Robert J. Bert, M.D., Ph.D.

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EDUCATION

DEGREES

10/1990	Ph.D., Neurosciences, University of Illinois-Urbana
06/1991	M.D., University of Illinois-Urbana
08/79 - 08/83	Post-baccalaureate, University of Wisconsin-Madison, pre-medical Sciences and Biomedical Engineering
12/1976	B.S., Civil Engineering, University of Missouri-Rolla,

POST GRADUATE TRAINING

7/93 - 6/97	Residency, Diagnostic Radiology, University of Massachusetts
7/91 - 6/92	Internship, Surgery, St. Joseph Hospital, Denver, Colorado

FELLOWSHIPS & SPECIALIZED COURSES

7/97 - 6/99	Fellowship: Neuroradiology, Boston Medical Center
7/92 - 6/93	Research Fellowship: Neuroscience, University of Colorado Health Sciences Center

ACADEMIC APPOINTMENTS

7/2019 – Current	Tenured Associate Professor of Radiology Department of Radiology University of Louisville Louisville, KY
7/2013 – 6/2019	Assoc. Prof. of Radiology Tenure Track Department of Radiology University of Louisville Louisville, KY
7/2004 – 6/2013	Associate Professor of Radiology Department of Radiology University of CO Denver Aurora, Colorado
7/2000 – 6/2004	Assistant Professor of Radiology Tufts New England Medical Center Department of Radiology Boston, MA
7/1999 – 6/2000	Assistant Professor of Radiology Boston Medical Center Department of Radiology Boston, MA
7/1998 – 6/1999	Clinical Instructor of Radiology Boston Medical Center Department of Radiology Boston, MA

OTHER POSITIONS AND EMPLOYMENT

1977-1982 Professional Engineer. Wisconsin Power & Light Company, Mechanical engineering department.
Professional License, State of WI. 1981. Inactive status.
Duties, Administrative and Supervision (WPL):
Budget planning: annual construction and maintenance budgets for water utility division. Assistance in preparation of rate base for utility rate increases.
Supervision of construction contractors for well, pipeline and water tower construction, maintenance and renovation.
Specification writing and supervision of contractors installing computer-based telemetry for closed-loop process control system for well stations.
Supervision of engineering assistant.
Duties, Design (WPL):
Design of physical plant facilities (e.g. wells, pumping stations, treatment plants).
Design of telemetry, instrumentation and controls, for remote closed-loop process control of water utility wells, treatment plants and pumping stations.
Computer simulation and modeling of water utility pumps, towers and pipelines; modeling of natural gas pipeline systems.
Structural analysis (e.g. electrical towers).
Duties, Construction (WPL):
Field supervision of well house construction, well maintenance and renovation, pipeline construction, treatment plant construction, water tower maintenance and telemetry installation.
Duties, Standards (WPL):
Developing construction and design standards; writing contracts & construction specifications; development of operating standards & protocols.

1975: Engineers assistant: Zurhyde & Herman, St. Louis, Missouri,
Surveying and construction site planning.

1972-1974 Sales/business (Southwestern Company, Nashville, TN):
Ran sole proprietorship door to door book sales, summer 1972, sponsored by Southwestern Company of Nashville, Tennessee.
Ran sole proprietorship door to door book sales, summer 1973, sponsored by Southwestern Company of Nashville, Tennessee.
Ran sole proprietorship door to door book sales business, with direct supervision of 6 additional salesmen and joint management of ~21 salesmen, summer 1974, sponsored by Southwestern Company of Nashville, Tennessee.

AWARDS

1972 Top 50 first year salesman, Southwestern Company.
1973-1974 Top 50 salesman, Southwestern Company
1974 Top 10 student managers Southwestern Company.
1972-1973 Southwestern Company Diamond Award (averaged 30 demonstrations/day)
1972-1974 Southwestern Company Gold Awards (avg. 80 hour work week)

CERTIFICATION AND LICENSURE

Certifications

2009	MOC Recertification, Neuroradiology
1999	Neuroradiology, Certificate of Added Qualification
1997	American Board of Radiology, Diagnostic Radiology
1992	Diplomate, National Board of Medical Examiners, General Medicine

Licenses

2013	Kentucky Medical License 46115
6/91 – 2015	Colorado No. 32145
7/93 – 5/05	Massachusetts No. 151528 (inactive)

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

1999-**Present**	American College of Radiology
1999-**Present**	Radiological Society of North America
1999-**Present**	American Society of Neuroradiology
1999-2012	American Roentgen Ray Society
1997-2004	New England Roentgen Ray Society
1999-2006	American Medical Association
2006-2013	Colorado Radiological Society
2011-**Present**	European Society of Neuroradiology
2013-**Present**	Greater Louisville Medical Society

Offices Held

2002-2003	New England Roentgen Ray Society *Tufts-New England Medical Center Representative*

ACADEMIC HONORS AND AWARDS

2005 - 2022	American Board of Radiology Service Awards
2016	University of Louisville Lecturer of the Year
2012	Nominated for Excellence in Mentoring and Advising Award University of CO Academy of Medical Educators (Nominated by Dr. Frank Mihlon)
2009	Alumnus of the Year, Perryville High School (Perryville, MO).
Ongoing	America's Best Doctors (Ongoing)
Ongoing	Who's Who in America
1999	ARVO (Assoc. for Research in Vision and Ophth.) Travel Fellow
1989	Johnson Endowment Fellowship: Univ. of IL, Urbana.
1990	University Fellowship: Univ. of IL, Urbana. Fall Semester of 1990
1984, 85, & 86	University of IL College of Medicine Summer Research Fellowships
1989	University Fellowship: Univ. of IL, Urbana. Spring Semester 1989

COMMITTEE ASSIGNMENTS AND ADMINISTRATIVE SERVICES

Institutional: 2013 – Present

Section Chief of Neuroradiology - University of Louisville
Stroke Counsel - University of Louisville

Clinical Competency Committee (Resident) - University of Louisville
Head and Neck Tumor Board - University of Louisville
CNS Tumor Board - University of Louisville
Epilepsy Council - University of Louisville
Epilepsy Council - Norton Hospital/University of Louisville
Pituitary Council - University of Louisville
Pain Fellowship - Neuroradiology Rotation Advisor

Institutional: 2004 – 2012

Stroke Counsel - University of Colorado Denver**,** 2005 - 2012
Medical School Admissions Committee - University of Colorado Denver 2005 - 2012
Faculty Senate - Radiology representative**,** University of Colorado Health Sciences, Center, 2005-2009
Radiology Executive Counsel - University of Colorado Denver, 2004 – 2009
AIP Planning Committee - University of Colorado Denver, 2004 – 2007
Medical School Radiology Curriculum Committee - University of Colorado Denver, 2005 – 2007
Graduate Medical Education Committee - University of Colorado Denver, 2004 – 2009 (***Neuroradiology Fellowship Director***)

National & International: 2002 – Present

Associate Editor: Journal of Radiology and Imaging (2016-Current)
Associate Editor: International Journal of Radiology and Imaging Technology (2016-Current)
Guerbet MRI Advisory Board: 06/2016
American Board of Radiology Volunteer: General radiology section, 2012- present. ***Section Chief***: 2017-2021.
Agency for Healthcare Research and Quality. Magnetic Resonance Spectroscopy for Brain Tumors. 2002-2003. Technology Assessment Task Order Assessment #1, Contract No. 290-97-0019. http://www.cms.hhs.gov/ncdr/techasmt.asp.

EDUCATIONAL ACTIVITIES

Started Neuroradiology Fellowship Program at University of Louisville. 2020. Appointed Dr. Mohuiddin Hadi as Program Director. First fellow recruited and currently completing training 2021-2022.
American Board of Radiology: General Radiology Certifying Exam Committee. 2012 - Present. ***Section Chief 04/2017-Present. 2nd Term as Section Chief ends 04/2023***.
Clinical Competency Committee for Department of Radiology Residency Program. 2013- Present
Neuroradiology Fellowship Director, University of Colorado Denver - 2004 -2009.

CURRICULUM IMPROVEMENTS FOR RESIDENTS:

1. Expanded core lecture topics to be compliant with ACGME and ASNR guidelines. We have now doubled our monthly lectures, with two per month. One lecture is based on key elements of pathophysiology that affects imaging presentations. The second is either a case-based conference on the same subject material, meant to reinforce the principals, or part II of the topic (if needed).
2. Developed a new primary set of introductory lectures for 1st-year residents that covers basic imaging anatomy in neuroradiology and special lectures for call imaging. The anatomy lectures often include a take home exam.
3. Developing new comprehensive shared neuroradiology teaching file system (in progress).
4. Instituted daily 30-minute morning case-based teaching rounds at the work stations.
5. Instituted assigned rotational presentations for 4th year mini fellowships at end of rotation.
6. Developed report templates for structured reporting on the voice recognition system (Powerscribe).
7. Developed standard normal reports and report templates for emergency trauma brain and spine.
8. Revised reading list for residents. Instituted Rad-primer assignments for residents.
9. Developed 4th year mini-fellowship rotation (3 mo. length) in Neuroradiology.
10. Currently coordinating faculty efforts to provide on-line lectures in Neuroradiology for Medical School Rotations, Residents, Fellows and Non-Radiology Rotators (Pain Fellows, Neurology Residents, Neurosurgery Residents)

INVITED GUEST LECTURES

1. Visiting Guest Lecturer: Polish Magnetic Resonance Imaging Society Annual Meeting: special invitation from Department of Radiology, Medical Academy and Public Hospital in Bialystok, Poland 10/99.
    a. Presented: The Third Congress of the Polish Medical Society of Magnetic Resonance. Bert, RJ. 10/99. *Herpes simplex infection of the orbit*.
    b. Presented: The Third Congress of the Polish Medical Society of Magnetic Resonance. Bert, RJ. 10/99. *MR imaging of CNS infections*.
2. Visiting Guest Lecturer: Congress of Polish Society of Neurosurgeons, 10/2000. Special invitation of Polish Society of Neurosurgeons, Medical Academy and Public Hospital in Bialystok, Poland. Bert RJ & Spektor V. *A linear systems model and analysis of fluid dynamics at the carotid bifurcation: effects of both ECA and ICA capacitance, resistance and inductance on ICA dynamics*.
3. Guest Lecturer, Tufts-NEMC Hematology/Oncology Grand Rounds Lecture: Bert RJ. 2002. *MR spectroscopy & spectroscopic imaging: what are they & what are their roles in CNS and H&N tumors*?
4. Guest Lecturer, UCHSC Neurology Grand Rounds Lecture: Bert RJ. 2005. *Cerebral Hemodynamics.*
5. Guest Lecturer, Rocky Mountain Chapter of ISMRT: Bert RJ. 2005. M*RI findings in CNS Infections.*
6. Guest Lecturer, UCHSC Neurology Grand Rounds Lecture: Bert RJ. 2006. *Imaging of CNS Infections*.
7. Guest Lecturer, Neurosurgery Resident Rounds Lecture: Bert RJ. 03/2007.*MRI and CT Perfusion and MRI Diffusion Weighted Imaging.*
8. Guest Lecturer, UCHSC Neurology Grand Rounds Lecture: Bert RJ. *Early experience with clinical 3T MR imaging at the University of Colorado Denver 10/2007*.
9. Guest Lecturer, UCHSC Surgical Intensive Care Nurses Conference: Bert RJ. 11/2007.*Early experience with*

clinical 3T MR imaging at the University of Colorado Denver.

10. Guest Lecturer, UCHSC MRI Technologist Conference: Bert RJ. 01/2008.*Early experience with clinical 3T MR imaging at the University of Colorado Denver*.
11. Guest Lecturer, UC Denver, Anschutz Campus, Neurology Grand Rounds. Bert RJ. 09/2011. *Arterial Spin Labeling: MR cerebral blood flow imaging without IV contrast. How the technique has come of age and its applications in tumor imaging*.
12. Guest Lecturer, Case Conference. Dept. of Radiology, Beth Israel Deaconess Hospital, Boston, MA: Bert RJ. 03/2012.*Imaging of Hypothalamic & Pituitary Lesions*. *Followed by Board Review Case Conference*.
13. Guest Lecturer, Case Conference. Dept. of Radiology, University of MA Medical Center, Worcester, MA: Bert RJ. 03/2012. *Imaging of Hypothalamic & Pituitary Lesions. Followed by Board Review Case Conference*.
14. Guest Lecturer, Dept. of Radiology, University of Vermont Medical Center, Burlington, Vermont: Bert RJ. 08/2012. *Imaging of CNS Infectious Diseases*.
15. Guest Lecturer. Dept. of Radiology, University of Kentucky. Bert RJ. 06/2015. *MR Spectroscopy*.
16. Guest Lecture, Stroke Counsel. University of Louisville. *Caveats in Ischemic Penumbras*
17. Guest Lecturer, Dept. of Radiology, University of Cincinnati. Bert RJ. 03/2016. *MR Imaging of Infectious Diseases*.
18. Guest Lecturer, Neurosciences lecture series, University of Louisville. Bert RJ. 10/2016. *Gadolinium Deposition in Tissues: NSF and Beyond*.
19. Guest Lecturer, Dept. of Radiology, University of Cincinnati. Bert RJ. 05/2017. *Spinal, Epidural & Intrathecal Infectious & Inflammatory Diseases Part 1*.
20. Guest Lecturer, Dept. of Radiology, University of Cincinnati. Bert RJ. 10/2017. *Spinal, Epidural & Intrathecal Infectious & Inflammatory Diseases Part 2*.
21. Guest Lecturer, Dept. of Biomedical Engineering, University of Louisville. Bert RJ. 02/2018. *Arterial Compliance Measurements: Windkessel Models Oversimplify*.
22. Guest Lecturer, Dept. of Radiology, University of Kentucky. Bert RJ. 10/2018. *Spinal, Epidural & Intrathecal Infectious & Inflammatory Diseases Part 2*.
23. Guest Lecturer, Dept. of Radiology, University of Kentucky. Bert RJ. 10/2019. *Pathophysiology of Stroke Imaging*.
24. Guest Speaker, Dept. of Neurosurgery, Neuro-Oncology Symposium, University of Louisville. Bert RJ. 07/2019. *Evolution of Radiology Assessment of Meningiomas*
25. Guest Lecturer, Department of Neurosurgery Residency Program. Bert RJ. 10/2020. *Imaging Vascular Malformations*
26. Guest Lecturer, Fellowship Lecture, Department of Reproductive Endocrinology. Bert RJ. 11/2020. *Imaging the Hypothalamic-Pituitary Axis*
27. Guest Lecturer, Grand Rounds, Department of Endocrinology. Bert RJ. 12/2020. *Imaging the Hypothalamic-Pituitary Axis*

General Teaching Lectures University of Louisville

Annual 1st year Orientation and Pre-call Series

1. Fundamentals of radiology reporting
2. Beginning Cross Sectional Anatomy of the Human Brain
3. Beginning Plain Film and Cross Sectional Anatomy of the Human Spine
4. Beginning Cross Sectional Anatomy of the Human Head and Neck
5. Traumatic Spine Imaging: Biomechanics
6. Mechanisms of Traumatic Cervical Injury and Resulting Plain film, CT and MR Findings
7. Mechanisms of Traumatic Thoracic and Lumbar Spine Injury and Resulting Plain film, CT and MR Findings

Biannual University of Louisville Core Lecture Series

8. Advanced Spine and Spinal Cord Anatomy

9. Classification and Imaging of Hypothalamic, Parasellar & Pituitary Lesions
10. Diagnosis of the Suprahyoid Extramucosal Neck Masses by Location
11. Understanding Lymph Nodal Disease in Head & Neck Imaging
12. CT and MR Imaging of CNS Infections Part 1: Pyogenic and Granulomatous Diseases
13. CT and MR Imaging of CNS Infections Part 2: Parasitic, Viral and Prion Diseases
14. Fundamentals of MRI Spectroscopy and Spectroscopic Imaging
15. Classification and Pathophysiology of Cerebrovascular Ischemic Disease
16. Diffusion and Perfusion MR Imaging in Cerebrovascular Disease
17. Fundamentals of Cerebral Hemodynamics
18. Caveats of CT and MR Perfusion Imaging
19. The Phakomatoses: Pathophysiology, Genetics and Imaging
20. Classification and Imaging of Neurodegenerative Syndromes
21. Advanced Imaging 1: Arterial Spin Labelling Perfusion, Cine Flow Imaging,
22. *A*dvanced Imaging 2: Dynamic Contrast Enhanced Imaging & Susceptibility-Weighted Imaging
23. Spinal, Epidural & Intrathecal Infectious & Inflammatory Diseases Part 1
24. Spinal, Epidural & Intrathecal Infectious & Inflammatory Diseases Part 2

Other Department Lectures (Univ. of Colorado, 2006 - 20012)

- MRI Emergencies. Department of Emergency Medicine
- Imaging Traumatic Brain Injury. Division of Rehabilitative Medicine (Annual)
- Imaging and Pathology of Endocrine Diseases: Case Vignettes – Medical School, Annual PGY II Lecture (Annual)
- Clinical Examples of MRI, MRA and MRS in Neuroradiology and Body Imaging - Biomedical Engineering (Annual)
- Imaging Cerebrovascular Diseases - Neuroradiology Fellowship (Annual)
- Diseases of the Sella Turcica, Parasellar Structures and Hypothalamus - Neuroradiology Fellowship (Annual)

SERVICE

Accomplishments as Section Chief University of Louisville (2013 – 2019)

Imaging Technical Improvements (new sequences, sequence modifications and new studies)

MRI

1. **fMRI** (added **BOLD** functional imaging in 2013. New Vol. since 2013 = 62 studies)
2. **DTI** (added DTI in 2013. New Vol. since 2013 = 62 studies)
3. **MRP** (added MR Perfusion for primary brain tumors in 2013 for its ability to distinguish tumor recurrence from pseudo-recurrence, tumor staging and diagnostic aid. These are now performed on about 19% of all MRI Brain studies. New Vol. since 2013 = ~5000 studies).
    a. **DSC** (Dynamic Contrast Susceptibility perfusion-weighted imaging was instituted in 2013 and requires contrast.)
    b. **ASL** (2013. ASL was instituted in 2014 and does not require contrast.)
4. **Skull base imaging protocol** (2014) Developed new skull-based imaging protocol for Neurosurgery that meets imaging needs for surgery but reduces overall imaging time. New protocol was tailored to meet Stryker specifications for localization.
5. **Phase Contrast Cine Flow Imaging** (Phase contrast flow imaging was added in 2013 for Normal Pressure Hydrocephalus Chiari I malformations and selected spine studies. Vol. since 2013 = 62 studies)
6. **Susceptibility-Weighted Imaging** (SWI was added 2015 and is used in selected cases for head trauma, epilepsy (about 25% of cases) and some specific venous imaging.)
7. **Arterial Wall Imaging** (2017. Volume is one study to date but just instituted 2018.)
8. **DCE** (Dynamic Contrast Enhancement has been added for head and neck MRI imaging. It will become part of the standard neck imaging protocol 2018.)

   a. **Protocol development** (2016)
   b. **Software implementation** (2018)
9. **Stroke Protocol** (2016)
   a. **ASL** (Arterial Spin Labelling was added to the stroke protocol to provide a means to assess perfusion-diffusion mismatch without IV contrast. Vol =~2000 cases to date.)
   b. **DWI** (the B Values were adjusted to 1800 at 3 Tesla imaging to reduce T2 shine through and improve specificity for stroke and other causes of restricted diffusion Vol > 2200 cases to date.
10. **Multiple Sclerosis Protocols**
   a. **Brain** (See Quality Improvement below, MRI 3.)
   b. **Spine** (See Quality Improvement below, MRI 4.)
11. **Epilepsy Protocol** (See also Quality Improvement below, MRI 1.)
   a. Added ASL perfusion imaging (when available)
   b. Added Susceptibility-Weighted Imaging (when available).
12. **Pituitary Protocol** (2014) Pituitary Protocol Pituitary Protocol Increased the signal to noise ratio and decreased time of imaging of high resolution pituitary images. Limited use of dynamic imaging to microadenomas to improve throughput.
13. **Spine protocols**
   a. Improved spine imaging to include axial imaging stacks that cover the entire vertebral bodies in lumbar and thoracic spine imaging. This resulted in fewer skipped lesions
   b. (See Quality Improvement below, MRI 4)
14. **Other improvements in progress**
   a. Use of double inversion recovery imaging in MS, Epilepsy and Head and Neck imaging
   b. Diffusion imaging in head and neck imaging. Awaiting upgrade.)
   c. Unifying CT and MRI imaging protocols across the multiple sites of *University of Louisville Health Care*.
   d. Bi-annual reviews of imaging protocols

CT

15. **Perfusion Protocol**
   a. Developed and tested new perfusion protocols.
   b. Expanded coverage to near whole brain coverage.
   c. Retrained technologist on proper positioning and windowing.
16. Developed the protocols for brain helical acquisition, contrast enhanced CTA of the neck, contrast-enhanced CTA of the Circle of Willis. This resulted in higher image quality and fewer missed intracranial hemorrhages and meningiomas (consensus).
17. Developed and tested new spine imaging protocols. *See also Workflow Improvements a. CT*.
18. Developed and tested face imaging protocols.
19. Developed and tested new skull-based protocol for surgical planning.
20. Developed CT pituitary protocol for patients with contraindications for MRI.
21. Bi-annual reviews of imaging protocols

US

22. **Transcranial Doppler** (2014. *Volume since 2014 = 1297 cases ordered*)
   a. After previous service providers left the U of L, I collaborated with Dr. Greg Postal and Dr. Albert Seow to provide the service through the department of radiology. Currently, Neuroradiology and Body imaging share the workload. Volume:
   b. Developed standard templates for TCD.
   c. Assisted training faculty (with help from Tracy Van Meter) from previous publications (CV) and selected review articles.

Workflow improvements increasing scanner throughput.

CT

23. Use of helical imaging for routine traumatic head CTs, with additional thin section axial reformats that allow multiplanar reformatting on the clinical workstations. This significantly reduced imaging time.
24. Improving CT angiograms by changing the reformats to include 1 mm thin section imaging with sagittal and coronal MIPs with less overlap to reduce the number of images and time of review. *Our volume of CTAs of the head have increased 73% (931 additional scans) since 2012. CTAs neck have increased72% (1026 scans). Without these improvements, we could not have kept up with demand.*
25. Improved CT trauma spine protocols to include 1 mm axial images for multiplanar reformatting at the workstation for improved detection of fractures.

MRI

26. Improved spine imaging to include axial imaging stacks that cover the entire vertebral bodies in lumbar and thoracic spine imaging. *This shortened the imaging time by reducing technician interface.*
27. Numerous adjustments were made to reduce redundant imaging sequences and overall imaging time per study, resulting in increased throughput. *The overall volume has increase about 39% since 2012. This is about 1,700 additional neuroradiology cases per year (net revenues for the hospital over 1 Million; net professional revenue over $170,000.00 per year.)*
28. Instituted electronic protocolling through the Cerner Electronic Medical Record System Redesigned the imaging protocol worksheet and worked with technologists to update online protocol manuals to mirror the scanning protocols for the technologists and residents.
29. Updated Allscripts to reduce protocol errors from ordering clinicians and to meet ICD 10 codes
30. Work with John Wells from MRI to develop new electronic ordering for Cerner Electronic Record system.
31. Worked with Dr. Richard Downs (Clinical MRI Director) to unify MRI and CT imaging protocols to between the VA and University systems (as practical, based on manufacturer differences in equipment).

PQRI (Quality Improvements)

MRI

32. Conducted PQRI project for the section in 2014 – 2015, with input from clinical services. One major finding was concerns regarding Epilepsy protocol signal to noise ratios. In followup, we increased signal to noise ratios in high resolution coronal images.
33. Improved the accuracy of all imaging by reducing the inter-slice gap to 10% from 30%. This has resulted in fewer skipped lesions, especially in metastatic disease of the CNS.
34. Improved MS protocols by reducing slice thickness to 3 mm (recommended international standard) with no gap and included Proton Density images. This has resulted in fewer skipped lesions and more accurate followup. Proton Density Images provide improved sensitivity and specificity in the posterior fossa as a result of better signal to noise.
35. Improved MS protocols by reducing changing to no gap on sagittal images and changed GRE to Proton Density images in the axial plane (2017). This has resulted in fewer skipped lesions and more accurate followup. Proton Density Images provide improved sensitivity and specificity in the spine. Additionally, switched to manual tight shimming and crossing Saturation Bands for improved quality.
36. Changes in contrast agents

a. As a result of new data on contrast deposition in the brain, the contrast agent at the VA Rex Robly Medical Center was switched from the linear agent, *Magnavist* (Gadopentitate) to the most stable macrocyclic agent, *Dotarem* (Gadoterate).
b. Instituted the placement of *Dotarem* on the Univ. of Louisville formulary and instituted its use for patients with multiple studies (MS, low grade brain tumors) as well as its use in patients with moderate renal failure.

CT

37. Tested and chose specific low dose kernels for iterative reconstruction used for in CTA brain and neck studies, Trauma Spine and Trauma Brain studies, on two new scanners. This resulted in a significant dose reduction and allowed for helical acquisition without exceeding recommended limits on radiation dose.
38. Tested and chose specific low dose kernels used for iterative reconstruction on two new VA scanners. The Rex Robly VA Medical Center now has one of the lowest Brain and CTA doses in the US VA system

MULTIDISCIPLINARY CONFERENCES.

1. The Neuroradiology Section supports seven multidisciplinary conferences. Two Tumor Boards
   a. CNS Tumor Board
   b. Head & Neck Tumor Board
2. Pituitary conference: Developed together with Dr. Steven Winters of Endocrinology, Dr. Hattab of Pathology and Dr. Brian Williams of Neurosurgery
3. Stroke Council
4. Stroke Morbidity and Mortality Review
5. Epilepsy Conference, U of L
6. Epilepsy Conference, Kosairs Children's Hospital

Prior Position, University of CO

Major Accomplishments as Division Chief University of Colorado (2004 – 2009)

1. **One of three founding clinicians developing the University of Colorado Denver, Anschutz Campus, acute stroke care program.**
    a. Developed CT perfusion imaging and trained the neuroradiologists in CTP interpretation.
    b. Developed Acute Stroke Imaging protocol with non-contrast head CT, CTA of the neck, CTA of the circle of Willis and CTP.
    c. Improved quality of CT angiograms and encouraged their use in trauma, TIA and stroke. Number of CT angiograms have increased from 3-4 a month to 3-4 per day.
2. **Reinstated the Neuroradiology Fellowship program:**
    a. Served as fellowship director for five years. Successfully maintained ACGME accreditation through two evaluation cycles, with one interim internal review.
    b. Increased fellowship trainees from one fellow per year to two fellows per year. Demonstrated cost effectiveness to hospital and improvement of resident training by adding an additional fellow.
    c. Restructured fellowship training program, increasing rotation duration at The Children's Hospital to 8 weeks (previously 4), added a neuropathology rotation where neuroradiology fellow, pathology resident and neurology resident rotate together on the Neuropathology Service under the directorship of Dr. Betty DeMasters. Increased rotation on Neurointerventional radiology to 8 weeks (previously 4).
    d. Developed Neuroradiology core curriculum, adding didactic lectures in accordance with ASNR guidelines.
    e. Added monthly M&M conference for misses and mishaps on neuroradiology service.
    f. Sponsored research resulting in eight presentations and three papers involving fellows and residents. Four additional papers in preparation.
3. **Directed development of diffusion tensor imaging and clinical fMRI programs for neurosurgical planning:**
    a. Tested early DTI software from Massachusetts general hospital on Siemens systems, later replaced by FDA approved software on 3T GE magnet.
    b. Budgeted, planned and installed fMRI and DTI brainwave system on 3t GE system. Tested its use and brought online.
    c. Hired a new member of the faculty finishing a 2 year fellowship in Neuroradiology from Massachusetts General Hospital, with subspecialization in DTI and fMRI clinical applications (trained by Dr. Bucbinder at MGH).
4. **Brought 1st clinical 3T magnet to the University of Colorado Denver, Anschutz campus:**
    a. Served on planning committee.
    b. Assisted in budgeting, cost justification and needs assessment.
    c. Participated in equipment evaluation site visits.
    d. Chose brain imaging software, including DTI & fMRI brainwave package.
    e. Incorporated appropriate knock out panels, subfloor conduits, etc., needed for eventual incorporation of brain MRI guided focused ultrasound.
5. **Developed clinical use of MRI perfusion imaging and MR spectroscopy (as an adjunct) for brain tumor imaging:**
    a. Demonstrated the ability of MR perfusion to differentiate recurrent GBMs from early treatment-related inflammatory changes (pseudoprogression) to neurosurgeons.
    b. Tested ASL products from Philips and GE, leading to eventual purchase of ASL packages.
    c. Demonstrated advantages of ASL over contrast MR perfusion in differentiating tumor recurrence from treatment response (see presentation at the ASNR, 2012).
6. **Reconstructed core curriculum for residents training in neuroradiology:**
    a. Improved topics covered to be compliant with ACGME and ASNR guidelines.
    b. Made recommendations on lecture structure, including exams.
    c. Instituted rotation exams in anatomy.
    d. Encouraged greater teaching at the work stations.
    e. Developed report templates to better structure reports on the voice recognition system (powerscribe).
    f. Encouraged division sharing of teaching files/cases.

g. No resident has conditioned Neuroradiology since 2006 (8-9 residents per year taking exam). This was not the case prior to my arrival.

7. **Served on new hospital radiology department planning committee, with key contributions:**
   a. Spearheaded hospital-directed testing, purchase and implementation of voice recognition software, ultimately resulting in Powerscribe purchase.
   b. Served on evaluation/site visit team for purchase of new PACS system, ultimately resulting in purchase of McKesson PACS.
   c. Served on evaluation/site visit team for purchase of new CT scanners, procedure room and MRI system. Ultimately resulted in purchasing G# HDx 3T system for MRI, one Siemens 64 slice scanner, two Philips 64 Slice scanners and Philips Multipurpose suite.
   d. Reserved 750 square feet of laboratory space for radiology in new Research Center 2 building (including wet lab, procedure and dry lab/electronics rooms).
8. **Increased MRI and CT throughput.** Developed new standard protocol sequences and constructed manuals for the technologists. Worked in conjunction with technologists to streamlined work flow and improve image quality. This resulted in about a 30% improvement in throughput.

PREVIOUS HOSPITAL & ADMINISTRATIVE POSITIONS

7/04 - 06/13 Director of Clinical MRI
University of CO Denver

7/04 – 11/09 Division Chief, Neuroradiology
University of CO Denver

7/06 – 11/09 Director of Stroke Imaging
University of CO Denver

7/04 – 11/09 Director
Neuroradiology Fellowship Program University of CO Denver

7/99 – 6/00 Director of Neuroradiology Research
Boston Medical Center

RESEARCH

IRB and IACUC

IACUC 15389 Quantitative Detection of Focal Cortical Dysplasia

IRB

1. **15.1101** Magnetic Resonance Perfusion Imaging in Radiosurgery for Brain Metastases
2. **02.0274 JH #041.04**--Early Interventional Strategies for Spinal Cord Injury: Imaging and Functional Assessment of Human Spinal Cord Injury
3. **14.0510** Optimization of Diagnostic MR Sequences at the MR Research Facility
4. **13.0805** CT brain perfusion and recognizing false ischemic penumbras: a retrospective study
5. **14.0903** (Completed) Intra-Individual Cross-Over Efficacy Evaluation of Dotarem Enhanced MRI Compared to Gadovist/Gadavist-Enhanced MRI in the Diagnosis of Brain Tumors
6. **13.0941** Determining the Prognosis of Oropharyngeal Squamous Cell Carcinoma using Arterial Spin Labeling, Dynamic Contrast Enhancement, and Diffusion Imaging.
7. **11.0359** Longitudinal Study of Acquired Brain Injury Outcomes

GRANTS AND CONTRACTS

Current Grant support

Helmsley Charitable Trust — Harkema (PI) — 07/01/15 - 06/30/19
Recovery of Function, Health and Quality of Life for People with Paralysis — $6,000,000
The major goal is to restore motor function and quality of life in patients with spinal cord injury using epidural stimulation and locomotor training therapies. The information related to the Helmsley funding is below.
Speedtype G2339, G2746, Z1709. — 10% Effort

Craig H. Neilsen Foundation — Boakye (PI) — 08/01/18 – 07/30/21
Improving Outcomes Using Myelotomy with Intramedullary Hemorrhagic Necrosis Removal in Porcine Model of Acute Thoracic Cord Injury — $600,000
Speedtype CCDB180308. — 3% Effort (Collaborator)

USAMRAA-DOD — Boakye (PI) — 10/01/18 – 08/31/20
Improving Outcomes Using Myelotomy with Intramedullary Hemorrhagic Necrosis Removal in Porcine Model of Acute Thoracic Cord Injury — $770,000
Speedtype OGMB180553. — 2% Effort (Co-Investigator)

Pending

NIH Submission — Boakye (PI) — 09/01/18 - 08/31/23
Therapeutic efficacy of decompressive myelotomy with and without nanobiomatrix scaffold in a porcine model of spinal cord injury Necrosis Removal in Porcine Model of Acute Thoracic Cord Injury — $3,849,999
Role: Co-Investigator — 10% effort

Clinical Trials:

Current clinical trials listed as radiologist for clinical interpretations and (some studies) clinical site specialty measurements. Below are listed active trials with myself (Dr. Robert Bert) listed as the clinical reader or one of the clinical readers.

SPONSOR	PI	Protocol Number	PROTOCOL
Abbvie	Kloecker	Abbvie M16-289 (Rova-T)	Phase 3 Study of Rovalpituzumab Tesirine Compared with Topotecan for Subjects with Advanced or Metastatic DLL3 high Small Cell Lung Cancer (SCLC) with have First Disease Progression During of Following Front-Line Platinum-Based Chemotherapy
Abbvie	Kloecker	Abbvie M16-298 (MERU)	A Randomized, Double-Blind, Placebo-Controlled Phase 3 Study of Rovalpituzumab Tesirine as Maintenance Therapy Following First-Line Platinum-Based Chemotherapy in Subjects with Extensive Stage Small Cell Lung Cancer (MERU)
Abbvie	Pagidas	Abbvie Elagolix M14-702	A Phase 3 Study to Evaluate the Safety and Efficacy of Elagolix in Combination with Estradiol/Norethindrone Acetate I Subjects with Moderate to Severe Endometriosis-Associated Pain
AMGEN	Chesney	Amgen 201102264	Phase 1b/2, Multicenter, Open-label Trial to Evaluate the Safety and Efficacy of Talimogene Laherparepvec and Ipilimumab Compared to Ipilimumab Alone in Subjects with Unresected, Stage IIIB-IV Melanoma
AMGEN	Chesney	Amgen 20130232 (TVEC)	Phase 1b/3 Multicenter, Randomized, Open-label Trial of Talimogene Laherparepvec in combination with Pembrolizumab for the Treatment of Subjects With Recurrent or Metastatic Squamous Cell Carcinoma of the Head and Neck
AMGEN	Chesney	Amgen 201102265	Phase 1b/3, Multicenter, Trial of Talimogene Laherparepvec in Combination With Pembrolizumab (MK-3475) for Treatment of Unresectable Stage IIIB to IVM1c Melanoma (MASTERKEY-265)
BeyondSpring Pharmaceuticals	Kloecker	BPI-2358-103	Ph 3 Assessment of 2nd or 3rd line Chemotherapy with Docetaxel + Plinabulin compared to doxetaxel alone in patients with advanced non-small cell lung CA w/ at least 1 large lung lesion
Bristol Myers Squibb	Chesney	BMS-CA209370 (Checkmate-370)	Phase 1/2 Studies of Nivolumab in Advanced NSCLC Using Nivolumab as Maintenance after Induction Chemotherapy or as First-line Treatment Alone or in Combination with Standard of Care Therapies

Bristol Myers Squibb	Chesney	BMS-CA209568 (Checkmate-568)	An Open-Label, Single Arm Phase II Study of Nivolumab in Combination with Ipilimumab as first line-therapy in stage IV Non-small Cell Lung Cancer (NSCLC)
Bristol Myers Squibb	Redman	BMS-CA209714 (Checkpoint-714)	Double-Blind, Randomized, Two Arm Phase 2 Study of Nivolumab in Combination with Ipilimumab versus Nivolumab in combination with Ipilimumab placebo Squamous Cell Carcinoma of the Head and Neck (SCCHN)
Bristol Myers Squibb	Liu	BMS-CV0006400	Phase 2, Placebo Controlled, Randomized, Double-Blind, Parallel-Arm Study to Evaluate Efficacy and Safety of BMS-986141 For the Prevention of Recurrent Brain Infarction in Subjects receiving acetylsalicylic acid (ASA) following Acute Ischemic Stroke or Transient Ischemic Attack
Celegene	Kloecker /Rios	Celegene-ABI-007	PHASE III, RANDOMIZED, OPEN-LABEL, CROSS-OVER, MULT-CENTER, SAFETY AND EFFICACY STUDY TO EVALUATE NAB-PACLITAXEL (ABRAXANE®) AS MAINTENANCE TREATMENT AFTER INDUCTION WITH NAB-PACLITAXEL PLUS CARBONPLATIN IN SUBJECTS WITH SQUAMOUS CELL NON-SMALL CELL LUNG CANCER (NSCLC)
Celegene	Tse	MEDI4736-DLBCL-001	Phase 2, SAFETY AND CLINICAL ACTIVITY OF DURVALUMAB IN COMBINATION WITH RITUXIMAB, CYCLOPHOSPHAMIDE, DOXORUBICIN, VINCRISTINE, PREDNISONE (R-CHOP) OR WITH LENALIDOMIDE PLUS R-CHOP (R2-CHOP) IN SUBJECTS WITH PREVIOUSLY-UNTREATED, HIGH-RISK DIFFUSE LARGE B-CELL LYMPHOMA
CerRx	Tse	Cerx FEN-T14	Phase II Trial of Intravenous Fenretinide (N-(4-hydroxyphenyl) retinamide, 4-HPR) Emulsion for Patients with Relapsed/Refractory Peripheral T-cell Lymphomas (PTCL)
CREST-2 (National Institute of Neurological Disorders & Stroke)	Liu	CREST-2	CAROTID REVASCULARIZATION AND MEDICAL MANAGEMENT FOR ASYMPTOMATIC CAROTID STENOSIS TRIAL (CREST-2) PROTOCOL
Daiichi-Sankyo	Lu	DS1040-AU103	Ph 1b/2 Single-ascending dose study to assess the safety, Pk / Pd of DS-1040B in subjects with acute ischemic stroke

Daiichi-Sankyo	Redman	DS8201-A-J101	PHASE 1, TWO-PART, MULTICENTER, NON-RANDOMIZED, OPEN-LABEL, MULTIPLE DOSE FIRST-IN-HUMAN STUDY OF DS-8201A, IN SUBJECTS WITH ADVANCED SOLID MALIGNANT TUMORS
ELI LILLY	Redman	18x-MC-JECA	Phase 1 Study of LY3200882 in Patients with Solid Tumors
ELI LILLY	Kloecker	L3Y-MC-JPBO(a)	Phase 2 Study of Abemaciclib in patients with Brain Metastases Secondary to Hormone Receptor Positive Breast Cancer, Non-Small Cell Lung Cancer, or Melanoma
Merck	Redman	Merck 3475-048	Phase 3 Clinical Trial of Pembrolizumab (MK-3475) in First Line Treatment of Recurrent/Metastatic Head and Neck Squamous Cell Carcinoma
Merck	Redman	MK-3475-062	Randomized, Active-Controlled, Partially Blinded, Biomarker Select, Phase III Clinical Trial of Pembrolizumab as Monotherapy and in Combination with Cisplatin+5-Fluorouracil versus Placebo+Cisplatin+5-Fluorouracil as First Line Treatment in Subjects with Advanced Gastric or Gastroesophageal Junction (GEJ) Adenocarcinoma
Merck	Riley	MK-3475-119	Randomized Open-Label Phase III Study of Single Agent Pembrolizumab versus Single Agent Chemotherapy per Physician's Choice for Metastatic Triple Negative Breast Cancer (mTNBC)- (KEYNOTE-119)
Merck	Sharma	MK-3475-164	Phase II Study of Pembrolizumab as Monotherapy in Subjects with Previously Treated Locally Advanced Unresectable or Metastatic Stage (IV) Mismatch Repair Deficient or Microsatellite Instability-High Colorectal Carcinoma (KEYNOTE-164)
Merck	Sharma	MK-3475-177	Phase III Study of Pembrolizumab (MK-3475) vs. Chemotherapy in Microsatellite Instability-High (MSI-H) or Mismatch Repair Deficient (dMMR) Stage IV Colorectal Carcinoma (KEYNOTE-177)
Merck	Kloecker	MK-3475-189	Phase III Study of Platinum+ Pemetrexed Chemotherapy with or without Pembrolizumab (MK-3475) in First Line Metastatic Non-squamous Non-small Cell Lung Cancer Subjects
Merck	Krem	MK-3475-204	Phase 3, Randomized, Open-label, Clinical Trial to Compare Pembrolizumab with Brentuximab Vedotin in Subjects with Relapsed or Refractory Classical Hodgkin Lymphoma

Monteris Medical (Laantern-study)	Neimat	LANTERN – CL10027	Laser Ablation of Abnormal Neurological Tissue using Robotic Neuroblate system (LAANTERN) Prospective Registry
NovoCure Ltd	Burton	NovoCure EF-25	METIS: Pivotal, open-label, randomized study of radiosurgery with or without Tumor Treating Fields (TTFields) for 1-10 brain metastases from non-small cell lung cancer (NSCLC).
Pfizer	Jain	Pfizer-Trio A548 1008	Ph3 Study of PD-0332991 (oral CDK 4/6 inhibitor) plus letrozole vs. placebo plus letrozole for the treatment of postmenopausal women with ER+, HER2 - Breast CA who have not received any prior systemic anti-CA treatment for advanced disease
Pfizer	Redman	Pfizer B9991016 JAVELIN	Phase e study of AVELUMAB in combination with standard of care chemoradiotherapy (Cisplatin + Definitive radiation therapy) Vs standard of care chemoradiotherapy in the front-line treatment of patients with locally advanced squamous cell carcinoma of the head and neck
SanBio	Liu	SanBio SB-STR02	Double-Blind, Controlled Phase 2B Study of the Safety and Efficacy of Modified Stem Cells (SB623) in Patients with Chronic Motor Deficit from Ischemic Stroke
Vascular Biogenics Ltd (VBL)	Burton	VB-111-215	Phase 3, Randomized, Controlled, Double-Arm, Open-Label, Multi-center Study of VB-111 Combined with Bevacizumab vs. Bevacizumab Monotherapy in Patients with Recurrent Glioblastoma

Previous Grant support

Helmsley Charitable Trust — Amini, Bert (PI) — 07/01/15 - 06/30/18
4D Flow MR Imaging of CSF in SCI (Spinal Cord Injury) — $50,000
Role: Co-PI

Ky. Council on Postsecondary Ed — Malik (PI) — 01/01/16 - 12/31/17
SpheraHance, a Cancer-Targeted Contrast Agent for MRI an — $200,000
Speedtype OGMB150024A3. — 1% Effort
Role: Collaborator

PVA Research Foundation. Grant # 3010. Boakye (PI) 01/01/15-12/31/16
Improving acute SCI assessment with cine MRI and epidural electrophysiology.
The goal of this study is to determine if Phase Contrast Cine MR flow studies and electrophysiology provide imaging and electrophysiological biomarker for early surgical intervention in traumatic cord injury.
Role: Co-Investigator

The Radiosurgical Research Institute Bert (PI) 12/01/15 - 06/30/16*
Magnetic Resonance Perfusion Imaging in Radiosurgery for Brain Metastasis $2828
The goal of this study is to determine if perfusion-weighted imaging can predict radiosensitivity tumor metastases to the brain.
Role: PI *extended to 12/31/16

Siemens Medical Systems Bert (PI) 11/01/15 – 05/23/16
ULRF-2014-MR-1-01-Bert_C00214773, works in progress software license
LOUISVILLE_BERT_HEADNECK_CLINICAL_MR.
The purpose of this study was to investigate high resolution, low distortion Diffusion-Weighted Imaging (RESOLVE) as an imaging biomarker

Guerbet Protocol # DGD-44-058 Maravilla (PI) 11/01/14 - 09/15/15
Intra-individual cross-over efficacy evaluation of Dotarem-enhanced MRI compared to Gadovist-enhanced MRI in the diagnosis of brain tumors (REMIND Study).
The goal of this study is to compare the efficacy of two MRI contrast agents in establishing the diagnosis of brain tumors.
Role: Site PI. **(This study is now closed. We were not able to enroll any subjects. Please see narrative)**

OLDER PREVIOUS SUPPORT

Project #: RO1-EY-13825 (Thomas Freddo)
NIH/NEI RO1 Grant
Redefining the Model of the Blood-Aqueous Barrier
Dates of Funding: 7/1/2002-6/30/2004
Percentage Funded: 30% (**subcontract PI**)

Project #: RO1-EY-04567 (Thomas Freddo)
NIH/NEI RO1 Grant
Mechanisms of Recurrence of Anterior Uveitis of the Eye
Dates of Funding: 7/1/01-6/30/2002
Percentage Funded: 25% (**subcontract PI**)

Project #: RO1-EY-04567 (Thomas Freddo)
NIH/NEI RO1 Grant
Mechanisms of Recurrence of Anterior Uveitis of the Eye
Paid Consultant 7/1/98-6/30/2000

Project #: EY09275 (Jeffrey Karpen)
T32NS07083 (UCHSC)
NIH TG, NIH RO1
UCHSC Neurosciences Training Grant
Dates of Funding: 8/15/1992-6/30/1993
Percentage Funded: 100%

Project #:RO1-EY-04364(Burks Oakley)

NIH/NEI Grant
Dates of Funding: 9/1/1985-8/31/1989
Percentage Funded: 25%

Lions and Searle Grants (Burks Oakley)
Dates of Funding: 9/1/1983-8/31/1985
Percentage Funded: 25%

ABSTRACTS AND PRESENTATIONS

Scientific and Educational Presentations (All abstracts published in meeting Proceedings)

A. **Bert R**. A Review of Chronic Subdural (Intradural) Hematomas and Hygromas from a Glymphatic Perspective: Anatomy, Etiology, Pathophysiology and Imaging Findings. **SNR-ASNR Proceedings 2022**.

B. **Bert R**, Negahdar M, Boakye M. Remote changes in spinal cord interstitial space-subarachnoid space Communication 24 hours after acute mild traumatic spinal cord injury in a miniature spine model: a case for early Wallerian degeneration? **SNR-ASNR Proceedings 2022**.

C. Nath R, Negahdar MJ, **Bert R**, Amini A. 4D CSF Flow Measurement in Cervical Spine at 3T. (Poster) ***ISMRM-ESMRMB, 2018***.

D. **Bert R**, Muddasani D, Negahdar MJ, Wellman B, Boakye M. Differences in Velocity Distributions in Supine vs. Prone CSF Pulsations in the Cervical Spinal Canal Support Local Arterial Contributions to CSF Pulsatilities. ***ASNR Proceedings*****. 2018**.

E. Ghaderini S, Amsbaugh M, Yusuf M, Woo S, Gaskins J, **Bert R.** Can Perfusion Imaging Predict CyberKnife Treatment Response in Cerebral Metastatic Disease? ***ASNR Proceedings*****. 2018**.

F. Mehwish A, Muddasani D, Negahdar MJ, Wellman B, Maxwell B, **Bert RJ**. Cervical Spinal Canal Support Local Arterial Contributions to CSF Pulsatilities. (Poster). ***APS (American Physiologic Society). 2018.***

G. **Bert R**, Muddasani D, Negahdar MJ, Wellman B, Boakye M. Developing Imaging Pulse Sequences for Miniature Swine Traumatic Spinal Cord Injury Model. ***SNR* (*Symposium Neuroradiologicum, Taipei*) 03/2018.**

H. **Bert R**, Negahdar MJ, Muddasani D, Xu J, Kim J-W, Siefert A, Wellman B, Boakye M. Thoracic Spinal Cord Diffusion Tensor Imaging in Miniature Swine Model for Spinal Cord Injury. ***SNR* (*Symposium Neuroradiologicum, Taipei*) 2018**.

I. **Bert R**, Tiwana E, Settipalle N, Muddasani D, Negahdar MJ, Amini A, Wellman B, Boakye M. The Relationships of Cervical, Thoracic and Lumbar CSF Flows with Cross Sectional Cord Area, Caudal Residual Cord Length, Caudal Residual Cord Volume and Arterial, Venous Correlations: Evidence of Intrathecal Sources and Sinks Contributing to CSF Pulsations. ***SNR (Symposium Neuroradiologicum, Taipei) 2018***.

J. Ghaderi Niri S, Muddasani D, Zang H, Zhu M, Boakye M, **Bert RJ.** Is CSF in direct communication with the spinal cord interstitial space? ***ASSR Proceedings. 2018***.

K. **Bert R**, Tiwana E, Settipalle N, Wellman B, Boakye M. Cervical, Thoracic and Lumbar CSF Flow Pulsation Temporal Correlations with Major Arterial and Venous Flow Pulsation and Inverse Correlations with Cross-Sectional Cord Area and Caudal Residual Length. 05/17. ***Proceedings ASNR.***

L. **Bert R**, Garabato B, Zhu M, H Zheng H, Ng C, Kozlowsk P. Theoretical and Empirical Evidence of Voltage Sensitivity of Macrocyclic Gadolinium-based Contrast Agents within Physiologic Ranges. 05/17. ***Proceedings ASNR.***

M. **Bert R**, Muddasani D, M Negahdar M, Sherwood L, Wellman B, Boakye M. Developing Imaging Pulse Sequences for Miniature Swine Traumatic Spinal Cord Injury Model. 05/17. ***Proceedings ASNR.***

N. Fahangi MM, Hichem Frigui, **Bert R**, Amini AA. Incorporating Shape Prior into Active Contours with a Sparse Linear Combination of Training Shapes: Application to Corpus Callosum Segmentation. 08/16. ***IEEE EMBS*****.**

O. Richardson AM, **Bert RJ**. Testing Susceptibility Weighted Imaging and Double Inversion Recovery Sequences in the Evaluation of Oropharyngeal Squamous Cell Carcinoma. 05/16. ***ASNR Proceedings*****.** *Turbo Talk and Electronic Poster.*

P. Settipalle N, Boakye M, **Bert RJ**. CSF Pulsations in the Spinal Canal in Acute Traumatic Spinal Stenosis Patients: Evidence of Interstitial Movement of Fluid and Spinal Cord Sources and Sinks. 05/16. ***ASNR Proceedings*****.**

Q. Settipalle N, Boakye M, **Bert RJ**. Retrocardiac-Gated Phase Contrast Cine Flow Time Curves in Cervical, Thoracic and Lumbar Regions of Normal Volunteers: Evidence of Spinal Canal Sources and Sinks. 05/16. ***ASNR Proceedings*****.**

R. **Bert RJ,** Nagel M, Gilden D. Varicella-Zoster Virus: One Pathogen with Multifaceted Pathophysiological Spread, Clinical Expressions and Imaging Presentations. 05/16. ***ASNR Proceedings*****.** Educational Poster.

S. **Bert RJ,** Zhu M, Zheng H, Ng C. MR Myelography in Rat Spinal Cord Demonstrates Communication Between

Interstitial Spaces and the Subarachnoid Space. 05/16. ***ASNR Proceedings*.**

T. Dobson ML, Gootee B, Kendrick M, **Bert R**, Negahdar MJ, Amin A. 4D Flow imaging in a MR compatible Spinal Canal Phantom with and without Occlusion. 04/16. ***ISBI*.**

U. Negahdar MJ, **Bert R**, Amini A. Quantification and Visualization of CSF flow in the Cervical Spine using 4D Spiral flow MRI. 04/14. ***ISBI Proceedings.***

V. **Bert RJ**, Nagel MA, Gilden D. Varicella-Zoster Virus: One Pathogen with Multifaceted Pathophysiological Spread, Clinical Expressions and Imaging Presentations. 04/15. ***Proceedings ASNR***. Educational Exhibit.

W. Settipalle N, Boakye M, **Bert RJ.** Comparison of cardiac and pulse gated CSF cine flow throughout the spinal canal demonstrating true sources and sinks. 09/15. ***Eastern Neuroradiological Society Proceedings. 2015.***

X. **Bert RJ**, Zhu M, Zheng H, Ng C. Koszlowski P. Voltage-Sensitivity of Changes in the Gd-H2O Bond Length at Neuronal Membrane Potentials in Selected Macrocyclic Compounds: Can Selected Gadolinium-based Contrast Agents Be(Made) Voltage Sensitive? 04/15. ***Proceedings ASNR.***

Y. **Bert RJ**, Zhu M, Zheng H, Ng C. Histogram Analytic Anomalies of Interstitial Gadolinium Between Brain and Spinal Cord in MR Myelography in Anesthesized Rats Suggests Two Independent States of T1 Shortening in the Brain. 04/15. ***Proceedings ASNR.***

Z. **Bert RJ**, Zhu M, Zheng H, Ng C. MR Myelography as a Means of Interrogating the Subarachnoid Space Communication with Cortical Micro-Virchow Robin Spaces. 05/15. ***Proceedings ISMRM.***

AA. Amsbaugh MJ, Perez C, Gaskins J, Silverman C, Bumpous J, Kevin Potts K, Rajeurs A, **Bert R**, Redman R, Dunlap N. Squamous Cell Cancer of an Unknown Primary Head and Neck Site: Is Upfront Neck Dissection Still Relevant in the Era of Chemoradiation? 02/15. **Proceedings ASTRO**.

BB. **Bert RJ,** Munoz E, Meyer MA**.** Effects of Arterial Choice for the Arterial Input Function on Perfusion Parameters in Isolated Posterior Circulation**.** 09/14. ***PWSNR.***

CC. **Bert RJ,** Bashir M, Jung K-J. Optimization of Double Inversion Recovery Contrast for Squamous Cell Carcinoma of the Neck. 09/14. ***WSNR. 2014.***

DD. **Bert RJ,** Bashir M, Jung K-J. Optimization of Double Inversion Recovery Contrast for Brachial Plexus Imaging of the Neck. 09/2014. ***Proceedings WSNR.***

EE. **Bert RJ**, Mihlon F, Hildreth K, Moreau K, Schwartz R. Comparison of Common Carotid, Internal Carotid and Vertebral Arterial Compliance in Young Healthy Controls and Elderly Subjects Directly Measured with 3D Time-of-Flight MR Angiography. 05/13. ***Proceedings ASNR.***

FF. Damek DD, Ney DE, Borges MT, Colantoni W, **Bert RJ**. Arterial spin labeling perfusion and MR contrast-enhanced susceptibility perfusion in post treatment malignant glioma evaluation. 11/12. ***Proceedings SNO.***

GG. Mihlon F, Hildtreth K, Moreau K, Schwartz R and **Bert RJ.** Comparison of Common Carotid, Internal Carotid and Vertebral Arterial Compliance in Young Healthy Controls and Elderly Subjects Measured with 3D Time of Flight MRA. 09/12. ***Proceedings of ESNR*.**

HH. Mihlon F, Hildtreth K, Moreau K, Schwartz R and **Bert RJ.** Comparison of Common Carotid Compliance Measured with Cardiac-Gated 3D Time of Flight MR imaging and Ultrasound. 04/12. ***Proceedings ASNR*.**

II. Colantoni W, **Bert RJ**, Borges MT. Comparison of Arterial Spin Labeling and Dynamic Susceptibility Contrast-Enhanced MR Perfusion in Differentiating Tumor from Radiation Necrosis. 04/12. ***Proceedings ASNR*.**

JJ. Best A, Borges MT, Ree A and **RJ Bert.** Evaluation of Perceived Occipital Blood Flow Asymmetries in Patients with Asymmetric Posterior Communicating Arteries. 06/11. ***Proceedings ASNR*.**

KK. **Bert RJ**, Roberts R, Ree A and Kuriakose M. Evaluation of Contrast Enhancement Comparing 3T MR Imaging T1 FLAIR and Conventional Spin Echo in an Agar Model. 05/10. ***Proceedings ASNR*.**

LL. O'Callaghan M, Nyberg EM, Ree A, Borges MT, **RJ Bert.** Case Report: Hemiatrophy and Venous Anomalies Associated with Linear Sebaceous Nevous Syndrome – a Rare Phakomatosis. 05/10. ***Proceedings ASNR*.**

MM. Acosta NR, Best A, Brega K, Anderson T and **RJ Bert**. Caveats of Ischemic Penumbra in CT Perfusion: Recognition and Potential Physiologic Basis. 05/ ***Proceedings ASNR*.**

NN. **Bert RJ.** Does ischemia or hypoxia play a role in tumofactive MS & ADEM? 06/04. ***Proceedings ASNR*.**

OO. Ortiz Y, O'Callaghan M, Wang C, Bhadelia RA and **RJ Bert.** Longitudinal MRI changes and MRS of neurocutaneous melanosis with subsequent development of malignant peritonitis. 06/04. ***Proceedings ASNR*.**

PP. Reczek JT, House MD, Erbay SH, **Bert R** and RA Bhadelia. Fetal MRI as an adjunct to fetal ultrasound in suspected cranio-spinal anomalies. 05/02. ***Proceedings ASNR*.**

QQ. **Bert RJ**, Krejza J and R Bhadelia. Epidural Hematomas 2002: A comprehensive review of pathophysiology, etiologies and imaging findings. 05/02. ***Proceedings ASNR*.**

RR. **Bert RJ**, Krejza J and R Bhadelia. Chronic intradural (misnomer "subdural") hematomas and hygromas: updating our understanding of imaging, pathophysiology and etiologies. 05/02. ***Proceedings ASNR*.**

SS. **Bert RJ**, Krejza J and R Bhadelia. Acute intradural ("subdural") hematomas: a critical review of the bridging vein oversimplification and mislabeled "shear" forces. 05/02. ***Proceedings ASNR*.**

TT. **Bert RJ** and B Auster. Conventional and advanced MR imaging/MR spectroscopy findings in three cases of prion disease with and without basal ganglia involvement. 05/02. ***Proceedings ASNR*.**

UU. Yun E, Erbay S, Gupta P, **Bert R**, Mahajan A, Borden J and R Bhadelia. Gamma knife radiosurgery for trigeminal neuralgia: value of MR Imaging in predicting response to treatment. 05/02. ***Proceedings ASNR*.**

VV. Kingstone MS, Do Dai DD, Bhadelia RA and Heilman CB, Erbay SH, **Bert R** and Carter, BL. Imaging appearances of skull base masses. *04/01.* ***Proceedings ASNR*.**

WW. Do Dai DD, Kingstone MS, Bhadelia RA and Heilman CB, Erbay SH and **Bert R**. Spectrum of cranial nerve schwannomas: imaging characteristics and clinical manifestations. *04/01.* ***Proceedings ASNR*.**

XX. **Bert RJ**, Spektor V, Jara H, Caruthers SD and R Bhadelia. A noninvasive evaluation of intracranial vascular compliance in patients with subarachnoid hemorrhage. 04/01***.*** ***Proceedings ASNR*.**

YY. **Bert RJ**, Spektor V, Jara H, Caruthers SD and S Erbay. Verification of direct vascular compliance measurements using pulse-gated 3D Time of Flight imaging in a phantom flow model. 04/01. ***Proceedings ASNR*.**

ZZ. **Bert RJ**, Vaynberg E, Spektor V, Jara H, S Caruthers. Noninvasive evaluation of intracranial vascular compliance in patients with intracranial vasculopathy vs. normal controls. 12/99***. Proceedings RSNA.***

AAA. Stanislaw S, Kordecki K, Krejza J, **R Bert**. Power Doppler sonography in detection of periarticular soft-tissue hyperemia in early rheumatoid arthritis-longitudinal study. Annals of Rheumatologic Diseases. 1999. Proceedings XIV European League Against Rheumatism Congress.

BBB. **Bert RJ**, Caruthers SD, Jara H, Melhem ER, Kolodney N. and T. Freddo. High resolution dynamic imaging of the globe confirms an anterior molecular pathway. 05/99. ***Proceedings ASNR*.**

CCC. **Bert RJ**, Samaraweerwa R and ER Melhem. CNS MR and CT findings associated with herpetic acute retinal necrosis and retrobulbar optic neuritis in HIV-infected patients. 05/99. ***Proceedings ASNR.***

DDD. Melhem E, Faddoul S, **Bert R**. Cervical Spondylosis Contrast-Enhanced Magnetization Transfer Pre-pulsed 3DTFE MR Imaging. 05/99. ***Proceedings ASNR.***

EEE. **Bert RJ**, Caruthers SD, Jara H, Melhem ER, Kolodney N and T Freddo. MR imaging identification of an anterior large-molecule pathway in the normal human eye. 05/99. ***Proceedings ARVO.***

FFF. Karpen JW, Gramling R**, Bert RJ** and RL Brown. Cyclic GMP binding sites within two different subunits of the retinal rod cGMP-gated channels. 1995. *Biophysical Journal.* 68: A253*.* ***Proceedings ABS.***

GGG. Brown RL, Gramling R, **Bert RJ** and JW Karpen. Identification with photo affinity labeling of peptide regions within retinal rod c-GMP- activated channel subunits involved in cGMP binding. 05/94. *Investigative Ophthalmology & Vis. Sci. 35: 1473. 05/94.* ***Proceedings ARVO.***

HHH. **Bert RJ**. The effects of the tubulin-binding drug, colchicine, on the electrophysiological aspects of phototransduction in toad rod photoreceptors. *Univ. of Illinois Theses.* 1990. ***Presented: Thesis Defense and** 1989. **U of I Medical Scholars Program.***

III. **Bert, R.J.** & B. Oakley II. The effects of colchicine upon rod-mediated $[Ca^{2+}]_o$fluxes. 1989. ***Proceedings ARVO****. 30: 64.*

JJJ. **Bert, R.J.& B. Oakley II.** Colchicine's effects on the light-sensitive conductance in toad rods are due to inhibition of Na^{+}-Ca^{2+} exchange. 05/87. ***Proceedings ARVO.** 28: 353.*

KKK. **Bert, R.J.**, Kuffel, R.R. & B. Oakley II. Colchicine may affect the light-sensitive conductance in toad rods. 05/86. ***Proceedings ARVO****. 27: 241.*

LLL. Proenza, C., **Bert, R.J**. & B. Oakley II. Phosphodiesterase activity may control dark adaptation in rods. 05/86.

Proceedings ARVO*. 27: 299.*

MMM. **Bert, R.J.** & B. Oakley II. The cytoskeleton may affect rod membrane potential. 05/85. ***Proceedings ARVO****. 26: 248.*

NNN. B. Oakley II & **Bert, R.J**. Electrophysiological assessment of phosphodiesterase activity in rod photoreceptors. 05/85. ***Proceedings ARVO****. 26: 333*.

OOO. **Bert, R.J.** & B. Oakley II. The effects of intracellularly injected proteins and small molecules upon membrane potential in rod outer segments. 1984 **Carle Selected Papers.** 34:60.

Peer Reviewer Work

2004 – 2018 Manuscript Reviewer

2006 – 2010	Journal of Computer - Assisted Tomography
2006 – 2010	Academic Radiology 2006 - 2010
2008	Journal of Magnetic Resonance Imaging Single review (requested)
2004 – 2006	American Journal of Neurology
2015	Neurographics Single review (requested)
2015	Journal of the Neurological Science (single review) (requested)
2015	Academic Radiology Single review (requested)
2016	Associated Editor International Journal of Radiology and Imaging Technology
2016	Associate Editor of Journal of Journal of Radiology and Imaging
2016	Associate Editor of Journal of Neurology and Therapeutics
2016	Journal of Radiology and Imaging (single review)
2017	Journal of Anesthesia and Analgesia (requested review and editorial)
2017	Fertility and Sterility (requested single review)
2017 – 2022	Spine
2017 – 2022	Academic Radiology
2017 – 2022	American Journal of Neuroradiology

2016 - 2018 *Associate Journal Editor*

2016 - 2018	Associated Editor International Journal of Radiology and Imaging Technology
2016 - 2020	Associate Editor of Journal of Radiology and Imaging
2016 - 2018	Associate Editor of Journal of Neurology and Therapeutics

2011 – 2012 *Grant Reviewer*

2011 – 2012	American Heart Association grant cycle 02/2011 and 06/2011 - imaging grants for cardiovascular disease and stroke; 02/2012 - Basic Science and Radiology.
2016 -2017	University of Louisville SOMC committee.

PUBLICATIONS

A. Smith AC, Angeli CA, Ugiliweneza B, Weber II KA, **Bert RJ**, Negahdar M, Mesbah S, Boakye M, Harkema SJ, Rejc E. Spinal cord imaging markers and recovery of **standing** with epidural stimulation in individuals with clinically motor complete spinal cord injury. *Experimental Brain Research*. 2022. 240:279-288 doi.org/10.1007/s00221-021-06272-9

B. **Bert, Robert J.** Progress in Development of Statistically-Verifiable Successful Teaching Tools: RadExam Makes a Successful Debut. Available online, May, 2021. https://doi.org/10.1016/j.acra.2021.04.003

C. Rejc E, Smith C, Weber KA, Ugiliweneza B, Bert RJ, Negahdar MJ, Maxwell Boakye M, Harkema SJ, Angeli CA. Spinal cord imaging markers and recovery of **volitional leg movement** with spinal cord epidural stimulation in individuals with clinically motor complete spinal cord injury. *Frontiers in Systems Neuroscience*. 21 October 2020. doi.org/10.3389/fnsys.2020.559313

D. Bhagat R, Elnazeir MA, Bert R, Liu W. A dermoid cyst mimicking a large thrombosed basilar tip aneurysm. Neurol. Clin. Neurosci. 2020. 8:99-100. DOI: 10.1111/ncn3.12357

E. Ram C, Borges MT, **Bert R**. Reversible Thoracic Cord Edema Secondary to Morphine Intrathecal Catheter Granuloma – A Case Report and Short Review. International Journal of Advanced Research in Orthopaedics. 3(1):ISSN: 2642-0155

F. Ghaderini S, Amsbaugh M, Yusuf M, Woo S, Gaskins J, **Bert R.** Can Imaging Biomarkers Predict CyberKnife Treatment Response in Cerebral Metastatic Disease**.** *In Preparation. International Journal of Radiation Oncology*. 2020.

G. **Bert R**, Settipale N, Muddasani D, Wellman B, Amini A, Negahdar MJ, Boakye M. Comparison of retrocardiac and retropulse gating of phase contrast cine MRI quantitation of CSF Velocity and Flow Pulsations. *Academic Radiology*. 2020. 27(4):463-602.

H. **Bert RJ,** Mehwish A, Muddasani D, Negahdar MJ, Wellman B, Boakye M. Differences in Velocity Distributions in Supine vs. Prone CSF Pulsations in the Cervical Spinal Canal Support Local Arterial Contributions to CSF Pulsatilities. *In preparation AJNR.*

I. **Bert RJ,** Muddasani D, Negahdar MJ, Xu J, Kim J-w, Siefert A, Boakye M. Developing A Robust Imaging Protocol for a Porcine Model of Traumatic Spinal Cord Injury. *In submission.* Academic Radiology. 2020

J. **Bert RJ**, Settipalle N, Tiwana E, Muddasai D, Wellman B, Milhon F, Megahdar M, Nath R, Amini A, Boakye M. The Relationships Between Spinal CSF Flows, Spinal Cord Geometry and Vascular Correlations: Evidence of Intrathecal Sources and Sinks. *Am J Physiol Regul Integr Comp Physiol.* 2019. 317:R470-R484. DOI:10.1152/ajpregu.00101.218

K. **Bert RJ**, Hayek S, Yaksh TL. Modeling spinal intrathecal drug distribution: the challenge of defining and predicting CSF dynamics. *Anesthesia and Analgesia*. 2017. 124(5):1403-1406.

L. **Bert R.J**, Nagel MA, Friedland RP, Hattab EM, Gilden DH Varicella-Zoster Virus: One pathogen with multifaceted pathophysiological spread, clinical expressions and imaging presentations. *Neurographics.* 2017.
7(1):20-35.

M. **Bert RJ**, Colantoni W, Ney DE, Damek DM, Kleinschmidt-DeMasters BK, Borges MT. Visual assessment for primary central nervous system tumor recurrence, progression or persistence: a comparison of arterial spin labeling and dynamic susceptibility contrast-enhanced MR perfusion techniques. *Int J Radiol Imaging Technol*. 2017. 3(1):02

N. Kaur A, Sharma P, Wang Z, Moore CE, Koutourousiou M, Abayazeed A, **Bert R**, Winters SJ. Development of an empty sella in neurosarcoidosis. *Open Access J Neurol Neurosurg.* 2017. 3(1). DOI:10.19080/OAJNN.2017.03.555605

O. Fahangi MM, Hichem Frigui, **Bert R**, Amini AA. Incorporating shape prior into active contours with a sparse linear combination of training shapes: application to corpus callosum segmentation. *IEEE EMBS Conference*, Orlando, FL, August 2016, **DOI:** 10.1109/EMBC.2016.759220

P. Amsbaugh M, Yusuf M, Cash E, Silverman C, Wilson L, Bumpous J, Potts K, Perez C, **Bert R**, Redman R, Dunlap N. Distribution of cervical lymph node metastases from squamous cell carcinoma of the oropharynx in the era of risk stratification using HPV and smoking status. *International Journal of Radiation Oncology*Biology*Physics.* 2016. 96(2):349-353

Q. Nagel MA, Khmeleva N, Boyer PJ, Choe A, **Bert R**, Gilden D. Varicella zoster virus in the temporal artery of a patient with giant cell arteritis. *Journal of the Neurological Sciences.* 2013. 335:228-230

R. Jean T, **Bert RJ**, Gilden D. Zoster Paresis: Asymptomatic MRI lesions far beyond the site of rash and focal weakness. *J. Neurolog. Sci.* 2013. 330:119–120.

S. Nagel MA, **Bert RJ,** Gilden D. Raeder's syndrome produced by extension of chronic inflammation to the internal carotid artery. *Neurology*. 2012. 79:1296-1297.

T. O'Callaghan M, Nyberg EM, Ree A, Borges MT, **Bert RJ.** Case Report: Hemiatrophy and venous anomalies associated with linear sebaceous nevous syndrome – a rare phakomatosis. *Journal of Pediatric Neurology.* 2012. 10:23

U. Best A, Acosta NR, Brega K, Anderson T and **Bert RJ**. Caveats of ischemic penumbra in CT perfusion: recognition and potential physiologic basis*. Radiographics.* 2012. 32:1179-1196.

V. Patz S, **Bert RJ**, Frederick E and Freddo TF. T1 and T2 Measurements of the fine structures of the in vivo and enucleated human eye. *JMRI. J. Magn. Reson. Imaging*. 2007. 26:510-518.

W. Orme HT, Smith G, Nagel MA, **Bert RJ**, Mickelson TS, Gilden DH. VZV spinal cord infarction identified by diffusion- weighted magnetic resonance imaging (DWI). *Neurology*. 2007:69.398-400.

X. **Bert RJ**, Caruthers SD, Jara H, Krejza J, Melhem ER, Kolodny NH and Freddo TF. Demonstration of an anterior diffusional pathway for solutes in the normal human eye with high spatial resolution contrast-enhanced dynamic MR imaging. *Investigative Ophthalmology & Vis. Sci.* 2006. 47:5153-5162.

Y. **Bert RJ**, Patz S, Ossiani M, Caruthers SD, Jara H, Kresja J, Freddo T. High-Resolution MR Imaging of the Human Eye. *Acad. Radiol.* 2006. 13:368-378.

Z. **Bert RJ**, Samawareerwa R, Melhem ER, CNS MR and CT findings associated with herpetic acute retinal necrosis and retrobulbar optic neuritis: 5 HIV-infected and one non-HIV infected patients. *AJNR. Am J. Neuroradiol. 2004*.

25:1722-1729.

AA. Jordan H, **Bert R**, Chew P, Kupelnick B and J Lau. Magnetic resonance spectroscopy for brain tumors. Technology assessment task order assessment #1, Contract No. 290-97-0019. Agency for Healthcare Research and Quality. May, 2003. Rockville, MD. http://www.cms.hhs.gov/ncdr/techasmt.asp.

BB. Krejza J, Siemkowicz J, Sawicka M, Szylak A, Kochanowicz J, Mariak Z, Lewko J, Spektor V, Babikian V, **Bert R**. Oscillations of cerebrovascular resistance throughout the menstrual cycle in healthy women. *Ultrasound Obstet Gynecol.* 2003. 22:627-632.

CC. **Bert RJ**. Imaging epidural and subdural hematomas. In: Imaging Cerebrovascular Disease. Babikian, Wechsler, Higashida. *Butterworth & Heinemann.* Chapter 15. 2003.

DD. Krejza J, Fryc J, Owlasiuk M, Huba M, **Bert RJ,** Mariak Z. Transcranial color Doppler sonography in the emergency diagnosis of middle cerebral artery occlusion in a patient after head injury. *Clin Imaging.* 2001. 25:90-94.

EE. Mariak Z, Krejza J, **Bert RJ**. Transcranial color Doppler sonography in the emergency management of spontaneous intracerebral hemorrhage caused by a cerebral arteriovenous malformation: a case report. *Neuroradiology.* 2000. 42: 900-904.

FF. Krejza J, Mariak Z, Melhem ER, **Bert RJ**. A guide to the identification of major cerebral arteries with transcranial color Doppler sonography. *AJR. Am J Roentgenol.* 2000. 174:1297-1303.

GG. Melhem ER, **Bert RJ,** Faddoul SG. Cervical spondylosis: contrast-enhanced magnetization transfer prepulsed 3D turbo field echo MR imaging. *JMRI. J. Magn. Reson. Imaging*. 2000. 11:294-298.

HH. Kwong M & **Bert RJ**. Neuroradiology case of the day. Polymorphous low-grade adenocarcinoma of a minor salivary gland in the right buccal space. *AJR*. *Am. J. Roentgenol*. 1999. 173:805, 808-809.

II. **Bert RJ**, Antonacci V, Berman L, ER Melhem ER. Polyarteritis nodosa presenting as temporal arteritis in a 9-year-od child. January 1999. *AJNR. Am. J. Neuroradiol.* 20:167-171.

JJ. Melhem ER, **Bert RJ,** Walker R. Usefulness of optimized gadolinium-enhanced fast fluid-attenuated inversion recovery MR imaging in revealing lesions of the brain. 1998. *AJR. Am. J. Roentgenol*. 171:803-807.

KK. Melhem ER, Whitehead RE, **Bert RJ** and SD Caruthers. MR Imaging of the hippocampus: measurement of T2 with four dual-echo techniques. 1998. *Radiology.* 209:551-555.

LL. Brown RL, Gramling R, **Bert RJ** and JW Karpen. 1995. Cyclic GMP contact points within the 63-kDa subunit and a 240-kDa associated protein of retinal rod cGMP-activated channels. *Biochemistry*. 34:8365-8370.

MM. Brown RL, **Bert RJ**, Evans FE and JW Karpen. Activation of retinal rod cGMP-gated channels: what makes for an effective 8-substituted derivative of cGMP? 1993. *Biochemistry*. 32:10089-10095.

NN. **Bert RJ.** The effects of the tubulin-binding drug, colchicine, on the electrophysiological aspects of phototransduction in toad rod photoreceptors. 1990. *Univ. of Illinois Theses*.