The Women and Mathematics Program
at the
Institute for Advanced Study

Alice Chang, Princeton
Dusa McDuff, Barnard C, Columbia
Margaret Readdy, U Kentucky
Karen Uhlenbeck, UT Austin & IAS.
In the beginning...

Karen Uhlenbeck
Berkeley 1969
1993
Mentoring Program for Women.
(MOSRI)

Antonella Grassi
Antonella Grassi, Chuu-Liang Terry, Karen Uhlenbeck.
The birth of WAM...

1994 Institute for Advanced Study.

Chuu-Liang Terng
Karen Uhlenbeck
(8 lectures each).

Seminar talks:

Nancy Hingston
Jean Taylor
Lisa Jeffrey
Doug McDuff
Pamela Davis

"Constant Mean Curvature Surfaces"
"Gauge Theory"
"Changing the Image of Women in Science"
1995 IAS  “Non-linear wave phenomena”

Joyce McLaughlin (undergrad course)

Barbara Keyfitz (grad course)

Susan Friedlander

8 undergrads
12 grad students
6 postdocs
4 college teachers
1996 Probability
1997 Symplectic Geometry
1998 Representation of Lie Groups
1999 Arithmetic Algebraic Geometry
2000 Computational Complexity Theory
2001 Quantum Field Theory, Supersymmetry, Enumerative Geometry
2002 Symplectic Geometry & Holomorphic Curves
2003 Math Biology
WAM became independent of PCMI

NSF support for WAM as a stand alone program began.
~60 participants (undergrad, grad, postdoc, faculty)

7 day workshop

2 lead lecturers (Terzio + Uhlenbeck lectures)

2 TAs

Colloquium speaker (Grassi Distinguished Colloquium)

Computer workshop leader & TA
WAM Committee
Alice Chang (Princeton)
Michelle Huguenin (IAS)
Durga McDuff (Barnard, Columbia)
Liz Milicevic (Harvard)
Maria Chudnovsky (Princeton)

Nancy Hingston (C of NJ)
Linda Neus (Applied Communic. Sciences)
Lillian Pierce (Duke)
Margaret Readdy (U. Kentucky)
Karen Uhlenbeck (UT Austin, IAS)
WAM Committee: 

Meets twice a year
Discuss & decide program theme
Suggest workshop topics
Suggest lecturers
Choose participants
Mentor at program

Duga McDuff, Chair
Peter Sarnack, IAS Faculty Representative
Program Schedule (sample)

Day 1: Arrival
      Registration + Reception
      Ice Breaker
      Tour of Princeton Graduate College

Day 2: Course previews
       Outreach
       Panels (gender pay gap,
                applying to grad school,
                finding an advisor,
                applying for NSF funding)
Days 3, 4, 6, & 7:

- Term lecture course (beginner)
- Whalenbeck lecture course (adv.)
- Review sessions
- Colloquium
- Research Seminar
- Women in Science (lux. Career Panel)
- Mealtimes - Mentoring
4 speakers
Computer workshop.
Lunch, tea & dinner with faculty, grad students
Uniqueness of WAM:

Intergenerational Mentoring

Intense Mathematical Program

Alumni return in new roles

Participants house together

Forms lifetime collaborative relationships
Growing WAM

2018 ~ 160 applicants
2019 ~ 110 applicants
2020 ~ 265 applicants.

Clearly there is a need for this type of program.
Ambassador Program:

Funded by Lisa Simonyi

WAM alumni can apply for small grants for
undergrad math support
community outreach
weekend conference.

This extends the reach and impact of WAM
Challenges:

- Zoom fatigue (in-person program is packed)
- Informal Mentoring
- Building Community virtually
Some solutions:

- Trim program
- e-Outreach + e-Ambassador program
- Use lunchtime for mentoring
- WAM Committee + other volunteers will lead small research groups
- Possible pre-meeting intros
“My eyes were opened on this program to all different possibilities of a future in mathematics, I now have lots of role models and contacts whom I can turn to at each stage of the process, as I weave my own unique mathematical future.”

WAM undergraduate participant
For more information

www.iasg.edu/math/wam.
Thank you!