

**Curriculum Vita**  
**Fariba Bigdeli-Jahed**  
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**Education, Professional Preparation:**

Intern: *Council on Postsecondary Education (CPE)*, 2009 Leadership Education: *Leadership Kentucky*, class of 2003

*The Aspen Institute; Wye Faculty Seminar on Citizenship in the American and Global polity*, 2018

Postdoctoral Education, *Management Development Program (MDP)*, Harvard University 2001

Ph.D., Mathematics, Thesis: *Regular triangulations of convex polytopes and d-cubes*

Directed by Professor Carl W. Lee, University of Kentucky 1991

MA, Mathematics, University of Kentucky, 1985

BS, Mathematics, University of Kentucky, 1980

**Appointments:**

Chairperson, Division of Mathematics and Sciences, Kentucky State University, 1999-2018

Associate Professor, Division of Mathematics and Sciences, Kentucky State University, 1997-

2023, Division of Mathematics and Sciences, Kentucky State University, 1991-1997 Visiting

Assistant Professor, Shahid Beheshti (National University of Iran), Tehran, Iran.

**Selected Publications and Presentations:**

*“Improving Student Learning and Teacher Content Knowledge in Middle School Mathematics”*  
Improving Educator Quality State Grant Program Conference, Bigdeli, et al, 2006

*“Improving Teacher Mathematics Content and Pedagogical Knowledge through Engagement with Connected Mathematics Curriculum”* Teacher Quality Summit, Bigdeli, et al, 2005

*“NSF Teams Enhancing Access for Minorities in Sciences (TEAMS)”*, Bigdeli, et al published in Proc. Of Pathway to Changes 2002 Conference, Washington D.C.

*“Placing the d-Cube in Lexicographic Order”*, published in Proc. of the 26<sup>th</sup> Annual Iranian Mathematics Conference, Iran, 28-31, 1995

*“Pulling Triangulations of the d-Cube”*, presented to the Ninth Annual Symposium in Mathematical, Statistical and Computer Sciences, March 5, 1993

Research Scholar and Consultant, *Center for Applied Energy Research, University of Kentucky*  
Mathematical Modeling for Fischer-Tropsch Synthesis, 1993-1994

*“Regular Triangulations of Convex Polytopes and d-Cubes”*, Doctoral Dissertation. University Of Kentucky, 1991

**Teaching Experience:**

*Division of Mathematics & Sciences, Kentucky State University*

Contemporary Mathematics, College Algebra, Precalculus, Calculus I, Calculus II, Multivariate Calculus, Introduction to Advanced Mathematics, Introduction to Linear Algebra, Complex Variables, Mathematical Programming, Numerical Analysis, Modern Algebra I&II, Real Analysis

Visiting Professor, *College of Mathematical Sciences, Shahid Beheshti (National) University, Tehran, Iran*

Discrete Mathematics and Linear Programming

**Grants:**

Co-PI, *Preparing the pipeline of next generation STEM Professionals*, Implementation project, National Science Foundation, \$1,250,000, 2020-2023

PI, *Scaling the Co-requisite Education*, Kentucky Council on Postsecondary Education, submitted collaboratively with English Department, \$50,000, 2018.

*Accelerated Mathematics*, Kentucky Council on Postsecondary Education, \$20,000, 2016.

*Developmental Education Acceleration Model*, Kentucky Council on Postsecondary Education, \$11,500,

2014-2015.

Center for Mathematics Achievement “Regional Coordinator” grant (\$30,000), 2006-2007; (\$69,600), 2007-2008; (\$68,820), 2008-2009; (\$68,000), 2009-2010; (\$68,000), 2010-2011; (\$66,560), 2011-2012; (\$69,370) 2012-2013, (\$69,370) 2013-2014, (\$72,535) 2014-2015, 2015-2016 (\$72,535), 2016-2017 (\$72,000).

PI, *Enhance Assessment and Placement Efforts at Kentucky’s Public Postsecondary Institutions*, \$25,000 mini-grant funded by Kentucky Council on Postsecondary Education, 2010

COPI, *Improving Student learning and Teachers’ Content Knowledge in Middle school Mathematics* partnership project with the college of Education at University of Louisville, funded by USDE, \$142,000 July 1, 2006 – June 30, 2007

KSU’S PI, *Appalachian Mathematics and Sciences Partnership (AMSP)*, a five year \$22 million partnership project with eleven Kentucky Institutions of Higher Education and fifty two school districts, funded by NSF, \$95,000/year, 2002-2007

Project Manager, *Enhancing Student Learning Experiences in Mathematics and Sciences Instructional Laboratories, Title III*, funded by U.S. Department of Education, total of \$442,000, 2001 – 2006

Project Manager *Technological Enhancement of instruction in Mathematics and Sciences, Title III*, funded by U.S. Department of Education, \$60,000, 2000-2001.

### **Professional Development of P-12 Mathematics Teachers:**

Supervise the Mathematics Intervention leader and the Regional coordinator for the *Center for Mathematics Achievement “Regional Coordinator”* grant since 2006.

Mathematics Consultant, *Improving Student learning and Teachers’ Content Knowledge in Middle school Mathematics*, a partnership project with the college of Education at University of Louisville, July 1, 2006 – June 30, 2007

Workshop Facilitator, AMSP (Appalachian Mathematics and Sciences Partnership); Transition into Algebra, Eastern Kentucky University, 2005

### **Synergistic Activities:**

KSU representative on CPE’s Quantitative Reasoning Workgroup

KSU representative for developing statewide student learning outcomes for quantitative reasoning Member CMA (Committee on Mathematics Achievement)

Member, CPE/STEM (Council on Postsecondary Education/Science, Technology, Engineering & Mathematics) Taskforce

Chair, CPE/STEM Taskforce Study Group for Recommendation 5

STEM Content Representative, EPSB Committee to Develop Guidelines for Approval of the Redesigned Master’s Degree Programs for Rank Change

Member of Appalachian Mathematics and Science Partnership (AMSP) Management Team and the AMSP’s Local PI at KSU

Facilitator for the AMSP Transition into Algebra workshop at Eastern Kentucky University

Curriculum Reform Coordinator for KSU’s Teams Enhancing Access for Minorities in Sciences (TEAMS) project funded by NSF

Member of the Statewide Advisory Board for Mathematics Achievement

Member of Council on Postsecondary Education’s Mathematics Placement Policy Group

Participated in Governor’s Literacy Summit, KY

Mentor for U.S. Department of Labor, Women’s Bureau, (GEM-SET) Program

Member of the Committee on Education and Leadership, Governor’s Task Force on Economic Status of Kentucky Women

Member of the Executive Committee, Kentucky Women in Mathematics, Sciences, Technology and Engineering (KY WISMET) Alliance

Member of CPE/KDE Mathematics Alignment Team

Member of Kentucky Public Universities Mathematics Chairs Advisory Board

Participated in American Diploma Project

**Review Panels:**

Review Panelist, NSF's Mathematics and Science Partnership (MSP) grants

Judge, Intel ISEF Kentucky Science and Engineering Fair, Eastern Kentucky University Review

Panelist, Online Review, U.S. Department of Education, Higher Education Program Review

Panelist, CPE Eisenhower Professional Development Grant Proposal

Judge, Intel ISEF International Science and Engineering Fair, Louisville, KY