

2014 FIRST® LEGO® LEAGUE CHAMPIONSHIP TOURNAMENT JUDGES

FLL CHAMPIONSHIP TOURNAMENT JUDGE ADVISOR

Kim McDonald, IPFW, Associate Dean, College of Engineering, Technology & Computer Science and Professor of Organizational Leadership and Supervision

B.A.C. Communication, Bowling Green State University

M.A. Communication, University of South Florida

Ed.D. Adult & Community Education, Ball State University

Dr. McDonald has been a faculty member at IPFW for over twenty years. She is the associate dean for the College of ETCS. Prior to this appointment, she was chair of the Division of Organizational Leadership & Supervision. She has taught a variety of leadership courses at both the graduate and undergraduate level. Her research focuses primarily on career development issues. Currently she is serving as Editor-in-Chief for the academic journal, *Advances in Developing Human Resources*. 2014 marks her 11th year in judging.

PROJECT PRESENTATION JUDGES

FLL Championship Lead Project Presentation Judge

Chris Douse, First-Year Experience Coordinator, Indiana Tech

B.A. Communication, IPFW

M.S.M., Indiana Wesleyan University

This is Mr. Douse's 12th year as a judge and his 10th year as Lead Judge in the project category.

Scott Armstrong, Management consultant

B.A. Physics, William Jewell College

M.S. Physics, University of Missouri

Ph.D. Optical Engineering, University of Rochester

Dr. Armstrong has spent his 33 year career in advanced product development for space based electro-optical and rf/microwave sensor systems. He is retired from ITT where he held leadership positions in space systems engineering, program management and business development. Earlier in his career, he held a number of engineering management positions in the US government, at The Aerospace Corporation and Aerojet Electronic System Division in Los Angeles where he and his family lived for 17 years. Dr. Armstrong has been involved in every aspect of product development including concept development, systems engineering, design, integration and test as well as user support. Dr. Armstrong has been involved with FLL for 14 years and this is his 12th year as a judge.

Anna Baer, Construction Estimator, Blundall Associates, Inc.

B.S. Construction Engineering Technology, IPFW

A.S. Architectural Engineering Technology, IPFW

Ms. Baer is a construction estimator with Blundall Associates, Inc in Fort Wayne, IN. Since starting at Blundall in 2009, she has worked on all types of projects, including commercial, government, and educational, to assist in determining the cost of projects before they go out to bid. Ms. Baer is involved with the Society of Women Engineers Northeast Indiana and has served as President and Outreach Chair. She has volunteered at the Championship Tournament since 2006.

Michael Columbia, IPFW, Associate Professor, Department of Chemistry

B.S. Chemistry, Indiana University South Bend

Ph.D. Analytical Chemistry, Iowa State University

Dr. Columbia has taught courses in general chemistry and analytical chemistry at IPFW for 21 years. His research projects have probed chemistry at solid surfaces with emphasis on catalysis and electrodeposition. He is also interested in developing new laboratory experiences for introductory courses that expand the uses of digital data acquisition and demonstrate the role chemistry plays in producing color in works of art. Dr. Columbia also serves as the Judge Coordinator of the Northeast Indiana Regional Science and Engineering Fair. This is Dr. Columbia's eighth year as a FLL judge.

Gary R. Dostal, Retired – Verizon Manager of Employee Communications
B.S., M.A, ABD Journalism & Communications, University of Minnesota

Mr. Dostal is a Verizon retiree with twenty-five years as a public affairs professional with managerial experience in both public relations, lobbying and employee communications. Since retiring Mr. Dostal has taught at the University of Saint Francis and Ivy Tech Community College. Prior to his telecommunications career, he taught for thirteen years in higher education at the University of Wisconsin - River Falls, St. Cloud State University and Normandale Community College where he also was the Director of Forensics and coached several award winning speech teams. This is Mr. Dostal's 12th year as a judge in the project category.

John McGauley, Court Executive, Allen County Superior Court
B.S. Journalism, Ball State University

Mr. McGauley has served as Court Executive for Allen Superior Court since August 2014. The court executive is the chief administrative officer of the Allen Superior Court, directing all administrative functions of the Court, including court operations, public information, budget, and personnel matters. He previously served two terms as Allen County Recorder. A former journalist, he has written about science and technology for Fort Wayne Monthly, The Fort Wayne News-Sentinel, Florida Today, Air & Space Magazine and Space.com. This will be his 10th year as a judge in the project category.

Rick Malecki, Owner and Principal, Team Global LLC

Mr. Malecki worked for Navistar in Engineering and Product Development for almost 27 years. Prior to that, he worked at Magnavox Industrial, Hurco CNC and Tokheim Corporation. His Engineering and Product Development experience spans Products and Processes from Commercial Heavy Trucks to Heavily Armored Military Vehicles, to software development for CNC machine tools thru gas station dispensing and high tech metering equipment, our nation's first credit card gas station, thru automotive, agricultural and construction systems and including heavy sisters to embedded controller hardware and software development systems. Mr. Malecki has worked with and led Global Teams and is the Owner and Principal of Team Global LLC.

Paresh Mishra, Assistant Professor, IPFW Division of Organizational Leadership and Supervision
Ph.D. Indiana University, Bloomington

Dr. Mishra is an Assistant Professor in the Division of Organizational Leadership and Supervision of IPFW. He earned his Ph.D. from Indiana University, Bloomington. His research examines the role of emotions in management and leadership. He has worked in the corporate sector at Tata Motors, India (the largest automobile company of India) for close to 5 years. He has also worked with children of various age groups for about 8 years.

John Renie, Associate Professor of Mechanical Engineering at Indiana Tech; Adjunct Professor in Mechanical Engineering at IPFW; Adjunct Professor in Math and Science at IVY Tech; Automotive Driveline Consultant
BSAE, MS, Ph.D., Purdue University

Dr. Renie studied aerospace engineering at Purdue University majoring in the area of thermal sciences in general and rocket propulsion in particular. During the period of time between 1984 and 1995, he taught at the University of Illinois and Indiana University Purdue University Fort Wayne (IPFW).

In 1995, he left the academic environment to work for the Spicer Outdoor Power Equipment Components Division of Dana Corporation located in Fort Wayne, IN. His primary responsibility at Dana was as Lab Manager, with responsibility for conducting quality assurance and product durability tests on drive train components involved in leisure and utility vehicles. He also had the responsibility of conducting finite element analysis on drive train components as well as NVH measurements. He was employed until 2008 by Torque Traction Technologies, Inc., Dana Corporation, Maumee, Ohio. He is a past member of the Fort Wayne chapter of the Society of Automotive Engineers (SAE) serving as their Chairman for one year and as a Governing Board member. He has participated in FLL since 2000 and has also served as a judge for the Northeast Indiana Regional Science and Engineering Fair. Since 2008, Dr. Renie has returned to academia, currently as an Associate Professor of Mechanical Engineering at Indiana Tech. His major focus is teaching in the thermal sciences and energy engineering area.

Mary K. Ross, Field Preceptor, Indiana University School of Social Work, University of St. Francis
BSW, MSW, LCSW

Mary K. Ross, MSW, LCSW has been involved in *FIRST LEGO* League as a judge since 2010 for both Project and Finalist judging. Ms. Ross also participates as a judge for Indiana Future City and the Northeast Indiana Science and Engineering Fair. Ms. Ross has been a clinical social worker 28+ years with youth and families, medical and psychiatric social work in HIV and cancer, and youth education projects. She currently works for the Indiana University School of Social Work as liaison and field supervision faculty for the IUSW-Fort Wayne MSW program.

ROBOT DESIGN JUDGES

FLL Championship Lead Robot Design Judge

Edward M. DeWitt, Senior Test Engineer at Franklin Electric and Associate Faculty at IPFW
B.S.M.E. and M.B.A. from IPFW

Mr. DeWitt has been involved in the testing arena for 20 years, working on validating designs of pumps, AC/DC motors, and commercial vehicles. He has a commercial driver's license, and holds a patent for instrumented testing of vehicle steering systems. He is a former chairman of two subcommittees in the Society of Automotive Engineers Truck and Bus organization. He has published papers through SAE and the Midwest Business Administration Association. In addition to his employment at Franklin Electric, Mr. DeWitt teaches an Electrical and Computer Engineering Technology class at IPFW focusing on instrumentation, data acquisition, and data analysis. He teaches his students the LabVIEW programming language, uses it at Franklin Electric, is a Certified LabVIEW Associate Developer, and co-founded a local user's group based on the language. He is also a co-founder of FortLUG, the user group for adult fans of LEGO in the Fort Wayne area. This is his seventh year judging at the Championship level.

Kitty Bellis, Coach Consultant and NXT/EV3 Instructor
B.S. Computer Science, Athens State College, Athens, AL

As the former coach of the award winning team ZBOTs from 2005-2008, Ms. Bellis has continued to support FLL activities as the coach clinic instructor and demonstrator at Brickworld. She has helped with Science Central Regional, IUN Regional, and the Indiana Championship Tournaments for the past six years. Ms. Bellis has also worked on curriculum for Science Central's Advanced NXT Summer Camp, Saturday Morning FLL mini-camp with the Indianapolis Children's Museum, and a guest speaker with the Starbase program. Ms. Bellis is currently working with Allen County 4-H program as the leader of the 4-H Robotics club.

Anamarie Crone, Electrical Engineer, SB Microsystems
B.S. Computer Engineering, Indiana Tech

Ms. Crone is an Electrical Engineer at SB Microsystems located in the Northeast Indiana Innovation Center nearby IPFW. Her activities are currently working on her own Lego Mindstorms robot as well as hosting workshops for

applying wearable electronics to clothing at Tekventure and the Allen County Public Library. She graduated from Indiana Tech with a bachelor's in Computer Engineering.

Jaydip Desai, Ph.D. Assistant Professor of Biomedical Engineering, Indiana Institute of Technology, Fort Wayne, IN M.E. and Ph.D. Biomedical Engineering, Stevens Institute of Technology, Hoboken, NJ
Graduate Certificate - Robotics & Control, Mechanical Engineering, Stevens Institute of Technology, Hoboken, NJ
B.Tech Biomedical & Instrumentation Engineering, U.V. Patel College of Engineering, Kherva, Gujarat, India.

Dr. Desai is an Assistant Professor of Biomedical Engineering at Indiana Institute of Technology. Dr. Desai's research interests include Biorobotics, Bioinstrumentation and Human-Machine Interface. Recently, he has started a Human-Machine Interface laboratory at Indiana Tech. He teaches Biomedical Instrumentation, Biokinematics, Biosimulation, Computer Programming for Engineers, Computer Integrated Manufacturing, Thermodynamics & Fluids and BME Senior Project I&II at Indiana Tech. He recently served as a reviewer for Neural Engineering, Biomechanics and Device Technology & Biomedical Robotics tracks in Biomedical Engineering Society (BMES) Annual Meeting 2014.

Michael Dobbs, Director of Engineering, SB Microsystems

Mr. Dobbs is the Director of Engineering at SB Microsystems. SB specializes in the development of very small very smart devices for medical research, medical care, as well as automotive, space and other industries. The team includes molecular biologist, electrical, mechanical, software and semiconductor engineers.

Wayne Doenges, 3D Draftsman, Parker Hannifin
Associate degree, Mechanical Design

Mr. Doenges currently works for Parker Hannifin in Hicksville as a 3D Draftsman using Pro/E and Inventor. He is a retired sergeant in the U.S. Air Force. Mr. Doenges has been a mechanical engineering mentor for FRC Team 535 and now FRC Team 1501 for 14 years.

Michael Kanning, Medical Protective
B.S., Electrical Engineering, Purdue Fort Wayne
M.B.A., Indiana University Fort Wayne

Michael Kanning received his B.S. in Electrical Engineering from Purdue University in Fort Wayne in 1992, and his M.B.A. from Indiana University in Fort Wayne in 1999. Mr. Kanning has more than 25 years of IT experience and a wealth of leadership expertise. He has served as IT Director at several Fort Wayne companies and presently works as a Project Manager at Medical Protective. His volunteer experience includes founding President of Young Leaders of Northeast Indiana and he is currently the President of the IPFW Alumni Association.

Andrea Mitofsky, Trine University, Assistant Professor, Electrical and Computer Engineering
B.S., M.S., and Ph.D. Electrical Engineering, University of Illinois at Urbana-Champaign

Ms. Mitofsky is currently an Assistant Professor in the Electrical and Computer Engineering department at Trine University in Angola Indiana. She has been at Trine University since 2008.

Les Turner, Assistant Executive Director/Director of Technology, Northern Indiana Educational Service Center

Mr. Turner is a veteran of the US Navy (Guided Missile Weapon Systems) and currently provides technology planning, training and consulting services to 32 school districts. He has been involved in FLL since 2000. Teams under his direction have won three Indiana Championships, multiple robot design and robot performance awards, and a World Festival Gracious Professionalism award. Although retired from coaching, he continues to provide coaches workshops and guidance for teams throughout Northern Indiana.

CORE VALUES JUDGES

FLL Championship Team Work Head Judge

David Brumm, Retired Teacher, Fort Wayne Community Schools
B.S. Psychology, United States Air Force Academy
Meteorology major, San Jose State University
M.S. Education, IPFW, Fort Wayne

Mr. Brumm was a teacher at South Side High School in Mathematics, General Science, Computer Science, Government, International Baccalaureate Theory of Knowledge, and the Technology Coordinator 1985-2006. From 1983-1986, he taught at Memorial Park Middle School in the areas of Mathematics, Science, Physical Education, and Home Economics. In addition, Mr. Brumm founded South Side's FIRST Robotics team in 2001. Mr. Brumm has worked with the VEX Robotics Summer Exploration Camp at IPFW for four years. This is his 11th year volunteering as a tournament judge. In retirement, he works with ACRES Land Trust to protect and preserve nature in a tri-state area.

Debra Barrick, Director, IPFW Academic Internships & Cooperative Education

Darlene Markovich, FRC Mentor & Former FLL Coach
B.S. Computer Information Systems Analyst and Design, Purdue

Currently working at home, Ms. Markovich has been involved with FIRST, going on twelve years. She was a School Sponsor for the Munster Lego League for nine years and ran several FLL teams. Her team won three Champions Awards at the Indiana Championship Competition. Ms. Markovich is currently a mentor for the third year year with the FIRST FRC Team 71.

She has been a volunteer for FLL IUN Regional Competition as a Core Values Judge and Robot Design Judge; FLL State Championship as a Core Value judge and also volunteered at the FRC Midwest Regional Competition and FTC IUN regional tournament.

Freya Berntson, School and Public Programs Manager at Science Central

LaTheresa King, Curriculum Coordinator, Fort Wayne Community Schools
B.S., Biology, Kentucky State University M.B.A., Nova Southeastern University

Ms. King is native of Fort Wayne, Indiana. She graduated from Riley Nelson Snider High School. Ms. King attended Nova Southeastern University where she received her MBA and is currently finishing work on her Education Specialist degree in Educational Leadership. Ms. King is a Curriculum Coordinator for Science, Social Studies, PE, Health and Related Arts PreK - 12 at Fort Wayne Community Schools. Prior to relocating back to Fort Wayne in 2013, she was a School Improvement Specialist with the Florida Department of Education Region 4 Team.

Sharon Parnin, IPFW Continuing Lecturer, College of Education and Public Policy

Ms. Parnin moved to Fort Wayne, IN to open Science Central and her first office was in a construction trailer! Currently, she is a continuing lecturer in the College of Education and Public Policy teaching science education courses. Ms. Parnin's doctoral program was completed at Ball State University in science education.

Richard Slayback, P.E., Owner, Civil Engineering Services, Fort Wayne
B.S. Civil Engineering, University of Illinois

Mr. Slayback is a registered Professional Engineer in Illinois, Indiana and Ohio and does civil engineering design work for land development projects. He has been a member of the NE Indiana Engineers Week Committee since 1977, and is a founding member/judge of the Student Design Bridge Competition for both High School and Junior High School

Students. Mr. Slayback was also an Engineer Mentor for the Future City Competition from 2001-2010 and is currently a committee member for the Indiana Regional Competition at IPFW.

Mr. Slayback is the owner of Civil Engineering Services, established in 1984. His company provides contract design services to many firms and individuals covering the gamut of needs for land development of commercial, industrial and residential projects. He is a long standing member of the Indiana Society of Professional Engineers and the American Society of Civil Engineers, as well as being a member of the International Association of Lions Clubs. He is the Chairman of the Lions District Youth Services and Co-Advisor to the Leo Club "Students Sharing Hearts".

Jenny Young, Education Director, Science Central
B.S. Biology, Indiana University-Purdue University Fort Wayne (IPFW)

Ms. Young is the Education Director at Science Central and has worked at Science Central since 1996. She is Science Central's Regional Tournament Director for *FIRST*®*LEGO*® League and a self-professed total science nerd.

AGAINST ALL ODDS

Art Friedel, Professor Emeritus, Chemistry, IPFW
B.S. and M.S. Chemistry Education, University of Pittsburgh
Ph.D., Science Education, Ohio State University

Dr. Friedel taught general chemistry, methods of science teaching, and supervised student teachers of science in middle and high school since his arrival at IPFW in 1967. Although recently retired, Dr. Friedel continues to be active with many IPFW organizations. He was the Director of the Northeast Regional Science and Engineering for 20 years and serves on the Advisory Committee. Dr. Friedel has been a judge for the FLL tournament since 2003.

Adam Renie, Engineer, Attero Tech, LLC
B.S. Computer Engineering, Purdue University

Mr. Renie is currently a hardware design engineer at Attero Tech, LLC in Fort Wayne. He has worked at Attero Tech since 2007 and became a part owner in 2011. He graduated from Purdue University in 2007 with a B.S. in computer engineering.