

# Curriculum Vitae

## Personal Contact Information

Ferenc A. Jolesz, MD.  
B. Leonard Holman Professor of Radiology  
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## Education

1971 M.D, summa cum laude, Semmelweis Medical School, Budapest, Hungary

## Postdoctoral Training

1972-1973 Research Fellow, Biomedical Engineering, K. Kando College of Electrical Engineering, Budapest, Hungary  
1975-1979 Resident, Neurosurgery, Institute of Neurosurgery, Budapest, Hungary  
1979-1980 Research Fellow, Neurology, Massachusetts General Hospital and Boston Biomedical Research Institute  
1980-1982 Research Fellow, Physiology, Harvard Medical School  
1982 Clinical Fellow, Neuroradiology, Brigham and Women's Hospital  
1982-1985 Resident, Diagnostic Radiology, Brigham and Women's Hospital

## Professional Licenses/Certifications

1982 Educational Commission for Foreign Medical Graduates  
1982 The Commonwealth of Massachusetts Board of Registration in Medicine  
1987 American Board of Radiology (Diagnostic Radiology)  
1988 American Society of Neuroradiology (Neuroradiology)

## Academic Appointments

1971-1973 Instructor, Department of Physiology, College of Physical Education, Budapest, Hungary  
1973-1974 Assistant Professor, Department of Physiology, College of Physical Education, Budapest, Hungary  
1973-1975 Research Associate, Department of Physics, K. Kando College of Electrical Engineering, Budapest, Hungary  
1974-1975 Adjunct Professor, Department of Physiology, College of Physical Education, Budapest, Hungary  
1981-1982 Research Associate in Physiology, Harvard Medical School, Boston  
1985-1989 Assistant Professor of Radiology, Harvard Medical School, Boston  
1989-1996 Associate Professor of Radiology, Harvard Medical School, Boston  
1996-1998 Professor of Radiology, Harvard Medical School, Boston  
1998- B. Leonard Holman Professor of Radiology, Harvard Medical School, Boston

## Hospital Appointments

1985 Staff Neuroradiologist, Brigham and Women's Hospital

1985 Radiologist, Brigham and Women's Hospital  
 1987-1988 Director, Neuro MR Imaging Section, Brigham and Women's Hospital  
 1987-1995 Consultant, Neuroradiology, West Roxbury VA Hospital  
 1988- Director, Division of MRI, Brigham and Women's Hospital  
 1993- Director, Image-Guided Therapy Program, Brigham and Women's Hospital  
 2000-2009 Vice-Chairman of Research, Radiology, Brigham and Women's Hospital  
 2001- Director, Advanced Imaging Center, Harvard Medical School, NeuroDiscovery Center

**Awards and Honors**

1985 Research Career Development Award  
 1991 Visions in Medicine Award, General Electric Medical Systems  
 1996 Honorary Doctorate, Pannon Agricultural University, Kaposvar, Hungary  
 1997 Honorary Member, Hungarian Neuroradiology Society and Hungarian Society of Radiology  
 2002 Outstanding Scientist Award, Radiological Society of North America  
 2002 Szentgyorgyi Award of Hungarian National Academy of Sciences  
 2002 Honorary Doctorate, Semmelweis Medical School, Budapest, Hungary  
 2006 Fullbright Research Scholarship  
 2007 Gold Medal International Society of Magnetic Resonance in Medicine  
 2007 Establishment of Ferenc A. Jolesz Chair in Radiology, Brigham and Women's Hospital, Harvard Medical School (granted to Clare Tempany, MD.)  
 2011 Partners in Excellence Award (AMIGO Teamleader)  
 2012 Globe 100: Most innovative in Massachusetts. A higher vision for the O.R.  
 2012 Named to the Council of Distinguished Investigators of the Academy of Radiology Research  
 2013 Research Innovation Award, Brigham and Women's Hospital  
 2014 A. Clifford Barger Excellence in Mentoring Award, Harvard Medical School

**Research Funding Information, Grants**

1985-1988 Principal Investigator, R01 NS23093, "Proton Magnetic Resonance of Myelin and Demyelination"  
 1985-1990 Principal Investigator, K04 NS010383, "Proton Magnetic Resonance of Myelin"  
 1987-1992 Co-PI, Research Grant, P01 AG04953 (PI: Marilyn Albert), "Age-related Changes of Cognition in Health and Disease, Project 4: MRI"  
 1988-1998 Principal Investigator, R01 CA45743, "MRI of Thermally Induced Surgical Interventions"  
 1990-1994 Co-PI, N01-NS-0-2397 (PI: Howard Weiner), "Magnetic Resonance Imaging Studies in Multiple Sclerosis"  
 1991-1994 Principal Investigator, RG 2318-A1 "Proton Magnetic Resonance of Myelin and Demyelination"  
 1992-1995 Co-PI, Whitaker Foundation, "Development of Computerized Image Processing Methods for the Quantitative Analysis of Brain Magnetic Resonance Images for the Diagnosis of Schizophrenia"  
 1992-1997 Co-PI, Research Grant, P01 AG04953 (PI: Marilyn Albert), "Age-related Changes of Cognition in Health and Disease," Project 3: MRI  
 1992-2008 Principal Investigator, General Electric Company, "Magnetic Resonance Guided Therapy"  
 1993-1999 Co-Investigator, R01 CA48939-06 (PI: Kullervo Hynynen), "Intracavitary Ultrasound Hyperthermia"  
 1994-1996 Principal Investigator, Adria Laboratories, "Roquinimex in the Treatment of Multiple Sclerosis."  
 1995-1999 Co-Investigator, R01 CA46627 (PI: Kullervo Hynynen), "High Temperature Ultrasound Therapy Guided by MRI"

- 1995-2012 Principal Investigator, P01 CA67165-10, "MR-Guided Therapy"
- 1996-1998 Co-Investigator, F41 624-96-2-0001, "Virtual Endoscopy"
- 1996-2004 Co-Investigator, R01 N235142-01 (PI:John Mugler), "Optimize 3D spin echo"
- 1998-2003 Principal Investigator, P41 RR13218 (PI: Ron Kikinis), "Neuroimaging Analysis Center"
- 2003- Co-Investigator, P41 RR13218 (PI: Ron Kikinis), "Neuroimaging Analysis Center"
- 1999-2001 Principal Investigator, S10 RR13952, "Bruker Biospec 47/30 MRI Upgrade"
- 2000-2013 Principal Investigator, R25 CA089017-06A2, "Multidisciplinary Training in Image Guided Therapy"
- 2000-2003 Co-Investigator, R01 AG 19513-01 (PI: Clare Tempany), "MR Guided Prostate Cancer Diagnosis and Brachytherapy"
- 2000-2005 Co-Investigator, CA09536 (PI: Steven Moore), "Research Training in Imaging Methods for Cancer"
- 2005-2015 Principal Investigator, U41 RR019703-04, "Image-Guided Therapy Center"
- 2007-2009 Principal Investigator, R01 9902-01A1, "Intraoperative 3T MRI Scanner for Minimally Invasive Therapy"
- 2010-2014 Principal Investigator, R13 CA139764-01, "NCIGT Workshop on Future Directions in Image-Guided Therapy"

**Patents**

1. US patent 5,131,392, July 21, 1992. Jolesz FA, Jakab PD. Use of Magnetic Field of Magnetic Resonance Imaging Devices as the Source of the Magnetic Field of Electromagnetic Transducers.
2. US patent 5,611,025. March 11, 1997. Lorensen WE, Jolesz FA, Kikinis R. Virtual Internal Cavity Inspection System.
3. US patent 5,752,515. May 19 , 1998. Jolesz FA, Hynynen K. Methods and Apparatus for Image-guided Ultrasound Delivery of Compounds through the Blood Brain Barrier.
4. US patent 6,074,352, June 13, 2000. Hynynen K, Foldes K, Jolesz FA, Winalski C, Shortkoff S. Method for the Treatment of Joint Diseases Characterized by Unwanted Pannus.
5. US patent 6,320,378. Nov 20, 2001. Maier SE, Jolesz FA, Kacher DF. Continuous Magnetic Resonance Line-Scan Imaging in the Presence of Motion and Varying Magnetic Field Inhomogeneities within the Field of View.
6. US patent 7,362,889, April 22, 2008. Dubowsky S, Hafez M, Jolesz FA, Kacher DF, Lichter M, Weiss P, Wingert A. Elastomeric Actuator Devices for Magnetic Resonance Imaging.
7. US Patent 8,496,573, July 30, 2013. Hata N, Jakab P, Kosa G, Jolesz FA. Steerable Capsule Apparatus and Method.

*Pending:*

2005 Hynynen K, Jolesz FA, Epstein L. Phased Array Ultrasound for Cardiac Ablation.

**Research Interests**

MRI Imaging, Image Guided Therapy, Neuroscience

**Affiliations/Memberships in Professional Societies**

- 1982- Member, New England Roentgen Ray Society
- 1985- Member, Radiological Society of North America (RSNA)
- 1985-1990 Member, Society of Magnetic Resonance in Medicine (SMRM)
- 1988- Senior Member, American Society of Neuroradiology (ASNR)
- 1988- Member, Association of University Radiologists (AUR)
- 1990- Member, International Society of Magnetic Resonance Imaging (ISMRM)
- 1994 Member of the Board of Directors Society of Computer Assisted Surgery (SCAT)
- 1995- Member, Institute of Medicine, National Academy of Sciences
- 2004- Member of the Hungarian National Academy of Sciences
- 2005-2008 Member of the Board of Directors International Society of Brain Mapping and Surgical

Planning  
 2006- Fellow, International Society of Magnetic Resonance in Medicine  
 2007-2009 Member, Board of Directors International Society of Intraoperative Imaging

**Editorial Boards**

1990-1994 Member, Editorial Board, Investigative Radiology  
 1994-2008 Associate Editor, Academic Radiology  
 1995- Member, Editorial Board, Magnetic Resonance in Medicine  
 1995-1997 Member, Editorial Board, Computer Assisted Surgery  
 1997- Member, Editorial Board, Journal of Magnetic Resonance Imaging  
 2003- Member, Editorial Executive Committee, Association of University Radiologists  
 2009 Deputy Editor, Journal of Magnetic Resonance Imaging  
 2011- Member, Editorial Board, Neuroradiology Journal  
 2013- Member, Editorial Board, Journal of Therapeutic Ultrasound

**Selected Professional Services**

1986-2008 Co-Director, CT and MRI annual Harvard CME Courses  
 1988-2001 Workshop Chairman (4 workshops) Society of Magnetic Resonance in Medicine  
 1990 Member, Visible Human Peer Review Committee National Library of Medicine, NIH  
 1991- Chairman and member, Ad Hoc Review Committees National Cancer Institute, NIH  
 1991- Chairman, International Symposium on MR-Guided Laser Interventions Symposium, Boston, MA  
 1991- Workshop Chairman, Image-Guided Stereotactic Tumor Diagnosis and Treatment, National Cancer Institute, NIH  
 1991- Director and Co-Director, *MRI Clinical Update and Practical Applications*, Harvard MRI CME Course, Harvard Medical School  
 1994- Founder, Chairman, and Co-Chairman Biannual International Interventional MRI Workshops (1-9)  
 1994- Member, MR Safety Committee International Society of Magnetic Resonance in Medicine  
 1995- Member, Program Committee Computer Assisted Radiology  
 1996-1999 Member, Neuroradiology/Head & Neck Subcommittee Radiological Society of North America (RSNA)  
 1997-1998 Member, Workshop Committee, International Society for Magnetic Resonance in Medicine  
 1998-1999 Member, Executive Committee, Center for Innovative Minimally Invasive Therapy (CIMIT)  
 1999 Chairman, Image-Guided Therapy Committee, American College of Radiology Imaging Network (ACRIN)  
 2005-2006 President, International Society of Brain Mapping and Surgical Planning (IBMSP)  
 2006 Chairman, MRI-Guided Therapy: Focus on Cryotherapy Symposium, Beijing China  
 2007 President, 1<sup>st</sup> MRI-guided Focused Ultrasound Symposium Cambridge, MA  
 2008 President, 1<sup>st</sup> Symposium of Focused Ultrasound Foundation  
 2010 Co-Chair, Interventional MRI Symposium Leipzig, Germany  
 2011 Chairman, Technology Portion of Program, 1<sup>st</sup> European Symposium MRgFUS Therapy, Rome, Italy  
 2011 Co-Chair, 4<sup>th</sup> NCIGT and NIH Image Guided Therapy Workshop, Arlington, VA  
 2011 ACR Representative, Collaborative Committee for ACR–ASNR–SPR Practice Guideline for the Performance of Non-Breast Magnetic Resonance Imaging (MRI)  
 2012 Co-Chair, 5<sup>th</sup> NCIGT and NIH Image Guided Therapy Workshop, Boston, MA  
 2012 Chairman, 9<sup>th</sup> Interventional MRI Symposium, Boston, MA  
 2014 Co-Chair, 10<sup>th</sup> Interventional MRI Symposium, Leipzig, Germany

### **Advisory Board, Consultant**

- 1991 Member, Advisory Board, Picker International, CT Clinical Consortium
- 1991 Member, Advisory Board Member, GE Medical Systems Midfield Magnet
- 1994 Member, Neuroimaging Advisory Board, GE Medical Systems
- 1994 Member, Advisory Board, Medical Robotics and Computer Assisted Surgery
- 1996- Adviser, Radiologic Devices, National Institute of Health, Food and Drug Administration (FDA)
- 1998-2006 Adviser, Hong Kong Jockey Club MRI Engineering Centre
- 2000-2002 Member, Advisory Board, Surgi-Vision
- 2000- Adviser, Neuroscience Research Institute, Gachon University of Medicine and Science, South Korea
- 2000 Consultant to the Board, Insightec, Inc, Haifa Israel
- 2005- Member, Advisory Board, XinaoMDT (China)
- 2009- Member, Advisory Board, Time-Medical (China)
- 2008- Adviser, Focus Ultrasound Foundation
- 2010- Member, Advisory Board, MACO Surgical, Inc.
- 2010- Consultant, Food and Drug Administration (FDA)
- 2011- Member, Harvard University Imaging Subcommittee

### **Selected Invited Presentations**

- 1984 Invited Lecture, Long Island Jewish Hillside Medical Center
- 1984 Invited Lecture, American Academy of Physical Medicine and Rehabilitation
- 1985 Invited Lecture, Universidad Complutense de Madrid, Spain
- 1986 Invited Lecture, Laboratory for Medicinal Chemistry, University of Cambridge
- 1988 Invited Lecture, Children's Hospital Medical School, Zurich, Switzerland
- 1988 Invited Lecture, McArthur Foundation
- 1989 Invited Lecture, Joint MIT/MGH Seminar on Lasers in Biomedical Research, Massachusetts General Hospital, Boston, MA
- 1989 Invited Lecture, University of North Carolina, Chapel Hill, NC
- 1990 Keynote Speaker, American Society for Neuroradiology Annual Meeting, Los Angeles, CA
- 1990 Keynote Speaker, Society of Laser Surgery in Medicine, Nashville, TN
- 1990 Invited Lecture, UCLA Medical Center, Los Angeles, CA
- 1990 Invited Lecture, Johns Hopkins Medical Institutions, Baltimore, MD
- 1990 Invited Lecture, Research Society of Neurological Surgeons of North America Annual Meeting
- 1990 Invited Lecture, Hospital of the University of Pennsylvania, PA
- 1990 Invited Lecture, University College Hospital, London, England
- 1990 Invited Lecture, University of Akita, Department of Radiology, Akita, Japan
- 1990 Keynote Speaker, 1<sup>st</sup> Meeting of the Hungarian Neuroradiological Society, Budapest, Hungary
- 1990 Keynote Speaker, 13<sup>th</sup> Annual Japanese Society of CNS Computerized Tomography, Tokyo, Japan
- 1990 Invited Lecture, Institute of Neurology, National Hospital, London, England
- 1990 Invited Lecture, University Hospital, Graz, Austria
- 1990 Invited Lecture, Diagnostic Imaging Center, Semmelweis University, Budapest, Hungary
- 1991 Keynote Speaker, Society for Magnetic Resonance Imaging Annual Meeting, Chicago
- 1991 Invited Lecture, University of Texas, M.D. Anderson Cancer Center, Houston, TX
- 1991 Invited Lecture, Oregon Health Sciences University, Portland, OR
- 1991 Invited Lecture, Long Island Jewish Medical Center, New Hyde Park, NY
- 1991 Keynote Speaker, Eastern Neuroradiological Society Annual Meeting
- 1992 Invited Lecture, University of Chapel Hill, NC
- 1992 Keynote Speaker, (talk presented by R. Mulkern), Society for Magnetic Resonance

Imaging Annual Meeting, New York, NY

1992 Invited Lecture, Convegno di Neuroradiologia Geriatrica, Ancona, Italy

1993 Invited Lecture, National Science Foundation, Workshop on Computer Assisted Surgery

1993 Invited Lecture, Department of Radiology, University of Chicago, Chicago, IL

1993 Invited Lecture, Advances in the Understanding & Treatment of Multiple Sclerosis Conference, Washington DC

1993 Invited Lecture, Engineering Foundation Conference on Future Directions for Lasers in Medicine and Surgery

1993 Keynote Speaker, Brain Edema 9<sup>th</sup> International Symposium, Tokyo, Japan

1993 Invited Lecture, Department of Radiology, Keio University School of Medicine, Tokyo, Japan

1993 Invited Lecture, Soka University, Institute of Life Science, Tokyo, Japan

1993 Invited Lecture, Chiba University, Tokyo, Japan

1994 Keynote Speaker, Symposium of the 21<sup>st</sup> Century, Budapest, Hungary

1994 Invited Lecture, Singapore General Hospital, Singapore

1994 Invited Lecture, University Hospital, Singapore

1994 Keynote Speaker, Radiology Symposium, Budapest, Hungary

1994 Plenary Address, Society of Magnetic Resonance in Medicine, San Francisco, CA

1994 Invited Lecture, Johns Hopkins Medical Institutions

1994 Invited Lecture, Department of Radiology, Memorial Sloan-Kettering Cancer Center

1994 Invited Lecture, New York Hospital, Cornell University

1994 Invited Lecture, Rambam Medical Center, Haifa, Israel

1994 Keynote Speaker, National Conference of the Hungarian Neurosurgical Society, Kaposvar, Hungary

1994 Keynote Speaker, Society for Minimally Invasive Therapy, Berlin, Germany

1994 Invited Lecture, Royal Melbourne Hospital, Melbourne, Australia

1994 Invited Lecture, IGE Medical Systems Ltd, Coolidge Symposium, London, England

1995 Keynote Speaker, MR into the 2<sup>nd</sup> Decade and Beyond, Garmisch-Partenkirchen, Germany

1995 Plenary Session, American Society of Neuroradiology, Chicago, IL

1995 Invited Lecture, Stanford University School of Medicine, Stanford, CA

1995 Keynote Speaker, 3<sup>rd</sup> International Congress on New Technology and Advanced Techniques in Surgery, Luxembourg

1995 Invited Lecture, Frieburger Radiologischen Tage, Frieberg, Germany

1995 Invited Lecture, INSERM (French Institute for Research on Health) Paris, France

1995 Invited Lecture, Roentgen Centenary Congress, 100 Years of X Rays, Birmingham, England

1995 Keynote Speaker, 2<sup>nd</sup> International Workshop on Interventional Radiology, Prague, Czech Republic

1995 Keynote Speaker, SPIE-Institute on Laser-Induced Thermotherapy

1995-1996 Invited Lecture, Refresher Course RSNA, Chicago, IL

1996 Invited Lecture, Long Island Jewish Medical Center, New Hyde Park, NY

1996 Eugene P. Pendergrass New Horizons Lecture, Radiology Society of North America, Chicago, IL

1995 Keynote Speaker, Laser Association of Neurological Surgeons, Surgeons International (LANSI), Salzburg, Austria

1995 Keynote Speaker, Progress in RM International Workshop, San Giovanni Rotondo, Italy

1995 Keynote Speaker, Zurich Symposium and Centennial Meeting

1995 Keynote Speaker, Interventional MRI Workshop, Dusseldorf, Germany

1995 Invited Lecture, St. Mary's Hospital, London, England

1995 Keynote Speaker, European Society of Neuroradiology, Budapest, Hungary

1996 Keynote Speaker, The Society for Minimally Invasive Therapy (SMIT), Milan, Italy

1996 Invited Lecture, Tel Aviv University, Tel Aviv, Israel

- 1996 Keynote Speaker, 100 Years of Hungarian Radiology, Robotics and Computer Assisted Medical Interventions: An Interventional Workshop, Tihany, Hungary
- 1996 Invited Lecture, Hirosaki University School of Medicine, Aomori, Japan
- 1996 Keynote Speaker, 13<sup>th</sup> Annual European Society for Magnetic Resonance in Medicine and Biology, Prague, Czech Republic
- 1997 Invited Lecture, 2<sup>nd</sup> Oxford International Symposium on the Costs and Benefits of Radiology
- 1997 Keynote Speaker, American Society of Neuroradiology Annual Meeting, Toronto, Canada
- 1997 Keynote Speaker, 9<sup>th</sup> Annual International Meeting for the Society of Minimally Invasive Therapy, Kyoto, Japan
- 1997 Keynote Speaker International Symposium and Workshop Neuroendoscopy and Allied Techniques, Tuttlingen, Germany
- 1997 Invited Lecture, High Care, Bochum, Germany
- 1997 Invited Lecture, Bayer Schering Pharma and Siemens STAR Program, Budapest, Hungary
- 1997 Invited Lecture, Western Neuroradiological Society Meeting
- 1997 Invited Lecture, University of California, San Francisco, CA
- 1997 Invited Lecture, 22<sup>nd</sup> Eugene Pendergrass Lecture, Department of Radiology, University of Pennsylvania, Philadelphia, PA
- 1997 Keynote Speaker, 7<sup>th</sup> International Radiology Symposium, Garmisch-Partenkirchen, Germany
- 1997 Keynote Speaker, 6<sup>th</sup> Zurich Course on Interventional Neurology, Zurich, Switzerland
- 1997 Keynote Speaker, European Society for Magnetic Resonance in Medicine and Biology, Vienna, Austria
- 1998 Keynote Speaker, ISMRM 6<sup>th</sup> Annual Scientific Meeting and Exhibition, Sydney, Australia
- 1998 Invited Lecture, Bayer Schering Pharma and Siemens, STAR Program, China
- 1998 Invited Lecture, 19<sup>th</sup> Congress of the Hungarian Society of Radiologists, Department of Radiology, Medical University of Pecs, Pecs, Hungary
- 1998 Invited Lecture, Hong Kong University and Hong Kong College of Radiologists Symposium, Hong Kong
- 1998 Keynote Speaker, 10<sup>th</sup> World Congress for Bronchology and Bronchoesophagology, Budapest, Hungary
- 1998 Invited Lecture, Association of the University of Radiologists Research Symposium Annual Meeting
- 1998 Keynote Lecture, Medical Image Computer and Computer Assisted Intervention (MICCAI), Boston
- 1999 Invited Lecture, Congress of Neurological Surgeons (CNS) Annual Meeting
- 1999 Invited Lecture, Annual Symposium on Critical Issues in Surgery, Staten Island Hospital
- 1999 Keynote Speaker, 37<sup>th</sup> Merrill Sosman Lecture, Brigham and Women's Hospital, Boston
- 1999 Invited Lecture, 8<sup>th</sup> Annual International MRI Symposium Garmisch-Partenkirchen, Germany
- 1999 Invited Lecture, 25<sup>th</sup> Annual Congress for the European Society of Neuroradiology, Vienna, Austria
- 1999 Invited Lecture, University of Hong Kong Symposium on MRI Research and Clinical Applications, Hong Kong
- 1999 Invited Lecture, 2<sup>nd</sup> International Symposium on Ultrafast MRI in Medicine (ISUM '99)
- 2000 Keynote Speaker, Kaposvar University, Scientific Symposium, Hungary
- 2000 Invited Lecture, Millennium Congress, International Society of Vascular Interventional Radiology, New Delhi, India
- 2000 Invited Lecture, Keio University Center of Excellence Symposium, Tokyo, Japan
- 2000 Invited Lecture, University of Barcelona International Symposium, Barcelona, Spain

2000 Invited Lecture, Pannonian Symposium, Hungary  
 2000 Invited Lecture, ISRACAS, Jerusalem, Israel  
 2000 Invited Lecture, Congress of Neurological Surgeons (CNS) Annual Meeting  
 2000 Invited Lecture, William Beaumont Hospital, Royal Oak, Michigan  
 2000 Invited Lecture, RSNA 86<sup>th</sup> Scientific Assembly and Annual Meeting, Chicago, IL  
 2000 Invited Lecture, Shiga Medical University, Japan  
 2000 Invited Lecture, Institute for Magnetic Resonance Research of Sidney University, Australia  
 2001 Invited Lecture, American Society of Neuroradiology Symposium and 39<sup>th</sup> Annual Meeting, Boston, MA  
 2001 Invited Lecture, National Institute of Biomedical Imaging and Bioengineering (NIBIB)  
 2001 Invited Lecture, 2<sup>nd</sup> International Innovative Solutions for Prostate Cancer Conference San Diego, CA  
 2001 Invited Lecture, 3<sup>rd</sup> Annual National Oncology Forum, Washington DC  
 2001 Invited Lecture, European Society of Neuroradiology, 11<sup>th</sup> Advanced Course XXVII Congress, Ancona, Italy  
 2001 Invited Lecture, MRI and MRS Conference, Cairns, Australia  
 2002 Invited Lecture, 12<sup>th</sup> International Symposium on Brain Edema and Brain Tissue Injury, Beijing, China  
 2002 Invited Lecture, 33<sup>rd</sup> International Symposium of the Princess Takamatsu Cancer Research Fund, Tokyo, Japan  
 2002 Invited Lecture, National Neuro Institute, Singapore  
 2002 Invited Lecture, People's Hospital of Beijing University, China  
 2002 Keynote Speaker, Brain Edema International Meeting, Hakone, Japan  
 2002 Invited Lecture, New York Presbyterian Hospital, Cornell University Medical Center  
 2002 Invited Lecture, 25<sup>th</sup> Annual Meeting for the American Society of Neurimaging  
 2003 Invited Lecture, NER Foundation Symposium and ASNR 41<sup>st</sup> Annual Meeting  
 2003 Invited Lecture, Hong Kong University MRI Center, Hong Kong, China  
 2003 Invited Lecture, International Conference on Closed Head Trauma, San Juan, Puerto Rico  
 2003 Invited Lecture, Seminar at Osaka and Tokyo University, Japan  
 2003 International Lecture of the year, Finish Radiological Society, Finland  
 2003 Invited Lecture, RSNA 2003  
 2004 Invited Lecture, Biomedical Imaging Research Opportunities Workshop II  
 2004 Invited Lecture, NIDDK National Institutes of Health, Hepatocellular Carcinoma: Screening, Diagnosis and Management  
 2004 Invited Lecture, Yale School of Medicine, New Haven, CT  
 2004 Invited Lecture, OR of the Future Workshop, Lake Arrowhead, CA  
 2004 Keynote Lecture, 25<sup>th</sup> National Radiology Congress, Antalya, Turkey  
 2004 Invited Lecture, Namba Hospital, Miyazaki, Japan  
 2005 Invited Lecture, Indiana University,  
 2006 Invited Lecture, Symposium at National Cancer Center, Tokyo, Japan  
 2006 6<sup>th</sup> John Dopman Memorial Lecture, National Institute of Health Clinical Center  
 2007 Charles Drake Lecture, Department of Neurosurgery, University of Virginia, Charlottesville, VA  
 2007 Keynote Lecture, Japan Society for CNS Computed Imaging, Osaka, Japan  
 2008 Invited Lecture, University of Virginia, Charlottesville, VA  
 2008-2009 Refresher Courses, RSNA  
 2008 David B. and Diane Heller Lecture, MRgFUS International Symposium, Washington DC  
 2008 Invited Lecture, 5<sup>th</sup> Annual Biomedical Research Symposium, Image Guided Therapy, University of Michigan, Ann Arbor, MI  
 2009 Keynote Lecture, Academy of Neurosonology, Osaka, Japan  
 2010 Invited Lecture, Annual Meeting of the American Academy of Neurology, Toronto,



- Canada
- 2010 Invited Lecture, American Society of Neuroradiology Meeting, NER Foundation Symposium
- 2010 Keynote Lecture, 9<sup>th</sup> International Symposium on Highfield MR in Clinical Applications, Bonn, Germany
- 2010 Moderator, 2<sup>nd</sup> International MRgFUS Symposium, Washington DC
- 2010 Invited Lecture, Hungarian Medical Association of America, Sarasota, FL
- 2010 Invited Lecture, BWH/DFCI Multidisciplinary Neuro-Oncology Conference, Boston, MA
- 2011 Invited Lecture, University of Rochester, New York, NY
- 2011 Invited Lecture, Translational Health Science Colloquium, Boston, MA
- 2011 Invited Lecture, Cancer Imaging and Radiation Therapy Symposium - A Multidisciplinary Approach. Co-sponsored by the American Society for Radiation Oncology and Radiological Society of North America, Atlanta, GA
- 2011 Invited Lecture, Technology Portion of Program, 1<sup>st</sup> European Symposium MRgFUS Therapy 2011, Rome, Italy
- 2011 Plenary Lecture, 20 years Harvard Medical School - Kaposvar Diagnostic Center Collaboration, Kaposvar University Anniversary Symposium, Kaposvar, Hungary
- 2011 Keynote Lecture, Annual Research Day, Sunnybrook Health Science Centre of University of Toronto, Toronto, Canada
- 2012 Plenary Lecture, IGT Symposium, Beijing, China
- 2012 Plenary Lecture, Skull Base surgery and Minimally Invasive Neurosurgery Meeting, Shanghai, China
- 2012 Grand Rounds, Department of Neurology, Massachusetts General Hospital, Boston
- 2012 Invited Lecture, Joint Center of Nuclear Medicine, Harvard Medical School
- 2012 Invited Plenary Lectures (2), 71<sup>th</sup> Congress of Japanese Neurosurgical Society, Osaka, Japan
- 2013 Keynote Lecture, Annual Neuroimaging Society Meeting, Las Vegas, NV
- 2013 Plenary Lecture, Inoperative Imaging Society St Louis, MO
- 2013 Grand Rounds, BWH and Children's Neurosurgery, Boston, MA
- 2013 Keynote Speaker (on Skype), The Society for Minimally Invasive Therapy (SMIT), Munich, Germany
- 2014 Invited Lecture, Image Guided Interventions 50, Oregon Health and Science University, Portland, OR
- 2014 Moderator, Scientific Session I on Prostate, 10<sup>th</sup> Interventional MRI Symposium, Leipzig, Germany
- 2014 Presenter, Scientific Session VII on Cardiovascular II/Chest- Jayender J, Nehs MA, Lee TC, Jolesz F, Ruan DT. MR-guided parathyroidectomy and intraoperative recurrent laryngeal nerve identification. (V-50).

## References

### Original Journal Articles

1. Gyarmati I, Jolesz FA. In vitro study of the antibacterial effect of streptomycin-L glutamate. *Fogorv Sz.* 1971 Dec;64(12):445-6. Hungarian. PMID: 5290841.
2. Jolesz FA, Labos E. Study of the anesthetic effect of streptomycin- L-glutamate. *Fogorv Sz.* 1971 Dec;64(12):447-9. Hungarian. PMID: 5290842.
3. Jolesz FA, Szilagyi M. A possible new model of neurons and neural processes based on the quantum-mechanical theory of measurement. *Acta Cybernetica* 1978; 4:221-239.
4. Tulassay Z, Papp J, Szebeni A, Jolesz FA, Horvath T, Szucs J. New possibilities in the diagnosis of Caroli's syndrome. *Orv Hetil.* 1979 Jan 7;120(1):19-23. Hungarian. PMID: 760034.
5. Horvath M, Jolesz FA, Pasztor E. Development of bilateral collateral circulation after fracture of the axis. *Acta Chir Acad Sci Hung.* 1980;21(1):69-76. PMID: 7293611.
6. Sreter FA, Pinter K, Jolesz FA, Mabuchi K. Fast to slow transformation of fast muscles in response to long-term phasic stimulation. *Exp Neurol.* 1982 Jan;75(1):95-102. PMID: 6460645.

7. Jolesz FA, Cheng-Tao X, Ruenzel PW, Henneman E. Flexor reflex control of the external sphincter of the urethra in paraplegia. *Science*. 1982 Jun 11;216(4551):1243-5. PMID: 720063.
8. Wang AM, Jolesz FA, Rumbaugh CL, Zamani A. CT assessment of thoracic extension and of concomitant lesions in syringohydromyelia. *J Comput Assist Tomogr*. 1983 Feb;7(1):18-24. PMID: 6826848.
9. Jolesz FA, Polak JF, Ruenzel PW, Adams DF. Wallerian degeneration demonstrated by magnetic resonance: Spectroscopic measurements on peripheral nerve. *Radiology*. 1984 Jul;152(1):85-7. PMID: 6729140.
10. Holman BL, Jolesz FA, Polak JF, Kronauge JF, Adams DF. Comparison of I-123 IMP cerebral uptake and MR spectroscopy following experimental carotid occlusion. *Invest Radiol*. 1985 Jul;20(4):370-3. PMID: 4044177.
11. Jolesz FA, Patz S, Hawkes RC, Wallman JK. Mapping of normal and abnormal cerebrospinal fluid flow/motion patterns using steady state free precession imaging. *Acta Radiol Suppl*. 1986;369:302-4. PMID: 2980481.
12. Wang AM, Jolesz FA, Rumbaugh CL, Zamani AA, Haykal HA. Thoracic spinal metastasis from unexpected cerebellar medulloblastoma: the value of MRI. *Comput Radiol*. 1986 Jul-Aug;10(4):161-6. PMID: 3791981.
13. Jako GJ, Jolesz FA. The control of neodymium YAG laser fiber optics hyperthermia with magnetic resonance imaging. *SPIE* 1987;712:72-77.
14. Poser CM, Kleefield J, O'Reilly GV, Jolesz FA. Neuroimaging and the lesion of multiple sclerosis. *AJNR Am J Neuroradiol*. 1987 May-Jun;8(3):549-52. PMID: 3111216.
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