

# FACULTY FULL NAME: Saja Abdullah A. Al-Rayes

Vice Dean of female Student Affairs in the College of Public Health

#### Personal Data

Nationality |Saudi Date of Birth |08 – 01 Department |health information management and technology Official IAU Email |salrayes@iau.edu.sa Office Phone No. |0133331242

#### Bio

Dr. Saja A. Al-Rayes is an assistant professor at the College of Public Health (CPH) on the Imam Abdulrahman bin Faisal University (IAU) in Saudi Arabia. She is also the vice dean of the female students' affaires in the college, the Head of Health Information Management and technology department and the coordinator for the Master of Sciences program in healthcare quality and patient safety. Her undergraduate degree was earned from the IAU with a degree on health information management and technology. She offered to be one of the demonstrators in the department after she was graduated. Afterwards, Dr. Saja's master's degree was on Health informatics. It was granted from the University of Leeds in the United Kingdom. The final year project for her master's degree was about identifying the requirement of Virtual Microscopy with extension to the Virtual Reality Powerwall in training sessions at St. James's University Hospital in Leeds. This degree allowed her to be promoted as a lecturer in the CPH. Later, she earned her PhD from the school of medicine at the University of Leeds in the United Kingdom. The PhD thesis was about understanding the factors influencing patient acceptance toward using electronic patient reported outcome measures (e-PROMs). Currently, she has around 13 publications in multiple per reviewed journals and conference proceedings. Her interest in conducting research in the field of health informatics including digital health, mobile health, and technology user's behavior. As an assistant professor, she is teaching different courses relevant to the health informatics field including system analysis and design and for both bachelor and master's degree. She is also supervising and defend multiple master thesis relevant to the health informatics and the public health specialty.

#### Language Proficiency



| Language | Read      | Write     | Speak     |
|----------|-----------|-----------|-----------|
| Arabic   | Excellent | Excellent | Excellent |
| English  | Excellent | Excellent | Excellent |

## Academic Qualifications (Beginning with the most recent)

| Date     | Academic Degree              | Place of Issue       | Address              |
|----------|------------------------------|----------------------|----------------------|
| 05-2016  | PhD.                         | University of Leeds  | Leeds, UK            |
| 10-2010  | Master in Health informatics | University of Leeds  | Leeds, UK            |
| 08- 2007 | Bachelor degree              | University of Dammam | Dammam, Saudi Arabia |

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

| PhD        | Development and early-stage validation of a questionnaire measuring patient acceptance of electronic patient reported outcome measures.                             |
|------------|---|
| Master     | Identifying the requirement of Virtual Microscopy with extension to the Virtual Reality Powerwall in training sessions at St. James's University Hospital in Leeds. |
| Fellowship |   |

# Professional Record: (Beginning with the most recent)

| Job Rank            | Place                                     | Place and Address of Work |              | Date           |
|---------------------|---|---------------------------|--------------|----------------|
| Assistant Professor | Imam Abdulrahman bin<br>Faisal University | Dammam                    | Saudi Arabia | 2016 – present |
| Lecturer            | Imam Abdulrahman bin<br>Faisal University | Dammam                    | Saudi Arabia | 2010 - 2016    |
| Demonstrator        | Imam Abdulrahman bin<br>Faisal University | Dammam                    | Saudi Arabia | 2008- 2010     |

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

| Administrative Position   | Office  | Date                 |
|---|---|----------------------|
| Acting dean   | College of Public Health - IAU  | July 2021            |
| Head of the health information<br>management and technology<br>department | College of Public Health - IAU  | Jan 2021 - present   |
| Acting dean   | College of Public Health - IAU  | August 2020          |
| Vice Dean of student affairs  | College of Public Health - IAU  | Aug. 2019 – present  |
| Coordinator of the master program   | Department of health information management<br>and technology at the College of public health in<br>the Imam Abdulrahman bin Faisal University. | Sept. 2018 – present |
| Head of graduation project committee                                      | Department of health information management<br>and technology at the College of public health in<br>the Imam Abdulrahman bin Faisal University. | 2016 – 2018          |
| Quality manager in the college of public health                           | College of public health – Imam Abdulrahman bin<br>Faisal University.   | 2016                 |



## Scientific Achievements

#### Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

| # | Name of Investigator(s)  | Research Title   | Publisher and Date of Publication             |
|---|--|--|---|
|   | Shayma-a Hijlis, Turki Alanzi,<br>Fahad Alanezi, Hala Alhodaib,<br>Arwa Althumairi, Afnan Aljaffary,<br>Duaa Aljabri, Saja Alrayes, Demah<br>Alsalman, Asma Al-Fayez,<br>Sumaiah Alrawiai, Bashair AlThani,<br>Zahraa Alakrawi, Amjad Saadah,<br>Norah Alyousif. | Use of social media for the<br>improvement of radiation safety<br>knowledge among Saudi Arabian<br>radiographers.  | International Health. (2021)                  |
|   | Al-Rayes SA, Alumran A, Aljabri D,<br>Aljaffary A, Aldoukhi E,<br>Alahmedalyousif Z, Al Madani R.  | Public Awareness and Utilization<br>of 937-Telephone Health<br>Services in the Kingdom of Saudi<br>Arabia Before and During the<br>COVID-19 Pandemic:<br>Longitudinal Study. | Journal of Medical Internet<br>Research. 2021 |
|   | Sarah Al-zahrani, Arwa Althumairi,<br>Afnan Aljaffary, Asma Alfayez,<br>Demah Alsalman, Fahad Alanezi,<br>Hala Alhodaib, Saja Al-Rayes,<br>Sumaiah Essa Alrawiai, Duaa I.<br>Aljabri, Bashair AlThani, Amjad<br>Saadah, Turki M. Alanzi.                         | Opinion of mental healthcare<br>providers on the impact of<br>electronic games on psychiatric<br>patients in Saudi Arabia.   | Informatics in Medicine<br>Unlocked.(2021)    |
|   | Zainab Alzain, Asma Alfayez,<br>Demah Alsalman, Fahad Alanezi,<br>Beyan Hariri, Saja Al-Rayes, Hala<br>Alhodaib, Turki Alanzi.   | The role of social media in the<br>training and continuing<br>education of healthcare<br>professionals in Eastern Saudi<br>Arabia.   | Informatics in Medicine Unlocked.<br>(2021)   |
|   | Turki M Alanzi, Arwa Althumairi,<br>Afnan Aljaffary, Asma Alfayez,<br>Demah Alsalman, Fahad Alanezi,<br>Hala Alhodaib, Maha M<br>AlShammari, Reem AL-Dossary,<br>Saja Al-Rayes, Beyan Hariri,<br>Bashair AlThani   | Evaluation of the Mawid mobile<br>healthcare application in<br>delivering services during the<br>COVID-19 pandemic in Saudi<br>Arabia.                                       | International Health. (2021)                  |
|   | Doaa Alhabib, Arwa Alumarn, Saja<br>Alrayes.   | Emergency room visualization<br>dashboard user satisfaction in<br>Saudi Arabia.  | Informatics in Medicine Unlocked.<br>(2020)   |
|   | Al-Rayes, S. A., Aldar, F., Al Nasif,<br>N., Alkhadrawi, Z., Al-Fayez, A., &<br>Alumran, A.  | The use of electronic incident<br>reporting system: Influencing<br>factors.  | Informatics in Medicine Unlocked.<br>(2020)   |
|   | Demah Alsalman, Arwa Alumran,<br>Saja Alrayes, Arwa Althumairi,<br>Sama'a Almubarak, Sumaiah   | Implementation status of health<br>information systems in hospitals<br>in the eastern province of Saudi<br>Arabia.   | Informatics in Medicine Unlocked.<br>(2020)   |



| Alrawiai, Zahraa Alakrawi, Beyan<br>Hariri, Turki Alanzi   |   |   |
|--|---|---|
| Alrawiai S, Aljaffary A, Al-Rayes S,<br>Alumran A, Alhuseini M, Hariri B.  | The OPTION Scale: Measuring<br>Patients' Perceptions of Shared<br>Decision-Making in the Kingdom<br>of Saudi Arabia.  | J Multidiscip Healthc. (2020)                   |
| Reem Al Madani, Saja A Al-Rayes,<br>Arwa Alumran   | Policies vs Practice of Medical<br>Error Disclosure at a teaching<br>hospital in Saudi Arabia                         | Risk Management and Healthcare<br>Policy (2020) |
| Saja A. Alrayes, Hessah Aldossary,<br>Ethar Aldoukhi, Zainab<br>Alahmedalyousif, Ghadeer<br>Aldawood, Arwa Alumran | The awareness and utilization of<br>937-telephone health services in<br>Saudi Arabia: Cross-sectional<br>survey study | Informatics in Medicine Unlocked<br>(2020)      |
| SA Al-Rayes, A Alumran, W<br>AlFayez   | The Adoption of the Electronic<br>Health Record by Physicians   | Methods of Information in Medicine<br>(2019)    |
| Alumra, A., Aldossary, H.,<br>Almulhim, L., Almolhim, B.,<br>Bakodah S., Alrayes, S. A.                            | Are dental care providers in<br>Saudi Arabia prepared to treat<br>patients with special needs?                        | Journal of Dental Research (2019)               |

#### Refereed Scientific Research Papers Accepted for Publication

| # | Name of Investigator(s) | Research Title | Journal | Acceptance Date |
|---|-------------------------|----------------|---------|-----------------|
|   |                         |                |         |                 |
|   |                         |                |         |                 |

## Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

| # | Name of Investigator(s)                    | Research Title   | Conference and Publication Date  |
|---|--|--|--|
| 1 | Saja A. Al-Rayes, Maryam<br>Al-Meshkhas    | Preparing legal electronic medical record case: A process analysis and improvement plan  | 19th Distributed Computing and<br>Applications for Business Engineering<br>and Science from October 16 to 19 of<br>year 2020 conducted at China Mining<br>University, Xuzhou, Chin |
| 2 | Saja A. Al-Rayes, Fatimah<br>Ali Al-Shatti | Speech Therapy Clinic Workflow at One<br>of the Government Hospitals in Saudi<br>Arabia: Process Analysis and<br>Recommendations | 19th Distributed Computing and<br>Applications for Business Engineering<br>and Science from October 16 to 19 of<br>year 2020 conducted at China Mining<br>University, Xuzhou, Chin |

#### **Completed Research Projects**

| # | Name of Investigator(s)<br>(Supported by) | Research Title                         | Report Date |
|---|---|--|-------------|
| 1 | Faculty: Dr. Saja A. Al-                  | Factors influencing caregivers' use of | May 2021    |
|   | Rayes and Ms. Ohood                       | Electronic Patient Reported Outcome    |             |
|   | alKhaldi                                  | Measures (E-PROMs) in Eradah           |             |



|   | Student: Aisha Fuad<br>Alkhamis, Atheer Meteb<br>Alrashidi,Horaya<br>Abdulbaset Amin  | Complex for Mental Health on<br>Dammam Eastern Region   |            |
|---|---|---|------------|
| 2 | Faculty: Dr. Saja A. Al-<br>Rayes and Ms. Asma<br>Alfayez<br>Student: Falak Adel<br>Aldar, Nada Saud Al Nasif<br>and Zainab Ibrahim<br>Alkhadrawi             | FACTORS INFLUENCING THE USE OF<br>ELECTRONIC INCIDENT REPORTING<br>SYSTEM   | June 2020  |
| 3 | Faculty: Dr. Saja A. Al-<br>Rayes and Ms. Hessa<br>Aldossary<br>Student: Ethar Abdulaziz<br>Al-Doukhi, Zainab Tawfiq<br>Al-Yousef, Ghadeer Ghazi<br>Al-Dawood | THE SATISFACTION AND UTILIZATION<br>OF 937- TELEPHONE HEALTH SERVICES<br>IN SAUDI ARABIA: CROSS-SECTIONAL<br>SURVEY STUDY | April 2019 |
| 4 | Faculty: Dr. Saja A. Al-<br>Rayes, Dr. Arwa<br>Althumairi<br>Student: Baraq Awani<br>and Gufran Alzubil   | THE AWARENESS OF CHEMOTHERAPY<br>SIDE EFFECTS AND ITS RELATED<br>FACTORS: A SYSTEMATIC REVIEW                             | May 2018   |

#### **Current Researches**

| # | Research Title                         | Name of Investigator(s)       |
|---|--|-------------------------------|
| 1 | Factors influencing the use of Virtual | Faculty: Dr. Saja A. Al-Rayes |
|   | Clinic in Eradah Complex for Mental    | Students: Sarah Alzahrani     |
|   | Health on Dammam Eastern region        |                               |

#### Contribution to Scientific Conferences and Symposia

| # | Conference Title                                       | Place and Date of the Conference | Extent of Contribution |
|---|--|----------------------------------|------------------------|
| 1 | MEIbioeng 15   | Leeds, UK - 2015                 | Poster presentation    |
| 2 | International Digital Health and Care<br>Congress 2015 | London, UK - 2015                | Poster presentation    |
| 3 | European Medical Informatics<br>Conference             | Istanbul, Turkey- 2014           | Poster presentation    |

#### Membership of Scientific and Professional Societies and Organizations

- Head of the graduation project committee in the department of Health information management and technology.
- Member of the quality committee in the department of health information management and technology and the college of public health



- member of the strategic planning committee in both the department of health information management and technology and the college of public health.
- Member of graduation project committee for academic affairs initiatives.

## **Teaching Activities**

#### Undergraduate

| # | Course/Rotation Title         | No./Code | Extent of Contribution<br>(no. of lectures/Tutorials. Or labs, Clinics) |
|---|-------------------------------|----------|---|
| 1 | System analysis and design I  | HIMT 221 | Main course instructor  |
| 2 | System analysis and design II | HIMT 314 | Main course instructor  |
| 3 | Graduation project            | HIMT 4   | Supervisor  |

#### Brief Description of Undergraduate Courses Taught: (Course Title - Code: Description)

| 1 | System analysis and design I – HIMT 221: aims at providing the student with the key techniques to analyze the current process within the healthcare centers and facilitate the process improvement by introducing new systems of modifying the old ones. |
|---|--|
| 2 | System analysis and design I – HIMT 221: aims at analyzing structured decisions, designing effective input, designing effective output and quality assurance of information systems.   |
| 3 | Graduation project – HIMT4: accomplish a scientific research using the techniques studied during the undergraduates courses and following the academic way. It includes applying the appropriate methodology   |

#### and running the appropriate statistical test toward reaching the study aim and objectives.

#### Postgraduate

| # | Course/Rotation Title                                     | No./Code | Extent of Contribution<br>(no. of lectures/Tutorials. Or labs, Clinics) |
|---|---|----------|---|
| 1 | Health information<br>management and<br>technology        | MQPS 601 | Lectures  |
| 2 | The landscape of<br>healthcare quality in<br>Saudi Arabia | MQPS 613 | Lectures and course coordinator   |
| 3 | Thesis  | MQPS 690 | Supervisor  |

#### Brief Description of Postgraduate Courses Taught: (Course Title – Code: Description)

- Health information management and technology -MQPS 601: introduction of health information management and technology and the its main applications including (digital health and mobile health)
  The landscape of healthcare quality in Saudi Arabia MQPS 613: it provides the student with the recent
- developments of the Quality in Saudi Arabia.
- 3 Thesis MQPS 690: supervise one of the student's thesis toward awarding her master degree.



#### **Course Coordination**

| # | Course Title and Code                                       | Coordination | Co-coordination | Undergrad. | Postgrad. | From | to          |
|---|---|--------------|-----------------|------------|-----------|------|-------------|
| 1 | The landscape of<br>healthcare quality in<br>Saudi Arabia   | Х            |                 |            | Х         | 2018 | Prese<br>nt |
| 2 | Seminars in Healthcare<br>Improvement and<br>Patient Safety | Х            |                 |            | Х         | 2018 | Prese<br>nt |

### Guest/Invited Lectures for Undergraduate Students

| # | Activity/Course Title<br>and Code | Subject                                 | College and University or Program   | Date                         |
|---|-----------------------------------|---|---|------------------------------|
| 1 | Teaching a lecture                | Mixed<br>method<br>research<br>approach | Health information management and technology department- College of public health – IAU | 2017,<br>2018<br>and<br>2019 |
| 2 | Teaching a lecture                | Mixed<br>method<br>research<br>approach | Public health department - College of public health –<br>IAU                            | 2019                         |

#### Student Academic Supervision and Mentoring

| # | Level             | Number of Students | From | to      |
|---|-------------------|--------------------|------|---------|
| 1 | Bachelor students | 5                  | 2019 | present |
| 2 | Bachelor students | 5                  | 2018 | 2019    |
| 3 | Bachelor students | 5                  | 2017 | 2018    |
| 4 | Bachelor students | 5                  | 2016 | 2017    |

#### Supervision of Master and/or PhD Thesis

| # | Degree Type | Title   | Institution | Date          |
|---|-------------|---|-------------|---------------|
| 1 | Master      | Toward the Saudi National Electronic<br>Health Record, The Barriers to the<br>adoption of the EHR by the physicians<br>at KFMMC during the Implementation<br>Stage            | CPH - IAU   | 2018-<br>2019 |
| 2 | Master      | Physician's Perception toward<br>Disclosing of Patient Safety Event and<br>Barriers to Disclose at King Fahd<br>Hospital of The University, Eastern<br>Province, Saudi Arabia | CPH - IAU   | 2019-<br>2020 |

## Ongoing Research Supervision

| # | Degree Type | Title | Institution | Date |
|---|-------------|-------|-------------|------|
|---|-------------|-------|-------------|------|



| 1 | Master | Factors influencing caregivers'<br>use of Electronic Patient<br>Reported Outcome Measures | Department of health information<br>management and technology – CPH<br>- IAU | 2020-<br>2021 |
|---|--------|---|--|---------------|
| 2 | Master | (E-PROMs) in Eradah Complex<br>for Mental Health on<br>Dammam Eastern region.             | Department of health information<br>management and technology – CPH<br>- IAU | 2020-<br>2021 |

# Administrative Responsibilities, Committee and Community Service (Beginning with the most recent)

#### Administrative Responsibilities

| # | From | То      | Position                             | Organization   |
|---|------|---------|--------------------------------------|--|
| 1 | 2021 | Present | Head of HIMT department              | College of public health - IAU   |
| 2 | 2019 | Present | Vice dean of student affairs         | College of public health - IAU   |
| 3 | 2018 | Present | Coordinator of master program        | Department of health information management<br>and technology – college of public health - IAU |
| 4 | 2016 | 2018    | Head of graduation project committee | Department of health information management<br>and technology – college of public health - IAU |
| 5 | 2016 | 2017    | Quality manager                      | College of public health - IAU   |

#### **Committee Membership**

| # | From | То      | Position                                  | Organization   |
|---|------|---------|---|--|
| 1 | 2020 | Present | Member in the crises management committee | College of public health - IAU   |
| 2 | 2019 | Present | Member in demonstrator committee          | Department of health information management<br>and technology – college of public health - IAU |
| 3 | 2016 | Present | Member of quality committee               | Department of health information management<br>and technology – college of public health - IAU |
| 4 | 2016 | Present | Member of strategic planning committee    | Department of health information management<br>and technology – college of public health - IAU |

#### Scientific Consultations

| # | From | То | Institute | Full-time or Part-time |
|---|------|----|-----------|------------------------|
|   |      |    |           |                        |

#### Volunteer Work

| # | From | То   | Type of Volunteer        | Organization                          |
|---|------|------|--------------------------|---------------------------------------|
| 1 | 2018 | 2018 | Presenting a lecture for | Alfaisalia Islamic School in Alkhobar |
|   |      |      | gifted students          |                                       |

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)



- 1 Computer and information technology
- 2 Web designing and graphics Adobe photoshop
- 3 SPSS and Amos software for statistics tools
- 4 Mplus statistics tools

# Last Update

Sept. 9<sup>th</sup>, 2021.