# FRED WILLIAM PRIOR, PhD

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# **Personal contact information**

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# **Education**

Ph.D. in Computer Science, Illinois Institute of Technology, Chicago, IL	1992
M.S. in Biomedical Engr., Case Western Reserve University, Cleveland, OH	1984
M.A. in Anthropology, Case Western Reserve University, Cleveland, OH	1976
B.A. in Chemistry, Case Western Reserve University, Cleveland, OH	1974

# **Current Position**

Distinguished Professor and Chair	2015 - present
Department of Biomedical Informatics	
University of Arkansas for Medical Sciences	
Little Rock, Arkansas	

# **Professional Experience**

-		
	Director of the Electronic Radiology Laboratory	2003 - 2015
	Washington University School of Medicine	
	Department of Radiology	
	Saint Louis, MO	

Director of the Center for High Performance Computing	2011 – 2015
Washington University School of Medicine	
Department of Radiology	
Saint Louis, MO	

Associate Director of the Center for Biomedical Informatics	2011 – 2015
Washington University School of Medicine	
Department of Radiology	
Saint Louis, MO	

Chief, Section Radiologic Computing and Imaging Science	1993 - 1997
Department of Radiology	
Pennsylvania State University College of Medicine	
Hershey, PA	

# **Academic Appointments**

University of Arkansas for Medical Sciences

Distinguished Professor Department of Biomedical Informatics University of Arkansas for Medical Sciences	2021 - present
Little Rock, Arkansas  Professor Department Radiology	2020 - present

# Little Rock, Arkansas

Professor with Tenure Department of Biomedical Informatics University of Arkansas for Medical Sciences Little Rock, Arkansas	2019 - present
Professor Department of Biomedical Informatics University of Arkansas for Medical Sciences Little Rock, Arkansas	2015 – 2019
Adjunct Professor of Radiology Washington University School of Medicine Department of Radiology Saint Louis, MO	2015 – 2016
Professor of Radiology Washington University School of Medicine Department of Radiology Saint Louis, MO	2013 – 2015
Research Associate Professor of Radiology Washington University School of Medicine Department of Radiology Saint Louis, MO	2003 – 2013
Assistant Professor Department of Radiology Pennsylvania State University College of Medicine Hershey, PA	1993 - 1997
Adjunct Assistant Professor Department of Neuroscience & Anatomy Pennsylvania State University College of Medicine Hershey, PA	1993 - 1997
Member, Faculty Committee on Bioengineering Pennsylvania State University College of Engineering State College, PA	1993 - 1997
Other Positions and Employment Dir. PACS Product Line Management Eastman Kodak Co. Health Imaging Division Fremont, CA	2001 - 2003
Vice President R&D and Chief Technology Officer Cemax-Icon, a Kodak Co. Fremont, CA	2000 - 2001
Program Management Group Director Philips Medical System Integrated Clinical Solutions Best, Netherlands	1997 - 2000
Manager of Program Planning for PACS Siemens Gammasonics Inc. Hoffman Estates, IL	1986 - 1993

# **Consulting Relationships and Board Memberships:**

# **Corporate and Advisory Boards**

Member External Advisory Board of the Cardiff University, UK, Interdisciplinary Precision Oncology Cardiff Hub (IPOCH)	2022 - present
Member External Advisory Committee of the Arkansas Integrative Metabolic Research Center (AIMRC)	2021 - present
Member External Advisory Board for the Image Data Commons	2020 - present
National Alliance for Medical Image Computing (NA-MIC), external advisory board	2005 - 2014
Georgetown University Biomedical Informatics External Advisory Board, Chairman	2008
Organization for Computational Neurosciences, Board Member	2005
Pacsolve Limited, London, UK, Member of Board of Directors	2003 - 2005
US Dept. of Defense, Project Seahawk Advisory Panel, Tacoma, WA	1995 - 1996
RadMan Inc., Santa Monica, CA, Member of Medical Advisory Board	1994
Consulting Experience	
Technical Consultant on Imaging IT, UK Biobank and Oxford University, Oxford, UK	2013
Technical Consultant on Healthcare IT, Nuada Medical Specialist Imaging, London, UK	2013
Technical Consultant for Open Source Technology to OSEHRA, Inc., Arlington, VA	2012 – 2014
Consultation and Oversight for Conversion of NIOSH Pneumoconiosis Programs to Accept Digital Chest Images to the Centers for Disease Control (CDC) National Institute for Occupational Safety and Health (NIOSH), Morgantown, WVa	2008 - 2010
Management Consultant on Enterprise Healthcare IT, Booze & Co., Dubai, UAE	2010
Technical Consultant on Information System Interoperability Testing Province of Prince Edward Island, CA	2008 - 2009
Technical Consultant for Information System Integration, Joint Medical Information	2000 - 2009
Systems Office, US Department of Defense, Washington, DC	2005
Technical Consultant for Information System Technology, MEDIA PACS Architecture Working Group, US Department of Defense, Washington, DC	2004
Technical Consultant for PACS Technology Assessment, Philips Medical Systems, Shelton	, CT 1996
Technical Consultant on Teleradiology, General Electric Medical Systems, Milwaukee, Wise	consin 1996
Technical Consultant on DICOM and Modality Interfaces, Rigshospitalet, Copenhagen, Der	nmark 1996
Technical Consultant on PACS and Teleradiology, Northwestern Memorial Hospital, Chicag	go, II 1996
Technical Consultant on HIS-PACS Interfaces, Booz-Allen & Hamilton Inc., McLean, Va.	1995 – 1996
Technical Consultant on DICOM, College of American Pathologists, New York, NY	1995
Technical Consultant on DICOM and Modality Interfaces, Department of Veterans Affairs, V Information Services Center, Washington, DC	Vashington 1994
Technical Consultant on PACS and Telemedicine, Siemens Medical Systems and Siemens Iselin, NJ and Erlangen, Germany	AG, 1994
Technical Consultant on DICOM, Siemens Gammasonics, Inc., Hoffman Estates, Illinois	1994
Technical Consultant on Picture Archive and Communication Systems, Royal Alexandra Hospital for Children, Sydney, Australia	1994
Technical Consultant on Medical Image Communication, Management Systems Designers	
(for the National Library of Medicine), Vienna, Virginia	1994 - 1996
Technical Consultant on Medical Image Communication, Codman & Shurtleff, Inc.	1993 - 1994
Technical Consultant on IMAC Database Applications, Georgetown U., Washington, DC	1993 -1995
Technical Consultant on Telehealth Communications, UNC, Chapel Hill, NC	1993
Technical Consultant on DICOM Applications, RadMan Inc., Santa Monica, Ca.	1993
Technical Consultant to RSNA on DICOM Demonstration	1993

Professional Memberships and Activities	
Member, Biomedical and Health Informatics Academic Leaders Committee	2020 - present
Associate Member Royal Society of Medicine	2020 - present
Life Senior Member IEEE	2018 - present
Fellow, International Cancer Imaging Society	2017 - present
Member American Medical Informatics Association	2016 - present
Member Organization for Human Brain Mapping	2008 - present
Vice President, Chicago Chapter IEEE EMB	1987 - 1988
Member IEEE Computer Society	1982 - present
Member IEEE Engineering in Medicine and Biology Society	1980 - present
Member, IEEE	1980 - present
Honors and Awards	
European Journal of Medical Physics – Physica Medica, Galileo Galilei Award for best public	ation 2021
Elected Fellow, International Cancer Imaging Society	10/1/2017
Recipient of a UAMS Chancellor's Circle Grant on behalf of the Department of Biomedical Inf	ormatics 2017
Journal of Digital Imaging Best Paper Award, SIIM 2014	2014
Gift from the St. Louis Brain Tumor Research Foundation in support of The Cancer Imaging	Archive 2011
Recipient of the Richard W. Brand Award, Washington University Program in Physical Thera	
Committee Assignments and Administrative Services	
Grant Review Panels:	
Chair, NINDS Panel ZNS1 SRB-O23	2023
Chair, NCI Special Emphasis Panel/Scientific Review Group 2023/05 ZCA1 TCRB-J (M2) R	2023
UAMS Path 2 K Grant Writing Program Senior Panel Reviewer	2022
Peer Reviewer, ITCR Collaborative Proposals	2022
Peer Reviewer, UK Medical Research Council	2022
Co-Chair, Special Emphasis Panel/Scientific Review Group 2022/01 ZMH1 ERB-G (02)	2021
Member, Winthrop P. Rockefeller Cancer Institute RRAP Review Panel	2021
NIH ECHO Opportunities and Infrastructure Fund (OIF) Review Panel	2021
NIDDK Panel 2021/10 ZDK1 GRB-S (O1) R	2021
NCI ITCR Collaborative Proposal Review panel	2021
NCI P01 Panel 2021/05 ZCA1 SRB-K (M1) P	2021
NCI P01 Panel 2021/01 ZCA1 SRB-K (J1) P	2020
NIH Special Emphasis Panel 2020/10 ZCA1 SRB-K (O2) S	2020
Member, UAMS TRI (CTSA) KL2 Review panel	2020
Member, UAMS TRI (CTSA) Data Scholars Review panel	2020-2021
Chair, NIBIB P41 National Resource Center review panel	2019
Chair, NIH Special Emphasis Panel/Scientific Review Group 2020/01 ZRG1 ETTN-D (50) R	2019 - 2020
Expertise Reviewer, Swiss National Science Foundation	2019 - 2020
Charter Member and Chair, NIH Emerging Imaging Technologies in Neuroscience (EITN)	2019 - 2020
Charter Member and Chair, NIH Neuroscience and Ophthalmic Imaging Technologies Panel	2016 - 2018
NIH Special Emphasis Panel 2017/01 ZRG1 ETTN-L (53) R	2017
Chair, NIH Special Emphasis Panel 2016/08 ZRG1 ETTN-L (54) R	2016
Oak Ridge National Laboratory Associated Universities Ad Hoc Reviewer	2016
NIH Special Emphasis Panel 016/05 ZRG1 ETTN-L (53) R	2016
Referee, Netherlands Technology Foundation STW "Perspectief" programme	2015
NIH Special Emphasis Panel 2015/10 ZRG1 BST-N (55) R	2015
NIH Special Emphasis Panel 2015/05 ZNS1 SRB-G (81)	2015

NIH Special Emphasis Panel 2015/01 ZRG1 BST-F (30) 2		2014
NIH Special Emphasis Panel 2015/01 ZCA1 TCRB-9 (J3) S		2014
Alternate Chair, NIH Special Emphasis Panel 2014/05 ZRG1 ET	ΓN-I (51-53) R	2014
NIH Special Emphasis Panel 2014/01 ZNS1 SRB-G (72)	(0.00)	2013
NIH Special Emphasis Panel 2013/10 ZNS1 SRB-G (69)		2013
NIH Special Emphasis Panel/Scientific Review Group 2013/05 Z	CA1 SPLR 0 (M1) R	2013
	CAT SKLB-9 (WT) B	
NIH Special Emphasis Panel 2012/08 ZNS1 SRB-G (58)	O ( ALOIT)	2012
NIH Neuroscience and Ophthalmic Imaging Technologies Study	, ,	2012 - 2016
NIH Clinical and Services Studies of Mental Disorders Review Pa	anel ZRG1 ETTN-L (60) C	2012
NIH Neurotechnology - B Review Panel ZRG1 NT-L (09) F		2011 - 2012
NCI Special Emphasis Panel/Scientific Review Group 2010/10 Zo	, ,	2010 - 2011
NIH Special Emphasis Panel/Scientific Review Group ZRG1 MOS	SS-C (58)	2009 - 2010
Ad Hoc Reviewer, Chief Scientist Office Biomedical and Therape	utic Research Committee, So	otland 2009
Washington University ICTS review panel		2008 - 2014
Reviewer, Atlantic Canada Opportunities Agency (ACOA), Atlanti	ic Innovation Fund (AIF)	2006, 2008
Reviewer, National Science Foundation		1995
Technical Review Panelist, HPCC Multidisciplinary Research Opp	portunities. NSF	1995
Ad Hoc Technical Evaluator for VA Merit Review Board		1993 - 1994
Technical Evaluator for NLM		1993
Toolinaa Evaluator for NEW		1000
Reviewer for the following Journals and Confere	nces.	
Cell Press		2023
Insights into Imaging		2022
Journal of Clinical and Translational Science		2022
IEEE Systems, Man and Cybernetics		2022
Cancer Imaging Diagnostics		2021 2021
JCO Clinical Cancer Informatics		2020
Neurolmage		2020
Journal of Medical Systems		2020
Computational and Structural Biotechnology		2019 2019 - 2020
Nature Machine Intelligence Nature Nanomedicine		2019 - 2020
Journal of Pathology Informatics		2019
Nature Scientific Data		2019 - 2021
Tomography		2018, 2023
Entropy Medical Physics	2017	2018 2018, 2021 –
Science Translational Medicine	2017	2017 - 2018
Human Brain Mapping	2007, 201	2 - 2015, 2018
Multimedia Tools and Applications	2013	3, 2015 - 2019
Journal of Medical Imaging		2017
AMIA Annual Symposium Nature		2017 - 2018 2016 - 2019
Journal Biomedical Informatics	2016	6 – 2017, 2019
Journal of Digital Imaging		3 - 2014, 2016
Radiographics	1994, 2000 - 2003, 200	
Quantitative Imaging in Medicine and Surgery		2015, 2019
OSEHRA Open Source EHR Summit & Workshop Journal of Biological Physics		2012 - 2015 2007 - 2015
Frontiers in Neuroinformatics		2014
International Archives of Medicine		2014
IEEE Transactions on Information Technology in Biomedicine		2005 - 2012
Neuroscience and Neuroeconomics Biomedical Optics Express		2012 2010
International Journal of Computer Assisted Radiology and Surger	·V	2008, 2022
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ISCAS IEEE/NLM Life Science Systems & Applications Workshop	2007 2006 - 2007
PNAS	2007
Cancer Informatics	2006
RSNA InfoRad Technical Exhibits Society for Computer Applications in Radiology	2001 -2004 2004
Symposium on Computer Applications in Radiology  Symposium on Computer Applications in Medical Care	1994, 1996, 2002
Radiological Society of North America, Electronic Journal	1997-1999
IEEE Computer	1994, 1997
International Journal of Digital Libraries American Medical Informatics Association (SCAMC)	1997 1996
IEEE Computer Society	1996
Journal of Nuclear Medicine	1995
IEEE Transactions Medical Imaging	1990, 2019
University and Hospital Appointments and Committees:	
Member Dean's Lectureship and Alumni Awards Committee	2023 - present
Member of the Director, Data Coordinating and Operations Center for the ECHO IDeA	
States Pediatric Clinical Trials Network Search Committee	2022 - present
Chair, UAMS Advisory Committee for Data Management and Sharing Policy	2022 - present
Member of the Chair of the Department of Pharmaceutical Sciences Search Committee	2021 - 2022
Member of the ACRI Research Faculty Advisory Committee	2021 - present
Member of the UAMS Research Space Committee	2021 - present
Chair, UAMS Council of Department Chairs	2020 - 2022
Member of the TRI KL2 Internal Advisory committee	2020 - present
Member of the Data Monitoring committee	2018 - present
Member of the Radiology Chair Search committee	2018 - 2019
Member of the Vice Chancellor for Research Search committee	2018 - 2019
Member of the COBRE Center for Translational Pediatric Research	2018 – present
Member of the Dean's Distinguished Lecture Committee	2017 - 2022
Affiliate faculty in the UAMS Center for Health Literacy	2017 - 2022
Member of the Dept. of Pediatrics Chair Search committee	2016 - 2017
Member of the Winthrop P. Rockefeller Cancer Institute Senior Leaders committee	2016 - present
Member of the COM Research Council	2016 - 2019
Member of the Research Technology Executive Committee	2016 - present
Member of the UALR/UAMS Bioinformatics Steering Committee	2016 - 2021
Member, Electronic Data Warehouse Working Group and Executive Governance Group	2015 - present
Member, UAMS Translational Research Institute Leadership Council	2015 - present
Director, Biomedical Informatics Core (now CIRC), Translational Research Institute	2015 - present
Co-Leader, Biostatistics and Data Management Core, Arkansas Claude D. Pepper	
Older Americans Independence Center	2015 - 2019
Member, Appointments Promotions Committee, Department of Genetics,	
Washington University	2015
Member, Washington University Division of Biology and Biomedical Sciences Program in	
Computational & Systems Biology	2014 - 2015
Chair, Washington University IT governance committee on Research Computing	2014 - 2015
Member, Washington University IT Council	2014 - 2015
Member, WUSM Dean's Research Informatics Committee	2014 - 2015
Member, Clinical Informatics Fellowship Oversight Committee and faculty	2014 - 2015
Member, Research Data Center Planning Committee	2013 - 2015
Member, Radiological Sciences Executive Committee	2012 - 2015
Member, WUSM Institute of Clinical and Translational Sciences Operations Committee	2011 - 2015

	Research Member, Siteman Cancer Center	2007 -	2015
	Member, Center for Biomedical Informatics Leadership Committee	2007 -	2015
	Member of the WUSM Medical Library Informatics Advisory Board	2006 -	2015
	Member, Neuroimaging Informatics and Analysis Center (NIAC) Advisory Board	2010 -	2014
	Member, WUSTL CSE Faculty Search committee	2012 -	2013
	Member, WUSM Clinical Trials Management System Technical & Implementation Committees	2006 -	2009
	Member, Center for Clinical Imaging Research Executive Committee	2007 -	2008
Na	itional and International Committees:		
	Discussion Leader and Panelist, NCI-DOE Virtual Workshop: Accelerating Precision Radiation		
	Oncology Through Advanced Computing and Artificial Intelligence		2021
	Invited panel member, Pioneering the Future of Federally Supported Data Repositories A NITRD Big Data Interagency Working Group Virtual Workshop		2021
	Invited panel member, NCATS virtual convening on expanding data sharing and collaboration in biomedical research		2020
	Co-Organizer and Session Chair, The Wizardry of Al and Machine Learning in Cancer Imaging		
	Conference, Lisbon Portugal	2019 -	2021
	Invited Member, NCI Director's Research Planning Group		2018
	Plenary Speaker, NCI/NASA Think Tank Meeting on the Development of a Cancer		
	Biomarkers Data Commons		2018
	,	<b>' -2018</b> ,	2020
	Member, Arkansas Bioinformatics Consortium (AR-BIC) Steering Committee	2016 -	2020
	Member, AAPM's Medical Physics Dataset Article Subcommittee		2017
	Member, planning committee for NCI-ORNL workshop on HPC for radiomics		2017
	Session Chair, MCBIOS XIV		2017
	Session Chair, OSEHRA Open Source EHR Summit & Workshop	2012 -	2015
	Program Committee Chair, OSEHRA Open Source EHR Summit & Workshop	2012 –	2014
	Committee Member, NCI Lung Cancer Screening Prize Workshop		2012
	Subject Matter Expert, NCI Cooperative Groups RT/Imaging Workshop		2011
	Program Committee, AMA-IEEE Medical technology Conference		2011
	External Assessor for Tenure and Promotion, Universiti Sains Malaysia, Pulau Pinang, Malaysia	a	2010
	Learning Track Co-chair, and Session Chair, SIIM Annual Meeting		2010
	Member Program Committee and Session Chair, IEEE/NLM Life Science Systems &	0000	0040
		- 2008,	2010
	Special Interest Group Chair: Cancer Informatics Software, Invited Participant, ILO-NIOSH Scientific Workshop		2008
	Program Committee and session chair, National Forum on the Future of the Defense Health		2008
	Informatics System  Program Committee and Organizer: New Strategy Workshop – Open Source Strategy for		2000
	Multi-Center Image Management	2006 -	2007
	CaBIG in Vivo Imaging Workspace	2005 –	
	Workshop Chair: Image Quality, NIST USMA Workshop on Imaging Metrology for Telemedicine		2005
	Session Chair, PACS2005: the Expanding Integrated Digital Healthcare Enterprise		2005
	Steering Committee and Session Chair, Digital Transformation: Symposium for Radiology		
	and the Healthcare Enterprise		2004
	Program Committee & Session Chair, Annual Meeting of the Biomedical Engineering Society		1996
	Member ACR Committee on NEMA Standards	1993 –	1996
	ACR Representative to DICOM Standards Committee	1993 –	1996
	Program Committee, SPIE '97, PACS Design & Evaluation		1997
	Session Chair, Fifth International Conference on Image Management & Communication		1997

1985 - 1993

Siemens Representative to DICOM Standards Committee

#### **Educational Activities**

#### **Refresher Courses:**

**RSNA Features** Session: "Data Sharing and Patient Privacy in the World of Al" Chaired by F.W. Prior, Course M6-CIN10, Radiological Society of North America, Chicago, II. November 29, 2021.

MICCAI2021 Satellite Event: "NIH Cancer Imaging Data Repositories for Biomedical Data Science Research" Presented by F.W. Prior (faculty) MICCAI 2021, Strasbourg, France (virtual), 2021.

RSNA Features Session: "Novel Discoveries Using the NCI's Cancer Imaging Archive (TCIA) Public Data Sets" Chaired by F.W. Prior, Course RC653, Radiological Society of North America, Chicago, II. December 2, 2020.

MICCAI2020 Satellite Event: "Public Cancer Imaging Data Repositories for Biomedical Data Science Research" Presented by F.W. Prior (faculty) MICCAI 2020 Virtual, Lima Peru, 2020

**RSNA Refresher course**: "Computer Science 'Deep Learning' Research by the Academic Community" Presented by F.W. Prior (faculty) Course RCC55A, Radiological Society of North America, Chicago, II. 2019.

**RSNA Hands-on course**: "An Introduction to Using the NIH/NCI's Cancer Imaging Archive (TCIA) (Hands-on)" Presented by F.W. Prior (faculty) Course RCB54, Radiological Society of North America, Chicago, II. 2019.

**RSNA Refresher course**: "Computer Science 'Deep Learning' Research by the Academic Community" Presented by F.W. Prior (faculty) Course RCC453A, Radiological Society of North America, Chicago, II. 2017-2018.

RSNA Hands-on course: "Using Publicly Accessible 'Big Data' from the NIH/NCI's Cancer Imaging Archive (TCIA) to Research Quantitative Radiomics, Proteomics, Genetics and Pathology" Presented by F.W. Prior (faculty) Course RCB54, Radiological Society of North America, Chicago, II. 2016 - 2018.

RSNA Hands-on course: "The NIH/NCI Cancer Imaging Archive (TCIA); a comprehensive source of DICOM imaging data for research" Presented by F.W. Prior (faculty) Course ICIA41, Radiological Society of North America, Chicago, II. 2012 - 2015.

**RSNA Hands-on course:** "Rapid Application Development with XIP™ - the eXtensible Imaging Platform," Presented by F.W. Prior (docent) Course ICIA44, Radiological Society of North America, Chicago, II. 2013 - 2014.

RSNA Refresher course: "What is Cloud Computing and What Can It Do for Me?" Presented by F.W. Prior (faculty) Refresher Course RC130A, Radiological Society of North America, Chicago, II. 2012 - 2013.

RSNA Refresher course: "Digital Image Archives" Presented by F.W. Prior (faculty) Refresher Course 226, Radiological Society of North America, Chicago, II. 1997 - 2003.

RSNA Refresher course: "Update on PACS Technology and Infrastructure

PACS Architecture: State of the Art" Presented by F.W. Prior (faculty) Refresher Course 126, Radiological Society of North America, Chicago, II. 2004.

**SCAR University:** Emerging Technologies 101/104, Hardware and Software Advances for Storage and Display, 2001 - 2002

SCAR University: Introductory Course 107, Essential Components of a RIS, 2004.

# **Undergraduate, Graduate, Medical, Postgraduate:**

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2023	8 hours	Special Topics, BMIG 5180	(Graduate)
2022, 2023	1 hour	Path 2 K training program	(Post Grad)
2022	16 hours	Special Topics, BMIG 5180	(Graduate)
2021	16 hours	Special Topics, BMIG 5180	(Graduate)
2021 - 2022	16 hours/semester	Course Director, BMIG 6220	(Graduate)
2021 - 2022	6 hours	Research Rotations BMIG 5010	(Graduate)
2021	16 hours/semester	Course Director, BMIG 6210	(Graduate)
2021 - 2023	6 hours/year	Experimental Design BMIG 6050	(Graduate)
2020	16 hours	Clinical Imaging Informatics BMIG 5113	(Graduate)
2020	2 hours	HIDS 509 (Georgetown U.)	(Graduate)
2020 - 2021	2 hours/semester	Foundations BMI: CI BMIG 5012	(Graduate)
2020	1 hour	BMIG 5190 Seminar	(Graduate, Medical)
2020	28 hours	Research Rotations BMIG 5010	(Graduate)
2019	1 hour	BMIG 6012	(Graduate)
2019	16 hours	Experimental Design BMIG 6050	(Graduate)
2019 - 2022	1 hour/year	Pathology Resident Lecture	(Medical) ´
2019 - 2023	16 hours/semester	Course Director, BMIG 6201 ML	(Graduate)

2018 - 2019	15 hours/semester	Course Director, BMIG 5190 Seminar	(Graduate, Medical)
2018	2 hours	Biomedical Imaging, BMIG 5012	(Graduate)
2017	1 hour	Machine Learning, BMIG 5011	(Graduate)
2016 - 2017	15 hours/semester	Course Director, BIOM 5190 Seminar	(Graduate, Medical)
2009 - 2013	10 hours	Biomedical Informatics (WUSM)	(Graduate)
1998 - 2003	12 hours	Neuroscience, Neuro-Imaging (Touro)	(Medical)
1993 - 1996	12 hours	Bioengineering Internship (PSU)	(Graduate)
1994 - 1996	6 hours	Neuroscience (PSU)	(Medical)
1995	60 hours	Computational Neuroscience (PSU)	(Graduate)
1993	2 hours	Medical Imaging (PSU)	(Graduate)
1979	16 hours	Physiology Lab (CWRU)	(Medical)
1975	45 hours	Anthropology, Course Director (CWRU)	(Undergraduate)

# Student Mentoring High School Student:

Anu Iyer, Little Rock Central High, Arkansas Junior Science & Humanities Symposium mentor, 2020-2023

1st place in Computer Science category at the Central Arkansas Regional Science and Engineering Fair (CARSEF), Mu Alpha Theta award, 1st place in the overall 9th-12th senior division, qualified to compete in the International Science and Engineering Fair (ISEF) as a finalist, 1st place in Arkansas State JSHS, JSHS scholarship winner and qualified for JSHS Nationals, 2 NSF Funded summer internships, Regeneron STS Top 300 Scholar

# **Summer Internships:**

Yan Yuanheng, M.S. Student from University of Illinois, summer research rotation, 2017 Athen Smith, Student from UA Pine Bluff, NSF funded summer research rotation, 2021

#### **Research Rotations:**

Justin Porter, MD/PhD. Student, Washington University School of Medicine, Summer research rotation, 2015

### M.S. Thesis Advisor:

Katrina Donovan, Department of Biomedical Informatics, UAMS 2019-present Robert Kenney, Dept. of Bioengineering, Penn State University, MS Bioengineering 1996.

#### M.S. Thesis Committee:

Ibrahim Noorzaie, Dept. of Computer Science, Washington University, MS Computer Science 2006.

# Ph.D. Thesis Advisor:

Abigail Eubank, Department of Biomedical Informatics, UAMS 2020-present Saly Abouelenein, Department of Biomedical Informatics, UAMS 2019-present Mahanazuddin Syed, Department of Biomedical Informatics, UAMS 2019-2022 Shorabuddin Syed, Department of Biomedical Informatics, UAMS 2019-2022 Md. Enamul Hoq, Department of Biomedical Informatics, UAMS 2021-present

#### Ph.D. Thesis Committees:

Aaron Kemp, Department of Biomedical Informatics, UAMS 2021-present Michael Rutherford, Department of Biomedical Informatics, UAMS 2021-present Mitra Rocca, Department of Biomedical Informatics, UAMS 2022-present

Dr. Lu Liu, Dept of Computer Science, Washington University, Ph.D. Computer Science 2011

Dr. Sharath Cholleti, Dept of Computer Science, Washington University, Ph.D. Computer Science 2008

Dr. Rouhollah Rahmani, Dept of Computer Science, Washington University, Ph.D. 2008

Dr. Hui Zhang, Dept of Computer Science, Washington University, Ph.D. 2007.

Dr. Thomas Coates, Dept. of Neuroscience and Anatomy, Penn State University, Ph.D. 2001

- Dr. Huo Lu, Dept. of Neuroscience and Anatomy, Penn State University, Ph.D. 1998
- Dr. Pi Hsien, Dept. of Biomedical Engineering, Penn State University Ph.D. 1995
- Dr. Emil Wirsz, Dept. of Computer Science, Illinois Institute of Technology, Ph.D. 1994
- Dr. Nicholas Wirsz, Dept. of Computer Science, Illinois Institute of Technology, Ph.D. 1994

# **Postdoctoral and Faculty Mentoring:**

- Dr. Martijn Starmans, Erasmus Medical Center, Netherlands, Dutch Research Council (NOW) Veni Mentoring Committee, 2023-present
- Dr. Daniel Liu, UAMS/ACH, KL2 Mentoring Committee, 2022-present

Clinical Informatics Fellowship Program Faculty, UAMS, Dr. Nadim-Nicolas Ghanem and Dr. Azriel Stinson, Clinical Informatics Fellows – Research Rotation, 2022

- Dr. Cody Ashby, UAMS, KL2 mentoring committee, 2022-present
- Dr. Melody Greer, UAMS, Mentoring Committee, 2022-present

Clinical Informatics Fellowship Program Faculty, UAMS, Dr. Jacob Wooldridge, Clinical Informatics Fellow – Research Rotation, 2021

- Dr. Tuhin Virmani, UAMS, Mentored Grant Proposal Development Program, Mentor, 2021
- Dr. Horacio Gomez-Acevedo, UAMS, Mentored Grant Proposal Development Program & Diversity supplement proposal, Mentor, 2021

Clinical Informatics Fellowship Program Faculty, UAMS, Dr. Daniel Liu, Clinical Informatics Fellow – Research Rotation, 2021

- Dr. Maryam Garza, UAMS, KL2 mentor, 2021-present
- Dr. Corey Hayes, UAMS, Mentoring Committee, 2021-present

Clinical Informatics Fellowship Program Faculty, UAMS, Dr. Lori Wong, Clinical Informatics Fellow – Research Rotation, 2020

- Dr. Melody Greer, UAMS, HSIE Program, 2019-2020
- Dr. Shengli Sheng, University of Central Arkansas, mentee under the IMBRE Mentorship program, 2018 Clinical Informatics Fellowship Program Faculty, Washington University, Dr. Kevin O'Bryan, Clinical Informatics Fellow Research Rotation, 2014
- Dr. Matthew Kelsey, PhD, Washington University, Post-Doctoral Fellow 2012 2015
- Dr. Joseph Erinjeri, Dept. of Radiology, Washington University, Resident Research Rotation 2008
- Dr. David S. Channin, Dept. of Radiology, Penn State University, Resident Research Rotation 1993-1997

#### **Grants and Contract Awards**

### Pending:

# **Current:**

Co-Principal Investigator, UAMS Team Science Award, *Towards Advanced Lung Cancer Screening*, \$100,000, 04/01/2023 – 30/31/2024

**Principal Investigator**, UAMS Creativity Hub, *Creativity Hub AI for Health*, Total Award \$300,000, 03/15/2022 – 09/30/2023.

**Principal Investigator**, NIDDK 2 SB1 DK079387-09, *AcetaSTAT Validation and CommercializationA lateral flow dipstick to identify Acetaminophen protein adduct in serum*, Requested Amount: \$3,208,449, 04/01/2022 – 03/31/2025.

**Core Director**, NIH Office of the Director U24OD024957, *Data Coordinating and Operations Center (DCOC) for the IDeA States Pediatric Clinical Trials Network*, Total Award \$39,414,024, 09/01/2020 – 08/31/2025.

**Investigator:** NSF OIA-1946391, *RII Track-1: Data Analytics that are Robust and Trusted (DART): From Smart Curation to Socially Aware Decision Making*, Total Award \$20,000,000, 07/01/2020 – 06/30/2025.

**Work Package Lead:** EU SEP-210631720, *EuCanImage:A European Cancer Image Platform Linked to Biological and Health Data for Next-Generation Artificial Intelligence and Precision Medicine in Oncology,* Total UAMS Award: €805,479, 6/1/2020 to 5/31/2024.

**Principal Investigator**, Leidos Biomedical Research, Contract 20X023F for NCI, *Maintenance and Extension of The Cancer Imaging Archive (TCIA)*, Award Amount (Year 1): \$1,672,646, (Year 2): \$1,982,535, (Year 3): \$2,297,482, (Year 4): \$2,418,054, 8/31/19 to 08/30/24.

**Core Director**, NCATS UL1 TR003107, *Expanding Translational Research in Arkansas*, Requested Amount: \$26,136,160 (total award), 07/01/19-06/30/24.

**Principal Investigator**, NCI 1U24CA215109, *TCIA Sustainment and Scalability - Platforms for Quantitative Imaging Informatics in Precision Medicine*, \$8,318,449 Total Award, 09/22/2017 – 07/31/2023

**Sub Award Principal Investigator**, PCORI/PCS-1403-12804, *Pragmatic Randomized Trial of Proton versus Photon Therapy for Locally Advanced Breast Cancer to compare the effectiveness of photon vs. proton Radiotherapy.* Award Amount: \$335,943 10/01/15-08/31/24.

#### Past:

**Core Director**, NICHD U24HD090912, *Data Coordinating and Operations Center (DCOC) for the IDeA States Pediatric Clinical Trials Network*, Award Amount: \$41,881,887 (total award), 10/01/16 – 09/30/21.

**Principal Investigator**, Leidos Biomedical Research, Contract 20X023F, TO 6 for NCATS, N3C Imaging Pilot, Award Amount: \$180,000, 1/27/21 to 08/30/21.

**Core Director**, NCI U54 CA 199092-01, *Center for Multiple Myeloma Nanotherapy*, Award Amount: \$11,080,223 (total award). 9/1/15 – 8/31/20.

**Principal Investigator** NCI 1U01CA187013-01 Resources for development and validation of Radiomic analyses & Adaptive Therapy, \$2,916,794 Total Award, 09/01/2014 – 08/31/2020

**Principal Investigator**, Leidos Biomedical Research, Contract 16X011 for NCI, *Maintenance and Extension of The Cancer Imaging Archive (TCIA)*, Award Amount (Year 1): \$795,378, (Year 2): \$753,037, (Year 3): \$938,100, (Year 4): \$1,546,407 10/1/15 to 09/30/19.

**Principal Investigator**, NCI 3U24CA215109-02S1, *Informatics Platform for Cancer-Related Cognitive Impairment and Dementia Research*, \$375,000 Total Award, 08/01/2018 – 07/31/2019

**Core Director**, NCATS U54TR00162901A1, *Expanding Translational Research in Arkansas*, Award Amount: \$3,470,000 (total award), 09/15/17 – 06/30/18.

**Sub Award Principal Investigator**, 5UL1TR001857, University of Pittsburgh Clinical and Translational Science – ACTS Consortium. Award Amount: \$100,575 6/01/17-05/31/18.

**Principal Investigator**, NSF ACI-1541364, *CC\*DNI Networking Infrastructure: Washington University Research Network (WURN)*, Award Amount: \$475,590, 10/1/15 – 9/30/17.

**Sub Award Principal Investigator**, Leidos Biomedical Research, Contract 14X138 for NCI, *caMicroscope - A Digital Pathology Integrative Query System*, Award Amount: \$37,900, 5/1/14 – 9/30/15.

**Principal Investigator**, NIH 1 S10 OD018091-01, *GPU Computing Resource To Enable Innovation In Imaging And Network Biology*, Award Amount: \$597,700, 05/01/14 – 04/30/15.

**Co-Principal Investigator,** Data Coordinating Center, Therakos, Inc. Contract, *Extracorporeal Photopheresis for the Management of Progressive Bronchiolitis Obliterans Syndrome in Medicare-Eligible Recipients of Lung Allografts, Total Award Amount:* \$2,862,799, Core Award Amount: \$2,244,000, 3/1/14 to 2/28/18.

**Investigator**, 1 U54 MH091657-01, *Mapping the Human Connectome: Structure, Function, and Heritability*, Award Amount: \$6,784,111, 09/01/2010 to 08/31/2015.

**Principal Investigator**, Leidos Biomedical Research, Contract 14XS007 for NCI, *Maintenance and Extension of The Cancer Imaging Archive (TCIA)*, Award Amount (Year 1): \$1,037,705, Award Amount (Year 2): \$803,037, 10/1/13 to 09/30/15.

**Principal Investigator**, SAIC-F Contract 10XS220 for NCI, *Image Archive Hosting*, Award Amount: \$3,684,356, 10/15/10 to 09/30/13.

**Informatics Core Director**, NCI U54 CA136398, *Photoacoustic/optical/ultrasonic imaging of sentinel lymph nodes and metastases.* \$5,112,663 (total award), 09/01/08–08/31/13.

**Principal Investigator**, OSEHRA Contract for Dept. Veterans Affairs, *Open Source Electronic Health Record Foundation*, Award Amount: \$50,000, 6/15/12 to 9/30/12.

**Principal Investigator**, TIAG Contract GS-35F-0738N-WUSTL for Dept. Veterans Affairs, *Open Source Electronic Health Record Foundation*, Award Amount: \$379,216, 6/20/11 to 6/19/12.

**Principal Investigator**, NIDDK R21 DK079457-01, *Biomarkers for Charcot Arthropathy in Diabetic Patients*, Award Amount: \$836,073, 08/01/07 – 07/31/11.

**Principal Investigator**, NCI Contract 86001CBS43, *CaBIG Cancer Bioinformatics Grid In Vivo Imaging Workspace*, Award Amount: \$425,253, 10/1/05 to 4/14/11.

**Principal Investigator**, 1R41CA132790-01 (PI: Rhodes) Subcontract: *Electronic Image Trial Management System,* Award Amount: \$93,373, 09/22/09 – 02/28/11

**Principal Investigator**, NIH/NCRR 1S10RR022984-01A1, *High Performance Biomedical Imaging Computer Resource*. Award Amount: \$1,941,026 04/15/09 – 04/14/10

**Principal Investigator**, ScenPro/NCI Subcontract SP040709-002, *CaBIG Life Sciences Domain Analysis Model*, Award Amount: \$30,706, 02/01/09 to 09/30/09.

**Radiology Principal Investigator**, NIDDK 5 U01 DK062401, *Data Coordinating Center (DCC) for the Polycystic Kidney Disease Treatment Network (PKD-TN)*, Award Amount: \$1,366,622 08/15/02-06/30/09.

**Radiology Principal Investigator**, NIDDK 5 U01 DK062401-01, Consortium for Radiologic Imaging Studies of Polycystic Kidney Disease (CRISP) Extended Cohort Study, Award Amount: \$250,000 12/01/05 – 6/30/09.

**Principal Investigator**, N01-LM-3-3506 (PI: Mun) Subcontract: *WS/PIDS Validation and Testing*, Award Amount: \$134,999, 9/15/06-5/15/08

**Radiology Principal Investigator**, R01 HD36895-04A1, *Visualizing Diabetic Feet to Optimize Orthotic Fitting,* Award Amount: \$281,138, 12/1/98 – 11/30/06.

**Principal Investigator**, Pennsylvania Blue Shield Contract, *Cooperative Research and Development of a Web Based Care-Connect,* Award Amount: \$ 71,237, 5/96-4/97.

**Principal Investigator**, Siemens Medical Systems contract, *DICOM Interconnectivity Testing*, Award Amount: \$71,920, 3/96-2/97.

**Principal Investigator**, U.S. Army IPA Contract Renewal, *General Consultant for Medical Image Modality Interfaces*, Award Amount: \$60,218, 10/95-9/97.

**Principal Investigator**, Information and Control Technology, Inc. Subcontract (National Electrical Manufacturers Association Contract, "Guidelines for Cross-Vendor DICOM Testing," Award Amount: \$9,288. 8/95-8/96.

**Principal Investigator**, Loral WDL Contract, *Disaster Telemedicine Demonstration for RSNA '95*, Award Amount: \$52,500. 9/95-1/96.

**Principal Investigator**, Loral WDL Subcontract (ARPA "Advanced PACS" Technology Reinvestment Project, NASA AMES Contract Number NCC2-9004), *Distributed Radiology Demonstration*, Award Amount: \$45,000, 12/95-3/96.

**Principal Investigator**, U.S. Army Grant DAMD17-94-J-4428, *A DICOM/Asynchronous Transfer Mode (ATM) Interface Allowing Open Access To MDIS and Other PACS*, Award Amount: \$84,614, 7/94-12/94.

**Principal Investigator**, Loral WDL Subcontract (ARPA "Advanced PACS" Technology Reinvestment Project, NASA Ames Contract Number NCC2-9004), *DICOM/ATM Demonstration for RSNA '94*, Award Amount: \$114,602, 7/94-12/94.

**Principal Investigator**, U.S. Army IPA Contract, *General Consultant for Medical Image Modality Interfaces*, Award Amount: \$63,100, 11/93-9/95.

**Principal Investigator**, U.S. Army Contract DAMD17-93-M-4464, *DICOM User Conformance Profile*, Award Amount: \$10,000, 3/93-7/93.

# **Editorial Board Appointments**

Section Editor. Cancer Imaging, 2021-present

Editorial Board Member, Experimental Biology and Medicine, 2021 - 2024

Editorial Board Member, Nature Scientific Data, 2019-present

Guest Member of Nature Scientific Data Editorial Board, 2019

Associate Editor, Medical Physics, 2018-present

Reviewing Editor, Computerized Medical Imaging and Graphics, 2013-2022

Associate Editor, IEEE Journal of Biomedical and Health Informatics, 2013-2020

Associate Editor, IEEE Information Technology in Biomedicine, 2005-2013

Editorial Review Board member of the International Journal of Knowledge Discovery in Bioinformatics, 2009

#### **Publications**

#### Peer Reviewed

- 1. Lestrel PE, Kimbel WH, **Prior FW**, Size and Shape of the Hominoid Distal Femur: F Fleischmann ML. ourier Analysis. Am J Phy Anthro. 1977; 46(2):281-290. PMID: 403772
- 2. **Prior FW**. Preliminary Analysis of Functional Variability in the Mousterian of Levallois Facies: A Reexamination. Ohio J Science. 1977; 77(3):119-124.
- 3. **Prior FW**, Nabijee KH. Information Management for Data Retrieval in a Picture Archive and Communication System. J Digit Imaging. 1989; 2(3):170-176. PMID: 2488042
- 4. **Prior FW,** Specifying DICOM Compliance for Modality Interfaces. RadioGraphics. 1993; 13:1381-1388, 1993. PMID: 8290731
- 5. Prior F, Bradshaw F. Interconnectivity Testing. Adm Radiol J.1996:15(6):26-7. PMID: 10159369
- 6. Bidgood WD, Horii SC, **Prior FW**, Van Syckle DE. Understanding and Using DICOM, the Medical Image Communication Standard. JAMIA. 1997; 4:199-212. PMID: 9147339
- Bidgood WD, alSafadi Y, Tucker M, Prior FW, Hagan G, Mattison JE. The Role of DICOM in an Evolving Healthcare Computing Environment: The Model is The Message. J Digit Imaging. 1998; 11(1):1-9. PMID: 9502321
- 8. Coates TD, Larson-Prior L, Wolpert S, **Prior FW**. Classification of Simple Stimuli Based on Detected Nerve Activity. IEEE Eng Med Biol. 2003; 22(1):64-76. PMID: 12683065
- 9. Falk D, Hildeboldt C, Smith K, Morwood MJ, Sutikna T, Brown P, Brunsden B, **Prior FW**. The Brain of LB1, Homo floresiensis. Science 2005 308(5719):242-5. PMID: 15749690
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- 11. Mun, SK, **Prior**, **F**., Caramella D, Ratib O. Introduction to the Special Section on Image Management in the Healthcare Enterprise, IEEE Trans. Info. Tech. in Biomed. 2007; 11(1):1-6. PMID: 17249397
- 12. Falk D, Hildeboldt C, Smith K, Morwood MJ, Sutikna T, Saptomo E, Imhof H, Seidler H, **Prior FW**. Brain Shape in Human Microcephalics and Homo floresiensis. PNAS 2007; 104(7):2513-2518. PMCID: PMC1892980
- 13. **Prior F**, Erickson B, Tarbox L. Open Source Software Projects of the caBIG™ In Vivo Imaging Workspace Software Special Interest Group. Journal of Digital Imaging, 2007; 20(supl 1):94-100, doi: 10.1007/s10278-007-9061-4. PMCID: PMC2039820
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- 19. **Prior F**, Medical Knowledge Discovery and Management. Mil Med 2009; 174 (5) (Suppl): 21-26. PMID: 19562958
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- 27. Commean P, Kennedy J, Bahow K, Hildebolt C, Smith K, Liu L, Hastings M, Ju T, **Prior F**, Sinacore D. Volumetric Quantitative Computed Tomography Measurement Precision for Volumes and Densities of Tarsal and Metatarsal Bones, Journal of Clinical Densitometry, 2011; 14(3):313-20, DOI:10.1016/j.jocd.2011.05.006. PMID: 21723764
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- 47. Gelber J, Sinacore D, Strube M, Mueller M, Johnson J, **Prior F**, Hastings M. Windlass mechanism in individuals with diabetes mellitus, peripheral neuropathy and foot deformity, Journal of Foot and Ankle Research, 2014; DOI: 10.1177/1071100714538416, PMID: 24917647, PMCID:PMC4262736
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#### **Abstracts and Presentations**

#### **Oral Presentations**

#### **National and International**

- 1. "ACR-NEMA Data Dictionary for RIS-PACS Interfaces" Presented by F.W. Prior at Image Management and Communication Conference, Washington, D.C., June 1989.
- "ACR-NEMA and SPI Data Storage Structures" Presented by F.W. Prior at Telemed Project Meeting, Berlin, Germany. February 1990.
- 3. "The Status of the ACR-NEMA RIS-PACS Interface Standard" Presented by F.W. Prior at the meeting of IEEE Medix. Atlanta, Georgia. May 1990.
- "A Large Scale Picture Archive and Communication System to Support a Fully Digital Hospital".
   Presented by F.W. Prior at the Super Computer Center, Research Triangle Park, North Carolina. November 1991.

- 5. "Importance of Standards: A Medical Manufacturer's Perspective". Presented by F.W. Prior at the Transcontinental ISDN Project 1992 (TRIP'92), Reston, Virginia. November 1992.
- 6. **"Tutorial: DICOM Service Classes and Conformance Claims".** Presented by F.W. Prior at the Spring '93 Health Level Seven Working Group Meeting, Boston MA, May 1993.
- 7. "PACS: Picture Archiving & Communication Systems". Televised presentation on the Impact of Standards, Presented by F.W. Prior, Healthcare Informatics Telecom Network, September 1993.
- "Why Can't My Scanner Network". Presented by F.W. Prior, RSNA'93 InfoRad, Chicago, IL., November 1993.
- "DICOM HIS-RIS-PACS Interface Services". Presented by F.W. Prior, RSNA'93, NEMA Seminar -Implementation of the DICOM 3.0 Standard, Chicago, IL., November 1993.
- "DICOM Tutorial to JIRA and IS&C". Presented by F.W. Prior (officially representing ACR) & C. Parisot (officially representing NEMA) to the Japanese Radiology Apparatus Industry Association, Tokyo, Japan, May 1994.
- 11. "DICOM Conformance." Presented by F.W. Prior at SCAR 94, Winston-Salem North Carolina, June 1994.
- 12. "PA HealthNet Teleradiology: Two Perspectives," Presented by F.W. Prior and W. Salmon, RSNA'95 InfoRad, Chicago, IL., November 1995.
- 13. **"DICOM and PACS,"** A Week Long Lecture Series Presented by F.W. Prior, Riggshospitalet, Copenhagen, Denmark, January 1996.
- "DICOM Guidelines for Cross-Vendor Testing," DICOM Implementors Workshop, NEMA, Rosslyn, Va., February,1996.
- 15. "Networks: Local & Global, Fast & Slow," Catagorical Course, AIUM '96, New York, NY, March 1996.
- "DICOM: An Enabling Technology for PACS," Presented by F. Prior, American Roentgen Ray, San Diego, CA. May 1996.
- 17. "The Internet and Medicine," Presented by F. Prior, Connections 96, Philadelphia, PA. June 1996.
- 18. "The DICOM Standard and Implementation," Presented by F. Prior, Conference on Computer Applications in Radiology, SCAR 96, Denver, CO. June 1996.
- 19. **"Looking to the Future: Digital Hospitals and Beyond"** Presented by F.W. Prior (faculty) Hospital Management towards the 21st Century, Amsterdam, Netherlands, November 1997.
- 20. **"Focus on the Future: A Sneak Preview of Emerging Technologies"** Presented by F.W. Prior (faculty) The Future of Healthcare Technology is Now, Scottsdale Arizona, February 1999.
- 21. "Enterprise Scalable RIS based on Distributed Objects and Web Technologies" Presented by F.W. Prior, IT I vården. Stockholm. Sweden. May 1999.
- 22. "Electronic Medical Record Systems and Enterprise Information Technologies" Presented by F.W. Prior to the Right Honorable Frank Dobson MP, Secretary of State for Health of the United Kingdom, June 1999.
- 23. "Next steps in the evolution of PACS and Teleradiology toward universal electronic health systems," Presented by F.W. Prior, The British Institute of Radiology Seminar Teleradiology and Electronic Health, The Royal College of Physicians, London, UK, February 2002.
- 24. "Healthcare IT and Imaging Information Systems," Presented by F.W. Prior, DVI International Country Managers Meeting, Leeds Castle, Maidstone, UK, January 2003.
- 25. "Imaging Data Management Requirements in a Multi-Center Medical Research Environment," Presented by F.W. Prior, Imaging Biomarker Summit II, Philadelphia, PA, June 2006.

- "PACS system architecture: current and future design," Presented by F.W. Prior, UK Radiological Congress 2003, Birmingham, UK, June 2003.
- 27. **"Radiology Information Systems,"** Presented by F.W. Prior, Digital Transition Expo, Sociedad Radiologica De Puerto Rico, San Juan, Puerto Rico, August 2004.
- 28. "Digital Modalities, Study Acquisition, Distribution and Storage Requirements," Presented by F.W. Prior, PACS 2005: The Expanding Integrated Digital Healthcare Enterprise, San Antonio, TX, March 2005.
- 29. "Storage Hardware and the Infrastructure," Presented by F.W. Prior, PACS 2005: The Expanding Integrated Digital Healthcare Enterprise, San Antonio, TX, March 2005.
- 30. "Software for Image Based Cancer Research," Presented by F.W. Prior, CaBIG in Vivo Imaging Workspace, Philadelphia, PA, December 2005.
- 31. "Image Management for Research and Clinical Trials," Presented by F.W. Prior, New Strategy Workshop
   Open Source Strategy for Multi-Center Image Management, Las Vegas, NV, March 2006.
- 32. "Imaging Data Management Requirements in a Multi-Center Medical Research Environment," Presented by F.W. Prior, Imaging Biomarker Summit II, Philadelphia, PA, June 2006.
- 33. "Software Special Interest Group Status Update and Phase II Project Plan," Presented by F.W. Prior, CaBIG in Vivo Imaging Workspace, Washington, DC. July 2006.
- 34. "Research Imaging and Imaging Informatics: The Center for Clinical Imaging Research," Presented by F.W. Prior, American Institute of Chemical Engineers, St. Louis, MO. October 2006.
- 35. "Digital Imaging: How It Relates to Pathology In Vivo Imaging Workspace Projects," Presented by F.W. Prior, CaBIG Annual Meeting, Washington, DC. February 2007.
- 36. "Challenges in Research Image Management," Presented by F.W. Prior, Enterprise Research Image Archive Meeting, Duke University Medical Center, Raleigh, NC, March 20, 2008.
- 37. "Imaging Informatics for Neuroscience Research and Clinical Trials," Presented by F.W. Prior, Georgetown University Biomedical Informatics Speaker Series, February 13, 2009.
- 38. "Information Integration in a Complex Medical Research Environment," Presented by F.W. Prior, Virginia Tech Informatics Speaker Series, March 29, 2009.
- 39. "Multicenter Clinical Trials: A Case Study of World U-Health," Presented by F.W. Prior, Seoul National University World u-Health Alliance Symposium, Seoul South Korea, December 3, 2009.
- 40. "Imaging Informatics to Enable Image-based Biomarkers and Clinical Trials." Presented by F.W. Prior, Prime Forum, Princeton NJ, June 2, 2010.
- 41. "Case Study of OSS at the National Cancer Institute," Presented by F.W. Prior, Open Source Software and the Military Health System Workshop, Arlington, VA, Sept 23, 2011.
- 42. "Informatics and Computational Strategies for the Human Connectome Project," Presented by F.W. Prior, Illinois Institute of Technology, Chicago, IL, May 2013.
- 43. Plenary Address, "Big Data Research: Informatics and Computational Strategies for the Human Connectome Project," Presented by F.W. Prior, First International Symposium: Open Big Data and Advanced Analytics in Health, Seoul, South Korea, August 9, 2013.
- 44. **"Tutorial: Open Data,"** Presented by F.W. Prior, OSEHRA Summit and Workshop, Bethesda MD, September 4. 2013.
- 45. **"Tutorial: Open Source Primer,"** Presented by F.W. Prior, OSEHRA Summit and Workshop, Bethesda MD, September 4, 2014.

- 46. "Image-based Data Collection and Management, Including RT Planning Data," Presented by F.W. Prior, ASTRO-NCI Big Data Workshop, Bethesda MD, August 13, 2015.
- 47. "Publishing data online: Using the Cancer Imaging Archive," Presented by F.W. Prior, Editor's Forum, New York NY, August 22, 2015.
- 48. "Resources to Support Cancer Research Managing Volume, Variety and Veracity," Presented by F.W. Prior, Cancer Informatics for Cancer Centers (CI4CC) Precision Medicine Workshop, La Jolla, CA, October 19, 2015.
- 49. "Center for Multiple Myeloma Nanotherapy: Integrating caNanoLab with The Cancer Imaging Archive (TCIA)," Presented by F.W. Prior, National Nanotechnology Coordination Office, Arlington, VA, February 4, 2016.
- 50. "Informatics resources for cancer radiomics" Presented by F.W. Prior, NCI-Sponsored Session, AACR, New Orleans, LA, April 19, 2016.
- 51. "Imaging Informatics and PMI," Presented by F.W. Prior, Fourth Catholic University International Symposium on Medical Informatics, Seoul, South Korea, September 9, 2016.
- 52. "Overview of biomedical imaging and precision medicine, shared informatics challenges," Presented by F.W. Prior, Keynote lecture, Quantitative Imaging and Imaging Informatics in the Era of Precision Medicine, AMIA 2016, Chicago, II, November 13, 2016.
- 53. **"Enabling Open, Reproducible Science through Public Image Sharing,"** Presented by F.W. Prior, Integrative Biomedical Imaging Informatics at Stanford (IBIIS), Palo Alto, CA, May 17, 2017.
- 54. "Informatics to Enhance Rigor and Transparency in Nanomedicine Research," Presented by F.W. Prior, Cancer Nanotechnology Gordon Research Conference, Multimodal NanoTherapies Against Cancer, West Dover, VT, June 21, 2017.
- 55. "Machine Learning in Feature Space Adding New Dimensions to Imaging Research." Presented by F.W. Prior, Partnership for Artificial Intelligence and Automation in Healthcare, Washington, DC, October 1, 2018.
- 56. Invited Keynote address "Big data initiatives changing the future of cancer imaging and therapy." presented by F.W. Prior, International Cancer Imaging Society 18<sup>th</sup> Annual Teaching Course, Menton, France, October 8, 2018.
- 57. "Improving Lung Cancer Screening Using Radiomics." presented by F.W. Prior, International Cancer Imaging Society 18th Annual Teaching Course, Menton, France, October 8, 2018. (available on-line: https://www.youtube.com/watch?v=l4jOwlWiKZ0)
- 58. "Curating High Quality, Open Access Data to Enable Machine Learning Research." Presented by F.W. Prior, Arlington Imaging Artificial Intelligence (Al-Al) Workshop, Arlington Virginia, May 9, 2019.
- 59. "Data curation and quantitative analysis NCI's cancer imaging archive." Presented by F.W. Prior, The Wizardry of AI and Machine Learning in Cancer Imaging Conference, Lisbon Portugal, May 17, 2019. (available on-line: https://www.youtube.com/watch?v=2T79VDNRoNE)
- 60. Invited Keynote address "Scope of Image Banking in Modern Oncology Practice & Research." presented by F.W. Prior, Structuring a Collaborative National Image Banking Program, Joint Workshop organized under the initiative of National Digital Library of India CHAVI, Tata Medical Center, Kolkata, India, July 26, 2019.
- 61. "Structure and Vision of TCIA." presented by F.W. Prior, Structuring a Collaborative National Image Banking Program, Joint Workshop organized under the initiative of National Digital Library of India CHAVI, Tata Medical Center, Kolkata, India, July 26, 2019.
- 62. "Road map for development of artificial intelligence in oncological imaging." presented by F.W. Prior, International Cancer Imaging Society 19th Annual Teaching Course, Verona, Italy, October 8, 2019.

- 63. "Infrastructure for Imaging AI Research- Data Issues." presented by F.W. Prior, VA Center of Excellence Artificial Intelligence for Medical Imaging (AIMI), Central Virginia VA Health Care System, virtual, October 28, 2020.
- 64. "Digital Transformation of Cancer Care." presented by F.W. Prior, European Cancer Summit 2020 virtual, November 19, 2020.
- 65. "Open Access Publication of Covid-19 Image Data." presented by F.W. Prior, Course RC653, Radiological Society of North America, Chicago, II. December 2, 2020.
- 66. "Data Anonymisation & Curation." presented by F.W. Prior, EuCanImage Interim Review Meeting (virtual), European Commission Horizon 2020 Programme, May 12, 2021.
- 67. "PRISM Update and Outlook." Presented by F.W. Prior, National Cancer Institute (virtual), May 27, 2021.
- 68. "A DICOM Data Set for Evaluation of Medical Image De-Identification." Presented by F.W. Prior, NCI Imaging & Informatics Community Webinar (virtual), June 7, 2021.
- 69. "Radiomics and Deep Learning Explainable Al for Cancer Imaging." Presented by F.W. Prior, NRG Virtual Summer Meeting, July 22, 2021.
- 70. **"Explainable AI for Cancer Imaging."** Presented by F.W. Prior, The Wizardry of AI and Machine Learning in Cancer Imaging Conference (virtual), July 23, 2021.
- 71. "The Cancer Imaging Archive: Lessons Learned." Presented by F.W. Prior, IEEE BHI-BSN Virtual Conference, July 27, 2021.
- 72. "Open access labelled data to advance machine learning research in Cancer Imaging." presented by F.W. Prior, International Cancer Imaging Society 20th Annual Teaching Course, Virtual, September 19-22, 2021.
- 73. "NIH Cancer Imaging Data Repositories for Biomedical Data Science Research, TCIA Additional Tools and Resources." presented by F.W. Prior, MICCAI2021, Strasbourg France (Virtual), September 27, 2021.
- 74. "Al in Therapy Monitoring." presented by F.W. Prior, International Cancer Imaging Society 21st Annual Teaching Course, Boston, MA, September 12, 2022.
- 75. "Research Opportunities and Functionality of the NCI Cancer Imaging Archive (TCIA)." presented by F.W. Prior Quantitative Imaging in Radiation Therapy (QIRT) Interest Group, Bethesda, MD (Virtual), September 26, 2022.
- 76. "Creating and Operating a National Cancer Imaging Repository, TCIA Experience and Challenges." presented by F.W. Prior IEEE BHI-BSN 2022, Ioannina Greece (Virtual), September 27, 2022.
- "Trustworthy AI in Medical Imaging Guiding Principles." presented by F.W. Prior International Cancer Imaging Society Webinar, Guidelines for Trustworthy Artificial Intelligence in Medical Imaging, November 9, 2022.
- 78. "NIH Data Management and Sharing Policy," Presented by F.W. Prior, IDeA States Pediatric Clinical Trial Network Professional Development Series, virtual, February 23, 2023.

#### Local/Regional

- "Radiology Data Base Management". Presented by F.W. Prior at Digital Radiology and Networking Conference. Kansas City, Missouri. April 1991.
- 2. **"Data Base Systems for PACS"**. Presented by F.W. Prior at the Third Annual PACS-RIS School sponsored by Bowman Gray School of Medicine and Georgetown University, Georgetown, D.C. April 1993.
- "Tutorial: DICOM Service Classes and Messages". Presented by F.W. Prior at the InfoRAD '93 ACR-NEMA DICOM Demonstration Design Meeting, Mallinckrodt Institute of Radiology, St. Louis, Mo., July 1993.

- 4. "DICOM Digital Imaging and Communications in Medicine". Presented by F.W. Prior, Picker International Inc., Highland Heights, Ohio, October 1993.
- 5. "Digital Mammography for Screening and Primary Diagnosis". Presented by F.W. Prior, Bioengineering Seminar Series, Penn State University, State College, Pennsylvania, October 1993.
- "DICOM Applications." Presented by F.W. Prior, Analogic Inc., Peabody, Mass., December 1993.
- 7. "Networking and Connectivity" Presented by F.W. Prior, Siemens AG, Nuclear Medicine Division, Scottsdale, AZ., February 1994.
- 8. "Data Base Design". Presented by F.W. Prior (visiting faculty) at the Fourth PACS-RIS School, Georgetown University, Georgetown, D.C. March 1994.
- 9. **"RIS-HIS (& PACS) Interfacing"**. Presented by F.W. Prior (visiting faculty) at the Fourth PACS-RIS School, Georgetown University, Georgetown, D.C. March 1994.
- "Preliminary Report: A DICOM/Asynchronous Transfer Mode (ATM) Interface Allowing Open Access to MDIS and Other PACS" Presented by F.W. Prior at Hospital of the University of Pennsylvania, October 1994.
- 11. "Introduction to the DICOM Standard" Presented by F.W. Prior at Siemens Clinical Networking Conference, Cary, North Carolina, March 1995.
- 12. "Data Base Design" Presented by F.W. Prior (visiting faculty) at the Fifth PACS-RIS School, Georgetown University, Georgetown, D.C. May 1995.
- 13. "Teleradiology: PA HealthNet," Presented by F.W. Prior and G. Pappas, Pennsylvania Blue Shield Institute Forum II, Telemedicine, State College, PA, November 1995.
- 14. "Picture Archive and Communication Systems," Presented by F.W. Prior, Department of Radiology, Northwestern Memorial Hospital, Chicago, IL., January 1996.
- 15. "Data Base Design" Presented by F.W. Prior (visiting faculty) at the Sixth PACS-RIS School, Georgetown University, Georgetown, D.C. July 1996.
- 16. "Introduction to the Internet," Presented by F. Prior, Connections 96 West, Monroeville, PA. September 1996.
- 17. "Standards, Who Needs them Anyway," Presented by F. Prior, Siemens Healthcare Executive Briefing, Oak Brook, IL. October 1996.
- 18. "Data Base and Network Components" Presented by F.W. Prior (visiting faculty) at the Seventh PACS-RIS School, Georgetown University, Georgetown, D.C. September 1997.
- 19. "Transition from Film to Digital Imaging" Presented by F.W. Prior, University of Texas Medical Branch, April 2001.
- 20. "Surviving Outages: PACS Disaster Recovery Strategies," Presented by F.W. Prior, Digital Transformation: Symposium for Radiology and the Healthcare Enterprise, San Diego, CA, October 2004.
- 21. "**Pros & Cons of PACS Architectures Pearls & Pitfalls,**" Presented by F.W. Prior, Digital Transformation: Symposium for Radiology and the Healthcare Enterprise, San Diego, CA, October 2004.
- 22. "Emerging PACS Technologies," Presented by F.W. Prior, Digital Transformation: Symposium for Radiology and the Healthcare Enterprise, San Diego, CA, October 2004.
- 23. "Research PACS," Presented by F.W. Prior, Stentor/IBM PACS Seminar, Indianapolis, IN, June 2005.
- 24. "NeuroInformatics- Adding Informatics to Brain Research," Presented by F.W. Prior, Neurology Grand Rounds, UAMS, January 27, 2017.

- 25. "Informatics to Enhance Rigor and Transparency in Cancer Imaging Research," Presented by F.W. Prior, Myeloma Institute Grand Rounds, UAMS, July 20, 2017.
- "Radiomics and Imaging Informatics to Track Response to Cancer Therapy," Presented by F.W. Prior, MCBIOS XIV Session Featured Speaker, Little Rock, AR, March 24, 2017.
- 27. "Improving Lung Cancer Screening using Radiomics," Presented by F.W. Prior, Arkansas Biosciences Institute Annual meeting, Little Rock, AR, September 25, 2018.
- 28. **"Biomedical Informatics: Using Data to Improve Human Health,"** Presented by F.W. Prior, Grants Management Program Alumni 2019 Summer Business Meeting, Little Rock, AR, June 19, 2019.
- 29. Invited Keynote address: "Al and Machine Learning in Cancer Imaging," Presented by F.W. Prior, Arkansas Bioinformatics Consortium (AR-BIC) Annual meeting, North Little Rock, AR, February 10, 2020.
- 30. "Tool Development in the N3C Enclave," Presented by F.W. Prior, CORES Annual Meeting, Virtual, October 9, 2020.
- 31. "What is Biomedical Informatics and How Might Collaborations Aid Nursing Research," Presented by F.W. Prior, 2021 Arkansas Nursing Research Conference, Virtual, April 9, 2021.
- 32. "Big Data Management," Presented by F.W. Prior, DART EAB Annual Meeting, Virtual, May 20, 2021.
- 33. "Distributed Machine Learning to Create Imaging Phenotypes of Cancer," Presented by F.W. Prior, Arkansas Bioinformatics Consortium (AR-BIC) Annual meeting (virtual), North Little Rock, AR, March 11, 2022.
- 34. "Explainable AI for Cancer Imaging," Presented by F.W. Prior, NSF EPSCoR Workshop Artificial Intelligence (AI) with No-Boundary Thinking (virtual), Little Rock, AR, April 4, 2022.
- 35. "NIH Data Management and Sharing Policy," Session Chair, Presentation and Panel Discussion, Presented by F.W. Prior, Arkansas Children's Research Institute Center for Childhood Obesity Prevention Annual Scientific Retreat, Paris, Arkansas, July 21, 2022.
- 36. "NIH Data Management and Sharing Policy," Presented by F.W. Prior, UAMS Research Academy, Little Rock, Arkansas, February 14, 2023.
- 37. **"Explainability analysis of deep learning algorithms in medical imaging,"** Presented by F.W. Prior, Arkansas Bioinformatics Consortium (AR-BIC) 9th Annual Conference, Little Rock, AR, March 14, 2023

# **Posters**

## National and International

- Prior FW and Glicksman R, "A Hospital-Wide PACS Based on a Shared File System" EuroPACS '92, London, 1992.
- 2. **Prior FW**, "DICOM HIS/RIS-PACS Interface Services." Presented at Medical Imaging '93, The International Society for Optical Engineering, Newport Beach, California, February 1993.
- Zajdel M, Eggli D, and Prior FW, "Indexed Teaching File Management for Desktop Microcomputers." Radiological Society of North America, INFORAD '93, Chicago, Illinois, December 1993.
- 4. **Prior FW**, "DICOM HIS/RIS-PACS Interface Strategies." Presented at Medical Imaging '94, The International Society for Optical Engineering, Newport Beach, California, February 1994.
- Prior FW, Leckie R, Glicksman R, Freeman R, Zaidel M, Goeringer F, Channin D, Norton G, "A DICOM/Asynchronous Transfer Mode (ATM) Interface Allowing Open Access to MDIS and Other PACS" The Radiological Society of North America, INFORAD '94, Chicago, Illinois, December 1994. Certificate of Merit Award.
- Prior FW, Channin DS, Glicksman R, Zaidel M, Guo H, Kenney R. "An Integrated Desktop Telemedicine System to Support Consultation and Direct Patient Care." The Radiological Society of North America, INFORAD '95, Chicago, Illinois, December 1995.

- 7. Hemminger B, Roehrig H, Blume H, Channin DS, **Prior FW**, Johnston G, "Demonstration of image quality and display system standardization for high quality softcopy video display systems." RSNA, INFORAD '95, Chicago, Illinois, December 1995.
- 8. **Prior FW**, Channin D, Kenney R, Jones R. "Mediconf, Telemedicine Workstation based on DICOM and html." HIMSS 96, Atlanta, GA, March 1996.
- deGreef B, Moshfeghi M, Wang J, Wong S, Yu J, Glicksman R, Haas H and Prior FW, "Personalized Web Presentation of Computer-based Patient Records" Concern Research Exhibition (CRE'97), Eindhoven, Netherlands. June 1997.
- Clark K, Gierada D, Moore S, Maffitt D, Koppel P, Philips S, Prior FW, 'Creation of a CT Image Library (CTIL) for the Lung Screening Study of the National Lung Screening Trial." SCAR 2005, Orlando, FI, June 2005.
- 11. **Prior FW**, Kotyk J, Tarbox LR, Moore SM, Mintun, MA, The Development of an Information and Workflow Management System for a Center for Clinical Imaging Research, RSNA electronic poster LL-IN2065-R03, 2006.
- 12. **Prior FW**. "XIP: eXtensible Imaging Platform (An Open Source Workstation)." RSNA 2006, Chicago, Illinois, November 2006.
- 13. **Prior FW**, Tarbox LR, Powell S, Moore SM, Perry D, "RMS: A workflow and Information Management Solution for Translational Research." Abstract and poster presentation, RSNA 2006, Chicago, Illinois, November 2006. http://erl.wustl.edu/publications/posters/2006posters.html
- 14. Larson-Prior LJ, Zempel J, **Prior FW**, Vincent JL, Snyder AZ, Raichle ME, "An EEG-fMRI Study of the Relationship Between Alpha-Band Power and BOLD Signal." Abstract and poster presentation, Organization for Human Brain Mapping, 2006. http://erl.wustl.edu/publications/posters/2006posters.html
- 15. Dees N, Larson-Prior L, Nolan T, Politte D, **Prior F**, Bahar S. "Synchrony-based integration of EEG and fMRI-BOLD in cognitive state transitions." Computational Neuroscience 2007, Toronto, Canada, July 2007.
- 16. Massoumzadeh P, Stazzone M, **Prior F,** Whiting B. "Quantifying the Spatial Resolution of MR Protocols Using a Surface-spread Function", RSNA 2007, Chicago, Illinois, November, 2007.
- 17. Stazzone M, Massoumzadeh P, **Prior F**, Whiting B. "Comparison of Non-3D True-FISP Images Acquired Using Rapid Interleave Overlap Technique (RIOT) with Standard 3D True-FISP Sequences: Is There Measurable Improvement in Image Quality," RSNA 2007, Chicago, Illinois, November 2007.
- 18. **Prior F**, "Imaging Informatics to Enable Image-based Biomarkers and Clinical Trials," Abstract and oral presentation, AMIA Summit on Translational Bioinformatics, San Francisco, CA, March 2008.
- 19. **Prior F**, "Integration of Images for Knowledge Discovery," Abstract and oral presentation, National Forum on the Future of the Defense Health Informatics System, Washington DC, March 2008.
- 20. Hastings MK, Johnson JE, Bohnert KL, Vendt BA, **Prior F**, Sinacore DR. "Radiographic Correlates of Charcot Neuroarthopathy Deformity Reflect Midfoot Function and Calcaneal Bone Mineral Density." Charcot Neuroarthropathy: Recent Progress and Future Directions. NIH, Bethesda, MD, September 2008. Summary Report: http://www3.niddk.nih.gov/fund/other/neuroarthropathy/SummaryReport.pdf
- 21. Sinacore DR, Commean, PK, Ju T, Liu L, Hastings MK, Bohnert KL, **Prior F**. "Atlas-based Quantitative Imaging in Charcot Neuroarthropathy." Charcot Neuroarthropathy: Recent Progress and Future Directions. NIH, Bethesda, MD, September 2008. Summary Report: http://www3.niddk.nih.gov/fund/other/neuroarthropathy/SummaryReport.pdf
- Schick L, Prior F, Sharma M, Suzek B, "Life Science Domain Analysis Model (LS DAM)." Abstract and poster presentation, caBIG Annual Meeting, Washington, DC, July 2009. http://erl.wustl.edu/publications/posters/2009posters.html
- 23. Sinacore, DR, Hastings MK, Bohnert KL, Kwon OY, Vendt BA, **Prior FW**, Macky RB, Johnson JE. Talar Declination & Calcaneal Inclination Angles: Effect on Ankle Joint Motion. APTA Combined Sections Meeting. San Diego, CA. February 2010
- 24. Maffitt D, Koppel P, Moore S, Clark K, Tarbox L, Gierada D, **Prior F**. "Migrating National Lung Screening Trial's CT Image Library to a National Biomedical Imaging Archive." Abstract and poster presentation, caBIG Annual Meeting, Washington, DC, July 2010. http://erl.wustl.edu/publications/posters/2010posters.html
- 25. Hastings MK, Sinacore DR, Mercer-Bolton N, Bohnert KL, **Prior FW**, Vendt BA, Johnson JE. Reliability of foot alignment radiographic measures in diabetic neuropathic deformities. Abstract and poster

- presentation, APTA Combined Sections Meeting. San Diego, CA. February 2010. http://erl.wustl.edu/publications/posters/2010posters.html
- 26. Sinacore D, Hastings M, Commean P, Smith K, Bohnert K, **Prior F**. "Lumbar Spine, Hip & Calcaneal BMD in People with Diabetes Mellitus, Peripheral Neuropathy and Charcot Neuroarthropathy." Abstract and poster presentation, APTA Combined Sections Meeting, New Orleans, February 2011. <a href="http://erl.wustl.edu/publications/posters/2011posters.html">http://erl.wustl.edu/publications/posters/2011posters.html</a>
- 27. Politte D, Zempel J, Nolan T, Verner R, **Prior F**, Larson-Prior L. "Measures of Global Brain Dynamics Define Differences in Neural State." Abstract and poster presentation, Human Brain Mapping, Quebec City, June 2011. http://erl.wustl.edu/publications/posters/2011posters.html
- 28. Larson-Prior L, Smith K, Nolan T, **Prior F**, Politte D, et al., "Accurate head modeling: defining the right parameters," Abstract and oral presentation, Organization for Human Brain Mapping 17th Annual Meeting, Quebec City, June 28, 2011.
- 29. Politte D, **Prior F**, Nolan T, Larson-Prior L, et al., "EEG/fMRI: impact of noise on quantitative EEG Measures," Abstract and oral presentation, Organization for Human Brain Mapping 17th Annual Meeting, Quebec City, June 28, 2011.
- Prior F, Freymann J, Vendt B, Clark K, Kirby J, Tarbox L, Koppel P, Moore S, Pringle M, Phillips S, Maffitt D, Jaffe C. "The Cancer Imaging Archive a Repository of Advanced Imaging Information Correlated with TCGA Samples." Abstract and poster presentation, The Cancer Genome Atlas Symposium, Washington DC, November 2011. <a href="http://erl.wustl.edu/publications/posters/2011posters.html">http://erl.wustl.edu/publications/posters/2011posters.html</a>
- 31. Kim L, Chen M, Weinberger K, Commean P, Massoumzadeh P, Benzinger T, **Prior F**, Jost S, Marcus D. Machine Learning Algorithm for the Magnetic Resonance Characterization of Glioblastoma Mulitforme. Abstract and poster presentation, Radiological Society of North America (RSNA) 97th Scientific Assembly and Annual Meeting, Chicago, Illinois, 2011.
- 32. Sinacore DR, Bohnert KB, Hastings MK, Commean PK, Smith KE, Johnson JE, Prior FW. Persistent local and systemic markers of inflammation after acute neuropathic (Charcot's) arthropathy. APTA Combined Sections Meeting, Chicago, IL, 2012.
- 33. Hastings MK, Johnson JE, Strube MJ3, Hildebolt CK, Bohnert KL, **Prior FW**, Sinacore DR. Radiographic foot alignment change in Neuropathic Charcot Arthropathy at one year after acute onset. APTA Combined Sections Meeting, Chicago, IL, 2012
- 34. Clark KW, Vendt B, Smith K, Freymann J, Kirby J, Koppel P, Moore S, Phillips S, Maffitt D, Pringle M, Tarbox L, **Prior F**. "The Cancer Imaging Archive (TCIA): Maintaining and Operating a Public Information Repository." Abstract and poster presentation, Annual Meeting of the Society for Imaging Informatics in Medicine, Orlando FL.. June 2012, http://erl.wustl.edu/publications/posters/2012posters.html
- 35. Tarbox L, Koppel P, Moore SM, Pringle M, Kirby J, **Prior F**, "The Cancer Imaging Archive (TCIA): Creating a Large Public Image Collection." Abstract and oral presentation, Annual Meeting of the Society for Imaging Informatics in Medicine, June 2012, Orlando FL.
- 36. Zempel J, Politte D, Kelsey M, Verner R, Nolan T, Babajani-Feremi A, **Prior F**, Larson-Prior L, "Defining neural state using global measures of brain dynamics," Abstract and oral presentation SLEEP 2012, 26th Annual Meeting of the Associated Professional Sleep Societies, LLC, Boston, Massachusetts, June 13, 2012.
- 37. **Prior F**, Kirby J, Freymann J, Jaffe C, Smith K, Vendt B, Clark K, Tarbox L, "Building Open Science Communities For Imaging Research," Abstract and oral presentation Open Source EHR Summit & Workshop, National Harbor, MD, October 17, 2012, <a href="http://osehra.org/sites/default/files/OSEHRA2012">http://osehra.org/sites/default/files/OSEHRA2012</a> TCIA PRIOR.pdf
- 38. Jost S, Weinberger K, Kelsey M, Cholleti S, Politte D, Kim L, Boyd A, **Prior F**, "A machine-learning based classifier for predicting a multi-parametric probability map of active tumor extent within glioblastoma multiforme," Abstract and poster presentation, Society for NeuroOncology Scientific Meeting, Washington, D.C., November 15-18, 2012. http://erl.wustl.edu/publications/posters/2012posters.html
- 39. Kim L, Boyd A, Commean P, Milchenko M, Politte D, Chicoine M, Rich K, Benzinger T, Fouke S, **Prior F**, Marcus D, "Predicting the location and probability of viable tumor within glioblastoma multiforme with multiparametric magnetic resonance imaging," Abstract and poster presentation, Society for NeuroOncology Scientific Meeting, Washington, D.C., November 15-18, 2012. <a href="http://erl.wustl.edu/publications/posters/2012posters.html">http://erl.wustl.edu/publications/posters/2012posters.html</a>

- Moore S, Kirby J, Clark K, Freymann J, Vendt B, Jaffee C, Smith K, Maffitt D, Tarbox L, **Prior F.** "Safe (Compliant) De-identification of Medical Images With Maximum Retention of Scientific Research Value."
   Abstract and poster presentation, Radiological Society of North America (RSNA) 98th Scientific Assembly and Annual Meeting, Chicago, Illinois, 2012. <a href="http://erl.wustl.edu/documents/posters/RSNA-2012-TCIA-Deidentification-v10.pdf">http://erl.wustl.edu/documents/posters/RSNA-2012-TCIA-Deidentification-v10.pdf</a>
- 41. Clark K, Commean P, Rathmell J, Riley T, Jones G, Marquez G, **Prior F**. "National Lung Screening Trial (NLST): Post-Trial Data and Image Exploration with an Open Source Query Tool." Abstract and oral presentation. Annual Meeting of the Society for Clinical Trials. Boston. MA. May 2013.
- 42. Commean P, Rathmell J, Riley T, Clark K, **Prior F**. "A Query Tool for Investigator Access to the CT Images and Metadata of the National Lung Screening Trial." Abstract and oral presentation, Annual Meeting of the Society for Imaging Informatics in Medicine, Dallas, TX, June 2013.
- 43. Song J, Turovets S, Govyadinov P, Luu P, Tucker D, **Prior F**, Larson-Prior L. "Accurate Pediatric Head Models for EEG Source Localization." Abstract and poster presentation, 19th Annual Meeting of the Organization for Human Brain Mapping, Seattle, WA, June 2013.
- 44. Larson-Prior L, Oostenveld R, Della Penna S, Michalareas G, **Prior F**, Babajani-Feremi A, Schoffelen J-M, Marzetti L, de Pasquale F, Di Pompeo F, Stout J, Woolrich M, Luo Q, Bucholz R, Fries P, Pizzella V, Romani G, Corbetta M, Snyder A. "The electrophysiological component of the Human Connectome Project: imaging fast dynamics." Abstract and poster presentation, 19th Annual Meeting of the Organization for Human Brain Mapping, Seattle, WA, June 2013.
- 45. Freymann J, Kirby J, Jaffe C, **Prior F**. "The Cancer Imaging Archive (TCIA): diagnostic image collections case-matched to The Cancer Genome Atlas (TCGA)", workshop presentation, 3rd TCGA Scientific Symposium, Bethesda MD, May 12-13, 2014.
- 46. Kelsey M, Zempel J, Politte D, Boyd A, **Prior F**, Larson-Prior L, "Characterization of Human Electrocorticography Microstates in Awake and NREM Sleep," Abstract and poster presentation, 20th Annual Meeting of the Organization for Human Brain Mapping, Hamburg, Germany, June 2014.
- 47. Larson-Prior L, LaRosa P, Brooks T, Deych E, Shands B, **Prior** F, Shannon W, "Statistical Evaluation of Connectome Data using Object Oriented Data Analysis," Abstract and poster presentation, 20th Annual Meeting of the Organization for Human Brain Mapping, Hamburg, Germany, June 2014.
- 48. Sharma A, Moore S, Saghar N, Tabib Y, Tarbox L, **Prior** F, "Research Data Mashups for Open Science," Abstract and oral presentation, 2014 OSEHRA Open Source EHR Summit, Bethesda, MD, Sept. 3, 2014, http://osehra.org/sites/default/files/OSEHRA2014 OSPrimer FPrior.pdf
- Bennett W, Bosch W, Smith K, Clark K, Tarbox L, Straube W, Prior F, "Curation of RT datasets for TCIA: Preliminary Results," Abstract and poster presentation, NCI Quantitative Imaging Network, Bethesda, MD, April 13-14, 2015.
- 50. Shannon W, Post A, Deych E, Commean P, **Prior F**, Sharma A, "Advanced Graph Statistics for Radiomics," Abstract and poster presentation, NCI Quantitative Imaging Network, Bethesda, MD, April 13-14, 2015.
- 51. **Prior F**, Leraas K, Cooper L, Gutman D, Kirby J. "Imaging Resources for TCGA: Radiology and Pathology Tools for Enabling Science", Abstract and workshop presentation, 4th TCGA Scientific Symposium, Bethesda MD, May 11-12, 2015.
- 52. Kelsey M, **Prior F**, Larson-Prior L, "MEG Microstate Topographic Stability," Abstract and poster presentation, 21st Annual Meeting of the Organization for Human Brain Mapping, Honolulu, HI, June 2015.
- 53. Tobias M, Tarbox L, Moore S, Nolan T, **Prior F**, "Center for Multiple Myeloma Nanotherapy (CMMN) Data Management Core," Abstract and poster presentation, NCI Alliance for Nanotechnology in Cancer, Bethesda, MD, November 19-20, 2015.
- 54. Tobias M, Porter J, Sharma A, Politite D, **Prior F**, "Utilizing the Galaxy web-based platform to simplify access to imaging data and processing pipelines," Abstract and poster presentation, Quantitative Imaging Network (QIN) Annual Meeting, Rockville, MD, April 11, 2016.
- 55. Tobias M, Nolan T, Tarbox L, Moore S, **Prior F**, "The Washington University Center for Multiple Myeloma Nanotherapy (CMMN) Core 2: Data Management for CMMN Current Progress," Abstract and poster presentation, 2016 NCI Alliance for Nanotechnology in Cancer, Bethesda, MD, November 1-3, 2016.
- 56. Post A, Sharma A, **Prior F**, "Eureka! Clinical Analytics," Abstract and poster presentation, Quantitative Imaging Network (QIN) Annual Meeting, Rockville, MD, April 10, 2017.

- 57. Causey J, Zhang J, Ma S, Jiang B, Qualls J, Politte DG, **Prior F**, Zhang S, Huang X, "Highly accurate model for prediction of lung nodule malignancy with CT scans", Abstract and poster presentation, Quantitative Imaging Network (QIN) Annual Meeting, Rockville, MD, April 10, 2017.
- 58. Smith K, Nolan T, **Prior F**, Turovets S, Kemp A, Larson-Prior L, "Clinical Image Repositories to Conduct Quantitative Pediatric Research Lessons Learned", Abstract and poster presentation, SIIM Annual Meeting, Pittsburgh, PA, June 2017.
- 59. **Prior F**, Tobias M, Nolan T, Moore S, "Data Acquisition and Management for Nanotherapeutics", Abstract and poster presentation, 2017 NCI Alliance for Nanotechnology in Cancer, Bethesda, MD, October 3-5, 2017.
- 60. Nolan T, Kirby J, **Prior F**, "Data Management, Sharing, and Citation Strategies in The Cancer Imaging Archive (TCIA)," Abstract and poster presentation, AMIA Annual Symposium, Washington DC, November 2017
- 61. **Prior F**, Sharma A, Almeida J, Bennett W, Bona J, Bosch W, Bremer E, Brochhausen M, Fitzgerald TJ, Kurc T, Nolan T, Smith K, Tarbox L, Saltz J, "TCIA Sustainment and Scalability Platform for Imaging in Precision Medicine," Abstract and poster presentation, Quantitative Imaging Network (QIN) Annual Meeting, Rockville, MD, May 17, 2018.
- 62. **Prior F**, Sharma A, Almeida J, Bennett W, Bona J, Bosch W, Bremer E, Brochhausen M, Fitzgerald TJ, Kurc T, Nolan T, Smith K, Tarbox L, Saltz J, "Semantic Integration of Non-image Data in TCIA Collections and PRISM Platform," Abstract and poster presentation, Informatics Technology for Cancer Research (ITCR) Annual Meeting, Bethesda, MD, May 23, 2018.
- 63. **Prior F**, Sharma A, "The Cancer Imaging Archive (TCIA)," Interactive demonstration, Informatics Technology for Cancer Research (ITCR) Annual Meeting, Bethesda, MD, May 23, 2018.
- 64. Becich MJ, Saltz J, Silverstein J, Bollag RJ, Brochhausen M, Chennubhotla C, Feldman MD, Gaudioso C, Kurc T, London J, Maihle NJ, **Prior F**, Sharma A, Tarbox L, "The TIES Cancer Research Network (TCRN): Computational Pathology Support for Precision Oncology," Abstract and poster presentation, Informatics Technology for Cancer Research (ITCR) Annual Meeting, Bethesda, MD, May 23, 2018.
- 65. **Prior F**, Tarbox L, Kunc T, Larson-Prior L, Sharma A, Saltz J, "PRISM: Neuroinformatics Architecture to Support Research Reproducibility and Data Publication," Abstract and poster presentation, OHBM Annual Meeting, Singapore, June 17-21, 2018 <a href="https://files.aievolution.com/hbm1801/abstracts/31098/2013">https://files.aievolution.com/hbm1801/abstracts/31098/2013</a> Prior.pdf
- 66. Nolan T, Bona J, Tobias M, **Prior F**, "Center for Multiple Myeloma Nanotherapy (CMMN) Data Management Core: Your supplemental is my treasure opening data for search & reuse", Abstract and poster presentation, 2018 NCI Alliance for Nanotechnology in Cancer, Bethesda, MD, October 9-11, 2018.
- 67. Kunc T, Saltz J, **Prior F**, Sharma A, Towards a Services Oriented Platform for Combined Radiology-Pathology Image Analysis and Interpretation. Abstract and System demonstration at AMIA Annual Symposium, San Francisco, CA, November 4, 2018.
- 68. Fevrier-Sullivan B, Kirby J, Jaffe C, Smith K, Nolan T, Bennett W, Honomichl N, Sharma A, Birmingham R, **Prior F**, Freymann J, The Cancer Imaging Archive (TCIA): CPTAC Radiology and Pathology Imaging Research Efforts. Abstract and poster presentation, The Clinical Proteomic Tumor Analysis Consortium Steering Committee Meeting, NIH, Bethesda MD, April 30, 2019.
- 69. Freymann J, Bennett W, Kirby J, Levine B, Nolan T, Smith K, Tarbox L, **Prior F**, Data and Services Provided by NCI's Cancer Imaging Archive. Abstract and poster presentation, Co-Clinical Imaging Research Resources Program Network Annual Meeting, NCI SG Campus, Rockville, MD, May 20, 2019.
- 70. Bona JP, Kemp AS, Nolan TS, Larson-Prior L, Das A, Virmani T, Pillai L, Brochhausen M, **Prior F**, Semantic Integration of Neuroinformatics Data in the Arkansas Image Enterprise System. (ARIES). Abstract and poster presentation, 2019 ITCR Annual Meeting, Deer Valley, UT, May 29 31, 2019.
- 71. Sharma A, Gu P, Kathiravelu P, Marappareddy M, Saha M, Saltz J, Kurc T, Bremmer E, DiPrima T, Gupta R, **Prior F**, Tarbox L, Brochhausen M, Bona JP, Bennett W, Smith K, Nolan TS, Platform for Imaging in Precision Medicine (PRISM). Abstract and poster presentation, 2019 ITCR Annual Meeting, Deer Valley, UT, May 29 31, 2019.
- 72. Kemp A, Bona J, Nolan T, Larson-Prior L, Virmani T, Pillai L, Brochhausen M, Tarbox L, **Prior F**, Semantic Representations of Multi-Modal Data, NeuroInformatic Processing Pipelines, and Derived Neuroimaging Results in the Arkansas Image Enterprise System (ARIES). Abstract and poster presentation, AMIA Annual Symposium, Washington DC, November 16-20, 2019.

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# **Patents and Technology Transfer**

"Method and apparatus for acquiring overlapped medical image slices," M. Stazzone, O. El-Ghazzawy, F. Prior, United States Patent 8046044, 2011

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