# MARY R. GOLDBERG, PhD

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#### **EDUCATION**

August 2010 - December 2013 University of Pittsburgh, School of Education

> Doctor of Philosophy in Administrative and Policy Studies of Education Dissertation: "Comparative Effectiveness of Online Training in Assistive Technology and its Use for Development of Rehabilitation Professionals'

Interprofessionality and Reflectiveness" Committee Chair: Charlene Trovato, PhD

University of Pittsburgh, School of Education **August 2005 – April 2007** 

Master of Education in Higher Education Management

August 2001 - May 2005 University of Pittsburgh, School of Arts and Sciences

Bachelor of Science in Psychology and Spanish

January 2003 - May 2003 University of Sevilla, Spain

International Studies Abroad

January 2014 Spinning Instructor Certification Instructor #123906, Mad Dogg Athletics

October 2014 **CPR** Certification

**June 2015** Group Exercise Instructor Certification, Aerobics & Fitness Association

of America

#### RESEARCH SPECIALTIES

#### August 2005 – Present Education & Training

- International capacity building in assistive technology training
- Recruitment & retention of underrepresented groups (e.g. veterans and students with disabilities)
- Transitional and vocational support of veterans and their families
- Program evaluation
- STEM education
- Experiential and service learning curriculum development
- Online learning
- Ethnography, qualitative methods (interviews, focus groups), mixed methods (surveys-both quantitative and qualitative analysis via coding)

#### WORK EXPERIENCE

#### Sept. 2014 – Present

Assistant Professor, Department of Rehabilitation Science and Technology, School of Health and Rehabilitation Sciences, University of Pittsburgh

- Lead two project thrusts for the International Society of Wheelchair Professionals (Advocacy & Training)
- Teach/Co-teach four courses: Introduction to Rehabilitation Engineering Design and Client-Centered Design (grad); Disability Accommodations and Supports (MOOC); Assistive Technology Certificate (continuing education)
- Write grant proposals to federal and private agencies (Received 3 grants at PI; 6 grants as Co-PI since 2010 totaling \$1.5 million)
- Advise 2 PhD students; serve on 2 MS & 2 PhD committee

#### March 2013 – Present Director, Evaluneer, LLC

- Lead consulting group that focuses on education program development and evaluation
- Developed activities that are accessible to children with multiple disabilities for PBS Nova "Making Stuff" kits
- Evaluated STEM activities for PBS Nova "Making Stuff" kits

Jan. 2013 – Sept. 2014 Education and Outreach Project Director, Department of Rehabilitation Science and Technology, School of Health and Rehabilitation Sciences, University of Pittsburgh

- Scale and replicate veterans' transition program nationwide
- Conduct program evaluations across department
- Co-teach four courses: Introduction to Rehabilitation Engineering Design and Client-Centered Design (grad); College Achievement Transition Seminar (undergrad); Assistive Technology Certificate (continuing education)
- Write grant proposals for education and outreach programs to federal and private agencies (Received 6 grants since 2010 totaling \$1.27 million)
- Supervise 2 full time, 1 part time coordinators and 2 graduate students
- Co-advise 6 MS and PhD students
- Manage ~\$1.5 million annual budget

#### July 2007 – Jan. 2013

Education and Outreach Coordinator, Department of Rehabilitation Science and Technology, School of Health and Rehabilitation Sciences, University of Pittsburgh

- Write grant proposals for education and outreach programs to federal and private agencies
- Supervise 2 full time, 1 part time coordinators and 3 graduate students
- Facilitate 5 annual internship programs
- Facilitate 1 continuing education certificate program for rehabilitation professionals
- Recruit students and increase diversity in graduate program

#### Jan. 2006 – July 2007

Freshman Peer Counselor Coordinator, Office of Admissions and Financial Aid, Univ. of Pittsburgh

- Train, supervise, and schedule over 50 Freshman Peer Counselors for PittStart program
- Manage payroll for Freshman Peer Counselors
- Coordinate with 10 university departments to plan PittStart events
- Collaborate with Director of Freshman Programs to implement New Student Orientation programs

Sept. 2005 – July 2007 Graduate Student Assistant, Office of Admissions and Financial Aid, University of Pittsburgh

- Present at informational sessions for over 100 prospective students and their families
- Participate in admissions decisions committees
- Complete tasks for office research analysts

#### **PUBLICATIONS**

Peer-Reviewed Journals

- 1. Gartz R\*, Goldberg M, Miles A, et al. Development of a contextually appropriate, reliable and valid basic Wheelchair Service Provision Test. Disability Rehabilitation: Assistive Technology. April 2016:1-8. doi:10.3109/17483107.2016.1166527, http://www.tandfonline.com/doi/pdf/10.3109/17483107.2016.1166527
- 2. Goldberg, M., Karimi, H.; Pearlman, J. "Interactive, mobile, AGIle and novel education (IMAGINE): a conceptual framework to support students with mobility challenges in higher education." Disability and Rehabilitation: Assistive *Technology*, 2016 Jan; 11(1): 50-60. <doi: 10.3109/17483107.2014.959074>.
- 3. Goldberg, M., Cooper, R., Milleville, M., Barry, A., Sporner, M. "Ensuring Success for Veterans with Disabilities in STEM Degree Programs: Recommendations from a Workshop and Case Study of an Evidence-Based Transition Program." Journal of STEM Education, Vol 16, No 1., 2015.
- 4. Mandala, M.\*, Goldberg, M., Pearlman, J. "Combining Veterans and Teachers in a Unique Service Learning Experience." International Journal for Service Learning in Engineering Special Edition, pp. 381-405, Fall 2014. http://library.queensu.ca/ojs/index.php/ijsle/article/view/5559/5326
- 5. Goldberg, M., Pearlman, J. "Best Practices for Team-Based Assistive Technology Design Courses.", Annals of Biomedical Engineering, March 2013 <doi:10.1007/s10439-013-0798-2>.

#### **Book Chapters**

- 1. **Goldberg, M.**, Drach, R., Sporner, M. "Federal Programs to Assist Wounded, Injured, and Ill Service Members" In Wounded Warrior Handbook. 2011. Eds. Cooper, R., Pasquina, P. Washington DC: Borden Institute.
- 2. **Goldberg, M.**, Milleville, M., Ding, D., Simmons, R., Brown, S., Collins, D. "Developing Future Generations of Quality of Life Technology Researchers through Education, Outreach, and Diversity Initiatives." In Quality of Life Technology Handbook, 2012. Ed. Schulz, R. London: Taylor and Francis.
- 3. Duerstock, B., McDonagh, D., Thomas, J., Cooper, R., **Goldberg, M.**, Quamar, A., Milleville, M., Brown, S., Supalo, C., Wulle, B., Kirshner, J., Atchison, C., Border, J. "Technologies to Facilitate the Active Participation and Independence of Persons with Disabilities in STEM from College to Careers" In From College To Careers: Fostering Inclusion of Persons with Disabilities in STEM, 2014. Ed. Duerstock, B. Washington DC: Science Publishing.
- 4. Yurkiewicz, IR, Pasquina, PF, **Goldberg, M.**, Drach, R. "Army Programs Related to Warriors in Transition" In Wounded Warrior Handbook. 2011. Eds. Cooper, R., Pasquina, P. Washington DC: Borden Institute.

#### Peer-Reviewed Conference Abstracts

- 1. Mandala, M.\*, **Goldberg, M.**, Pearlman, J. Facilitating Successful Student Faculty Collaboration through Peer Evaluation in Engineering Design. VentureWell Conference, Portland, March 2016.
- 2. Miles, A.\*, **Goldberg, M.**, Gartz, R., Pearlman, J., Schmeler, M. "How to Develop a Contextually Appropriate, Reliable, and Valid Wheelchair Service Provision Assessment". Proceedings of the International Seating Symposium (ISS), Vancouver, March 2016.
- 3. **Goldberg, M.** Strategies for Effective Online Training and Learning in Assistive Technology, International Seating Symposium, Nashville, TN, February 26-28, 2015.
- 4. Mandala M.\*, **Goldberg M.**, Pearlman J, Cooper RA. Research Experience for Veterans and Teachers: Motivation, Program Description, Outcomes and Expectations for the Future. ASME IDETC/CIE, Buffalo NY, August 17-20, 2014.
- 5. Rice, L, **Goldberg, M.**, "How to Optimize your Continuing Education: A Necessary Benefit to Improve your Practice" Proceedings of the International Seating Symposium (ISS), Vancouver, March 2014.
- 6. Medina H, Tull RG, Pearlman J, **Goldberg M**. QoLT Engineering Education Outreach Facilitates Systems Analysis Study for Wheelchair Use in Mexico. Global Student Forum/World Engineering Education Forum, Cartagena, Colombia, September 21-27, 2013.
- 7. **Goldberg, M.**, Pearlman, J., Schunn, C., Reynolds, B., Brown, S. "Connecting Research and Teaching Through Product Innovation: Quality of Life Technology RET Site. Proceedings of American Society of Engineering Education Conference, Atlanta, June 2013.
- 8. **Goldberg, M.**, Pearlman, J. "Best Practices and a Repository for Assistive Technology Design Classes and their Products" Proceedings of the National Collegiate Innovators and Inventors Alliance (NCIIA), Washington D.C., March 2013.
- 9. **Goldberg, M.**, Schmeler, M., Schein, R. "Increasing Assistive Technology and Interprofessional Online Training" Proceedings of the International Seating Symposium (ISS), Nashville, March 2013.
- 10. Stirpe, B.M\*, **Goldberg, M.**, Milleville, M., Cooper, R. "The impact of a counseling based veteran transition program on educational and vocational outcomes" Proceedings of the American Counseling Association, March 2013.
- 11. Stirpe, B.M\*, **Goldberg, M.**, Milleville, M., Cooper, R. "ELeVATE: Experiential Learning for Veterans in Assistive Technology and Engineering" Proceedings of the Pennsylvania Association of Rehabilitation Facilities Conference, September 2012.
- 12. **Goldberg, M.**, Pearlman, J. "Technology Innovations for Persons with Disabilities (TIPeD): A Program to Develop Impactful Technologies and Teach Students the Fundamentals of Entrepreneurship" Proceedings of the National Collegiate Innovators and Inventors Alliance (NCIIA), San Francisco, March 2012.

- 13. Brown, K., Brown, S., **Goldberg, M.** Tech-Link: Expanding the Science, Technology, Engineering, and Math (STEM) Pipeline for Students with Disabilities through LEGO Robotics. Proceedings of the Annual International Technology and Persons with Disabilities Conference, San Diego, February 2012.
- 14. **Goldberg, M.**, Ding, D., Cooper, R. "Using Experiential Learning to Inspire, Educate, and Empower Underrepresented Undergraduates and Veterans Transitioning to Higher Education" Proceedings of American Society of Engineering Education Conference, Vancouver, June 2011.
- 15. Koontz, A., Ding, D., **Hershberger, M.**, Cooper, R. "A Model Undergraduate Research Program in Rehabilitation Engineering" Proceedings of the 31<sup>st</sup> Annual Conference on Rehabilitation Engineering (RESNA), Washington, DC, June 2008.

#### Other Publications

- 1. Brown SR, **Goldberg M**, Brown K, Research Update: The Power of Encouragement, *Paraplegia News*, pp. 36-37, Vol. 66, No. 5, May 2012.
- 2. Goldberg, M. "AT Designers: The Next Generation". *Paraplegia News*. June 2011.
- 3. **Goldberg, M.** "In Depth: State of the Science on Communication and Sensory Impairments" *Paraplegia News*. March 2011.

#### Media Recognition

 Tyson, C. (8/24/14) "Healing War Wounds". InsideHigherEd.com. <a href="https://www.insidehighered.com/news/2014/08/12/disabled-veterans-college-transition-program-pursue-stem-develop-assistive">https://www.insidehighered.com/news/2014/08/12/disabled-veterans-college-transition-program-pursue-stem-develop-assistive</a> (article about veterans' transition program)

<sup>\*</sup>Student is advisee/mentee.

TEACHING	
2015 – Present	Instructor, Disability Awareness and Support, Coursera (Massive open online course)
2013 – 2014	Instructor, HRS 1700 College Achievement and Transition Seminar, School of Health and Rehabilitation Sciences, University of Pittsburgh
2012 – Present	<b>Co-Instructor</b> , <u>HRS 2718 Client-Centered Rehabilitation Design</u> , Department of Rehabilitation Science and Technology, University of Pittsburgh
2011 – Present	<b>Co-Instructor</b> , <u>HRS 2706 Introduction to Rehabilitation Engineering Design</u> , Department of Rehabilitation Science and Technology, University of Pittsburgh
2012 – Present	Co-Instructor, RSTCERT, RST Continuing Education Program, University of Pittsburgh
2012 – Present	Guest Lecturer, HRS 2901 Research Methods, Department of Rehabilitation Science and Technology, University of Pittsburgh
2011 – 2012	<b>Teaching Assistant, HRS 2901 Research Methods,</b> Department of Rehabilitation Science and Technology, University of Pittsburgh

#### RELATED EXPERIENCE AND SERVICE

2015 – Present Panel Reviewer, National Institute on Disability, Independent Living, and Rehabilitation Research

**2014 – Present** *Panel Reviewer*, SBIR/STTR, National Science Foundation

• Review SBIR/STTR grant proposals related to education

2012 – Present	<ul> <li>Panel Reviewer, Division of Engineering Education and Centers, National Science Foundation</li> <li>Review Research Experience for Teachers grant proposals</li> </ul>
2012 – Present	<ul> <li>Peer Reviewer, American Society of Mechanical Engineering Intl Conference on Design Education</li> <li>Review design education papers for the peer-reviewed conference proceedings</li> </ul>
2012 – Present	<ul> <li>Peer Reviewer, National Collegiate Innovators and Inventors Alliance</li> <li>Review experiential learning &amp; entrepreneurship education papers and abstracts for the peer-reviewed conference proceedings</li> </ul>
2012 – Present	<ul> <li>Peer Reviewer, Educause</li> <li>Review online education papers and abstracts for the peer-reviewed conference proceedings</li> </ul>
2012 – Present	<ul> <li>Staff Representative, University of Pittsburgh School of Health &amp; Rehabilitation Science Budget &amp; Finance Committee</li> <li>Review departments' requests for new academic programs and major activities</li> </ul>
2010 – Present	<ul> <li>Peer Reviewer, Assistive Technology</li> <li>Review education-oriented articles for the peer-reviewed journal</li> </ul>
Jan. 2007 – July 2007	<ul> <li>Benchmarking Consultant, University of Pittsburgh</li> <li>Research and consult with 10 universities to redesign a "senior experience" program at the University of Pittsburgh</li> </ul>

## PROFESSIONAL ORGANIZATIONS AND SOCIETIES

2014 – Present	Member, American Evaluation Association (AEA)
2013 – Present	Member, Rehabilitation Engineering Society of North America (RESNA) Chair, Accreditation Committee Participant, International Special Interest Group Participant, Education Professional Special Interest Group
2013 – Present	Member, National Association of Professional Women (NAPW)
2012 – Present	Member, American Education Research Association (AERA)
2011 – Present	Member, American Society of Engineering Education (ASEE)

# **AWARDS**

2016 –	Nominee, Top Tech Innovators in Higher Education, Chronicle of Higher Education
2015 –	Nominee, Alumni Achievement Award, University of Pittsburgh School of Education
2013 –	Nominee, Chancellor's Award for Service to the Community, University of Pittsburgh
2012 –	Nominee, Chancellor's Award for Service to the University, University of Pittsburgh
2012 –	Innovations in Education Award, University of Pittsburgh (co-recognized with Dr. Jon Pearlman)
2011 –	Staff of the Year Award, Department of Rehabilitation Science & Technology
2009 –	Staff of the Year Award, Human Engineering Research Laboratories
2005 – 2007	Full Graduate Student Assistantship, Office of Admissions & Financial Aid, University of Pittsburgh

#### RESEARCH FUNDING

2016

#### 2016 NSF Research Experience for Teachers (Recommended; award in process)

PI: \$596.467

• Role: Develop a model for engaging teachers in authentic research experiences and developing new science and math curricula based on their experiences.

#### Management Sciences for Health Training of Trainers contract

PI: \$110.389

• Role: Evaluate Training of Trainers in Wheelchair Service Provision materials and pilots.

#### 2015 – 2016 NSF I-Corps for Learning

PI: \$50,000

- Project: Investigate the commercial potential for a peer evaluation software.
- Role: Serve as team-lead, write proposal, and engage partners.

#### 2013 – 2014 NSF I-Corps for Learning

Co-PI: \$50,000

- Project: Scale and replicate a college transition program in STEM for veterans.
- Role: Serve as team-lead, write proposal, and engage partners.

### 2012 – 2015 NSF Research in Engineering Education

Co-PI: \$472,794

- Project: Evaluate a college transition program in STEM for veterans.
- Role: Co-write proposal, supervise one coordinator and one graduate student, and liaise with partners and evaluation team.

#### 2012 – 2013 Pitt Innovation in Education Award

Co-PI: \$25,000

- Project: Course-development support to sponsor undergraduates to participate in international projects to design assistive devices for people with disabilities.
- Role: Co-write proposal, develop curricula, identify clients, and teach course modules.

# 2011 – 2015 Rehabilitation Services Administration Long-Term Training Grant

Co-PI: \$501,857

- Project: Develop a novel online continuing education program for assistive technology professionals and MS rehabilitation technology students.
- Role: Co-write proposal, mentor trainees, develop training program (for MS program: course sequence and additional activities; for online continuing education program: module development and course moderation), and identify mentors.

#### 2011 – 2014 NSF Research in Disabilities Education

Co-PI: \$199,849

- Project: Develop a model for support and inclusion of students with disabilities in STEM disciplines in higher education.
- Role: Co-write proposal, develop curricula for student course and faculty training program, supervise one coordinator and one graduate student, and identify mentors.

## 2010 – 2013 NCIIA Course & Program Grant

Co-PI: \$25,950

- Project: Support for the Technology Innovation for People with Disabilities (TIPeD) program, which partners undergraduate business and engineering students together to develop assistive technology.
- Role: Co-write proposal, mentor trainees, develop training program (workshops and additional activities), and identify projects and mentors.

# 2012 – 2014 NSF Integrative Graduate Education Research Traineeship (IGERT) Project Manager

- Project: Support for the Quality of Life Technology Center NSF IGERT program, which trains PhD candidates through cross-disciplinary activities in engineering and health sciences.
- Role: Co-write proposal, mentor trainees, develop training program (workshops and additional activities), and identify projects and mentors.

# 2012 – 2015 NSF Research Experience for Teachers Project Manager

- Project: Support for the Quality of Life Technology Center NSF RET program, which trains STEM middle and high school teachers on pedagogical techniques and content to better engage their students, and mentor their students through an engineering design competition.
- Role: Co-write proposal, mentor trainees, develop training program (workshops and additional
  activities including flipped classroom modules), liaise with Pitt Learning Research and
  Development Center, and identify projects and mentors.

### 2012 – 2014 NSF Research Experience for Undergraduates Project Manager

- Project: Support for the Quality of Life Technology Center NSF REU program, which pairs undergraduate students with graduate students and faculty on impactful assistive technology research.
- Role: Co-write proposal, mentor trainees, supervise one coordinator, develop training program (workshops and additional activities), and identify projects and mentors.

#### STUDENTS ADVISED

#### **PhD**

- 1. Alexandria Miles (Rehab Science & Technology, U-Pitt), PhD Expected 2018
- 2. Anhue Yohali Burrola (Rehab Science & Technology, U-Pitt), PhD Expected 2019

#### Committee Member

- 1. Anne Barry (Co-Advisor, Rehab Science & Technology, U-Pitt), MS 2014
- 2. Mahender Mandala (Rehab Science & Technology, U-Pitt), PhD Expected 2016
- 3. Hervens Jeannis (Rehab Science & Technology, U-Pitt), PhD Expected 2016
- 4. Victor Rivera (Rehab Science & Technology, U-Pitt), MS Expected 2016

#### Academic & Career Advice

- 1. Josh Telson (Rehab Science & Technology, U-Pitt), MS 2013, Engineer at 4 Moms Co, Pittsburgh, PA
- 2. Herbert Hill (Rehab Science & Technology, U-Pitt), MS 2014, Associate Engineer at Bayer HealthCare
- 3. Cassandra Cox (Rehabilitation Counseling, U-Pitt), MS 2015, Vocational Counselor at Cigna
- 4. Elaine Houston (Rehab Science & Technology, U-Pitt), PhD Expected 2016
- 5. Jonathan Duvall (Rehab Science & Technology, U-Pitt), PhD Expected 2016
- 6. Abbas (Bobby) Quamar (Rehab Science & Technology, U-Pitt), PhD Expected 2017
- 7. Brandon Daveler (Rehab Science & Technology, U-Pitt), PhD Expected 2017