

## **Carmen Muller-Karger**

### **1. Name and academic rank:**

Carmen Muller-Karger, Assistant Teaching Prof., MME, FIU

### **2. Education**

PhD	Central University of Venezuela Dr. in Science, Biomechanical Engineering	1998-2001
MSc	University of Virginia, VA, U.S.A. Mechanical Engineering. Rotodynamics	1992-1994
BSc	Simón Bolívar University (USB). Venezuela. Mechanical Engineering.	1985-1990

### **3. Academic experience**

Florida International Univ. Full time Teaching Assistant Prof., Mech. Eng. Dpt. Coordinator of the courses Statics and Dynamics	Aug.2020 – present Fall 2019- present
Florida International Univ., Full time Instructor, Mechanical Eng. Dpt.	Sep. 2017- Aug. 2020
Florida International Univ., Full time Professional Advisor, Mech. Eng. Dpt.	Jul. 2016 - Sep. 2017
Simon Bolivar University, Full time Assistant, Associate to Full Professor	Jan. 1991 - Dic.2015
Simon Bolivar University, Coordinator Mech. Eng. Graduate Studies	Sep. 2011 - Sep.2014
Technische Universität München, Munich, Germany, Invited researcher	Sep.-Dic.1999&2000

### **4. Non-academic experience**

Rancho Los Amigos National Rehabilitation Center, Downey, CA, and Dept. of Kinesiology at USC. Invited Scholar as Research Engineer	Sep.2010-Aug. 2011
Simon Bolivar University, Director of Motion Analysis Laboratory	Nov. 2007-Sep. 2015
Simon Bolivar University, Advisor and coordinator for Social Work	Nov. 2007-Sep. 2010
Simon Bolivar University, Founder and Director of Biomechanical Research Group, and gait analysis lab (2012- 2015)	Oct. 2004- Dic.2015

### **5. Certifications or professional registrations (N/A)**

### **6. Current membership in professional organizations (N/A)**

### **7. Honors and awards**

Award “Outstanding Academic Work 2007-2008” conferred by USB.  
Award “Fernando Fernandez”, Excellence in Extension 2006-2009, conferred by USB  
Award “Antonio Jose de Sucre”, Excellence in Education 2003-2005, conferred by USB  
Professor’ s Association.  
Mention of Honor to the Doctoral Thesis  
Award for Excellence in Education. PDVSA: "Best Lecture performance 1996-1997".  
Award “Outstanding Academic Work” , USB, 1995-1996  
CUM LAUDE, B.Sc Diploma Mechanical Engineer.  
Scholarship for Academic Merit granted by LAGOVEN S.A.

### **8. Service activities (within and outside of the institution)**

Member of the College Curriculum Committee (Fall 2021 – ongoing)  
Member of Department award Committee.  
CEC award committee (Spring 2020- Summer 2020).  
Department Curriculum Committee (Fall 2019 – ongoing)

Teaching evaluation committee (Spring 2019 - Spring 2020).  
Several Search committees for Tenure and teaching Track Faculty Positions  
Mechanical Engineering Department ABET committee.  
Scientific Committee member “V Annual Engineering Congress ASME USB 2007 and 2008”  
President of the Scientific Committee, and editor of the proceedings IV Congreso Latinoamericano de Bioingeniería, Margarita Venezuela, CLAIB, September 2007.  
Scientific Committee member “VI Congreso Nac. de Ing. Mecánica 2006,” VI CONIM 2006.  
Scientific Committee member “II Int. Conference on Computational Bioengineering, ICCB2005.  
Scientific Committee member “V Annual Engineering Congress ASME USB 2005.” May 2005  
Organization of technical session at the V Annual Engineering Congress ASME USB 2005.  
Organization of the International Conference of Numerical Method and Applied Science (CIMENICS2002) , 19- 12 April 2002, at USB, Caracas Venezuela.  
Organization of technical session at the European Congress on computational Methods in Applied Sciences and Engineering ECCOMAS2000, 10-14 Sept. 2000, Barcelona, España

**9. Briefly list the most important publications and presentations from the past five years**

Müller-Karger, C.M. “Teaching core engineering courses, Statics and Dynamics, considering different types of learners”. American Society of Engineering education, ASEE 2022  
Müller-Karger, C.M., Steiner L. “Dynamics Online Course: A Challenge content delivered with best teaching practices keeps students engaged”. American Society of Engineering education, ASEE 2020  
Wagner E, Russell I., Muller-Karger C.M., Requejo P. S., Rodgers M.M, Flashner, and. McNitt-Gray J.L, “An approach for characterizing complex multiplanar upper extremity motion through parsed angular velocity vector components”, 40st Annual Meeting of the American Society of Biomechanics (ASB) Raleigh NC, 2016.  
Wagner E, Brown K., Muller-Karger C.M., Flashner H, and McNitt-Gray J.L “Dual-Quaternion Analysis of Shoulder and Upper-Extremity Motion for Calculation of Angular Velocity Joint Axis” World Congress of Biomechanics, Boston USA, July 6-11 2014.  
Müller-Karger, C.M.; Wagner E.; Maneekomkunwong Somsoon; Brown K.; Flashner H.; Russel I.; Requejo P.; McNitt-Gray J.. "Representation of shoulder kinematics during multiplane tasks performed by manual wheelchair users". Podium. XXIV Congress of the International Society of Biomechanics Natal, Brasil. August 2013.

**10. Briefly list the most recent professional development activities**

Workshop Hybrid course design, Fall 2021  
Participation in the Teaching Professor Conference, June 2021, Virtual On-Line (summer 2021)  
Diversity Advocate (spring 2021)  
Launch and learn Online (spring, summer, fall 2020, spring 2021 7 sessions)  
Teaching with LAs: Designing Group-worthy Activity. (Spring 2021)  
Effectiveness Academic Assessment Workshop, (spring 2020)  
What is the Future of the Statics and Dynamics course in Engineering Education (McGraw Hill workshop) (spring 2021)  
Data Exploration and Application Submission Working Together (spring 2021)  
Participation in the ASEE conference 2020, Jun 22 to Jun 26 , 2020, Virtual On -line.  
Participation in the QS Reimagine Education Conference, 2-11 December 2020, Virtual On-Line  
LA Research Symposium and/or International LA Conference ( FALL 2019), 3 days  
Participation in the ASEE conference 2019, attendance 3 days conference, Tampa,FL  
Bystander Leadership workshop (spring 2019)  
STRIDE workshop (Fall 2019)