

Biographical Sketch
William H. Jaco
Oklahoma State University
The Initiative for Mathematics Learning By Inquiry

William “Bus” Jaco is Regents Professor and Grayce B. Kerr Chair, Department of Mathematics, Oklahoma State University and Executive Director of the Initiative for Mathematics Learning by Inquiry. He holds degrees from Fairmont State University (B.A. *magna cum laude*), Penn State University (M.A.), and University of Wisconsin-Madison (Ph.D.). He held faculty positions at University of Michigan and Rice University before joining the faculty at Oklahoma State University as Head in 1982. He has been a member of the Institute for Advanced Study (Princeton, NJ), The Mathematical Sciences Research Institute (Berkeley, CA), and the American Institute of Mathematics (Palo Alto, CA). He is a Fellow of the American Mathematical Society, a Fellow of the American Association for the Advancement of Science, an Honorary Life Member of the American Mathematical Society, an Honorary Associate Member of the Moscow Mathematical Society and received Honorary Recognition for Service to St. Petersburg and Russian Mathematics and Mathematicians. He was recognized as the 2017 Eminent Faculty Member at Oklahoma State University, as an outstanding alumnus of Fairmont State University, and recently held the Lois and Fred Gehring Distinguished Visitor Chair at University of Michigan. He served as Head, Department of Mathematics at OSU, 1982-87, as Executive Director and CEO of the American Mathematical Society (Providence, RI), 1988-95, and again became Head of Mathematics at OSU, 2011-2018. He served as Chair-elect, Chair, and Retiring Chair of the Mathematics Section of the American Association for the Advancement of Science, serves on the Advisory Board of the American Institute of Mathematics, served on the Board of Mathematical Sciences at the National Research Council/National Academy of Sciences, served on the Joint Policy Board for Mathematics, and was an elected member of the Board of Trustees of the American Mathematical Society serving as Chair of the Board of Trustees, 2014-15. His mathematical research is in Geometry and Topology where he studies low-dimensional manifolds, decision problems, algorithms, and complexity theory. He is best known for the Jaco-Shalen-Johannson (JSJ) Decomposition Theorem, his work on normal surfaces, and the co-discovery of efficient triangulations. He has published over 60 refereed research papers and 2 books; he has given over 300 plenary lectures worldwide. More recently he has participated as a group leader with the OSRHE Math Success Group, as co-Chair of the Oklahoma Math Pathways to Completion Project, on the Steering Committee of the Oklahoma Corequisite at Scale Project, a member of the Steering Committee of the Oklahoma Math Task

Force, as a Table Leader and coauthor of the report for the INGenlouS Project: *Mathematical Preparation of the Future Work Force*, a member of the Advisory Committee for the MAA CoMInDS Project, and as an invited participant of the Workshop on Transforming Postsecondary Education of Mathematics. He currently is PI on an NSF/DMS Grant “Embedded and Immersed Surfaces in Three-dimensional Topology” and an NSF-DUE Grant on the Mathematics Inquiry Project. He is co-PI on “Oklahoma – LSAMP Program for Doctoral Studies in the Mathematical Sciences” and CoPI on “Mathematics Resource Centers Collaborative Workshops.” In 2016 he assumed the position as the first Executive Director of the public nonprofit organization The Initiative for Mathematics Learning by Inquiry where he serves as PI on and NSF-DUE Grant “On the Strategic Direction for Mathematics Learning by Inquiry,” and co-PI on 100Kin10 Grant on Inquiry Teachers’ Circles.