



OFFICE OF THE PRESIDENT

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March 13, 2018

Dear Colleagues:

The 2018 Douglas R. Moore Faculty Research Lecture will be presented on Monday, April 23, 2018 at 7:00 P.M. In the Centennial Student Union Ostrander Auditorium by Dr. Kuldeep Agarwal. The lecture, "3D Printing and the Future of Health and Medicine" is the forty-fourth President's Faculty Research Lectureship to be presented and the twenty-ninth to be named in honor of our former president, Douglas R. Moore, who established the program at our University. Dr. Agarwal offers these words:

I am honored and humbled to join an esteemed group of scholars at MSU Mankato in giving the Douglas Moore lecture this year. I have spent my entire career working in the field of manufacturing and I am thrilled to bring this passion in front of everyone in talking about Additive Manufacturing (also called 3D printing). Using 3D printing, my research aims to find an alternative approach to develop materials for medical implants (knees, hips, etc.) that will improve their effectiveness and longevity.

Currently approximately 500,000 knee and 300,000 hip implants are performed in the US each year and are estimated to increase 8.3 percent annually through 2025. These implants often fail prematurely due to fracture, corrosion, tissue reaction, and wear.

The approach of our research group is to develop materials that will combine the mechanical performance of metals, such as cobalt chrome, with the biocompatibility of calcium phosphates. We are also working on prosthetic arms and their testing for individuals.

I strongly encourage my fellow colleagues and scholars to apply for Douglas Moore Scholarship this year.

I invite your application for the President's 2019 Douglas R. Moore Faculty Research Lectureship. This distinguished award offers a stipend of \$5,000 to honor the excellent research of a colleague within the Minnesota State University, Mankato community.

Application procedures for the award are attached. Former award recipients review the proposals and make recommendations to me. **Applications are due in the Office of the Provost by April 10, 2018. The 2019 award recipient will present his or her lecture at a spring 2019 formal meeting of the learning community on the University Campus.** I look forward to receiving applications for the 2019 Lectureship and to seeing you at Dr. Agarwal's presentation on April 23.

Sincerely,

A handwritten signature in blue ink that reads "Richard Davenport".

Richard Davenport
President

Douglas R. Moore 2019 Faculty Research Lectureship

I. Purpose

The purpose of the Douglas R. Moore Faculty Research Lectureship is to celebrate the joy and excitement of scholarly creativity. It honors a faculty member engaged in an activity demonstrating a quality of excellence in discovery, communicated in a way that enriches the intellectual life of the University community. The terms "research" and "lectureship" imply a great variety of scholarly projects, as well as diverse forms of presentation suitable for general audiences. Applications may relate to study in progress or to a new research topic.

II. Criteria for Selection

As a member of the Minnesota State University, Mankato community receiving this announcement, you are invited to apply for this award. Scholarly activity and research are defined as research conducted in the scientific laboratory, clinic, or field; original performances in staged settings; and studies or creative work that emanate from the studio, field, library, or other appropriate sources. The Project Proposal that you submit for the Douglas R. Moore Research Lectureship will be evaluated based on the following criteria:

- The proposed project is original and creative and expands the boundaries of scholarly activity in your field.
- The proposed project demonstrates your enthusiasm, insight, and devotion to knowledge and the creative process.
- The proposed project presents its insights in a way that will appeal both to the academic community and to the wider public.

III. Format

Applications must include an abstract identifying the project or problem, describing the method of research, explaining what has already been done, and identifying the medium or form of the presentation. The abstract should not exceed three single-spaced typewritten pages, and please provide your vita (not to exceed two pages) listing pertinent completed research. Additional supporting documents may also be submitted and should be listed in the text of the abstract. Members of the Selection Committee will interview all applicants. Applicants can anticipate addressing the following issues, among others:

- What is the nature of the proposal and its relevance to the intellectual or artistic context from which it is derived?
- What background of prior scholarship or creative activity can the applicant present in support of the project?
- What work has the applicant already completed on the project?
- What work remains to be completed by the applicant during the next year?
- What approaches will the applicant use to present the material to the audience?

Applications are due in the Office of the Provost by 4:30 P.M. on April 10, 2018. The 2019 award recipient will be announced in late spring 2018 or by Friday, May 4, 2018. The lecture will be presented at a spring 2019 formal meeting of the learning community on the University campus.

Douglas R. Moore Faculty Research Lectureship

Faculty Research Lecturers and Titles

1975	Charles Mundale (Political Science)	"The Trouble Within and The Trouble Without"
1976	Pearl Englund (Anthropology)	"Study of the Ewe People in Ghana"
1977	James Tanner and Robert Finkler (Art)	"Joint Project, Ceramic Sculpture by Tanner and Polymer Paintings by Finkler"
1978	Paul Goldstaub (Music)	Original Opera, "The Marriage Proposal"
1979	Mary Jo Meadow (Psychology)	"Religious Orientations and Personal Maturity"
1980	Peter Nash (Biology)	"Diet, Nutrition and Cancer Today"
1982	Hal Walberg (Philosophy)	A Play in Three Acts, "Nietzsche"
1983	Tony Filipovitch (Urban & Regional Studies)	"Streetsong: Children in the City"
1984	Suzanne Bunkers (English)	"Nineteenth Century Diaries, Journals, Letters and Memoirs: What Midwestern Women Were (Not) Saying"
1985	Branko Colakovic (Geography)	"Soviet Moslems: A Population Time Bomb?"
1986	Stewart Ross (Music)	"The History and Development of the Band March"
1987	Kathy Piehl (Library Faculty)	"Surviving the Flood"
1988	Steven Mercurio (Biology)	"Antidotes for a Chemical Environment"
1989	Lewis Croce (History)	"The American Presidency in its World Setting – 1789-1989"
1990	Donna Casella (English)	"In Search of Peace: A-Bomb Survivors' Perceptions of Nuclear War and Its Aftermath"
1991	Loretta Johnson (History)	"Memories of the Past: Accounts of Minnesota Shivarees"
1992	James Booker (Foreign Language) Diana Moxness (Music)	"Word and Music: Inseparable Elements in the Songs of Franz Schubert"
1993	William Lass (History)	"Mankato State: From Normal School to University" (Special 125th Anniversary)
1993	Allan Wiese (Political Science)	"Gambling at Jackpot Junction and Royal River Casinos"
1994	Jon Hakkila (Mathematics, Astronomy and Statistics)	"Gamma-Ray Bursts and the Milky Way: Old Paradigms Die Hard"
1995	Louisa Smith (English)	"A Day in Mankato Circa 1900 as Presented in Maud Hart Lovelace's Books"
1996	Richard Wintersteen (Social Work)	"Family Burden and the Needs of Mentally Ill Persons: A Cross-Cultural Study of Issues and Consequences"
1997	Winifred Mitchell (Anthropology)	"Giving Thanks in the Upper Midwest: An Ethnography of Minnesota Thanksgivings"
1998	Anne Blackhurst (Counseling and Student Personnel)	"Eating Their Words: How Food Advertisements Sell Disordered Eating to Women"
1999	Bruce Jones and Kirk Ready (Automotive & Manufacturing Engineering Technology)	"Alternative Fuels: The Future of the Automobile"
2000	Barry Ries and Melissa Polusny (Psychology)	"The Influence of Natural Disaster on Southern Minnesota Families"
2001	Nancy Wicker (Art)	"Identity in an Anonymous Age: Examining Prehistoric Scandinavian Gold Jewelry"
2002	Tomasz Inglot (Political Science)	"Building of United Europe: Socio-Economic and Political Challenges of European Enlargement to the East"

2003	Marcia Gentry (Education)	"The Important and Forgotten Role of Affect in Developing Quality Teaching and Learning: Instrumentation to Help Understand the School Experience from Students' Points of View"
2004	Charles Lewis (Mass Communication)	"Business, Politics and War: Relations Among American Indians and Whites as Portrayed in the Frontier Press of Mankato, 1857-1868"
2005	Mary Bliesmer, Patricia Earle, Sandra Eggenberger, Norma Krumwiede, Sonja Meiers (School of Nursing)	"Challenges of Chronic Illness: Artistic Interpretation of the Family Reintegration Process"
2006	Russell Palma (Astronomy & Physics)	"NASA's Genesis and Stardust Missions: Exploring the Early Solar System"
2007	Gina Wenger (Art)	"Images of Manzanar: Investigating the Documentary Photography of the Japanese American Internment Camps"
2008	Steven Losh (Chemistry & Geology)	"Petroleum Exploration and Production Technology: High-Tech Deep Down"
2009	Lillian Duran (Education)	"Transitional Bilingual Education vs. English-only Instruction in a Head Start Program: An Experimental Longitudinal Comparison"
2010	Vincent Winstead (Electrical & Computer Engineering & Technology)	"Energy Independence through Wind Power: Opportunities, Challenges and the Future"
2011	Liz Miller (Art)	"Drawing Beyond the Line: Using Pattern, Decoration, and Ornament in New Large-Scale Installations"
2012	Gwen Westerman (English)	"Dena Uŋkiyepi (This is who we are): Letters of Dakota People 1848 - 1864"
2013	Qun (Vincent) Zhang (Electrical and Computer Engineering and Technology)	"Fundamentals and Frontiers of Optical Communication: from Fastest Modems and Routers to Next Generation Computing"
2014	David Bissonnette (Family Consumer Science), Mary Hadley (Chemistry & Geology), Penny Knoblich (Biological Sciences)	"Obesity in America: A National Crisis"
2015	J. Heath Anderson (Anthropology)	"Ashes to Empire: Cerro Magoni and the Toltec State"
2016	Rebecca Moen (Chemistry & Geology)	"Oxidative Stress & Muscle"
2017	Byron Pike (Accounting & Business Law)	"The Effect of Auditor versus Forensic Mindset on Audit Procedures in Response to Fraud Risk Assessment."
2018	Kuldeep Agarwal (Auto & Manufacturing Engineering Tech)	"3D Printing and the Future of Health and Medicine"



Douglas R. Moore
Mankato State University President
1974-1978



MINNESOTA STATE

Minnesota State University, Mankato
A member of Minnesota State