***Women in Science and Engineering (WiSE)* Future Professionals Program**

About the Program

WiSE-FPP is a two-year professional development and academic support program that encourages and supports women pursuing careers in sciences, mathematics, and engineering to persist in their degree program at Syracuse University and to thrive professionally. It began from a partnership between the *WiSE* Program, the Graduate School, and the Colleges of Engineering & Computer Science and Arts & Sciences as a pilot in 2007-08. The specific focus is on doctoral student career development, planning, and preparation, as well as addressing academic and career resilience, productivity, and key success factors of professional women.

WiSE-FPP reflects: (a) the different disciplines of its members across the sciences, mathematics, and engineering, (b) the different career goals that participating graduate students pursue in academia, organizations, and industry, and (c) the unique needs of women. *WiSE*-FPP is designed to be collaborative, interdisciplinary, and self-directed, with *WiSE*-FPP participants, called Associates, taking a proactive role in designing the terms for their own academic and professional success.

Goals, Programs, and Learning Outcomes

As a means of meeting the goals of *WiSE*-FPP, we offer a series of programs and support in areas that have been shown to fulfill the various and specific needs among women in STEM fields.

1. Introduction and facilitation of strategic career planning that includes targeted professional development, career & academic action plans, and preparation of job/placement search documents.
    a. Individual programs will support career planning through self-assessment opportunities, professional portfolio development, and coaching/mentoring/training addressing a wide range of issues associated with career development. In addition, WiSE-FPP associates will have opportunities to learn critical success skills that support professional excellence, including such topics as conflict management, negotiation, team membership & leadership, peer mentoring & critiquing, effective communication, and interdisciplinary research & collaboration.

        Expected Learning Outcomes:
        - Students will demonstrate understanding of the essential elements and quality standards for a professional portfolio.
        - Students will make evident their ability in career preparation and planning via development of a professional portfolio and participation in mentoring and other FPP activities.

2. Integration of students into the research environment of science, mathematics, and engineering at Syracuse University, as well as in the professional community.
    a. Opportunities for social networking, including informal mentoring by women faculty, interactions with professionals from a variety of settings, and peer-to-peer connection will be provided. Through informal mentoring by peers, faculty, and guest presenters students learn about resources that support their academic and career goals. Peer-to-peer connection opportunities help to build community among women students, who often feel isolated in male-dominated fields. Former SU alumni and community professionals are frequently requested to facilitate programs as role models, providing enhanced knowledge of career opportunities/settings. These professionals also help students to initiate and practice networking skills.

        Expected Learning Outcome:
        - Students will demonstrate the skills, attitudes, and behaviors essential for developing and maintaining a career-related social network.

    b. Programs addressing work/life balance, leadership, and teamwork & collaboration skill development are provided to enhance associates' knowledge and skills that foster successful inclusion in research, personal &

professional resilience, and persistence towards her degree. As funds allow and with a written proposal by Associates, *WiSE* can provide support for an Associate to participate in relevant professional activities.

Expected Learning Outcomes:
- Students will enhance their knowledge of dynamics that foster successful inclusion in research opportunities at Syracuse University and to persistence toward her degree.
- Students will demonstrate increased knowledge of the skills necessary for professional success. (Specific skills will depend on workshops offered, and could include topics such as communication, etiquette, negotiation, peer critiquing, conflict management, writing, and grant writing/management.).

Policies and Approaches

Policies and activities that support these goals include:

1. Participating graduate students are nominated by a STEM faculty member familiar with their work. *WiSE*-FPP Associates are selected by a committee of faculty members and *WiSE* staff.
2. *WiSE*-FPP will provide programming that prepares Associates for careers in the professional/research sector, as well as the professoriate. This programming is often developed in concert with Associates to meet their changing needs.
3. *WiSE*-FPP programs are designed for women with their unique strengths, needs, and learning styles in mind. However, from time to time activities will be opened to the general public, including doctoral students in STEM fields who are men.
4. Wherever possible, *WiSE*-FPP programs will coordinate activities with other *WiSE* programs and activities to maximize our efforts on behalf of students and faculty.
5. WiSE-FPP evaluates most workshops and programs to maintain a flow of communication between Associates and the WiSE-FPP faculty and staff.

Commitment Expectations

All professionals are held accountable for their commitments. The faculty and staff of *WiSE* feel strongly that respect for the effort being spent on the student's behalf including program development, nominations, and the raising of funds to provide a stipend necessitates that students be held accountable for meeting the program's minimum expectations.

1. Selected 1st year Associates and returning 2nd year Associates will participate in an Orientation in September.
2. *WiSE*-FPP Associates will assist in the development of topics and programs for WISE-FPP activities tailored to their specific needs and interests.
3. *WiSE*-FPP Associates are expected to attend and evaluate at least at least five *WiSE*-FPP events/activities per academic year for each of the two years as a condition for receiving the stipend.
4. *WiSE*-FPP Associates are expected to participate in the end-of-year assessment activities with the *WiSE*-FPP staff.
5. *WiSE*-FPP Associates will complete a "professional portfolio" in their 1st year (draft of key sections) or 2nd year (complete portfolio) as a condition for their Certificate of Professional Development.

Benefits of Participating in *WiSE* – FPP

There are many benefits to participating in *WiSE*-FPP including:
- Professional development
- Support and feedback on the development of professional documents (CV, resume, teaching philosophy and research statements)
- Introduction and access to successful professional women role models
- A stipend for successful commitment to the program. Associates are eligible for $400 each of the two years.

Program Components

- *Faculty Nomination* – Women who are doctoral students in the colleges of Arts & Science (STEM departments), Engineering & Computer Science, iSchool, and the Science and Mathematics Education departments are eligible to be nominated by faculty to participate in the FPP program. Calls for nominations are sent out to *WiSE* faculty prior to the beginning of each academic year. Faculty are encouraged to recommend students based on academic standing and ability to benefit from additional support and skills that enable persistence towards their STEM degree and career goals. While a student does not need to be nominated by her advisor, it is strongly recommended that the student ensure that her advisor is on board and understands the program commitment.
- *Orientation* – The orientation meeting for FPP Associates will be held each September to allow the associates to be active participants in developing the *WiSE*-FPP programming for the year and to fully understand their commitments. The meeting will include opportunities for defining interests and general goals, information gathering for a *WiSE*-FPP directory & administrative purposes, and developing/conveying the semester schedule. The orientation will also include an overview of the professional portfolio and the required components.
- *Portfolio Development* – Individual and group activities will be planned to support *WiSE*-FPP Associates in their portfolio development process.
- *Other Events and Activities* – Associate meetings with designated topics will be held regularly. These may include panel presentations, a lecture/workshop, or informal networking events.

Program Evaluation

Review of Learning Outcomes:
- Students will demonstrate understanding of the essential elements and quality standards for a professional portfolio.
- Students will make evident their ability in career preparation and planning via development of a professional portfolio and participation in mentoring and other FPP activities.
- Students will enhance their knowledge of dynamics that foster successful inclusion in research opportunities at Syracuse University and persistence towards their degree.
- Students will demonstrate increased knowledge of the skills necessary for professional success. (Specific skills will be dependent upon workshops offered, and could include communication, etiquette, negotiation, peer critiquing, conflict management, writing, and grant writing/management).
- Students will demonstrate the skills, attitudes, and behaviors essential for developing and maintaining a career-related social network.

Evaluation:
- Pre-Post surveys
- Evaluation of Portfolio
- End-of-year reflection by participants on their participation in WiSE-FPP

Regarding Stipend and Other Financial Aid

The stipend awarded through WiSE shouldn't interfere with other financial support, unless your pre-existing financial aid specifically stipulates that you are ineligible to receive other funding. Graduate or teaching assistantships will not influence FPP funds. The WiSE-FPP stipend is $400. If you participate in the Graduate School's Future Professoriate Program, you will still only be eligible for a maximum of $400 per year of participation from FPP sources.

Professional Success Skills/Factors Defined

Social Networking
Defined as proactive actions to develop and maintain personal and professional relationships with others for the purpose of mutual benefit in their work or career (Forret & Dougherty, 2001).

- Ability to engage with peers, mentors and potential employers, referees, and other academics in professional settings
- Ability to summarize research project and skills in a succinct, interesting manner
- Develop communication skills
- Learn to self-promote in an effective manner

Key Personal Development Skills Essential for Successful Career Goal Attainment:
- Self- evaluation and awareness
- Self- management
- Self-promotion
- Building and sustaining teams as a leader and a member
- Communication and relationship skills to attend to other perspectives, to consult and work with others and to manage conflict
- Developing an invaluable personal support network
- Career-Life Balance

Teamwork
- Collaborative and interdisciplinary work
- Joint planning and problem solving
- Ability to engage in and promote mutual learning
- Ability to support the learning of others