUST	UP Mentor	Add'l P'ways
126	Wallace	Gabe	E-08	2012	Rural or public teaching hospital	Seattle	No	Andy Luks	
127	Wertin	Kate	E-08	2012	Homelessness, women's health, gender identity	Seattle	No	Nancy Sugg	
128	Weston	Spencer	E-09	2013	Rural, EM, FM, telemedicine	UWYO	No	Mary Barinaga	
129	Whitaker	Kathryn	E-09	2013	Urban homeless and incarcerated populations	WSU Pullman	No	Jill Watanabe	
130	Williams	Estell	E-09	2013	Urban African American, Latino populations	Seattle	No	Julian Perez	HHP
131	Wilson	Bryan	E-10	2014	Rural or Urban Underserved	MSU	No	not matched	
132	Wilson	Hailey	E-10	2014	Rural, Native Americans	UI	No	not matched	IHP
133	Wilson	Matthew	E-10	2014	Latino populations - Idaho	UI	No	not matched	HHP
134	Wolf	Joseph	E-10	2014	Rural or Urban Underserved	WSU-Spokane	Yes	Martin Clements	
135	Yorks	Kelsey	E-09	2013	Primary care, geriatrics, palliative care	UAA	No	not matched	
136	Zomer	Crystal	E-10	2014	Rural Family Medicine	MSU	Yes	Laura Bennett	
137	Zomorodian	Laila	E-10	2014	Rural or Urban Underserved	Seattle	No	Jill Watanabe	IHP, HHP
138	Zuger	Sarah	E-08	2012	Primary care, domestic and international	WSU-Spokane	No	Amanda Kost	GHP

## **Appendix C: 2011 Underserved Pathway Graduates and Residencies**

Christina Arredondo: Psychiatry, Yale, New Haven Hospital, New Haven, CT

Makristy Caratao: Family Medicine, Idaho Family Medicine, Pocatello, ID

Alicia Carrasco: Medicine-Primary, University of California San Francisco, San Francisco, CA

Maria Celio: Pediatrics, Seattle Children's, Seattle, WA

Meagan Dodge: Pediatrics, Seattle Children's, Seattle, WA

Maureen FitzMaurice: Family Medicine, Family Medicine Residency of Idaho, Boise, ID

Tania Hall: Obstetrics-Gynecology, Maine Medical Center, Portland, ME

Christine Harris: Family Medicine, University of Washington, Seattle, WA

Margaret Lukoff: Internal Medicine, Providence Portland Medical Center, Portland, OR

Michael Mitchell: Emergency Medicine, University of Arizona, Tucson, AZ

Donald Perry: Transitional, Providence Sacred Heart Medical Center, Spokane, WA; Diagnostic Radiology, UW, Seattle, WA

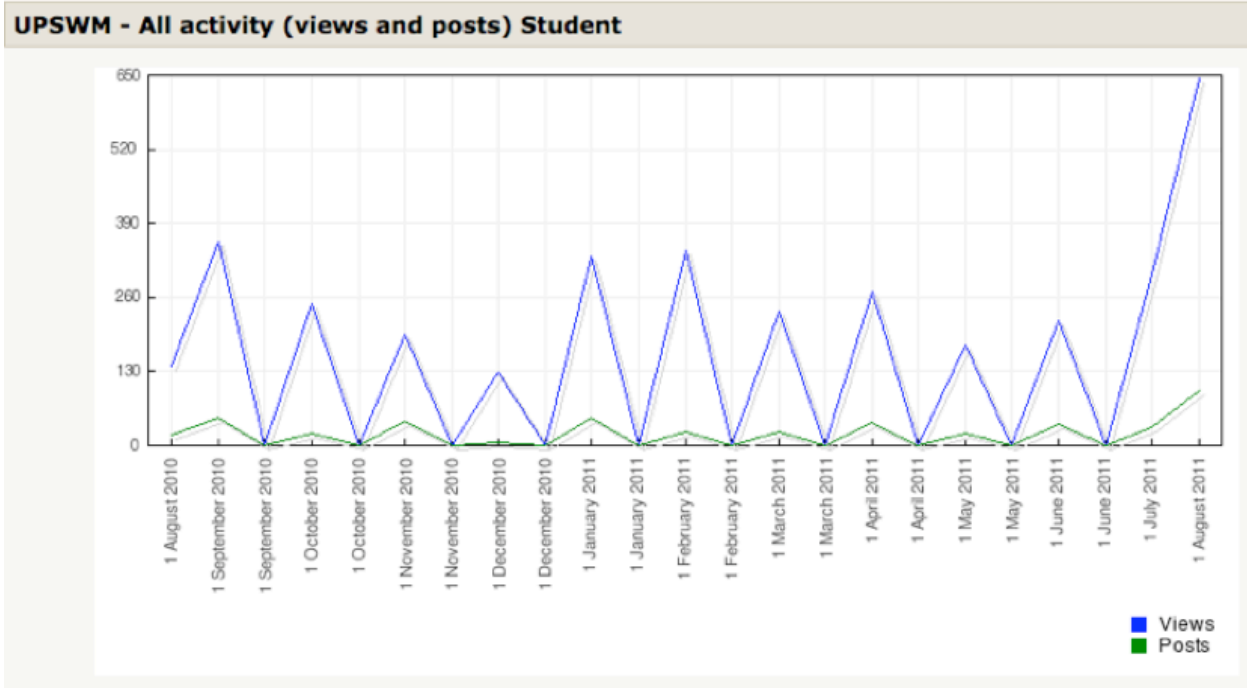
Anne Pugel: General Surgery, University of Washington, Seattle, WA

Ana Torvie: Obstetrics-Gynecology, University of Washington, Seattle, WA

Katrin Tsigonis: Family Medicine, Lacrosse-Mayo, Lacrosse, WI

Tara Whitaker: Family Medicine, Family Medicine Residency of Idaho, Boise, ID

**Appendix D: Underserved Pathway Student Web Module Usage**  
**August 1, 2010 – August 1, 2011**



<b><u>Month Ending</u></b>	<b><u>Views</u></b>	<b><u>Posts</u></b>
31 July 2011	645	97
30 June 2011	299	32
31 May 2011	220	38
30 April 2011	176	21
31 March 2011	271	40
28 February 2011	235	24
31 January 2011	343	24
31 December 2010	333	47
30 November 2010	128	6
31 October 2010	196	42
30 September 2010	248	22
31 August 2010	359	48