



THE UNIVERSITY
OF THE
WEST INDIES

An International Collaboration on Sustainable Workforce Development and Implementation of a Doctor of Pharmacy Program

Gina M. Prescott, PharmD., BCPS¹, Tyler R. Mullen, PharmD^{1,2}, Cameil F. Wilson-Clarke, PharmD², John Lindo, PhD², Brian Tsuji, PharmD¹, Jeffrey Lombardi, PharmD¹, Gene D. Morse, PharmD, FCCP, BCPS¹,

Maxine D. Gossell-Williams, BSc, MPhil, PhD²

¹University at Buffalo, School of Pharmacy and Pharmaceutical Sciences, ²The University of the West Indies, Faculty of the Medical Sciences

**University
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The State University
of New York

Introduction

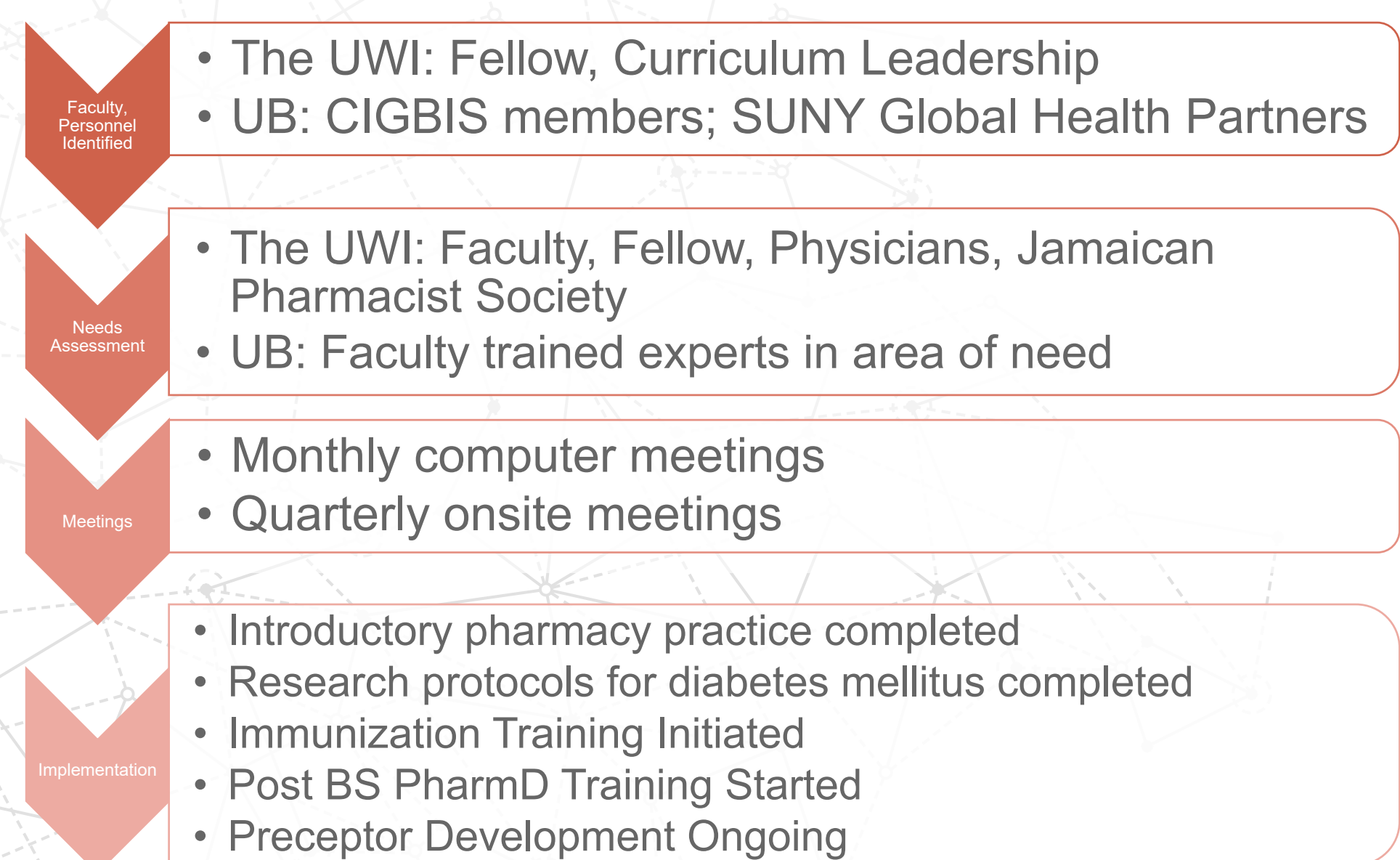
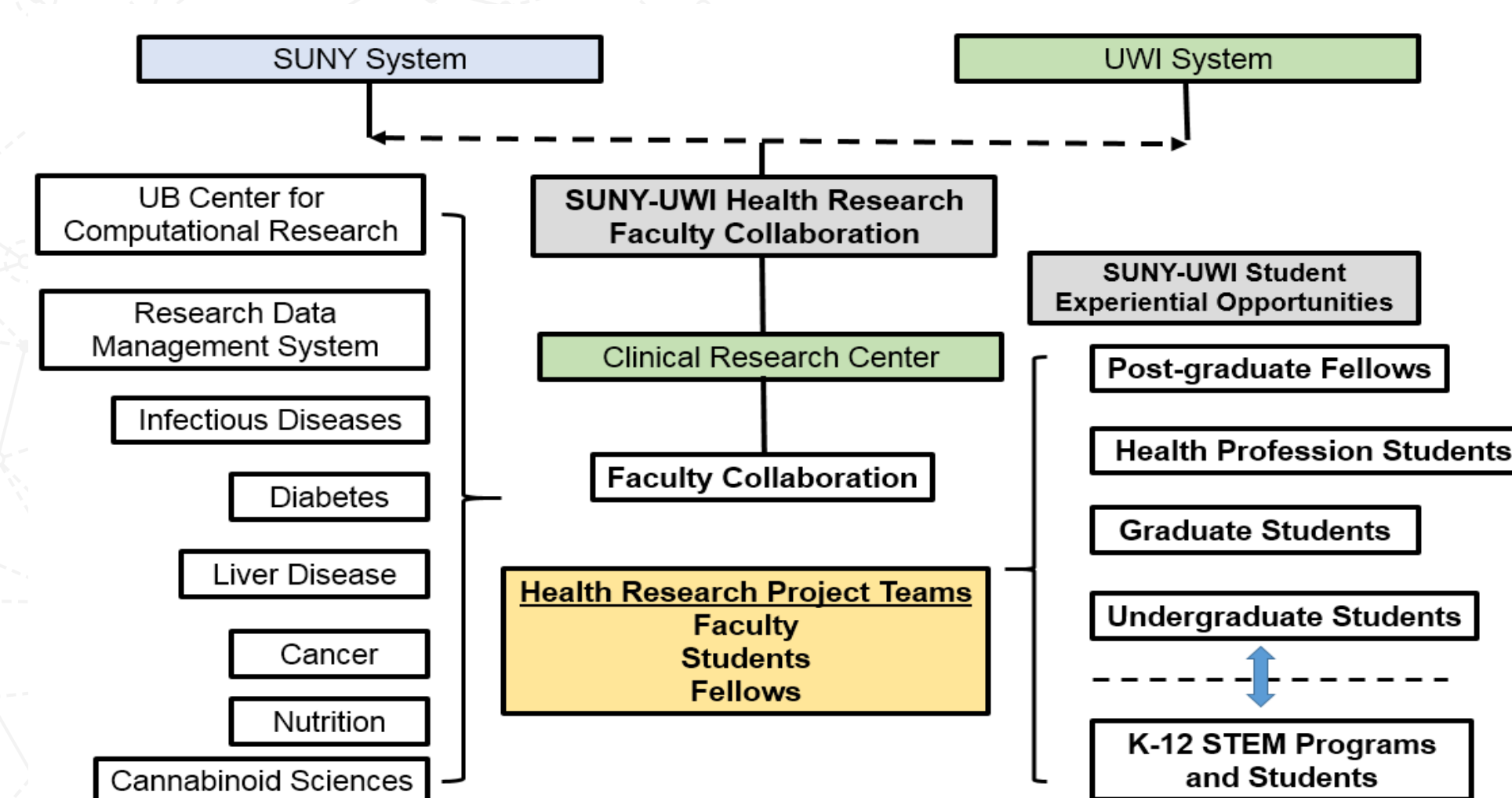
- The United Nations (UN) Sustainable Development Goal 3 calls for an (1) increase the training and retention of health care workers in developing countries, and (2) support the research and development of medications and vaccines for noncommunicable diseases (NCDs).
- A State University of New York (SUNY)-University of the West Indies (UWI) task force was developed and implemented to promote health and wellness.

Objectives

- The UWI, Mona Campus, and University at Buffalo (UB) School of Pharmacy and Pharmaceutical Sciences faculty have identified educational and implementation research priorities to expand education and research approaches for pharmacists to participate with public health prevention initiatives.

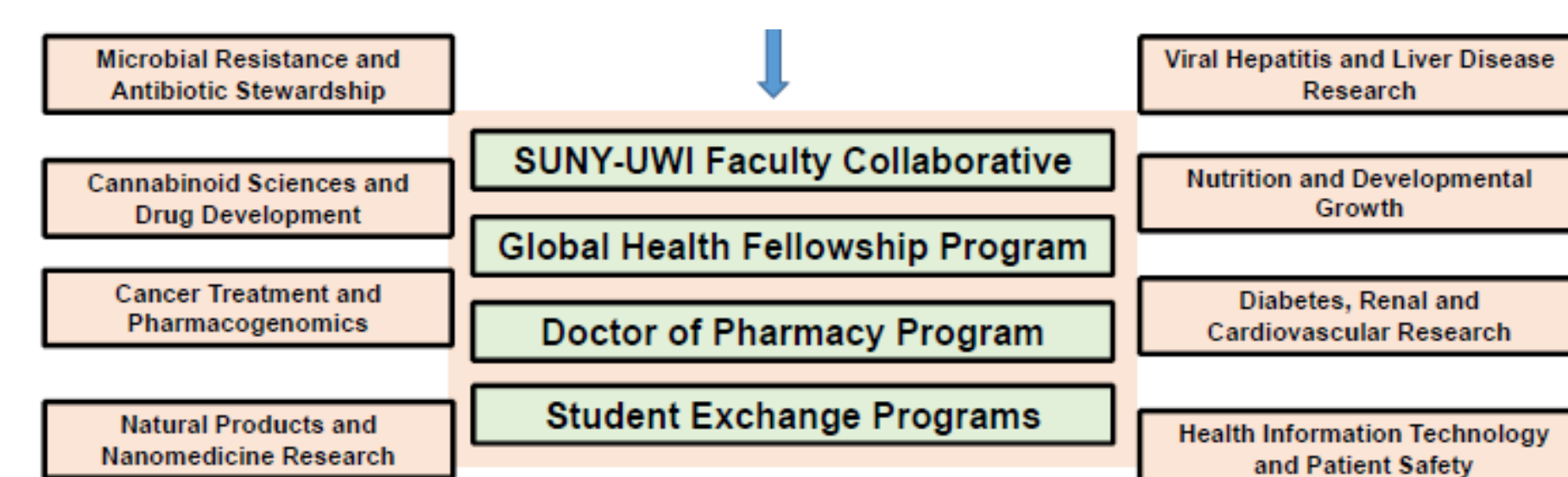
Methods

- In 2016-2017, a needs assessment was conducted between UB SPPS and The UWI Research Task force.



Methods

- Needs have been for the following groups:
 - The UWI Post-BS PharmD students and PharmD students
 - The UWI-UB Post graduate fellow
 - Jamaican Pharmacists
 - Jamaican STEM students
- Common areas of scholarship and curricular needs:



Scholarship and Outreach

Diabetes Mellitus (DM) Research:

- NCD Research
- Needs assessment:(1) To develop a national Type 1 DM patient registry in Jamaica for tracking and intervene on patients, (2) To track currently unknown prescribing patterns and medication use for patients with Type 2 DM in Jamaica
- Development of an Interdisciplinary Team

UWI Physicians and Faculty
• Endocrinology Specialist
• Research-Content Experience

UB-UWI Fellow
• Onsite Development & Implementation

UB Faculty
• Mentor Fellow
• Research- Content Experience

Bak USA
• Private Company
• Donor HIT (Tablets)

Frontier Science
• Private Company
• Database Development

UB-UWI Interdisciplinary Students
• Data Collection

- Type 1 DM: n=100 to be completed. Research protocols approved, tablets donated and delivered, data collection beginning
- Type 2 DM: Research protocol developed for Ethics Review.



Rural Clinic

Rural Clinic Rotation Experience

- Increased Training for HCP and provide medical care to underserved areas in Jamaica
- Needs assessment: 1) To train Jamaican and US students to work in interdisciplinary teams both nationally and globally; 2) To engage STEM students in Jamaica for career selection
- Development of a team

UWI Physicians and Faculty
• In country medical team
• Research Experience

UB-UWI Fellow
• Onsite Development & Implementation

UB Faculty
• Mentor Fellow
• Medical Team
• Research Experience

Bak USA
• Private Company
• Donor HIT (Tablets)

Frontier Science
• Private Company
• Database Development

UB-UWI Interdisciplinary Students
• Learners

STEM / Undergraduate Students
• Learners

Ministry of Health
• Linkage for patients in the clinic

- Students (n=8, UB; n= 28, UWI) have participated in clinics
- In-development: student survey to measure learning, integration of undergraduates and STEM students, and HIT



Curricular Collaborations

Post BS Pharm.D. Curriculum

- Advanced pharmacy practice training in Jamaica
- Needs assessment: 1) Pharmacy experts teaching in the areas of need, (2) Provide advanced rotations in the US for Post BS PharmD students
- Areas of need/expertise: NCDs: Diabetes Mellitus, Hypertension, Oncology; Communicable Disease: Infectious Diseases
- Fall-Spring Didactic Training via Zoom
 - Occurred for n= students
 - Topics: Hepatitis, Infectious Disease and Immunization

PharmD Training

- UB-UWI Fellow coordinated and lectured in a drug information and U.S. healthcare course.
- UB faculty assisted in teaching a pharmacy career class.

Curricular Collaborations

Introductory Pharmacy Experiences for US Students

- Global Health Training and Research Opportunities
- Needs assessment: 1) To expose US students to global health implementation research with the UB-UWI Research Task force, promote cultural exchange, and instruct students on care in resource limited settings
- Curriculum aligned with the FIP and CUGH competencies
- 4 students attended the program in June 2017

Value	VERY SATISFIED	SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	DISSATISFIED	VERY DISSATISFIED	TOTAL
Onsite Orientation	100.00% 4	0.00% 0	0.00% 0	0.00% 0	0.00% 0	4
Outpatient Pharmacy Experience	100.00% 4	0.00% 0	0.00% 0	0.00% 0	0.00% 0	4
Inpatient Pharmacy Experience	25.00% 1	25.00% 1	50.00% 2	0.00% 0	0.00% 0	4
Field Experience/ Health Fair	100.00% 4	0.00% 0	0.00% 0	0.00% 0	0.00% 0	4
Presentation to UWI Pharmacy on a Topic	50.00% 2	25.00% 1	25.00% 1	0.00% 0	0.00% 0	4
Research Overview	50.00% 2	50.00% 2	0.00% 0	0.00% 0	0.00% 0	4
Jamaica specific Drug Information Paper	0.00% 0	50.00% 2	50.00% 2	0.00% 0	0.00% 0	4
Pre-departure information (readings, video, etc)	50.00% 2	50.00% 2	0.00% 0	0.00% 0	0.00% 0	4

Limitations

- An interdisciplinary team and university leadership is critical to achieve programmatic success.
- Utilized an in-country fellow, which may not be available to all schools, but faculty from either partnership can substitute.
- In-country laws and programmatic requirements vary and flexibility needs to be considered.
- Program funding is an ongoing challenged and needs to be addressed.
- Pilot programs are time consuming but important to establishing larger programmatic success.

Conclusions

-International collaborations can assist universities with building a PharmD program, and promoting research to build capacity.

-Financial considerations are the largest constraint and can be addressed through internal mechanisms or grants

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