

GEORGIA D. TOURASSI

1 Bethel Valley Road
PO Box 2008 MS6085
Oak Ridge, TN 37831-6085
+1 (865) 576-4829 (office),
tourassig@ornl.gov

CAREER PATH

2011 – Present **Oak Ridge National Laboratory**, Oak Ridge, TN.

- **Distinguished R&D Scientist** and **Group Leader**, Biomedical Sciences, Engineering, and Computing (2016 – Present).
- **Founding Director**, Health Data Sciences Institute (2014 – Present).
- **Senior R&D Scientist** and **Director**, Biomedical Sciences & Engineering Center (2011-2013).
- **UT-ORNL Joint Professor** of Mechanical, Aerospace, and Biomedical Engineering, University of Tennessee at Knoxville (2016 – Present).
- **Adjunct Professor of Radiology** appointment at the University of Tennessee at Knoxville (2014 – Present)
- **Adjunct Professor of Radiology** appointment at Duke University (2011 – Present).

1988 – 2011 **Duke University**, Durham, NC.

- Associate Professor of Radiology & Medical Physics, School of Medicine (2006-2011).
- Assistant Professor of Radiology, School of Medicine (1996-2006).
- Research Associate of Radiology, School of Medicine (1993-1995).
- Research Assistant, Biomedical Engineering (1988-1993).
- On leave at the University of Louisville as Assistant Professor of Radiology (1996-1997) and Visiting Associate Professor of Computer Engineering and Computer Science (2004).

PROFESSIONAL EXPERIENCE

2011 – **Oak Ridge National Laboratory** (ORNL), Oak Ridge, TN.

Context and Key Positions:

Initially hired as Senior R&D staff member to direct the Biomedical Sciences and Engineering Center, a multi-disciplinary organization tasked to manage and foster the budding biomedical research portfolio at ORNL. In 2014, the scope of the center was expanded to encompass a larger programmatic portfolio that addresses nationally relevant challenges in the areas of health informatics, health economics, and clinical translation and was rebranded as the Health Data Sciences Institute. Subsequently promoted to Distinguished R&D staff member and appointed founding Group Leader of the Biomedical Sciences, Engineering, and Computing group in the Computational Sciences and Engineering division to manage and grow a team dedicated in computer and data intensive biomedical R&D.

ORNL Committees and Representations:

- Big Science Questions Initiative (Human Health Committee; Chair).
- ORNL-UTK Data Science PhD Program Development (Health Focus Area Lead).
- Liane Russell Fellowship Committee (member).
- UT-Battelle Awards review (Inventor of the Year and Technology Transfer Subcommittees; member)
- Committee for Women (member).
- Women in Computing Committee (Mentorship Program; member).

Major accomplishments as Director of Biomedical Sciences, Engineering, and Computing Center (BSEC):

- Developed the center's roadmap and key scientific priorities.
- Formed the center's Scientific Advisory Board with representation from federal agencies (DOE, FDA, NIH), industry, and academia (the first ever in the center's history).
- Chose the thematic focus, the scientific focus, organized, and chaired the annual Biomedical, Sciences, and Engineering conference at ORNL (2013-2015). Recruited national and international keynote and plenary speakers, secured IEEE-EMBS technical sponsorship, and secured internal and external funding sponsorship.
 - BSEC 2013: Integrating Experiments, Simulations and Modeling for Biomedical Advances: From Single Molecules to Public Health Dynamics (May 21-23, 2013)
 - BSEC 2014: The Multi-Scale Brain: Spanning Molecular, Cellular, Systems, Cognitive, Behavioral, and Clinical Neuroscience (May 6-8, 2014)
 - BSEC 2015: Data Sciences for Actionable Health Insights (August 25-27, 2015)
- Facilitated the signing of two Memorandums of Understanding (with the Duke University Biophotonics Institute and Northwestern University Feinberg School of Medicine).
- Applied for and secured \$1.6M from NCI in response to the "Provocative Questions in Cancer Research" initiative (one of the 15 applications funded out of 700+ submissions).

Major accomplishments as Director of Health Data Sciences Institute (HDSI):

- Developed the Institute's strategic vision, research agenda, and roadmap.
- Championed and facilitated the establishment of ORNL's first PHI data enclave with 3rd party accreditation in support of biomedical programs. ORNL is the only DOE laboratory with PHI data enclave capabilities.
- Enabled relationships with the Veterans Administration for the advancement of precision medicine research and operations that have resulted in \$21M to ORNL across multiple programs (2016 – now).
- Streamlined the development of policies and operation procedures supporting scientific innovation with sensitive, protected health data.
- Mentored undergraduate and graduate student interns through ORNL's annual recruitment campaigns.
- Facilitated the signing of Memorandum of Understanding with the Frederick National Laboratory, Mt. Sinai, Health Data Consortium, Summit Affordable Care Organization, Allen Brain Institute, and St. Jude's Medical Center.
- Grew academic partnerships with multiple joint faculty appointments, including: Duke University, University of Houston, Vanderbilt University.
- Led ORNL's efforts in the DOE-NCI partnership (established in 2016); \$50.9M total program, \$12.7M to ORNL.
- Coordinated ORNL's R&D efforts on the DOE-VA partnership (established in 2016).
- Secured DOE funding through the Exascale Computing Programs (\$5.8M included in the DOE-NCI funding listed above).
- Led ORNL's efforts in the newly formed partnership with the TN Department of Health on Opioids.
- Represented HDSI in annual Institute and Directorate-level Scientific Advisory Board reviews, Federal Agencies: DOE (2 Secretaries, Office of Science / ASCR and BES Directors, NNSA Director), NIH (NCI Director, NCI CBIIT Director, Program Officials, BD2K Committee), Centers of Medicare and Medicaid Services, Veterans Administration (MVP Program Director, Office of Information & Technology), Appropriation Committee Representatives, Senators and House Representatives, State-level officials (TN Department of Health, TN Health Commissioner, Legislative Task Force on Opioid Abuse), local community (District Representatives, Clinical Town Halls, Non-profits, Society Chapters), JASON Study Group on AI and Health.

Major accomplishments as Group Leader of Biomedical Sciences, Engineering, and Computing group:

- Developed the group's Human Capital Management plan for succession of key staff and positions.
- Instantiated a targeted hiring program that successfully resulted in growth of the group in both diversity and member size, expanding from 5 to 17 staff in 2 years.
- Developed mentorship, development, and staff management plans.

1988 – 2011 **Duke University Medical Center (DUMC), Durham, NC**

Context and key positions:

Initially hired as Research Associate in Radiology, Medical Imaging section (1993). Promoted to Research Assistant Professor of Radiology in 1995. Became joint faculty in the Medical Physics Graduate Program in 2005. Promoted to Associate Professor in 2006. Maintained a professional relationship with the University of Louisville, Computer

Engineering and Computer Science Department through annual leave and visiting faculty positions.

Major accomplishments:

- Won the NIH Young Investigator's Award (1994) and the Whitaker Foundation Award (1996).
- Built successful translational research programs pioneering the use of artificial intelligence in nuclear medicine and X-ray breast and lung cancer imaging.
- Secured research funding as PI (\$2.8M) and co-I (\$1.4M) from NIH/NCI, NIH/NHLBI, DoD, and Whitaker Foundation.
- Developed the curriculum and taught graduate level courses in Biostatistics for the Medical Physics Graduate Program.
- Personally supervised 1 MS student, 6 PhD students, and 2 postdoctoral fellows.

NATIONAL ADVISORY, REVIEW AND POLICY BOARDS

- **FDA Radiological Devices Review Panel**, Member (2008 – Present).
- **NIH Center for Scientific Review**, Chartered Member for Biomedical Computing and Health Informatics Study Section (2014-2018) and previously Biomedical Imaging Technology Study Section (2007-2011).
- **NIH Center for Scientific Review**, Ad hoc member of 30+ study sections (2004 - Present).

EDUCATION

1995	Duke University Medical Center	Postdoctoral Training in Radiology / Medical Physics
1993	Duke University	PhD in Biomedical Engineering
1987	Aristotle University of Thessaloniki	BSc in Physics

LEADERSHIP TRAINING

2016	Management Boot Camp Organization Development & Training Office, Oak Ridge National Laboratory
2014	Developing Leadership Potential Program Organization Development & Training Office, Oak Ridge National Laboratory

PROFESSIONAL RECOGNITION

- **Fellow**, International Society for Optics and Photonics (SPIE).
- **Fellow**, American Institute of Medical and Biological Engineering (AIMBE).
- **Fellow**, American Association of Medical Physicists (AAPM).
- **Senior Member**, Institute of Electrical and Electronic Engineers (IEEE).
- **Senior Member**, International Neural Network Society (INNS).
- **Associate Editor**, *Radiology* (2000-2007).
- **Associate Editor**, *Neurocomputing* (2007-2012).
- **Editorial Board Member**, *Intelligent Decision Technologies* (2007-2011).
- **NIH CSR Charter Member**: Biomedical Computing and Health Informatics Study Section (2014-2018) and Biomedical Imaging Technology Study Section (2007-2011).

RESEARCH AWARDS

DURATION	ROLE	TITLE	FUNDING AGENCY	BUDGET
2016 - 2019	Co-PI	JDASC4C: Joint Design of Advanced Computing Solutions for Cancer (Budget as of 2018)	NIH/NCI	\$21,000,000
2016 - 2020	Co-PI	CANDLE: Cancer Distributed Learning Environment (Budget as of 2018)	DOE	\$15,450,000
2016 - 2018	PI	Energy-Efficient Training Protocol for Scalable Deep Learning	ORNL / DOE	\$750,000
2016	PI	Deep-learning Enabled Clinical Cancer Surveillance (DECCS) for Exascale Computing	ORNL / DOE	\$150,000
2014 - 2016	PI	Algorithms for Context-Specific Analysis of Heterogeneous Unstructured Big Health Data	ORNL / DOE	\$800,000
2013 - 2015	Co-I	Computational National Healthcare Model for Value-Based-Purchasing Cost Projections (PI: Shankar)	ORNL / DOE	\$800,000
2012 - 2016	Lead PI	Cyber-Informatics Tools to Study Migration and Environmental Cancer Risk	NIH/NCI	\$1,600,000
2011 - 2013	PI	Perception-Driven Decision Support in Medical Imaging	ORNL / DOE	\$760,000
2010 - 2011	PI	Information Theoretic Based CAD in Mammography	Duke Medical Center	\$100,000
2005 - 2010	PI	Information Theoretic Based CAD in Mammography	NIH / NCI	\$1,250,000
2010 - 2013	Co-I	3D Digital Breast Phantoms For Multimodality Research (PI: Segars, co-I till 2011)	NIH / NCI	\$1,700,000
2009 - 2012	Co-I	In Vivo Diagnosis of Breast Cancer Using Gamma-Stimulated Emission-Computed Tomography (PI: Kapadia)	DOD	\$600,000
2008 - 2010	Co-PI	Knowledge-based optimization of radiation treatment planning for prostate cancer (PI: Lo)	W. H. Coulter Partners	\$200,000
2006 - 2009	Mentor	Simulations to evaluate accuracy and patient dose in neutron stimulated emission computed tomography (NSECT) for breast cancer diagnosis	DOD Postdoctoral Fellowship	\$90,000
2004 - 2007	PI	Breast Elemental Composition (Original PI: Floyd - deceased, PI as of 2006)	NIH/NCI	\$385,000
1999 - 2001	Co-I	Computer Aid for the Decision to Biopsy Breast Lesions (PI: Floyd)	NIH / NCI	\$310,000
2002 - 2005	Co-I	Predicting breast cancer with ultrasound and mammography (PI: Lo)	NIH / NCI	\$310,000
2001 - 2003	Co-I	Improved diagnosis of breast micro-calcification clusters (PI: Lo)	NIH / NCI	\$310,000
2001 - 2002	PI	A Constraint Satisfaction Neural Network Approach for Data Mining Classification and Association Rules in Breast Cancer Databases	USAMRMC	\$90,000
1999 - 2003	PI	Computer-Aided Analysis of Ventilation-Perfusion Lung Scans for Detection and Classifications of Lung Diseases	Whitaker Foundation	\$320,000
1994 - 2000	PI	Acute Pulmonary Embolism: Computer-Aided Diagnosis	NIH / NHLBI	\$750,000

Research funding awarded as PI, Lead PI and Mentor: **\$7,045,000**

Research funding awarded as co-PI: **\$36,650,000**

Research funding awarded as co-Investigator: **\$4,030,000**

Total research funding awarded to date: **\$47,725,000**

PATENTS AND INVENTION DISCLOSURES

YEAR	PATENTS	TITLE	INVENTORS
2017	62/594,240 (provisional)	Energy-Efficient Stochastic-Based Deep Spiking Neural Networks for Sparse Datasets	Hong-Jun Yoon, Mohammed Alawad, & Georgia Tourassi
2015	US 20150046875 A1	High-efficacy capturing and modeling of human perceptual similarity opinions	Songhua Xu & Georgia Tourassi
YEAR	DISCLOSURES	TITLE	INVENTORS
2018	ID201804205	Computationally Efficient Learning of Quality Controlled Word Embeddings for Natural Language Processing	Mohammed Alawad, Georgia Tourassi
2017	ID201703968	Energy-Efficient Stochastic-Based Deep Spiking Neural Networks for Sparse Datasets	Hong-Jun Yoon, Mohammed Alawad, & Georgia Tourassi
2015	ID201503533	Optimized High-Performance Computer Infrastructure for Precision Medicine	Sreenivas Sukumar & Georgia Tourassi
2014	ID201403249	Gaze as a Biometric	Georgia Tourassi
2013	ID201303148	A System for Visually Exploring Large-Scale, Heterogeneous Environmental Monitoring	Songhua Xu & Georgia Tourassi
2013	ID201303143	A Web Crawler for Acquiring Online Content in e-Health Research	Songhua Xu & Georgia Tourassi
2013	ID201303080	Studying Breast Cancer and Pregnancy Association Through Web Mining,	Songhua Xu & Georgia Tourassi
2012	ID201202917	Predicting Diagnostic Error from Visual Gaze Characteristics	Georgia Tourassi
2012	ID201202915	Cyber-informatics to Study Links Between Migration and Environmental Cancer Risk	Songhua Xu & Georgia Tourassi

HONORS AND AWARDS

- 2020 **Elected incoming Chair** of the SPIE Medical Imaging Conference.
- 2019 **Elected co-chair** of the SPIE Medical Imaging Conference (leading medical imaging conference of the International Society for Optics and Photonics).
- 2019 **Keynote Speaker**, 16th INFORMS Computing Society Conference, Knoxville, TN, January 6-8, 2019.
- 2018 **Keynote Speaker**, 2nd Commonwealth Computational Summit 2018, Lexington, KY, October 23, 2018.
- 2017 **UT-Battelle Distinguished Researcher Award**.
- 2017 **ORNL Director's Award for Outstanding Individual Accomplishment in Science and Technology**.
- 2017 **HPCwire Readers' and Editors' Choice Awards**, "Best Use of AI", November 2017.
- 2016 **DOE Secretary's Appreciation Award** for leadership in the DOE-NCI Joint Design of Advanced Computing Solutions for Cancer initiative.
- 2015 **R&D 100 Finalist** – "iCRAWL: A User-Oriented Intelligent Web Crawler".
- 2014 **R&D 100 Award** – "iSPM: Intelligent Software Suite for Personalized Modeling of Expert Opinions, Decisions, and Errors in Visual Examination Tasks".
- 2013 **YWCA – East TN Honoree** for STEM mentorship of minorities.
- 2006 **Reviewer's Choice Award**, American Association of Physicists in Medicine.
- 1998 **Whitaker Foundation Young Investigator's Award**.
- 1994 **NIH Young Investigator's Award**.
- 1988 **Graduate Fellowship**, 5-year award, Duke University.
- 1983 **Undergraduate Fellowship**, 4-year award, National Fellowship Foundation, Athens, Greece.

PROFESSIONAL AND SCIENTIFIC SERVICE

AAPM	Joint Working Group for Research Seed Funding Initiative (2008-11)
AAPM	Computer Aided Detection in Diagnostic Imaging (CAD) Subcommittee (2008-15)
AAPM	Education Coordination Subcommittee (2008-11)
FDA	Radiology Devices Review Panel (2008-present)
NIH	CSR Grant Reviewer and panelist for Epidemiology and Genetics of Cancer, BD2K training (2007-present)
RSNA	Refresher Course Committees, RSNA (2008-10) – AAPM Liaison
RSNA	Co-Director & Refresher Course Faculty, “CAD: The hope, the hype, and the hard truth” (2009-11)
RSNA	Refresher Course Faculty, “Breast Imaging: Physics, Technology & Clinical Applications” (2010-12)
SPIE	Medical Imaging Conference – CAD Committee Program Member (2010-present)
SPIE	Medical Imaging Conference – Co-Chair of Computer Aided Diagnosis (2015)
SPIE	Medical Imaging Conference – Chair of Computer Aided Diagnosis (2016)
SPIE	Medical Imaging Conference – Elected Co-Chair of the Full International Symposium (2019)
SPIE	Medical Imaging Conference – Elected Lead Chair of the Full International Symposium (2020)
AIMBE	Fellows Review Subcommittee – Member (2018)

EDITORSHIPS AND CONFERENCE ORGANIZATION

2019	Guest editor for IEEE Journal of Biomedical and Health Informatics special issue on “ <i>AI-enabled Connected Health Informatics</i> ”
2019	Technical Program Co-Chair for the 2019 International Conference on Biomedical and Health Informatics (BHI 19), Las Vegas, NV (May 10-13, 2019)
2018	Organizer of a workshop on “ <i>Computational Phenomics at Scale: From Supercomputers to Bedside</i> ” for the 2018 Supercomputing Conference, Dallas, TX (November 16, 2018)
2018	Invited Panelist at the 2018 Frontiers of Predictive Oncology Conference (FPOC) Panel, Santa Clara, CA (August 14-16, 2018)
2018	Invited Panelist at the 2018 Smoky Mountain Conference (SMC) Panel on “ <i>The Ethics of AI</i> ”, Gatlinburg, TN (August 30, 2018)
2018	Technical Program Co-Chair for the 2018 International Conference on Biomedical and Health Informatics (BHI 18), Las Vegas, NV (March 4-8, 2018)
2018	Organizer of a mini-symposium on “ <i>Actionable Health Intelligence</i> ” at the international 2018 Platform for Advanced Scientific Computing (PASC) Conference, Bern, Switzerland (July 5, 2018)
2017	Organizing Committee Member for the 2nd “ <i>Open Science in Big Data</i> ” Workshop for the 2017 International Conference on Big Data, Washington, DC (December 11-14, 2017)
2016	Organizing Committee Member for the 1st “ <i>Open Science in Big Data</i> ” Workshop for the 2016 IEEE International Conference on Big Data, Washington, DC (December 5-7, 2016)
2016	Organizer of the “ <i>Web-Based Public Health Informatics</i> ” Workshop for the 2016 International Conference on Biomedical and Health Informatics (BHI'16), Las Vegas, NV (February 27, 2016)
2015	Organizing Committee Member for the Smoky Mountain Computational Science and Engineering Conference, Gatlinburg, TN (August 31 – September 2, 2014)
2015	Organizer of the annual ORNL Biomedical Science and Engineering Conference: <i>Data Sciences for Actionable Health Insights</i> , Knoxville, TN (August 25-27, 2015)

- 2014** Organizing Committee Member of the US-Japan Exascale Applications Workshop, Life and Health Sciences Session Lead, Gatlinburg, TN (September 5-6, 2014)
- 2014** Organizing Committee Member for the Smoky Mountain Computational Science and Engineering Conference, Gatlinburg, TN (September 2-4, 2014)
- 2014** Invited Panelist on the Health Datapalooza workshop “*Is the Randomized Controlled Trial (RCT) Dead- A New Generation of Evidence Development*”, Washington, DC (June 3, 2014)
- 2014** Organizer of the annual ORNL Biomedical Science and Engineering Conference: *The Multi-Scale Brain: Spanning Molecular, Cellular, Systems, Cognitive, Behavioral, and Clinical Neuroscience*, Knoxville, TN (May 6-8, 2014)
- 2013** Organizer of the annual ORNL Biomedical Science and Engineering Conference: *Integrating Experiments, Simulations and Modeling for Biomedical Advances: From Single Molecules to Public Health Dynamics*, Knoxville, TN (May 21-23, 2013)
- 2012** Invited Panelist on the NCI sponsored workshop “*Frontiers in Epidemiology: What is the emerging role of epidemiology in reducing the burden of cancer and other diseases in the 21st century?*” Bethesda, MD (December 12-13, 2012)
- 2011** Organizer of Workshop on “Biomedical Instrumentation”, Future of Instrumentation International Workshop (FIIW), Knoxville, TN (November 7-8, 2011)
- 2011** Organizer of Workshop on “Computational Image Analysis: From Desktop to Bedside” at the annual ORNL Biomedical Science and Engineering Conference, Knoxville, TN (March 15, 2011)
- 2010** Member of the International Program Committee for the 2nd KES International Symposium on Intelligent Decision Technologies, Cardiff, UK (September 8-10, 2010)
- 2009** Co-Organizer of International Joint Conference on Neural Networks and of the Special Session: “*Computational Intelligence in Medical Diagnosis*”, Atlanta, GA, (June 14-19, 2009)

STUDENT SUPERVISION

- Mentored 24 undergraduate and graduate intern students via DOE sponsored programs (from 18 different US Universities and colleges).
- Served as academic advisor for one (1) MS and eight (6) PhD candidates to completion (DU and UofL) who subsequently became colleagues in academia (Duke University, Georgia Institute of Technology, University of Houston) and industry (SAS).
- Currently serving as PhD advisor of 2 PhD students at the UT-ORNL Bredesen Data Science program.

SELECTED MEDIA COVERAGE

<https://ncip.nci.nih.gov/blog/population-level-pilot-population-information-integration-analysis-modeling-precision-surveillance/> (July 18, 2018)

<https://www.wvlt.tv/content/news/ORNL-supercomputing-helps-sharpen-breast-cancer-detection-487696441.html> (July 9, 2018).

<https://www.medimaging.net/industry-news/articles/294774021/researchers-use-ai-to-improve-mammogram-interpretation.html> (July 4, 2018).

<https://medicalxpress.com/news/2018-06-ai-mammogram.html> (June 20, 2018).

<https://eteconline.org/news/ornl-researchers-use-ai-to-improve-mammogram-interpretation/> (June 19, 2018).

<https://www.onartificialintelligence.com/articles/13981/novel-method-for-energy-efficient-deep-neural-networks> (April 2, 2018).

https://www.labmanager.com/news/2018/03/researchers-design-novel-method-for-energy-efficient-deep-neural-networks#.W7wSsqlRf_Q (March 16, 2018).

<https://www.ornl.gov/news/ornl-researchers-design-novel-method-energy-efficient-deep-neural-networks> (March 14, 2018).

https://www.eurekalert.org/pub_releases/2018-03/drnl-ord031418.php (March 14, 2018).

<http://pulse.embs.org/january-2017/tracking-disease/> (January/February 2017).

<https://ascr-discovery.org/2016/11/machine-learning-curve/> (November, 2016).

<http://finance.yahoo.com/news/nvidia-teams-national-cancer-institute-030000301.html> (November 14, 2016)

<http://nvidianews.nvidia.com/news/nvidia-teams-with-national-cancer-institute-u-s-department-of-energy-to-create-ai-platform-for-accelerating-cancer-research> (November 14, 2016)

<https://www.ornl.gov/news/accelerating-cancer-research-deep-learning> (November 6, 2016)

<https://www.ornl.gov/news/medicine-deep-learning-cancer-research> (October 3, 2016)

<https://www.ornl.gov/news/computing-towards-cure> (July 28, 2016)

<https://www.amia.org/education/webinars/utility-web-mining-epidemiological-research-studying-association-between-parity> (January 14, 2016).

<http://vkc.mc.vanderbilt.edu/notables/2015/06/2015-hobbs-discovery-grants-announced/> (June 4, 2015).

<http://aimbe.org/georgia-d-tourassi-ph-d-to-be-inducted-into-medical-and-biological-engineering-elite/> (March 5, 2015).

<https://gcn.com/articles/2015/01/28/onrl-hpc-health-data.aspx>, "How a computing powerhouse delivers health care insights", January 28, 2015.

<http://www.cray.com/blog/unlocking-the-full-potential-of-health-data/>, "Unlocking the Full Potential of Health Data", October 28, 2014.

<http://www.rdmag.com/award-winners/2014/08/better-decision-making> "Better Decision Making", *R&D Magazine*, August 25, 2014.

<http://spie.org/newsroom/technical-articles/5026-developing-personalized-decision-support-tools-in-radiology?highlight=x2416&ArticleID=x102634> "Developing personalized decision support tools in radiology", *SPIE Biomedical Optics & Medical Imaging*, August 1, 2013.

<http://iopscience.iop.org/0031-9155/page/Highlights%20of%202008>, *Physics in Medicine and Biology, Highlights of 2008 Collection*, 2008.

<http://www.economist.com/node/7270191>, "The Bosom Buddy", published on *The Economist* August 11, 2006.

<http://www.axisimagingnews.com/2006/10/article-18309/> "KB-CAD System Provides Search Engine for Mammography", News Story in *AXIS Imaging, Health Care IT*, October 9, 2006.

<https://www.technologyreview.com/s/406214/a-faster-second-opinion/>, "A Faster Second Opinion" *MIT Science and Technology Review*, August 7, 2006.

<http://www.auntminnie.com/index.aspx?sec=ser&sub=def&pag=dis&ItemID=71925>, "Pilot study: Entropy-driven CAD zips through vast breast image database", *AuntMinnie.com*, August 2, 2006.

<http://psychcentral.com/news/archives/2006-07/aiop-gpf072506.html>, "Google-like process for mammogram images speeds up computer's second opinions", *PsychCentral*, August 2006.

<http://news.bio-medicine.org/medicine-news-3/Google-like-process-for-mammogram-images-speeds-up-computers-second-opinions-3805-1/> "Google-like process for mammogram images speeds up computer's second opinions", *Bio-Medicine News*, July 25, 2006.

<http://www.hopkinsbreastcenter.org/artemis/200609/11.html> "Speeding Up a Computer's Second Opinion for Breast Cancer" Feature Article in *Artemis, Johns Hopkins Breast Center*, 2006.

PUBLICATIONS

Database	Author ID	Documents	Citations	h-Index
SCOPUS	7003845683	171	2576	26
Google Scholar	O_0diUoAAAAJ	240	4083	30

Peer-Reviewed Journal Articles

74. E. Begoli, J. Brase, B. DeLaRosa, P. Jones, D. Kusnezov, J. Paragas, R. Stevens, F. Stritz, G.D. Tourassi, "Precision Medicine as an Accelerator for Next generation Cognitive Supercomputing," *International Journal of Supercomputing Frontiers and Innovations* (submitted April 2018)
73. J.X. Qiu, H.-Y. Yoon, K. Srivastava, T. Watson, J.B. Christian, A. Ramanathan, X-C Wu, G.D. Tourassi, P.A. Fearn, "Scalable Deep Text Comprehension for Cancer Surveillance on High-Performance Computing," *BMC Bioinformatics* (accepted)
72. F. Alamudun, H.-Y. Yoon, G. Morin-Ducote, G.D. Tourassi, "Modeling Sequential Context Effects in Diagnostic Interpretation of Screening Mammograms," *Journal of Medical Imaging* 5, no. 3 (2018): 031408.
71. S. Gao, M.T. Young, J.X. Qiu, J.B. Christian, P.A. Fearn, G.D. Tourassi, A. Ramanathan, "Hierarchical Attention Networks for Information Extraction from Cancer Pathology Reports," *Journal of American Medical Informatics Association* 25:3(1):321-330 (2018).
70. J.X. Qiu, H.-Y. Yoon, P.A. Fearn, G.D. Tourassi, "Deep Learning for Automated Extraction of Primary Sites from Cancer Pathology Reports," *IEEE Journal of Biomedical and Health Informatics* 22(1): 244-251 (2018)
69. H.-Y. Yoon, G.D. Tourassi, "Investigating Sociodemographic Disparities in Cancer Risk Using Web-Based Informatics," *Journal of Human Performance in Extreme Environments* 14(1), Article 2 (2018).
68. H.-Y. Yoon, F. Alamudun, K.B. Hudson, G. Morin-Ducote, G.D. Tourassi, "Deep Gaze Velocity Analysis During Mammographic Reading for Biometric Identification of Radiologists," *Journal of Human Performance in Extreme Environments* 14(1), Article 3 (2018).
67. F. Alamudun, H.-Y. Yoon, K.B. Hudson, G. Morin-Ducote, T. Hammond, G.D. Tourassi, "Fractal Analysis of Visual Search Strategy in Mammographic Screening," *Medical Physics* 9787: 1 (2017).
66. S.G. Armato, K. Drukker, F. Li, L. Hadjiiski, G.D. Tourassi, R.M. Engelmann, ... & Petrick, N. A., "Letter to the Editor: Use of Publicly Available Image Resources", *Academic Radiology*, 24(7), 916-917 (2017).
65. S.G. Armato, K. Drukker, F. Li, L. Hadjiiski, G.D. Tourassi, R.M. Engelmann, M.L. Giger, G. Redmond, K. Garahani, J.S. Kirby, L.P. Clarke, "The LUNGx Challenge for Computerized Lung Nodule Classification", *Journal of Medical Imaging* 3(4): 044506-044506 (2016).
64. G.D. Tourassi, H-J Yoon, S. Xu, "A Novel Cyber-Informatics Approach for Automated Surveillance of Cancer Mortality Trends", *Journal of Biomedical Informatics (JBHI)* 61: 110-118 (2016).
63. G.D. Tourassi, H-J Yoon, S. Xu, X. Han. "The Utility of Web Mining for Epidemiological Research: Exploring the Association Between Parity and Cancer Risk", *Journal of American Medical Informatics (JAMIA)* 23(3), 588-595 (2016).
62. S.G. Armato, L. Hadjiiski, G.D. Tourassi, K. Drukker, M.L. Giger, F. Li, G. Redmond, L.P. Clarke. "Guest Editorial: LUNGx Challenge for computerized lung nodule classification: reflections and lessons learned" *Journal of Medical Imaging* 2(2), 020103-020103 (2015).
61. S. Xu, H-J Yoon, G.D. Tourassi, "A user-oriented web crawler for selectively acquiring online content in e-health research," *Bioinformatics* 14:104-114 (2014).
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29. H-J Yoon, G.D. Tourassi, "Computational Modeling of Visual Search Behavior" Resilience Week 2016 (Transforming the resilience of cognitive, cyber-physical systems), August 16-18, 2016, Chicago, IL.
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