# Lamia Khaled Al Saikhan

#### **Assistant Professor**

#### **Personal Data**

Nationality | Saudi

Department | Cardiac Technology

Official IAU Email | Ikalsaikhan@iau.edu.sa

Office Phone No. | 013 – 333 – 1358

LinkedIn: Lamia Al Saikhan
UCL: Lamia Al Saikhan (1)

#### Bio

- Dr Al Saikhan is working as the Vice Dean for Scientific Research and Innovation of the College of Applied Medical Sciences at Imam Abdulrahman bin Faisal University (IAU), Saudi Arabia since 2024. She is an Assistant Professor and Chairperson of the Cardiac Technology Department at IAU, Saudi Arabia, and an Honorary Researcher at UCL since 2022. She received her PhD in Cardiovascular Medicine from UCL in January 2022.
- Member of the Saudi Leadership Society since 2021.
- Awardee of MiSK Fellowship and Higher Education Academy Fellowship since 2019.
- Awardee of the Certificate of Scientific Excellence from His Royal Highness Prince Muhammad bin Nawaf, the Saudi Arabia Ambassador in the UK.
- Winner of multiple awards including:
  - 1<sup>st</sup> Rank Dr Soliman Fakeek Award (Medical Research Track) (Sponsored by RDIA), Saudi Arabia 2024
  - 2021 Young Investigators Award, British and Irish Hypertension Society Annual Meeting, Brighton, UK 2021
  - 3<sup>rd</sup> Place Young Investigator Award, Artery 2019 Conference, Budapest, Hungry 2019
  - Best of the Best Clinical (Imaging) Abstract Award, British Cardiovascular Society Annual Conference, Manchester,
  - Faculty of Medicine Dean's Prize for Medical Ultrasound (Echocardiography), Imperial College London, UK 2017
  - Prince Mohammed Bin Fahad Prize for the Scientific Excellence in the Eastern province, Saudi Arabia 2010
- Winner of multiple grants including:
  - EuroEcho-2024 Educational Grant Award, Berlin, Germany 2024
  - MiSK Fellowship, Prince Mohammed bin Salman Foundation 2019
  - UCL Student Conference Fund Award, London, UK-2019
  - ESC Congress Educational Grant Award, Paris, France 2019
  - Dubai Harvard Foundation for Medical Research Scholarship 2019
  - EuroEcho-2018 Grant Award, Milan, Italy 2018
- Awardee of many Academic and Research Excellence awards and Exceptional Excellence awards from the Saudi Arabian Cultural Bureau in the UK.
- Awardee of many Scientific Publication Excellence awards from IAU.
- Participated in (and attended) many international scientific conferences and international forums.

# **Language Proficiency**

| Language | Read   | Write  | Speak  |
|----------|--------|--------|--------|
| Arabic   | Native | Native | Native |
| English  | Fluent | Fluent | Fluent |

#### **Academic Qualifications**

| Date | Academic Degree   | Place of Issue                            | Address                |
|------|---|---|------------------------|
| 2024 | Oxford Executive Leadership Program   | University of Oxford                      | Oxford, United Kingdom |
| 2022 | PhD Cardiovascular Medicine   | University College London                 | London, United Kingdom |
| 2020 | Global Clinical Scholars Research Training Postgraduate Certificate with Commendation   | Harvard University                        | Boston, U.S.A.         |
| 2017 | <b>MSc</b> and Diploma of Imperial College in Medical Ultrasound (Echocardiography) with Distinction and Faculty of Medicine Dean's Prize Awardee | Imperial College London                   | London, United Kingdom |
| 2015 | Diploma, Echocardiography   | Medical University of Vienna              | Vienna, Austria        |
| 2014 | <b>BSc</b> in Cardiac Technology (Echocardiography) with First Honor  | Imam Abdulrahman bin<br>Faisal University | Dammam, Saudi Arabia   |

# **Accreditation, Certification and Licenses**

| Date | Accreditation, Certification, Fellowships and Licenses                     | Place of Issue  | Address        |
|------|--|---|----------------|
| 2024 | Oxford Executive Leadership Program  | University of Oxford  | United Kingdom |
| 2024 | SLS Mentorship Program   | Saudi Leadership Society  | Saudi Arabia   |
| 2024 | Certified Academic Quality Practitioner<br>"ممارس جودة أكاديمي             | National Centre for Academic<br>Accreditation and Evaluation<br>(NCAAA) | Saudi Arabia   |
| 2023 | Academic Leadership Fellowship   | Center for Leadership, IAU  | Saudi Arabia   |
| 2022 | CMI Level 3 Award 3 in Principles of Management and Leadership             | СМІ   | United Kingdom |
| 2022 | Item Author Certification Program  | Saudi Commission for Health<br>Specialties (SCFHS)                      | Saudi Arabia   |
| 2021 | Misk Mentor Training Program   | Misk Foundation and Inspirational Development Group (IDG)               | United Kingdom |
| 2020 | Misk Fellowship Coaching Program   | Misk Foundation and Ivy Strategy Advisor                                | U.S.A.         |
| 2019 | Registered Cardiac Sonographer   | Cardiovascular Credentialing International                              | U.S.A.         |
| 2019 | Author Academy Certificate   | nature research ACADEMIES   | United Kingdom |
| 2019 | Certified Publons Academy Peer Reviewer (Lamia Al Saikhan Publons Profile) | Publons Academy   |                |
| 2018 | Adult TTE Accreditation  | British Society of Echocardiography                                     | United Kingdom |
| 2016 | Pre-sessional English Course Certificate                                   | Imperial College London   | United Kingdom |
| 2015 | Certified AHA-BLS instructor   | AHA   | Saudi Arabia   |

#### PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

| PhD    | Assessment of Myocardial Structure, Function and Mechanics by 3D and 3D-Speckle Tracking                   |  |  |
|--------|--|--|--|
|        | Echocardiography and its Associations with Morbidity and Mortality in Older People                         |  |  |
| Master | Left Atrial Function in Heart Failure with Mid-Range Ejection Fraction (HFmrEF) Differs from that of Heart |  |  |
|        | Failure with Preserved Ejection Fraction (HFpEF): A Two-Dimensional Speckle Tracking Study                 |  |  |

## Professional Record: (Beginning with the most recent)

| Job Rank  | Place and Address of Work  | Date                                |
|---|--|-------------------------------------|
| Visiting Researcher   | UCL Summer Scientific Visit, UCL Institute of Cardiovascular Science,<br>University College London, London, United Kingdom   | 2022 – 2023                         |
| Academic Thesis Co-<br>Supervisor                                 | MSc Cardiovascular Science, University College London<br>London, United Kingdom  | Sep. 2022 – Aug. 2023               |
| Assistant Professor of<br>Cardiovascular<br>Medicince (Full-time) | Cardiac Technology Department, College of Applied Medical<br>Sciences, Imam Abdulrahman bin Faisal University, Dammam, Saudi<br>Arabia   | Jun. 2022 – Present                 |
| Honorary Research<br>Fellow                                       | UCL Institute of Cardiovascular Science, University College London, London, United Kingdom   | Apr. 2022 – Present                 |
| Invited Lecturer  | MSc Cardiovascular Science, University College London<br>London, United Kingdom  | Mar. 2020<br>Mar. 2021              |
| Academic Thesis Supervisor (2)                                    | MSc Cardiovascular Science, University College London<br>London, United Kingdom  | Sep. 2019 – Aug. 2020               |
| Invited Lecturer  | MSc Medical Ultrasound (Echocardiography), Imperial College<br>London, London, United Kingdom  | Mar. 2019<br>Mar. 2020<br>Mar. 2021 |
| Clinical Research<br>Cardiovascular<br>Physiologist               | Cardiology Department, Barts Health NHS Trust Hospital London, United Kingdom  | Nov. 2018 – Jan. 2022               |
| Clinical Research<br>Cardiovascular<br>Physiologist               | Cardiology Department, University College London Hospital, London, United Kingdom  | Feb. 2018 – Jan. 2022               |
| Lecturer  | Cardiac Technology Department, College of Applied Medical<br>Sciences, Imam Abdulrahman bin Faisal University, Dammam, Saudi<br>Arabia   | Jan. 2018 – Jun. 2022               |
| Clinical Research<br>Fellow (Research<br>Student)                 | Institute of Cardiovascular Science, MRC Unit for Lifelong Health and Aging, UCL Bloomsbury Center for Clinical Phenotyping, University College London, London, United Kingdom | Nov. 2017 – Jan. 2022               |
| Clinical Research<br>Fellow (MSc Student)                         | Imperial College Healthcare NHS Trust - Hammersmith Hospital,<br>National Heart and Lung Institute, Imperial College London, London,<br>United Kingdom                         | Oct. 2016 – Dec. 2018               |
| Instructor  | Training Centre (American Heart Association (AHA) – Basic Life Support (BLS)), King Fahad Specialist Hospital, Dammam, Saudi Arabia  | Nov. 2015 – Present                 |

| Demonstrator                            | Cardiac Technology Department, College of Applied Medical<br>Sciences, Imam Abdulrahman bin Faisal University, Dammam, Saudi<br>Arabia | Mar. 2015 – Jan. 2018 |
|---|--|-----------------------|
| Cardiac Technologist (Echocardiography) | Saud Al Babtain Cardiac Center, Dammam, Saudi Arabia   | 2015                  |
| Intern                                  | King Fahad Hospital of University, King Fahad Military Medical Complex, Dammam, Saudi Arabia   | Jul. 2013 – Jul. 2014 |

## Administrative Positions Held: (Beginning with the most recent)

| Administrative Position                            | Office  | Date                |
|--|---|---------------------|
| Vice Dean for Scientific Research and Innovation   | College of Applied Medical Sciences, Imam Abdulrahman bin Faisal University                                   | Oct. 2024 – Present |
| Chairperson, Department of Cardiac Technology      | College of Applied Medical Sciences, Imam Abdulrahman bin Faisal University                                   | Aug. 2022 – Present |
| Member, College Council                            | College of Applied Medical Sciences, Imam Abdulrahman bin Faisal University                                   | Aug. 2022 – Present |
| Head, Advisory Committee                           | Department of Cardiac Technology, College of Applied Medical Sciences, Imam Abdulrahman bin Faisal University | Aug. 2022 – Present |
| Head, Quality and Academic Accreditation Committee | Department of Cardiac Technology, College of Applied Medical Sciences, Imam Abdulrahman bin Faisal University | Aug. 2022 – Present |
| Head, Curriculum Development and Update Committee  | Department of Cardiac Technology, College of Applied Medical Sciences, Imam Abdulrahman bin Faisal University | Aug. 2022 – Present |

#### **Scientific Achievements**

#### **Published Refereed Scientific Research**

(In Chronological Order Beginning with the Most Recent)

| C-1 | : Published Papers  |
|-----|---|
| 1   | Adulthood adiposity affects cardiac structure and function in later life. <b>Al Saikhan L</b> , Chaturvedi N, Ghosh AK, Hardy R, Hughes A. Eur Heart J. <b>2024</b> Jul 16:ehae403.   |
| 2   | Prevalence and Burden of Musculoskeletal Pain among Cardiac Sonographers in Eastern Province of Saudi Arabia: A Cross-Sectional Study. <b>Al Saikhan L</b> , Alshami AM. J Clin Med. <b>2024</b> May 29;13(11):3184.  |
| 3   | Mechanisms underlying exercise intolerance in long COVID: An accumulation of multisystem dysfunction. Jamieson A, Al Saikhan L, Alghamdi L, Hamill Howes L, Purcell H, Hillman T, Heightman M, Treibel T, Orini M, Bell R, Scully M, Hamer M, Chaturvedi N, Montgomery H, Hughes AD, Astin R, Jones S. Physiol Rep. <b>2024</b> Feb;12(3):e15940. |
| 4   | Occupational survey of the educational outputs of the first established program of cardiac technology speciality in the Kingdom of Saudi Arabia (2013-2022): A cross-sectional study. <b>Al Saikhan L</b> , Al Ghamdi L. PLoS One. <b>2023</b> Dec 14;18(12):e0295655.  |
| 5   | Does 3D-speckle tracking echocardiography improve prediction of major cardiovascular events in a multi-ethnic general population? A Southall and Brent Revisited (SABRE) cohort study. <b>Al Saikhan L</b> , Park C, Tillin T, Jones S, Mayet J, Chaturvedi N, Hughes A. PLoS One. <b>2023</b> Jun 27;18(6):e0287173.                             |
| 6   | Prevalence, characteristics, consequences, and awareness of work-related musculoskeletal pain among cardiac sonographers compared with other healthcare workers in Saudi Arabia: A cross sectional study. <b>Al Saikhan L</b> . PLoS One. <b>2023</b> May 5;18(5):e0285369.   |

- Sex-differences in associations of LV structure and function measured by echocardiography with long-term risk of mortality and cardiovascular morbidity. **Al Saikhan L**, Park C, Tillin T, Jones S, Francis D, Mayet J, Chaturvedi N, Hughes AD. Front Cardiovasc Med. **2023** Apr 25;10:1144964.
- A systematic review and meta-analysis of heart rate variability in COPD. Alqahtani JS, Aldhahir AM, Alghamdi SM, Al Ghamdi SS, AlDraiwiesh IA, Alsulayyim AS, Alqahtani AS, Alobaidi NY, **Al Saikhan L**, AlRabeeah SM, Alzahrani EM, Heubel AD, Mendes RG, Alqarni AA, Alanazi AM, Oyelade T. Front Cardiovasc Med. **2023** Feb 17;10:1070327.
- 9 Association between carotid atherosclerosis and brain activation patterns during the Stroop task in older adults: An fNIRS investigation. Mason SA, Al Saikhan L, Jones S, James SN, Murray-Smith H, Rapala A, Williams S, Sudre C, Wong B, Richards M, Fox NC, Hardy R, Schott JM, Chaturvedi N, Hughes AD.Neuroimage. 2022 Aug 15;257:119302.
- 10 Relationship Between Image Quality and Bias in 3D Echocardiographic Measures: Data From the SABRE (Southall and Brent Revisited) Study. Al Saikhan L, Park C, Tillin T, Lloyd G, Mayet J, Chaturvedi N, Hughes AD. J Am Heart Assoc. 2022 May 3;11(9):e019183.
- 11 Is carotid artery atherosclerosis associated with poor cognitive function assessed using the Mini-Mental State Examination? A systematic review and meta-analysis. Anbar R, Sultan SR, Al Saikhan L, Alkharaiji M, Chaturvedi N, Hardy R, Richards M, Hughes A. BMJ Open. 2022 Apr 19;12(4):e055131.
- Corrigendum: Imaging Protocol, Feasibility, and Reproducibility of Cardiovascular Phenotyping in a Large Tri-Ethnic Population-Based Study of Older People: The Southall and Brent Revisited (SABRE) Study. Al Saikhan L, Alobaida M, Bhuva A, Chaturvedi N, Heasman J, Hughes AD, Jones S, Eastwood S, Manisty C, March K, Ghosh AK, Mayet J, Oguntade A, Tillin T, Williams S, Wright A, Park C. Front Cardiovasc Med. 2021 Nov 4;8:769050.
- 13 Imaging Protocol, Feasibility, and Reproducibility of Cardiovascular Phenotyping in a Large Tri-Ethnic Population-Based Study of Older People: The Southall and Brent Revisited (SABRE) Study. Al Saikhan L, Alobaida M, Bhuva A, Chaturvedi N, Heasman J, Hughes AD, Jones S, Eastwood S, Manisty C, March K, Ghosh AK, Mayet J, Oguntade A, Tillin T, Williams S, Wright A, Park C. Front Cardiovasc Med. 2020 Nov 13;7:591946.
- 14 Cohort Profile Update: Southall and Brent Revisited (SABRE) study: a UK population-based comparison of cardiovascular disease and diabetes in people of European, South Asian and African Caribbean heritage. Jones S, Tillin T, Park C, Williams S, Rapala A, Al Saikhan L, Eastwood SV, Richards M, Hughes AD, Chaturvedi N. Int J Epidemiol. 2020 Oct 1;49(5):1441-1442e.
- Study Protocol Insight 46 Cardiovascular: A Sub-study of the MRC National Survey of Health and Development. Mason SA, **Al Saikhan L**, Jones S, Bale G, James SN, Murray-Smith H, Rapala A, Williams S, Wong B, Richards M, Fox NC, Hardy R, Schott JM, Chaturvedi N, Hughes AD. Artery Res. **2020** Sep;26(3):170-179.
- Reproducibility of Left Ventricular Dyssynchrony Indices by Three-Dimensional Speckle-Tracking Echocardiography: The Impact of Sub-optimal Image Quality. **Al Saikhan L**, Park C, Hughes AD. Front Cardiovasc Med. **2019** Oct 10;6:149.
- Prognostic implications of left ventricular strain by speckle-tracking echocardiography in the general population: a metaanalysis. **Al Saikhan L**, Park C, Hardy R, Hughes A. Vasc Health Risk Manag. **2019** Jul 24;15:229-251.
- Left atrial function in heart failure with mid-range ejection fraction differs from that of heart failure with preserved ejection fraction: a 2D speckle-tracking echocardiographic study. Al Saikhan L, Hughes AD, Chung WS, Alsharqi M, Nihoyannopoulos P. Eur Heart J Cardiovasc Imaging. 2019 Mar 1;20(3):279-290.
- 19 Prognostic implications of left ventricular strain by speckle-tracking echocardiography in population-based studies: a systematic review protocol of the published literature. **Al Saikhan L**, Park C, Hardy R, Hughes A. BMJ Open. **2018** Jul 16;8(7):e023346.
- Correlation between ST segment shift and cardiac diastolic function in patients with acute myocardial infarction. Azoz A, Youssef A, Alshehri A, Gad A, Rashed M, Yahia M, Alsharqi M, Al Saikhan L. J Electrocardiol. 2018 Jul-Aug;51(4):592-597.

| C-2 | C-2 Scientific Research Papers Presented to Refereed Specialized Scientific Conferences |   |   |  |  |
|-----|---|---|---|--|--|
|     | Investigator(s) Research Title  |   | Conference and Publication Date   |  |  |
| 1   | Al Saikhan L, et al.  | Adiposity over the adult life course and its implications on cardiac structure in later life  | Oral presentation, BIHS 2023 Annual Scientific Meeting, Aberdeen, UK, <b>2023</b> . |  |  |
| 2   | A. Jamieson, Al<br>Saikhan, et al.  | Whole-body cardiopulmonary fitness and local skeletal muscle function in people living with Long COVID compared with healthy controls | Poster presentation, Physiology 2023, North Yorkshire, UK, <b>2023</b> .            |  |  |

| 3  | A. Jamieson, <b>Al</b>               | Skeletal Muscle Oxygen Consumption and Oxidative  | Poster presentation, Europhysiology  |
|----|--------------------------------------|---|--|
|    | Saikhan, et al.                      | Capacity in long COVID using Near Infrared Spectroscopy (NIRS)  | 2022, Copenhagen, Denmark, <b>2022</b> .   |
| 4  | Al Saikhan L, et<br>al.              | Higher ventricular and arterial stiffness in women partly explain sex-difference in associations between left ventricular remodelling and long-term risk of mortality: findings from the Southall And Brent REvisited (SABRE) study | Invited oral presentation (UK Young Investigator Awardee), 2022 Italian Society of Hypertension (SIIA) Meeting, Rome, Italy, 2022.                                   |
| 5  | Al Saikhan L, et<br>al.              | Myocardial strain by 3D-speckle tracking echocardiography predicts long-term risk of cardiovascular morbidity and mortality in the general population: the Southall And Brent Revisited (SABRE) study                               | Oral presentation, Investigator of the Year Award Finalist, BSEcho 2021 (virtual), <b>2021</b> .   |
| 6  | Al Saikhan L, et<br>al.              | Higher ventricular and arterial stiffness in women partly explain sex-difference in associations between left ventricular remodelling and long-term risk of mortality: findings from the Southall And Brent REvisited (SABRE) study | Oral presentation, Young Investigator<br>Award Shortlisted, British and Irish<br>Hypertension Society 2021 Annual<br>Scientific Meeting, Brighton, UK, <b>2021</b> . |
| 7  | <b>Al Saikhan L</b> , et al.         | Myocardial strain by 3D-speckle tracking echocardiography predicts long-term risk of cardiovascular morbidity and mortality in the general population: the Southall And Brent Revisited (SABRE) study                               | E-poster presentation, ESC Congress 2021 – The Digital Experience, <b>2021</b> .   |
| 8  | Tabassian M, Al<br>Saikhan L, et al. | Quality Control of Echocardiographic Images Using Deep<br>Learning  | Lecture presentation, 2020 IEEE International Ultrasonic Symposium, Las Vegas, USA, <b>2020</b> .  |
| 9  | Al Saikhan L, et al.                 | The Prevalence Of Subclinical Left Ventricular Systolic Dysfunction By 3d-Global Longitudinal Strain In South Asians Compared To Whites Europeans And The Role Of Central Obesity: The Southall And Brent Revisited (Sabre) Study   | Poster presentation, ACC.20/WCC Congress 2020, (virtual), <b>2020</b> .  |
| 10 | Al Saikhan L, et<br>al.              | Sex-Differences In Left Ventricular Remodelling Pattern<br>By 3d Echocardiography In Association With The Long-<br>Term Risk Of All-Cause Mortality: Findings From The<br>Southall And Brent Revisited (Sabre) Study                | Poster presentation, ACC.20/WCC Congress 2020, (virtual), <b>2020</b> .  |
| 11 | Al Saikhan L, et al.                 | Ventricular and arterial stiffness partly explain sex-<br>difference in associations between left ventricular<br>structure by 3D echocardiograph and mortality: the<br>Southall and Brent revisited (SABRE) study                   | Oral presentation, JRSM Cardiovascular Disease Young Investigator Award Shortlisted (top 3 abstracts), London Cardiovascular Society, London, UK, <b>2020</b> .      |
| 12 | Al Saikhan L, et al.                 | Arterial stiffness partly explains sex differences in associations between left ventricular structure and mortality: the Southall and Brent revisited (SABRE) study   | Oral presentation, Young Investigator<br>Award Shortlisted, Artery 19 conference,<br>Budapest, Hungry, <b>2019</b> .   |
| 13 | Al Saikhan L, et<br>al.              | Comparison of 3D and 2D echocardiography-derived indices of left ventricular function and structure to predict long-term mortality in the general population: Southall And Brent Revisited (SABRE) study                            | Poster presentation, ESC Congress 2019, Paris, France, <b>2019</b> .   |
| 14 | Vrettos A, Al<br>Saikhan L, et al.   | Left atrial strain parameters predict clinical outcomes in patients with HFmrEF and HFpEF   | Poster presentation, ESC Congress 2019, Paris, France, <b>2019</b> .   |
| 15 | Al Saikhan L, et<br>al.              | 3D echocardiography-derived indices of left ventricular function and structure predict long-term mortality differently in men and women: the Southall And Brent Revisited (SABRE) study   | Oral presentation, top 3 abstracts in imaging category, British Cardiovascular Society Annual Conference, Manchester, UK, <b>2019</b> .                              |

| 16 | Vrettos V, Al<br>Saikhan L, et al.      | Left atrial function in HFpEF and HFmrEF patients; relation to pulmonary artery systolic pressure  | Poster presentation, Heart Failure Congress 2019, Athens, Greece, <b>2019</b> .                           |
|----|---|--|---|
| 17 | Al Saikhan L, et al.                    | The impact of intentional distortion of image quality on left ventricular deformation indices by three-dimensional speckle-tracking echocardiography   | HIT (Heart Imager of Tomorrow) poster presentation, EuroEcho Imaging, Milan, <b>2018</b> .                |
| 18 | Al Saikhan L, et al.                    | Reliability of left ventricular dyssynchrony indices by<br>three-dimensional speckle-tracking echocardiography:<br>the impact of intentional impairment of image quality                               | HIT (Heart Imager of Tomorrow) poster presentation, EuroEcho Imaging, Milan, <b>2018</b> .                |
| 19 | Al Saikhan L, et al.                    | Quantifying the effect of image quality on three-<br>dimensional speckle tracking echocardiography   | Oral presentation, Investigator of the Year Award Finalist, BSE conference, Liverpool, UK, <b>2018</b> .  |
| 20 | Al Saikhan L, et al.                    | Prognostic Implications of Left Ventricular Strain by<br>Speckle-Tracking Echocardiography in the General<br>Population: A Systematic Review and Meta-analysis   | Poster presentation, BSE 2018, Liverpool, UK, <b>2018</b> .   |
| 21 | Al Saikhan L, et al.                    | The impact of intentional distortion of image quality on left ventricular deformation indices by three-dimensional speckle-tracking echocardiography   | Moderated poster presentation, Early Career Physiologists Symposium and Europhysiology, London, UK, 2018. |
| 22 | Al Saikhan L,<br>Nihoyannopoul<br>os P. | Left atrial function in heart failure with mid-range ejection fraction differs from that of heart failure with preserved ejection fraction: a two-dimensional speckle tracking echocardiographic study | Poster presentation, ESC Congress 2018, Munich, Germany, <b>2018</b> .                                    |

| C-3 Contribution to Scientific Conferences and Symposia |   |                                     |                           |  |
|---|---|-------------------------------------|---------------------------|--|
|   | Title   | Place and Date of the<br>Conference | Extent of<br>Contribution |  |
| 1   | JAHA Annual Research Symposium 2024<br>Artificial Intelligence in Healthcare                  | Dhahran, Saudi Arabia, Oct 2024     | Attended                  |  |
| 2   | KFUPM Research Forum 2024   | Dhahran, Saudi Arabia, Oct 2024     | Attended                  |  |
| 3   | Riyadh First Health Cluster International Cardiology<br>Symposium 2024 (ICC-R1)               | Riyadh, Saudi Arabia, Sept 2024     | Attended                  |  |
| 4   | The 6 <sup>th</sup> National Computing Colleges Conference (NCCC 2024)                        | Dammam, Saudi Arabia, May 2024      | Attended                  |  |
| 5   | 10 <sup>th</sup> Respiratory Care Student Research Projects Poster<br>Presentation Day, IAU   | Dammam, Saudi Arabia, May 2024      | Invited reviewer/assessor |  |
| 6   | 12-Lead ECG Interpretation: A Step-by-Step Approach Workshop, IAU                             | Dammam, Saudi Arabia, April 2024    | Invited speaker           |  |
| 7   | NBES IAU 2024   | Dammam, Saudi Arabia, March 2024    | Attended                  |  |
| 8   | Almoosa 2 <sup>nd</sup> International ECHO Conference   | Alhasa, Saudi Arabia, March 2024    | Attended                  |  |
| 9   | Advancing Population Health in Saudi Arabia   | Al Khobar, Saudi Arabia, Dec 2023   | Attended                  |  |
| 10  | The 8th Saudi International Hypertension Conference   | Virtual, Saudi Arabia, Nov 2023     | Attended                  |  |
| 11  | BIHS 2023   | Aberdeen, UK, Sept 2023             | Speaker                   |  |
| 12  | ASE2023   | Virtual, June 20223                 | Attended                  |  |
| 13  | The 2 <sup>nd</sup> Scientific Research Forum, College of Science and Humanities Studies, IAU | Jubail, Saudi Arabia, May 2023      | Guest speaker             |  |
| 14  | Basics of Electrocardiogram (ECG), IAU  | Dammam, Saudi Arabia, May 2023      | Invited speaker           |  |
| 15  | 1st Almoosa International ECHO Conference   | Alhasa, Saudi Arabia, Jan 2023      | Attended                  |  |
| 16  | 2022 Italian Society of Hypertension (SIIA) Meeting   | Rome, Italy, Oct 2022               | Invited speaker           |  |
| 17  | 8 <sup>th</sup> Respiratory Care Student Research Projects Poster<br>Presentation Day, IAU    | Dammam, Saudi Arabia, May 2022      | Invited reviewer/assessor |  |

| 18 | 11 <sup>th</sup> Students Research Day, CAMS, IAU            | Dammam, Saudi Arabia, May 2022 | Invited reviewer/assessor    |
|----|--|--------------------------------|------------------------------|
| 19 | BSEcho 2021  | Virtual, Oct 2021              | Speaker                      |
| 20 | 2021 BIHS Annual Scientific Meeting                          | Brighton, UK, Sept 2021        | Speaker                      |
| 21 | Digital ESC congress 2021                                    | Virtual, Aug 2021              | Poster                       |
|    |  | . •                            | presentation                 |
| 22 | All About Clinical Trails Course Online Training Course 2020 | Virtual, Dec 2020              | Attended                     |
| 23 | ESC Digital Health Week 2020                                 | Virtual, Dec 2020              | Attended                     |
| 24 | EACVI – Best of Imaging 2020                                 | Virtual, Dec 2020              | Attended                     |
| 25 | Artery 2020  | Virtual, Oct 2020              | Attended                     |
| 26 | SHA 2020 17 <sup>th</sup> GHA Annual Conference              | Virtual, Oct 2020              | Attended                     |
| 27 | Global AI Summit   | Virtual, Oct 2020              | Attended                     |
| 28 | Misk Global Forum 2020                                       | Virtual, Oct 2020              | Attended                     |
| 29 | Y20 Youth Summit   | Virtual, Oct 2020              | Attended                     |
| 30 | Digital ESC congress 2020                                    | Virtual, Aug 2020              | Attended                     |
| 31 | Riyadh global digital health summit                          | Virtual, Aug 2020              | Attended                     |
| 32 | ACC.20/WCC 2020  | Virtual, Mar 2020              | Poster presentation          |
| 33 | JRSM Cardiovascular Disease Young Investigator Award 2020    | London, UK, Feb 2020           | Speaker                      |
| 34 | UCL AI in Medicine Conference                                | London, UK, Jan 2020           | Attended                     |
| 35 | Artery 19  | Budapest, Hungry, Oct 2019     | Speaker                      |
| 36 | Barts Handheld Echo Course                                   | London, UK, 2019 (Aug/Dec)     | Invited speaker<br>(Faculty) |
| 37 | ESC Congress 2019  | Paris, France, Aug 2019        | Invited speaker              |
| 38 | BCS Annual Conference 2019                                   | Manchester, UK, Jun 2019       | Speaker                      |
| 39 | Hammersmith Echocardiology Conference                        | London, UK, Jun 2019           | Attended                     |
| 40 | Advanced Imaging 2019 by Royal Society of Medicine           | London, UK, Apr 2019           | Attended                     |
| 41 | Myocardial Velocity & Deformation Imaging Symposium          | Leuven, Belgium, Feb 2019      | Attended                     |
| 42 | EuroEcho-2018  | Milan Italy, Dec 2018          | Poster presentation          |
| 43 | BSE2018  | Liverpool, UK, Oct 2018        | Speaker                      |
| 44 | Europhysiology   | London, UK, Sept 2018          | Poster presentation          |
| 45 | Early Career Physiologists' Symposium at the QEII Centre,    | London, UK, Sept 2018          | Attended                     |
| 46 | Cardiac Physiology Satellite Meeting                         | London, UK, Sep 2018           | Attended                     |
| 47 | 4 <sup>th</sup> EAPC Course on Sports Cardiology             | Munich, Germany, Aug 2018      | Attended                     |
| 48 | ESC congress 2018  | Munich, Germany, Aug 2018      | Poster presentation          |
| 49 | RV Masterclass in PAH and ACHD 'with live training'          | London, UK, Jul 2018           | Attended                     |
| 50 | 7th UCL Cardiovascular Symposium                             | London, UK, May 2018           | Attended                     |
| 51 | Hammersmith Echocardiology Conference                        | London, UK, Jun 2017           | Attended                     |
| 52 | ECG Course from Basic to Advance                             | Dammam, Saudi Arabia, 2016     | Invited speaker              |

| 53 | 3 <sup>rd</sup> ESC-SHA Joint Meeting  | Dammam, Saudi Arabia, Nov 2015 | Attended             |
|----|--|--------------------------------|----------------------|
| 54 | 1 <sup>st</sup> Annual Scientific Research Update: Medicine and<br>Biomedical Research                         | Dammam, Saudi Arabia, Apr 2015 | Attended             |
| 55 | 1 <sup>st</sup> Meeting of the General Assembly of the Saudi<br>Society of Cardiac Technology                  | Dammam, Saudi Arabia, 2014     | Invited speaker      |
| 56 | Saudi Arabian Cardiac Interventional Society 'The First<br>Saudi Arabian Cardiac Interventional Society Forum' | Dammam, Saudi Arabia, Apr 2014 | Organising committee |
| 57 | ECG Workshop from Basic to Advance   | Dammam, Saudi Arabia, Apr 2014 | Attended             |
| 58 | 11 <sup>th</sup> Gulf Heart Association joint with the 4 <sup>th</sup> Bahraini<br>Heart Association           | Bahrain, Feb 2014              | Attended             |
| 59 | 1 <sup>st</sup> ESC-SHA Joint Meeting  | Dammam, Saudi Arabia, Nov 2013 | Attended             |
| 60 | 24 <sup>th</sup> Annual Scientific Meeting in Internal Medicine on<br>Cardiovascular Diseases KFHU             | Dammam, Saudi Arabia, Nov 2013 | Attended             |
| 61 | ECG Symposium at KFHU  | Dammam, Saudi Arabia, Nov 2013 | Attended             |
| 62 | 5 <sup>th</sup> Saudi Group of Echocardiography Symposium  | Jeddah, Saudi Arabia, Nov 2013 | Attended             |
| 63 | ECG Workshop from Basic to Advance   | Dammam, Saudi Arabia, May 2013 | Attended             |
| 64 | 10 <sup>th</sup> Golf Heart Association Conference   | Bahrain, Feb 2013              | Attended             |
| 65 | Fourth International Echocardiography workshop,  | Saudi Arabia, Feb 2012         | Attended             |

|   | Membership of Scientific and Professional Societies and Organizations                |
|---|--|
| 1 | The Saudi Leadership Society, Member, since 2021                                     |
| 2 | European COST Action VascAgeNet, Member, 2020 – 2024                                 |
| 3 | Misk Foundation, Fellow, since 2019  |
| 4 | European Society of Cardiovascular Imaging (ESCVI), Silver Member, Fellow since 2019 |
| 5 | The Higher Education Academy, Associate Fellow since 2019                            |
| 6 | European Society of Cardiology (ESC), Member   |
| 7 | British Society of Echocardiography (BSE), Member, 2018 – 2023                       |
| 8 | American Society of Echocardiography (ASE), Member                                   |
| 9 | European Association of Preventive Cardiology (EAPC), Member                         |

# **Teaching Activities**

#### Undergraduate

|   | Course/Rotation Title             | No./Code  | Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics) |
|---|-----------------------------------|-----------|--|
| 1 | Electrocardiogram I               | CTECH-313 | 5 credits/week (3 Lectures and 2 Lab)                                |
| 2 | Basic Echocardiography            | CTECH-314 | 5 credits/week (3 Lectures and 2 Lab)                                |
| 3 | Advanced Adult Echocardiography I | CTECH-413 | 5 credits/week (3 Lectures and 2 Lab)                                |
| 4 | Echocardiography Practice I       | CTECH-414 | 4 credits/week (Field experience)                                    |
| 5 | Echocardiography Practice II      | CTECH-425 | 4 credits/week (Field experience)                                    |

| 6 | ECHO Interpretation            | CTECH-424 | 2 credits/week (Lectures)             |  |
|---|--------------------------------|-----------|---------------------------------------|--|
| 7 | Introduction to Cardiovascular | CTECH-221 | 5 credits/week (3 Lectures and 2 Lab) |  |
|   | Technology                     |           |                                       |  |

#### **Committee Membership**

| COIIIII | ommittee Membership |           |                            |  |  |  |  |
|---------|---------------------|-----------|----------------------------|--|--|--|--|
|         | From                | То        | Position                   | Organization   |  |  |  |
| 1       | Nov 2024            | Present   | Member                     | Teaching Assistants Affairs Committee, College of Applie Medical Sciences, Imam Abdulrahman bin Faisal Universit                                   |  |  |  |
| 2       | May 2023            | Present   | Member                     | Strategic Plan and Quality Committee, College of Applied Medical Sciences, Imam Abdulrahman bin Faisal University                                  |  |  |  |
| 3       | Oct 2022            | Present   | Member                     | Medical Excuses Committee, College of Applied Medical Sciences, Imam Abdulrahman bin Faisal University   |  |  |  |
| 4       | Sept 2022           | Present   | Member                     | Research Committee, College of Applied Medical Sciences,<br>Imam Abdulrahman bin Faisal University   |  |  |  |
| 5       | Jan 2019            | Jan 2020  | Co-president               | UCL Institute of Cardiovascular Science Postgraduate Society, UCL, UK  |  |  |  |
| 6       | 2018/2019           | 2020/2021 | Academic<br>Representative | UCL Institute of Cardiovascular Science, UCL, UK   |  |  |  |
| 7       | 2018/2019           | 2020/2021 | Member                     | ICS Research Degree Committee (RDC), UCL Institute of Cardiovascular Science, UCL, UK  |  |  |  |
| 8       | 2018/2019           | 2020/2021 | Member                     | ICS Departmental Teaching Committee (DTC), UCL Institute of Cardiovascular Science, UCL, UK  |  |  |  |
| 9       | 2018/2019           | 2020/2021 | Member                     | Student-staff Consultative Committee (SSCC), UCL Institute of Cardiovascular Science, UCL, UK  |  |  |  |
| 10      | 2018/2019           | 2020/2021 | Member                     | Research and Academic Networking Group (RANG) – Seminar Research Series Organizing Sub-committee, UCL Institute of Cardiovascular Science, UCL, UK |  |  |  |
| 11      | Apr 2018            | Aug 2019  | Vice Chair                 | Public Relations Committee, UCL Saudi Society, UCL, UK   |  |  |  |
| 12      | Apr 2018            | Aug 2019  | Member                     | Scientific and Educational Committee, UCL Saudi Society, UCL, UK   |  |  |  |
| 13      | Jul 2016            | Sep 2016  | Member                     | Student-staff Consultative Committee, Pre-sessional English Course, Imperial College London, UK  |  |  |  |

## **Volunteer Work**

|    | From | То   | Type of Volunteer | Organization                  |  |  |
|----|------|------|-------------------|-------------------------------|--|--|
| 1  | Nov  | 2023 | Guest Speaker     | "Bright Future"               | CAMS Student Council, IAU,<br>Dammam, Saudi Arabia |  |
| 2  | Sep  | June | Organizer         | "World Heart Day"             | Cardiac Technology                                 |  |
| 3  | 2023 | 2024 | Organizer         | "أمراض القلب الوراثية"        | Department, CAMS, IAU,                             |  |
| 4  |      |      | Organizer         | "قلب خديج"                    | Dammam, Saudi Arabia                               |  |
| 5  |      |      | Organizer         | "ماراثون القلب"               |  |  |
| 6  |      |      | Organizer         | "شعاع قلب"                    |  |  |
| 7  |      |      | Organizer         | "حملة قلبك حياتك"             |  |  |
| 8  |      |      | Organizer         | "السمنة والقلب"               |  |  |
| 9  |      |      | Organizer         | "تأثير صحة الأسنان على القلب" |  |  |
| 10 |      |      | Organizer         | "Rheumatic Fever"             |  |  |

| 11 | Dec 2022    |              | Guest Speaker          | "Where the Path Leads"  | CAMS Student Council, IAU<br>Dammam, Saudi Arabia                    |  |
|----|-------------|--------------|------------------------|---|--|--|
| 12 | Sep         | June         | Organizer              | "World Heart Day"   | Cardiac Technology   |  |
| 13 | 2022 2023   |              | Organizer              | "Your Heart is a Gift"  | Department, CAMS, IAU,   |  |
| 14 |             |              | Organizer              | "حملة قلبك حياتك"   | Dammam, Saudi Arabia   |  |
| 15 |             |              | Organizer              | "صحة القلب في رمضان"  | -  |  |
| 16 | Sep<br>2021 | Feb<br>2023  | Mentor                 | Misk Mentoring Program  | Misk Foundation, Saudi<br>Arabia                                     |  |
| 17 | Aug         | Oct<br>2020  | Participant            | Fellowship Annual Competition (SDGs Challenges)   |  |  |
| 18 | Mar 2020    |              | Advisor                | Misk Fellowship Redesign  |  |  |
| 19 | 2019        | 2020         | Interviewer            | Misk College Prep Program   | -  |  |
| 20 | Nov         | 2019         | Invited speaker        | "Academic Challenges and How to<br>Overcome them for PG Graduates"                      | Imperial College Saudi<br>Society, London, UK                        |  |
| 21 | Oct         | 2019         | Volunteer              | UCL Annual Festival "It's all Academic Festival"  | UCL, London, UK  |  |
| 22 | Jun         | 2019         | Volunteer              | MRC Festival, LHA UCL   |  |  |
| 23 | Feb         | 2019         | Organizer/Speaker      | "Scientific Day for Postgraduate<br>Students in the UK Event"                           | UCL Saudi Society, London,<br>UK                                     |  |
| 24 | Jan         | 2019         | Organizer/Speaker      | "Building Leadership for Change<br>through School Immersion Program",<br>IOE UCL        |  |  |
| 25 | Nov         | 2018         | Panel member           | "Open Discussion - the First Induction and Guidance Meeting"                            |  |  |
| 26 | Sep         | 2018         | Organizer              | "Saudi 88 <sup>th</sup> National Day"   |  |  |
| 27 | Mar         | 2018         | Student representative | Saudi Minister of Education Meeting   | Saudi Arabian Cultural<br>Bureau, UK                                 |  |
| 28 |             | 2013<br>2016 | Organizer              | "Hypertension" Awareness Day, Al-<br>Rashid Mall  | Cardiac Technology<br>Department, CAMS, IAU,                         |  |
| 29 | Apr         | 2016         | Organizer              | "Career Forum Week 2016 at Dhahran International Exhibitions"                           | Dammam, Saudi Arabia   |  |
| 30 | Feb         | 2015         | Speaker                | "Basic Life Support and Choking" Awareness Day, University of Dammam                    |  |  |
| 31 | Nov         | 2013         | Speaker/Organizer      | "How to Protect Yourself from<br>Atherosclerosis", King Fahad Hospital<br>of University |  |  |
| 32 | May         | 2013         | Speaker/Organizer      | "Hypertension" Awareness Day, High School   |  |  |
| 33 | Jul 2       | 2014         | Volunteer              | Charitable organization to care for orphans   | BENAA, Saudi Arabia  |  |
| 34 | Apr 2012    |              | Speaker                | "First women's health Forum"  | Saudi Diabetes and<br>Endocrine Association,<br>Dammam, Saudi Arabia |  |

## Awards, Grants and Scholarships

|    | and a control of the |   |
|----|---|---|
|    | Awards, Grants and Scholarships   |   |
| 1  | $1^{\text{st}}$ Rank <b>Winner</b> of Dr Soliman Fakeek <b>Award</b> (Medical Research Track) (Sponsored by RDIA)   | 2024  |
| 2  | EuroEcho-2024 Educational Grant Award, Berlin, Germany  | 2024  |
|    | <b>7 Scientific Publication Excellence Awards</b> , the Scientific Council, Imam Abdulrahman bin Faisal University  | 2019-2024   |
| 3  | • For the research entitled "A systematic review and meta-analysis of heart rate variability in COPD".  | September 2024  |
| 4  | <ul> <li>For the research entitled "Association between carotid atherosclerosis and brain activation<br/>patterns during the Stroop task in older adults: An fNIRS investigation."</li> </ul>   | May 2024  |
| 5  | <ul> <li>For the research entitled "Relationship Between Image Quality and Bias in 3D Echocardiographic<br/>Measures: Data From the SABRE (Southall and Brent Revisited) Study."</li> </ul>   | May 2024  |
| 6  | For the research entitled "Is carotid artery atherosclerosis associated with poor cognitive<br>function assessed using the Mini-Mental State Examination? A systematic review and meta-<br>analysis."   | May 2024  |
| 7  | <ul> <li>For the research entitled "Prognostic implications of left ventricular strain by speckle-tracking<br/>echocardiography in the general population: a meta-analysis."</li> </ul>   | Feb 2020  |
| 8  | For the research entitled "Left atrial function in heart failure with mid-range ejection fraction<br>differs from that of heart failure with preserved ejection fraction: a 2D speckle-tracking<br>echocardiographic study."  | July 2019   |
| 9  | <ul> <li>For the research entitled "Prognostic implications of left ventricular strain by speckle-tracking<br/>echocardiography in population-based studies: a systematic review protocol of the published<br/>literature."</li> </ul>  | July 2019   |
| 10 | <b>Shortlisted</b> , the 2021 Investigator of the Year <b>Award</b> , British Society of Echocardiography 2021 Annual Meeting, virtual, UK  | 2021  |
| 11 | <b>Winner,</b> the 2021 Young Investigators <b>Award</b> , British and Irish Hypertension Society Annual Meeting, Brighton, UK  | 2021  |
| 12 | 9 Academic and Research Excellence <b>Rewards</b> , the Saudi Arabian Cultural Bureau in the UK   | PhD: 1 (2021), 2 (2020),<br>2 (2019), 1 (2018)<br>MSc: 3 (2017) |
| 13 | <b>Runner up</b> , the JRSM Cardiovascular Disease Young Investigator <b>Award</b> , London Cardiovascular Society, London, UK  | 2020  |
| 14 | 2 Exceptional Distinction <b>Rewards</b> , the Saudi Arabian Cultural Bureau in the UK  | PhD: 1 (2019)<br>MSc: 1 (2018)                                  |
| 15 | <b>Winner</b> , the 3 <sup>rd</sup> Place Young Investigator <b>Award</b> , Artery 2019 Conference, Budapest, Hungry  | 2019  |
| 16 | Scholarship, Misk Fellowship (Lifelong recognition), SA   | Since 2019  |
| 17 | <b>Associate Fellow</b> of Higher Education Academy <b>Fellowship (Lifelong recognition)</b> , (AFHEA), UK  | Since 2019  |
| 18 | European Association of Cardiovascular Imaging (FEACVI) Fellowship  | Since 2019  |
| 19 | Student Conference Fund Award, UCL SLMS Graduate Funding, London, UK  | 2019  |
| 20 | <b>Winner</b> , Best of the Best Clinical (Imaging) Abstract <b>Award</b> , British Cardiovascular Society Annual Conference, Manchester, UK  | 2019  |
| 21 | ESC Congress Educational <b>Grant Award</b> , ESC Congress Paris 2019, Paris, France  | 2019  |
| 22 | Scholarship, Dubai Harvard Foundation for Medical Research Scholarship  | 2019  |
| 23 | EuroEcho-2018 <b>Grant Award</b> , Milan, Italy   | 2018  |
| 24 | <b>Shortlisted</b> , the 2018 Investigator of the Year <b>Award</b> , British Society of Echocardiography 2018 Annual Meeting, Liverpool, UK  | 2018  |
| 25 | Honored by the Saudi Ambassador in the UK Prince Mohammed bin Nawaf as one of the outstanding students, London, UK  | 2018  |

| 26 | Faculty of Medicine Dean's <b>Prize</b> for Medical Ultrasound (Echocardiography), Imperial College London, London, UK | 2017  |
|----|--|---|
| 27 | Prince Mohammed Bin Fahad <b>Prize</b> for the Scientific Excellence in the Eastern Province, SA                       | 2010<br>(Certificate award for<br>the year 2004 and 2007) |
| 28 | 4 <sup>th</sup> Place <b>Prize</b> , the National Chemistry Olympiad, SA   | 2010  |

#### **Last Update**

15/11/2024