Curriculum Vitae

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Education

- Ph.D. in Mathematics, University of Illinois at Urbana-Champaign, 1984. Area of specialization: Functional Analysis; specifically, the Geometry of Banach Spaces.

- A.M. in Statistics, University of Illinois at Urbana-Champaign, 1983.

- B.S. in Physics, University of Illinois at Urbana-Champaign, 1969.

Employment History

- Deputy Director, Mathematical Sciences Research Institute at Berkeley, July 2002–present. Position held while on leave from University of Michigan.

- Professor of Mathematics, University of Michigan at Ann Arbor, 2000–present. Associate Professor, 1992–2000. Tenured, 1994.

- Associate Professor of Mathematics, Eastern Illinois University, 1986–1992. Assistant Professor, 1983–1986. Tenured, 1987; early tenure was awarded.

- Teaching Assistant, Department of Mathematics, University of Illinois at Urbana-Champaign, most semesters, 1978–1983; four semesters of fellowship and research assistantships during this period.

- Computer Systems Software Specialist, Roper Corporation, Kankakee, Illinois, 1969–1977.

- Computer consultant for various organizations, 1969–1977.

Recent Honors and Awards

- Selected for inclusion in the book *100 Native Americans Who Shaped American History* by Bonnie Juettner, Bluewood Books, 2002.

- Named to Native American Science and Engineering Wall of Fame, maintained at Southwest Indian Polytechnic Institute in Albuquerque, NM, 2001.

- University of Michigan Harold R. Johnson Diversity Service Award, 2000.

- American Indian Science and Engineering Society's Ely S. Parker Award, 1999. This is a lifetime achievement award given each year to one person for professional achievement and service to the Native American community.

- University of Michigan Regents' Award for Distinguished Public Service, 1999.

- Featured University of Illinois alumnus, November/December 1999 *Illinois Alumni Magazine*. (*A mathematician against the odds*, by Scott Spilky, vol. 12, no. 3, pp. 36–38.)

- U.S. Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, awarded at a White House ceremony, 11 September 1997.

- University of Michigan College of Literature, Science, and Arts Excellence in Education Awards, 1994, 1997, 2000. These are currently given to about 3% of the LS&A faculty each year.

Positions with Professional and National Organizations and Institutions

- Nominee for President, Mathematical Association of America, 1999.

- Nominee for First Vice President, Mathematical Association of America, 1997.

- Member, Board of Trustees, Mathematical Sciences Research Institute at Berkeley, 1997–1999 and 2000-2002.

- Member, Building Committee, Mathematical Sciences Research Institute at Berkeley, 2000—2002.

- Chair, Human Resources Advisory Committee, Mathematical Sciences Research Institute at Berkeley, 1997–1999; member of the committee, 1994–1999.

- Chair, Coordinating Council on Human Resources, Mathematical Association of America, 1997–present; member of the committee, 1995–present.

- Chair, Gung-Hu Prize Committee, Mathematical Association of America, 2001-2004.

- Chair, Committee on Trevor Evans Prizes, Mathematical Association of America, 1997; member of the committee, 1995–1998.

- Co-Chair, Committee on Minority Participation in Mathematics, Mathematical Association of America, 1995–2002; member of the committee, 1990–2002.

- Member, Committee on Committees, American Mathematical Society, 2000–2005.

- Member, Committee on Academic Freedom, Tenure, and Employment Security, American Mathematical Society, 1996–1999 and 2002–2005.

- Member of the following additional Mathematical Association of America committees: *Ad hoc* Committee on Calculus in High School (2003–present), Nominations Committee for the 2003 Elections, Program Committee for the 2003 Baltimore Winter Meeting, Program Committee for the 2002 Burlington Summer Mathfest, *Focus* and *MAA Online* Advisory Board (2002–05), *ad hoc* Committee on the Committee Chairs' Handbook (2002–present), President's Task Force on NCTM Standards (1996–2001), Program Committee for the 1999 Providence Summer Mathfest, Task Force on Member Services (1995–1999), *Math Horizons* Advisory Board (1992–1999), Task Force on SUMMA Activities (1996–1997), Program Committee for the 1996 Orlando Winter Meeting.

- Member, Advisory Board, Cardinal Stritch University Geometry Project, 2003–present.

- Consultant for the Mathematical Association of America's Project for New Experiences in Teaching (Project NExT), 1995–present.

- Member, Steering Committee for Project Kaleidoscope's Faculty for the 21st Century (F21), 1997; chair, F21 Task Force on Increasing Minority Participation, 1998; F21 member, 1996–present.

- Member, Advisory Board, Great Lakes Regional American Indian Network, 1996–2000.

- Member, Board of Directors, National PreFreshman Engineering Program, 1996–1999.

- Member, U.S. Bureau of Indian Affairs/Mathematical Association of America Collaborative Program Oversight Committee, 1994–1995.

- Member, Native American Oversight Committee, Oklahoma Native American Mathematics Educators and Students (ONAMES) Project, 1992–1996.

- Teller, American Mathematical Society, 1989–1992.

Recent Invited Talks (2000–2003)

- *Native American Mathematics,* Albert Turner Bharucha-Reid Lecture, National Association of Mathematicians Regional Faculty Conference on Research and Teaching Excellence, Mathematical Sciences Research Institute, Berkeley CA, 28 March 2003.

- *The Role of Minority-Oriented Professional Societies for Increasing the Diversity of Students in Mathematics,* AMS-MAA-MER Special Session on Mathematics and Education Reform, Joint Mathematics Meetings, Baltimore MD, 16 January 2003.

- *Expanding Your Research Horizons at MSRI,* Project NExT Special Session on Research, Joint Mathematics Meetings, Baltimore MD, 15 January 2003.

- *Why Change? Because We Must!,* invited talk at National Assembly of Project Kaleidoscope, Washington DC, 11 October 2002.

- *Co-Curricular and Curricular Opportunities with Student Departmental Clubs,* workshop presentation at the University of Michigan Provost's Seminar on Teaching, Ann Arbor MI, 1 May 2002.

- *Modern Native Americans in Mathematics and the Sciences,* invited talk at National Cathedral School, Washington DC, 27 February 2002.

- *Native American Mathematics,* university colloquium talk at Washington and Lee University, Richmond VA, 2 November 2001.

- *Graduate Study in Mathematics,* mathematics colloquium talk at Washington and Lee University, Richmond VA, 1 November 2001.

- *Aligning Goals, Methods, and Assessment in the UM Reformed Introductory Mathematics Program,* workshop presentation at the University of Michigan Provost's Seminar on Teaching, Ann Arbor MI, 31 October 2001.

- *Mathematics Reform at the University of Michigan,* hour address at the Society for Industrial and Applied Mathematics Great Lakes Section Fall Plenary Meeting held at Oakland University, Rochester MI, 13 October 2001.

- *Issues in the Implementation of a Reformed Precalculus Program,* workshop presentation at the NSF/Oswego University Rethinking Precalculus Workshop, Hilton Crystal City Hotel, Arlington VA, 5 October 2001.

- *An Old Nearest Point Problem in Hilbert Space,* keynote address at the Annual Mathematics Conference of the Syracuse University Department of Mathematics, sponsored by the Mathematics Graduate Organization, Syracuse NY, 30 March 2001.

- *Project ENACT: An MAA Program to Increase the Number of Native American Mathematics Teachers,* AMS-MAA-MER Special Session on Mathematics and Education Reform, Joint Mathematics Meetings, New Orleans LA, 11 January 2001.

- *The Michigan Reformed Calculus Program: How and Why We Do It,* mathematics colloquium talk at the University of Toledo, Toledo OH, 25 August 2000.

- *Teacher Development at the University of Michigan,* part of a panel presentation on "Developing Effective Teaching Assistants" at the Mathematical Association of America's MathFest 2000, Los Angeles CA, 4 August 2000.

- *University of Michigan Calculus Reform: Why and How We Did It,* part of a panel presentation at the Project NExT (New Experiences in Teaching) Workshop preceding the Mathematical Association of America's MathFest 2000, Los Angeles CA, 1 August 2000.

- *The Meaning of Leadership in Diverse Cultures,* presentation as Guest Leader for Michigan LeaderShape, Boyne City MI, 10 May 2000.

Partial Listing of Other Professional Activity

- Principal Investigator, $200,000 NSF grant to implement an electronic mathematics testing and skill building center at the University of Michigan, 2000–2003.

- One of three principal organizers for the 1999 Conference for African American Researchers in the Mathematical Sciences, held 22–25 June 1999 at the University of Michigan in Ann Arbor.

- Principal Investigator, Mathematical Association of America/American Indian Science and Engineering Society Project for Enhancing Mathematics/Science Faculty at Native American Tribal Colleges in the Use of Calculators and Technology, a $400,000 project funded in part by the National Science Foundation, Exxon Educational Foundation, and National Aeronautics and Space Administration.

- Frequent proposal and program reviewer for National Science Foundation programs, as well as programs of other organizations targeting the mathematics education of minorities.

- Frequent participant in planning and review sessions for the summer intervention programs of the American Indian Science and Engineering Society and the minority programs of the Mathematical Association of America.

- Frequent invited participant in meetings and programs relating to the mathematics education of minorities, including the joint National Academy of Sciences/Mathematical Sciences Education Board's *Making Mathematics Work for Minorities* convocation, 3–4 May 1990.

- Invited participant, Conversations with Scientists, National Conferences of the Society for the Advancement of Native Americans in Science, 2000, 2001, 2002, 2003.

Partial Listing of Teaching and Educational Activities

- Designer, director, and implementer of a reformed precalculus program at the University of Michigan emphasizing cooperative learning and other modern educational methods.

- Designer of the mathematics portion of many mathematics programs for precollege students and their teachers on the Turtle Mountain Chippewa Reservation in North Dakota, summers of 1992 through the present.

- Director of the University of Michigan Mathematics Laboratory, a walk-in tutoring service.

- Co-designer and co-instructor for a course in *Native American Experiences in the United States* taught through the University of Michigan Pilot Program during the winter term of 1994.

Partial Listing of University of Michigan Service Activities

- Member, Literature, Science, and Arts College Curriculum Committee, 1994–1997, 1998–2003.

- Member, Executive Committee of the Gayle Morris Sweetland Writing Center at the University of Michigan, 1999–2002.

- Faculty Advisor for the University of Michigan Student Chapter of the American Indian Science and Engineering Society, 1992–2002.

- Member, Mathematics Department Executive Committee, 1999–2001.

- Member, University of Michigan Native American Search Committee charged with making a "cluster hire" of five or more Native American faculty, 1999–2001.

- Member, University of Michigan Search Committee for Vice President of Student Affairs, 1999–2000.

- Member, Faculty Senate's Committee for a Multicultural University, 1996–1999.

- Member, University of Michigan Advisory Council for UM 21st Century Program, 1992–1999.

Other Interests and Personal Information

- I have had a lifelong interest in astronomy, and have even done a very small amount of professional work in the area in a project with Kenneth Yoss of the Astronomy Department of the University of Illinois at Urbana-Champaign. My part in the project was to verify the validity of a new statistical method used to estimate the distance to the Hyades star cluster. I still maintain my membership in the Astronomical Society of the Pacific.

- I am an avid mountain climber. My current project is to climb all of Colorado's Fourteeners, the fifty-six Colorado mountains with summit elevations over 14,000 feet. I am halfway there.

- I have been an opera singer, and sang for a number of years with the Illinois Opera Theatre.

Thesis and Recent Publications

- *Yueh-Gin Gung and Dr. Charles Y. Hu Award to Clarence F. Stephens for Distinguished Service to Mathematics,* Amer. Math. Monthly **110** (March 2003), no. 3, 177–180.

- *Some political and practical issues in implementing reform,* in *Rethinking the Road toward Calculus* (J. Narayan, ed.), MAA Notes volume, Mathematical Association of America, Washington, to appear.

- *College-based precollege intervention projects: A model for outreach to groups underrepresented in science and mathematics,* Journal of Public Service and Outreach **4** (Fall 1999), no. 2, 7–13.

- *An introduction to Banach space theory,* Graduate Texts in Mathematics 183, Springer-Verlag, 1998.

- *MISHI and Math Horizons,* Math Horizons **3** (Nov. 1995), no. 2, 26–28.

- *Mathematics reform and Native Americans,* MER Newsletter **8** (Fall 1995), no. 1, 4–5.

- *A gateway testing program at the University of Michigan,* in *Preparing for a New Calculus* (A.E. Solow, ed.), MAA Notes, vol. 36, Mathematical Association of America, Washington, 1994.

- Thesis: *The semi-Kadec-Klee condition and nearest-point properties of sets in normed linear spaces,* University of Illinois at Urbana-Champaign, 1984, directed by Mahlon M. Day.

Thesis Directed

- Karen A. Schlauch, M.A. 1991, Eastern Illinois University, *A comparative study of ancient mathematical and calendrical systems*.

Membership in Professional and Honorary Societies

- American Mathematical Society.

- Mathematical Association of America, life member.

- National Association of Mathematicians, life member.

- Association for Women in Mathematics.

- American Indian Science and Engineering Society, life member and Sequoyah Fellow.

- Society for the Advancement of Chicanos and Native Americans in Science, life member.

- Astronomical Society of the Pacific.

- Phi Kappa Phi academic honor society.

- Pi Mu Epsilon mathematics honor society.