

**RUSSELL D. CARMAN, M.D.  
LECTURE SERIES**

**SPONSORED BY THE  
MISSOURI RADIOLOGICAL SOCIETY**



**LECTURE SERIES FOUNDED IN 1941 BY THE  
GREATER ST. LOUIS SOCIETY OF RADIOLOGISTS**

**73rd Lecture**

**“Cultivating Great Leaders” to be delivered by  
Richard Gunderman, M.D., Ph.D. FACR  
Chancellor’s Professor, Department of  
Radiology, Indiana University**

**March 24, 2018 at 11 am  
Missouri Radiological Society Spring Meeting**

### **73rd Carman Lecturer: Richard Gunderman, M.D., Ph.D., FACR**

Richard Gunderman, M.D. is Chancellor's Professor of Radiology, Pediatrics, Medical Education, Philosophy, Liberal Arts, Philanthropy, and Medical Humanities and Health Studies at Indiana University, where he is also John A Campbell Professor of Radiology.

He received his BA Summa Cum Laude from Wabash College, MD and PhD (Committee on Social Thought) with honors from the University of Chicago, and MPH from Indiana University. He was a Chancellor Scholar of the Federal Republic of Germany and received an honorary Doctorate of Humane Letters from Garrett Theological Seminary at Northwestern University.

He is a ten-time recipient of the Indiana University Trustees Teaching Award. In 2015 received the Indiana University School of Medicine's inaugural Inspirational Educator Award, and in 2017 he received its Scholar Educator Award. He was named the 2008 Outstanding Educator by the Radiological Society of North America, the 2011 American Roentgen Ray Society Berlin Scholar in Professionalism, and the 2012 Distinguished Educator of the American Roentgen Ray Society. In 2012, he received the Alpha Omega Alpha Robert J. Glaser Award for Teaching Excellence, the top teaching award from the Association of American Medical Colleges. In 2013, he was the Spinoza Professor at the University of Amsterdam. He serves on numerous boards, including the Kinsey Institute for the Study of Human Sexuality, Christian Theological Seminary, and Alpha Omega Alpha National Honor Medical Society.

He is the author of over 640 articles and has published ten books, including *We Make a Life by What We Give* (Indiana University, 2008), *Leadership in Healthcare* (Springer, 2009), *Achieving Excellence in Medical Education* (2nd edition, Springer, 2011), *X-ray Vision* (Oxford University, 2013), and *Essential Radiology* (3rd edition, Thieme, 2014). His new books, *We Come to Life with Those We Serve* and *Hoosier Beacons*, were published in 2017. He has delivered over 500 keynote addresses, named lectures, and grand rounds presentations.

In addition to lecturing on medicine and radiology, Dr. Gunderman also teaches in a variety of university courses. In 2018, these include Bioethics, Frankenstein, Ethics of Philanthropy, and Political Philosophy in Film and Theater.

## **RUSSELL DANIEL CARMAN, M.D.**

Born in 1875, Russell D. Carman was a prominent radiologist whose work at the Mayo Clinic advanced the radiologic diagnosis of gastrointestinal lesions and enhanced the technique of fluoroscopy. One of his most important contributions was his discovery of the “meniscus sign” of ulcerating gastric cancer, which permitted the making of positive differential diagnosis between malignant and nonmalignant lesions.

Carman began his medical studies at the College of Medicine and Surgery at the University of Minnesota. Upon moving to St. Louis he completed his medical studies at the Marion-Sims College of Medicine, receiving his M.D. in 1901. He then pursued graduate studies at Johns Hopkins but in 1902 returned to St. Louis to practice. Initially, he intended to specialize in orthopedics but his natural aptitude for the electrical arts soon attracted him to medical roentgenology, which was then in its early stages of development. Carman worked diligently and enthusiastically to advance with the science and was quickly recognized as an exceedingly proficient radiologist. He was appointed Assistant in Radiology at Saint Louis University in 1907, and three years later he was named Lecturer in Roentgenology at Washington University. In 1913, he joined the staff of the Mayo Clinic as Head of the Section on Roentgenology, and became Professor of Roentgenology at the Mayo Foundation where he continued in that capacity until his death in 1926. In 1922, he was elected president of the Radiological Society of North America and in 1926, he was elected president of the American Roentgen Ray Society.

Carman was a prodigious researcher who achieved technical perfection in this work. One of the most noteworthy facts in Carman's scientific work was his painstaking control of the Roentgen findings, obtained partly by comparing those with the findings at surgery and postmortem examinations. Carman referred to two types of researchers in his paper on “The Future of Radiology”: one group consisting of only scientists and another of “scientist, physician, and inventor combined.” It is undisputed that Carman belonged to the latter group. The goal of his life's work can largely be said to have been a furtherance of a broader knowledge of anatomy, physiology and pathology as related to radiological phenomena and, on the basis of this wider knowledge, a more reliable radiological diagnosis with a consequent greater value to clinical diagnosis. He was quite clear about the fact that the difficulties encountered by the radiological science on its path forward are not of any particular nature but depend upon problems alike to all specialized branches of medicine. In 1941, the Greater St. Louis Society of Radiologists established a memorial to Carman's radiologic excellence in the Annual Carman Lecture.

## PAST CARMAN LECTURES

Founded and Sponsored by the Greater St. Louis Society of Radiologists

March 25, 1941 First Annual Lecture

BYRL RAYMOND KIRKLIN, M.D., Mayo Clinic, Rochester, Minn.; "Cancer of the Gastrointestinal Tract: Its Early Manifestations"

1942 LEO GEORGE RIGLER, M.D., University of Minnesota School of Medicine, Minneapolis; "Roentgenological Diagnosis of Acute Abdominal States"

1943, 1944, 1945—NO LECTURES

1946 MAURICE LENZ, M.D., Columbia University, New York; "Recent Developments in the Treatment of Carcinoma of the Breast"

1947 EDWARD LEALAND JENKINSON, M.D., Northwestern University School of Medicine, Chicago; "Diaphragmatic Hernias and Lesions of the Diaphragm as a Cause of Cardiac and Gastrointestinal Symptoms"

1948 HARRY MATTHEW WEBER, M.D., Mayo Clinic, Rochester, Minn.; "The Early Diagnosis of Intestinal Cancer"

1949 EUGENE PERCIVAL PENDERGRASS, M.D., Pennsylvania University School of Medicine, Philadelphia; "Some Consideration of the Roentgenographic Findings in Certain Chest Lesions"

1950 URSUS VICTOR PORTMANN, M.D., Cleveland Clinic, Cleveland; "The Present Status of Radiation Therapy of Superficial Malignant Lesions"

1951 EDWARD BLAINE DUNCAN NEUHAUSER, M.D., Harvard Medical School, Boston; "The Relationship of Growth to Disease"

1952 RUSSELL HEDLEY MORGAN, M.D., Johns Hopkins University Medical School, Baltimore; "The Early Diagnosis of Gastric Carcinoma"

1953 CLARENCE ALLEN GOOD JR., M.D., Mayo Clinic, Rochester; "Some Problems in the Roentgenologic Diagnosis of Pulmonary Disease"

1954 ROGER ALLEN HARVEY, M.D., University of Illinois College of Medicine, Chicago "Super Voltage Contributions to Medicine"

1955 PHILIP J. HODES, M.D., University of Pennsylvania School of Medicine, Philadelphia "Unfavorable Reactions to Intravenous Media: Causes and Control"

1956 RICHARD HALL CHAMBERLAIN, M.D., University of Pennsylvania School of Medicine, Philadelphia; "Radioisotopes in Medical Practice"

1957 HENRY SEYMOUR KAPLAN, M.D., Stanford University, San Francisco; "What is the Radiation Hazard in Routine Office Radiology"

1958 BARTON ROGERS YOUNG, M.D., Temple University School of Medicine, Philadelphia; "Diagnosis of the Acute Abdomen"

1959 JUAN ANGEL DEL REGATO, M.D., Penrose Cancer Hospital, Colorado Springs; "The Present Status of Treatment of Carcinoma of the Cervix"

- 1960 BENJAMIN FELSON, M.D., University of Cincinnati School of Medicine, Cincinnati; "Fundamentals of Chest Roentgenology"
- 1961 GILBERT HUNGERFORD FLETCHER, M.D., Anderson Hospital, Houston; "High Dose Whole Pelvic Technique in Squamous Cell Carcinoma of the Cervix"
- 1962 HAROLD O. PETERSON, M.D., University of Minnesota School of Medicine, Minneapolis; "Myelograph"
- 1963 HAROLD GORDON JACOBSON, M.D., New York University School of Medicine, New York; "Abnormalities of the Spine"
- 1964 JOHN F. HOLT JR., M.D., University of Michigan School of Medicine, Ann Arbor; "Radiologic Aspects of Respiratory Diseases in Infants and Children"
- 1965 VINCENT P. COLLINS, M.D., Baylor University, Houston; "Medicine and the Law"
- 1966 ROBERT L. EGAN, M.D., Emory University, Atlanta; "Mammography"
- 1967 MANUEL VIAMONTE JR., M.D., University of Miami School of Medicine, Miami; "Potpourri of Angiographic Examinations"
- 1968 HARRY WILLIAM FISCHER, M.D., University of Michigan, Ann Arbor; "Radiology of the Biliary System and Liver Cholecystography and Beyond"
- 1969 WALTER EVAN BERDON, M.D., Columbia University, New York; "Changing Concepts of Urinary Tract Disease in Children"
- 1970 LEONARD OTTO LANGER JR., M.D., University of Minnesota, Minneapolis; "Radiological Diagnosis of the Generalized Bone Dysplasias"
- 1971 JOHN SCOTT DUNBAR, M.D., University of British Columbia Faculty of Medicine, Vancouver, B.C., Canada; "Pulmonary Disease in the Newborn"
- 1972 HOWARD L. STEINBACH, M.D., University of California — San Francisco, Stanford University School of Medicine, San Francisco; "Differential Diagnosis of Rheumatoid Arthritis and Some Related Arthritides"
- 1973 ELIAS PAUL GEORGE THEROS, M.D., Armed Forces Institute of Pathology, Washington; "Renal Osteodystrophy: Some Mechanisms and Correlations"
- 1974 MASON SONES, M.D., Cleveland Clinic, Cleveland; "Angiographic Assessment of Coronary Atherosclerosis and Evaluation of Surgical Treatment"
- 1975 HERBERT LEROY ABRAMS, M.D., Harvard Medical School, Boston; "Dissecting Aortic Aneurysm: A Diagnostic and Therapeutic Problem"
- 1976 THOMAS FRANCIS MEANEY, M.D., Cleveland Clinic, Cleveland; "The Place of Whole Body Computed Tomography and Diagnostic Radiology"

- 1977 PATRICK F. SHEEDY II, M.D., Mayo Clinic, Rochester; "Extra Cranial Computerized Tomography"
- 1978 GEORGE ROBERT LEOPOLD, M.D., University of California, San Diego; "New Areas for Ultrasonography: Small Parts Scanning"
- 1979 WILLIAM B. SEAMAN, M.D., Columbia University, New York; "Pathologic Physiology of the Esophagus"
- 1980 PHILIP OTIS ALDERSON, M.D., College of Physicians and Surgeons, Columbia University, New York; "Nuclear Cardiology"
- 1981 ARCH WALLACE TEMPLETON, M.D., University of Kansas Medical Center, Kansas City; "Digital Diagnostic Image Information Data: How Much? When? Where? At What Cost?"
- 1982 DAVID E. SCHWARTEN, M.D., St. Vincent Hospital, Head, Cardiovascular Library, Indianapolis; "Percutaneous Transluminal Angioplasty"
- 1983 RONALD G. EVENS, M.D., Washington University School of Medicine, St. Louis; "Radiology 1984: Big Brother, Big Business, Big Technology, Big Change"
- 1984 HOWARD M. POLLACK, M.D., University of Pennsylvania School of Medicine, Philadelphia; "Non-surgical Removal of Urinary Calculi"
- 1985 R. EDWARD COLEMAN, M.D., Duke University Medical Center, Durham; "Diagnostic and Prognostic Information from Cardiovascular Imaging"
- 1986 WILLIAM G. BRADLEY, M.D., Ph.D., Huntington Medical Research Institutes, Pasadena; "Flow Phenomena in MRI"
- 1987 BARRY B. GOLDBERG, M.D., Thomas Jefferson University Hospital, Philadelphia; "A Look into the Future of Ultrasound"
- 1988 STANLEY S. SIEGELMAN, M.D., Johns Hopkins University School of Medicine and Johns Hopkins Hospital, Baltimore; "TURF Battles: Ethical Issues"
- 1989 STUART SAGEL, M.D., Washington University, School of Medicine, St. Louis; "Portable Digital Radiography"
- 1990 HERMAN D. SUIT, M.D., D.Phil. (Oxon.), Harvard Medical School, Boston; "Radiology in Cancer: Precision in Diagnosis, Precision in Therapy"
- 1991 ROBERT JOSEPH STANLEY, M.D., University of Alabama School of Medicine, Birmingham; "The Radiologic Evaluation of the Acute Abdomen"
- 1992 MARC J. HOMER, M.D., Tufts University School of Medicine, Boston; "Malpractice and Mammography"
- 1993 JOSEPH K.T. LEE, M.D., University of North Carolina School of Medicine, Chapel Hill, NC; "Current Status of Abdominal MRI"

- 1994 CARLOS A. PEREZ, M.D., Washington University School of Medicine, St. Louis; "Carcinoma of the Prostate: A Challenge for Diagnostic Imaging And Radiation Oncology"
- 1995 WILLIAM MCALISTER, M.D., Washington University School of Medicine, St. Louis; "Sinusitis in Children"
- 1996 DANIEL H. JOHNSON JR., M.D., President, American Medical Association; "Put the Patient in the Driver's Seat"
- 1997 KAY HERZOG VYDARENY, M.D., Emory University Hospital, Atlanta; "Pulmonary Manifestations of AIDS"
- 1998 BARRY A. SIEGEL, M.D., Mallinckrodt Institute of Radiology, St. Louis; "The Emerging Role of PET in the Management of Patients with Cancer"
- 1999 PAUL H. YOUNG, M.D., Microsurgery and Brain Research Institute, St. Louis University School of Medicine, St. Louis; "Important Blood Vessels in Brain and Spinal Cord Stroke—a 3-D Perspective"
- 2000 JACQUES E. DION, M.D., Emory University Hospital, Atlanta; "Percutaneous Vertebroplasty: A New Therapy for Painful Vertebral Compression Fractures"
- 2001 ELLIOT K. FISHMAN, M.D., Johns Hopkins University School of Medicine, Baltimore; "3D CT Angiography and 3D Imaging: Current Applications in Clinical Practice"
- 2002 G. SCOTT GAZELLE, M.D., M.P.H., Ph.D., Harvard Medical School, Boston; "Screening for Disease with Computed Tomography"
- 2003 JACQUELINE CAROL BRUNETTI, M.D., Columbia University College of Physicians & Surgeons, New York; "Functional-Anatomic Imaging: Application in Oncology"
- 2004 STEVEN E. HARMS, M.D., F.A.C.R., University of Arkansas for Medical Sciences, Little Rock; "Clinical Uses of Breast MRI"
- 2005 ALBERT L. BLUMBERG, M.D., F.A.C.R., Greater Baltimore Medical Center, Baltimore, "American College of Radiology - Advocacy Update"
- 2006 THOMAS PTAK, M.D. Ph.D., Massachusetts General Hospital, Boston; "MDCT Imaging in Multiple Trauma"
- 2007 GREGORY R. SABOEIRO, M.D., Hospital for Special Surgery, New York, "Musculoskeletal Ultrasound & Ultrasound-Guided Therapeutic Interventions"
- 2008 TERESE I. KASKE, M.D. Radiology Imaging Associates, Denver, Colorado, "Diagnostic Breast Ultrasound and Biopsy"
- 2009 PAMELA K. WOODARD, MD, President, North American Society for Cardiovascular Imaging & Associate Professor at MIR, "Advances in Cardiac CT & Coronary CT Angiography"
- 2010 ERIC TREFELNER, MD Co-founder NightShift Radiology, "Teleradiology or TeleTerror? Strategies to Manage Risks and Opportunities"

- 2011 HUGH CURTIN, MD, FACR, Massachusetts Eye & Ear Infirmary, Harvard University, "Imaging of the Temporal Bone"
- 2012 LYNNE S. STEINBACH, MD, FACR, University of California-San Francisco, Professor Clinical Radiology & Orthopaedic Surgery, "MR Arthrography"
- 2013 SANJEEV BHALLA, MD, Section Chief, Cardiothoracic Imaging Section, Mallinckrodt Institute of Radiology, "Understand the Use of HRCT in the Diagnosis of Diffuse Lung Disease"
- 2014 MAURICIO CASTILLO, MD, FACR, Section Chief and Professor of Neuroradiology, University of North Carolina – Chapel Hill, Past President American Society of Neuroradiology, "White Matter Diseases In Adults"

### **Missouri Radiological Society**

- 2016 JAMES H. THRALL, MD, FACR, Chairman Emeritus, Department of Radiology, Massachusetts General Hospital, "Reinventing Radiology in the Digital Age."
- 2018 RICHARD GUNDERMAN, MD, PhD, FACR, Chancellor's Professor of Radiology, Pediatrics, Medical Education, Philosophy, Liberal Arts, Philanthropy, and Medical Humanities and Health Studies, Indiana University Department of Radiology, "Cultivating Great Leaders"