

## In This Issue:

### [In Memoriam of Dr. Jackson](#)

#### IN MY OPINION

### [An Introduction to EIBALL - The European Imaging Biomarkers Alliance](#)

By NANDITA M. deSOUZA, MD

### [QIBA IN THE LITERATURE](#)

#### QIBA MISSION

Improve the value and practicality of quantitative imaging biomarkers by reducing variability across devices, sites, patients and time.

#### QIBA CONNECTIONS

[QIBA Wiki](#)

#### QIBA CONTACT

[Contact Us](#)

Daniel C. Sullivan, MD

QIBA Chair

---

### [In Memoriam of Dr. Jackson](#)

Former QIBA chair, Edward Jackson, PhD, passed away on June 2 in Madison, WI. He was 58.

As a celebrated leader in medical physics, Dr. Jackson contributed significantly to QIBA efforts and the radiologic sciences.

Dr. Jackson was the immediate past chair of the RSNA Quantitative Imaging Biomarker Alliance (QIBA) and was passionate about driving QIBA efforts to advance the adoption of quantitative imaging in the broader radiologic community. He was a former vice-chair of QIBA and served as a member of the Committee on Scientific Affairs as the QIBA representative. He was a member of RSNA's 3D Printing Special Interest Group and Public Information Advisors Network. He also served as faculty at several RSNA annual meetings.

He was also an emeritus professor and the former chair of the Department of Medical Physics at the University of Wisconsin School of Medicine and Public Health, Madison. Dr. Jackson received his BS and MS in physics from Auburn University, Auburn, AL and completed his PhD in biophysics at the University of Texas Health Science Center at Houston. He began his career as an assistant professor at the University of Texas and became a professor and deputy chair and chief of the Section of MR and Ultrasound Physics in the Department of Imaging Physics at the University of Texas MD Anderson Cancer Center.

He was the former chair of the Commission on Accreditation of Medical Physics Education Programs and was the past chair of the ad hoc committee on standards for quantitative MR for the International Society for Magnetic Resonance in Medicine (ISMRM). Dr. Jackson was also a former vice chair of the education council of the American Association of Physicists in Medicine (AAPM).

Dr. Jackson was a prolific author of numerous papers on biomarkers and functional MRI and spectroscopy in the treatment and understanding of cancer.

He will be greatly missed by his family and those fortunate enough to have known him as a friend and valued colleague.

## **In My Opinion**

### ***An Introduction to [EIBALL](#): The European Imaging Biomarkers Alliance***

*By NANDITA M. deSOUZA, MD*

As the European counterpart to QIBA, the European Imaging Biomarkers Alliance (EIBALL) functions as a subcommittee of the Research Committee of the European Society of Radiology (ESR). The mission of EIBALL is "To facilitate imaging biomarker development, standardization and promote their use in clinical trials and in clinical practice by collaboration with specialist societies, international standards agencies and trials organizations to develop a network of excellence."

Activities of the EIBALL committee are represented by three major pillars:

1. **Promoting biomarker usage** in clinical trials
2. **Setting standards** for biomarker usage and
3. **Educational activities** that encourage the use of biomarkers in a standardized way within clinical trials.

In all these activities, EIBALL works closely with QIBA to address standardization and validation issues and with the European Organisation for Research and Treatment of Cancer Imaging Group (EORTC) to promote biomarker usage within the clinical trials agenda. There is cross-representation of members on the EIBALL and QIBA steering committees and on the EIBALL and EORTC steering committees. EIBALL also works closely with the European Institute of Biomedical Imaging Research (EIBIR) to provide input into strategy for biomarker development within large consortia and with modality-specific societies such as the European Society of Magnetic Resonance in Medicine and Biology (ESMRMB) and the European Society of Hybrid Imaging (ESHI).

To promote biomarker usage in clinical trials, EIBALL is developing a biomarker inventory by organ site in conjunction with relevant European organ-specialist societies (e.g. breast, urogynecology, abdominal, neurology). The inventory is hosted on the ESR web site and can be accessed by clinicians and imagers to inform them about biomarkers currently available, their effectiveness, their appropriateness for particular trials, and how to use them: <https://www.myesr.org/research/biomarkers-inventory>.

To support this endeavor of increasing quantitative biomarker awareness and usage, the EIBALL Subcommittee also produced an article titled, “Validated imaging biomarkers as decision-making tools in clinical trials and routine practice: current status and recommendations from the EIBALL Subcommittee of the European Society of Radiology (ESR),” which was published in *Insights into Imaging* in August 2019: <https://insightsimaging.springeropen.com/articles/10.1186/s13244-019-0764-0>. The article makes recommendations on how to employ imaging objectively to drive patient management decisions.

Work around setting standards for biomarker usage has involved a position paper soon to be published in *Insight into Imaging* on the validation of imaging biomarkers. The paper was led by Alberich-Bayarri, PhD, of La Fe Health Research Institute, Valencia, Spain.

Education around the biomarker usage agenda has been promoted by Laure Fournier, MD, PhD, of Hôpital Européen Georges Pompidou, Paris. She held a hands-on

biomarkers workshop in Vienna in November 2019 in conjunction with the European School of Radiology (ESOR). This focused on participants developing real trials that incorporated quantitative imaging biomarkers and addressing the issues around their standardization across multiple centers, their analysis and the statistical challenges arising. The workshop received extremely positive feedback; a second workshop is planned to coincide with the ECR 2021.



**Nandita M. deSouza, MD**

*Nandita M. deSouza, MD, is an academic radiologist, Professor of Translational Imaging and Co-Director of the MRI Unit, at the Institute of Cancer Research and Royal Marsden Hospital, U.K.*

*Dr. deSouza's main interests are oncological imaging with particular emphasis on gynecological, prostate and breast tumors, using functional imaging techniques to understand biology, improve staging and monitor treatment response. Dr. deSouza currently chairs the European Imaging Biomarkers Alliance (EIBALL), a subcommittee of the Research Committee of the European Society of Radiology. She is past chair of the European Organisation for Research and Treatment of Cancer (EORTC) Imaging Group.*



## QIBA Activities

QIBA Biomarker Committees are open to all interested persons. Meeting summaries, the [QIBA Newsletter](#) and other documents are available on the QIBA website [RSNA.ORG/QIBA](http://RSNA.ORG/QIBA) and wiki <http://qibawiki.rsna.org/>.

## QIBA Resources:

- [QIBA Webpage](#)
- [QIBA Wiki](#)
- [QIBA Biomarker Committees](#)
- [QIBA Organization Chart](#)
- [QIBA LinkedIn page](#)

Please contact [QIBA@rsna.org](mailto:QIBA@rsna.org) for more information. We welcome your participation.

## [QIBA and QI/Imaging Biomarkers in the Literature](#)

\*Please note that the list of references has been migrated to EndNote.

\*To obtain access to the RSNA EndNote citations, please send an email request to: [qiba@rsna.org](mailto:qiba@rsna.org).

The list of references showcases articles that mention QIBA, quantitative imaging, or quantitative imaging biomarkers. In most cases, these are articles published by QIBA members or relate to a research project undertaken by QIBA members that may have received special recognition.

New submissions are welcome and may be directed to [QIBA@rsna.org](mailto:QIBA@rsna.org).



**For more information:** <https://www.rsna.org/annual-meeting>