

# FAJR Mission Report: Gaza and Lebanon

(APRIL 2024 - PRESENT)

FROM EMERGENCY SURGERIES TO LONG-TERM CARE – HOW OUR DEDICATED TEAMS ARE SUPPORTING GAZA AND LEBANON'S MOST VULNERABLE POPULATIONS?





FAJR SCIENTIFIC ("FAJR") IS A U.S.-BASED NON-PROFIT MEDICAL ORGANIZATION DEDICATED TO SAVING LIVES IRRESPECTIVE OF ETHNIC OR RELIGIOUS BACKGROUNDS, FREE FROM RELIGIOUS, DENOMINATIONAL, OR POLITICAL AFFILIATIONS. WE ENVISION A WORLD WHERE TOP-NOTCH SURGICAL EXPERTISE IS A RIGHT, NOT A PRIVILEGE, AND AIM TO BRIDGE THE GAP BETWEEN MEDICAL ADVANCEMENTS AND THOSE IN NEED. OUR MISSION IS TO PROVIDE UNPARALLELED SURGICAL CARE TO VULNERABLE AND UNDERSERVED POPULATIONS AROUND THE WORLD.

FAJR.org

## HEALING IN WAR FAJR SCIENTIFIC'S MISSION IN GAZA

Since 2007, the Gaza Strip has faced severe challenges, including military conflicts and blockades that have drastically impacted its healthcare system and civilian welfare. The humanitarian crisis has deepened, with escalating military actions in 2024 intensifying the urgent need for medical and humanitarian intervention.

Founded in 2019 and revamped in 2022, FAJR Scientific has been at the forefront of this crisis, launching critical medical missions to meet the dire healthcare needs of Gaza's most vulnerable. Our focused efforts provide specialized trauma surgery, emergency care, and comprehensive rehabilitation for victims of war, particularly children and amputees suffering from severe injuries.

This brochure details FAJR Scientific's relentless endeavors since April 2024, showcasing our medical interventions, resource utilization, and the dedicated efforts of our volunteers. We also delve into the methodologies that highlight the impact of our work amidst ongoing challenges, ensuring our data reflects the realities on the ground as we continue our vital missions.





# About FAJR Scientific: Vision, Mission, and Approach

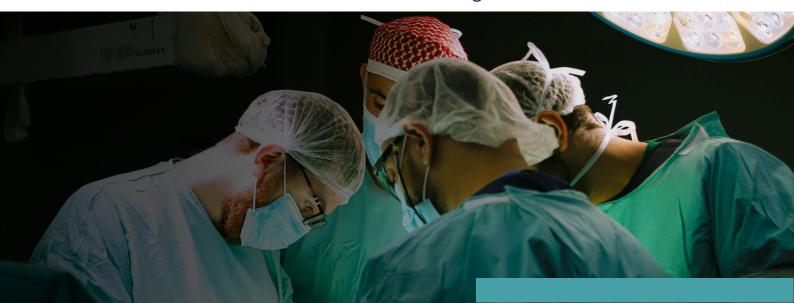


## VISION

FAJR Scientific aspires to make high-quality surgical care universally accessible, bridging the technological gap in underserved areas. In conflict zones like Gaza, our missions provide essential care and sustainable health solutions.



We are committed to delivering superior surgical and medical care to the most vulnerable, viewing access as a fundamental human right that overcomes barriers of war, poverty, and politics. Our approach combines compassion with scientific rigor and a deep understanding of regional challenges.



## Leadership



Khaled Saleh, MD Chairman and Chief Medical Officer



Mosab Nasser, PhD Co-founder and Chief Executive Officer

## **Our Approach**





## **CORE VALUES AND OPERATIONAL STRATEGY**



NEUTRALITY

We are a non-political, nondenominational organization focused solely on saving lives, regardless of ethnic or religious identities.

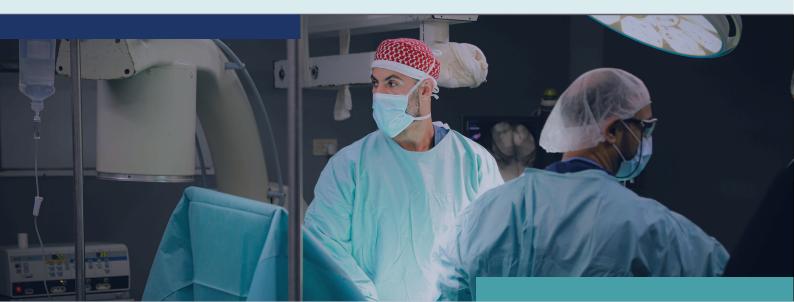


### MULTIDISCIPLINARY EXPERTISE

Our diverse team includes surgeons, emergency physicians, and trauma specialists, ensuring culturally sensitive and comprehensive medical strategies for Gaza.



We deploy elite surgical teams to crisis zones, equipped with cutting-edge technology and expertise in orthopedic trauma, maxillofacial, vascular surgery, and burn care, adhering to the highest international standards.

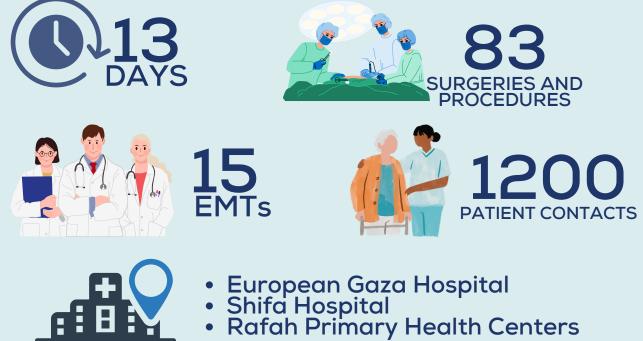


## **OVERVIEW OF FAJR GAZA MISSIONS** (APRIL 2024-PRESENT)

The FAJR missions to Gaza represent a large-scale, multidisciplinary humanitarian effort aimed at stabilizing the healthcare system in the face of severe resource shortages and a collapsing infrastructure. Each mission is tailored to address the evolving healthcare needs in Gaza, from trauma surgery to emergency care and long-term rehabilitation.



## FIRST GAZA EMERGENCY MISSION **APRIL 3-15, 2024**



### **CONTEXTS AND CHALLENGES**

This mission was launched amidst escalating military operations in Gaza, particularly in the southern region near Rafah. The FAJR team faced numerous logistical and security challenges, including movement restrictions, intermittent power outages, and resource shortages. Despite these challenges, the FAJR team successfully delivered critical surgical care to individuals suffering from complex war-related injuries.



#### **ORTHOPEDIC SURGERY**

50 cases involving external fixations, intramedullary nailing, tendon repairs, and plate removals for patients with severe shrapnel and blast injuries.

### **VASCULAR SURGERY**

ons, 18 procedures including amputations, AVF creations, VAC dressing changes, and debulking of gangrenous tissue, often conducted with limited anesthesia.

#### MAXILLOFACIAL SURGERY

8 cases including mandibular fixation, facial plate insertions, and foreign body removals from facial wounds caused by debris.

#### **GENERAL SURGERY**

7 cases including life-saving colostomies, ileostomies, and herniotomies for patients suffering from blast-related abdominal injuries.

### **IMPACT ON LOCAL HEALTHCARE**

During this mission, FAJR's presence helped stabilize the healthcare facilities in southern Gaza, where hospital staff had been overwhelmed by the influx of trauma patients. FAJR provided not only medical expertise but also donated critical medical supplies such as surgical gauze, orthopedic implants, and pain management medications.

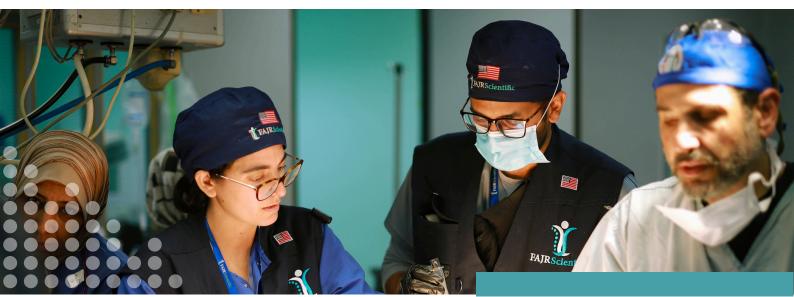


## SECOND GAZA EMERGENCY MISSION APRIL 29- MAY 17, 2024



## **MISSION HIGHLIGHTS**

This mission saw a significant escalation in the number of trauma cases due to the ongoing ground offensive near Rafah. The number of injuries nearly tripled compared to the first mission, placing an immense burden on local healthcare facilities. FAJR's team responded by setting up additional field hospitals and expanding ICU capacity.



# UPPER LIMB ORTHO AND PERIPHERAL NERVES

63 surgeries were performed, including Gaza's first nerve grafts and transfers, essential for patients with nerve damage.

### LOWER LIMB ORTHO

40 surgeries focused on IM nailing, external fixation, and limb salvage techniques, crucial for preventing sepsis and gangrene in patients with severe lower limb trauma.

### **VASCULAR SURGERY**

24 procedures, including amputations, thrombectomies, and bypass surgeries for patients with vascular complications from blast injuries.

### KEY MEDICAL INTERVENTIONS

### ICU MANAGEMENT

296 critical care cases managed, including sepsis, dialysis, plasmapheresis, and post-op care. FAJR's ICU specialists significantly reduced post-surgical mortality.

#### **EMERGENCY DEPARTMENT**

443 emergency cases, including blast and shrapnel injuries, gastrointestinal infections, respiratory distress, and dehydration. FAJR's presence in the ED significantly increased the capacity to treat mass casualties and stabilize critically injured patients.

## **CHALLENGES AND INNOVATION**

#### LIMITED RESOURCES

Power outages and supply shortages required the FAJR team to innovate on the ground. For example, the team adapted locally available materials for external fixations and created makeshift ICU beds to accommodate the rising number of critical care patients.

### BURN TRAUMA MANAGEMENT

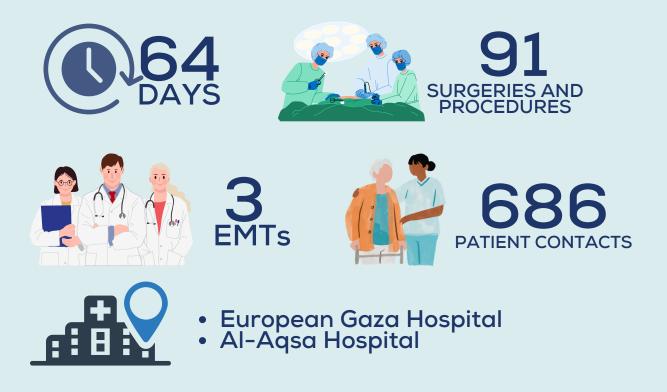
injuries Burn were particularly severe during this mission, with many patients suffering from thermal and chemical burns due to airstrikes. FAJR's burn specialists introduced advanced debridement VAC techniques and therapy, significantly reducing infection rates and improving patient outcomes.

### LONG-TERM IMPACT

FAJR's interventions during this mission not only saved lives but also left a lasting impact on Gaza's healthcare system. Local doctors received training in advanced nerve and vascular surgeries, and FAJR donated specialized medical equipment such as external fixators, orthopedic implants, and advanced wound care products. These contributions have enhanced Gaza's capacity to manage complex trauma cases long after the mission's completion.



## THIRD GAZA EMERGENCY MISSION JUNE 13, 2024 - JULY 11, 2024



### **SCOPE AND OBJECTIVES**

The third mission emphasizes complex peripheral nerve surgeries, burn care, and orthopedic reconstructions. Despite a smaller team due to access restrictions, FAJR continues to provide specialized care, focusing on nerve grafts, amputations, and reconstructive surgeries for burn victims.

## **CHALLENGES AND INNOVATION**

Despite blockades and military restrictions, FAJR continues to deliver essential medical services in Gaza, including nerve grafts, amputations, and advanced burn care. After evacuating from EGH on July 1st, operations resumed at AI-Aqsa Hospital by July 3rd, as our team remains dedicated to saving lives and performing critical surgeries under challenging conditions.



### PERIPHERAL NERVE SURGERIES

Complex grafts and transfers for trauma such as amputations and shrapnel injuries, previously unavailable in Gaza.

### **BURN TRAUMA CARE**

Advanced treatments for thirddegree burns, focusing on debridement and reconstructive surgeries to prevent severe complications.

## KEY MEDICAL INTERVENTIONS

### ORTHOPEDIC RECONSTRUCTIONS

Critical limb salvage surgeries like external fixations and ORIF to treat complex fractures and prevent amputations.

## FOURTH GAZA EMERGENCY MISSION JULY 11, 2024 - AUGUST 15, 2024



## **CHALLENGES AND INNOVATION**

This mission in Northern Gaza faced significant challenges due to intense military activity and limited resources. Despite these conditions, the small team adapted swiftly, making rapid decisions to provide urgent care and successfully managing a high volume of patient contacts under pressure.

## **STRATEGIC SIGNIFICANCE**

The fourth emergency mission marked FAJR's expansion into Northern Gaza, providing crucial care in previously underserved areas like Kamal Adwan Hospital, strained by military operations. This successful mission showcased FAJR's adaptability and commitment to delivering life-saving care under challenging conditions. The fourth emergency mission marked FAJR's expansion into Northern Gaza, providing crucial care in previously underserved areas like Kamal Adwan Hospital, strained by military operations. This successful mission showcased FAJR's adaptability and commitment to delivering life-saving care under challenging conditions.

### **PERIPHERAL NERVE SURGERIES**

Complex grafts and transfers for trauma such as amputations and shrapnel injuries, previously unavailable in Gaza.

### **BURN TRAUMA CARE**

Advanced treatments for thirddegree burns, focusing on debridement and reconstructive surgeries to prevent severe complications.

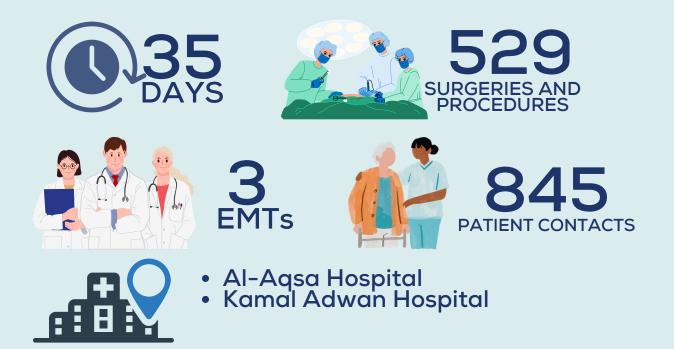
#### ORTHOPEDIC RECONSTRUCTIONS

Critical limb salvage surgeries like external fixations and ORIF to treat complex fractures and prevent amputations.

KEY MEDICAL INTERVENTIONS



## FIFTH GAZA EMERGENCY MISSION SEPTEMBER 29, 2024 - ONGOING

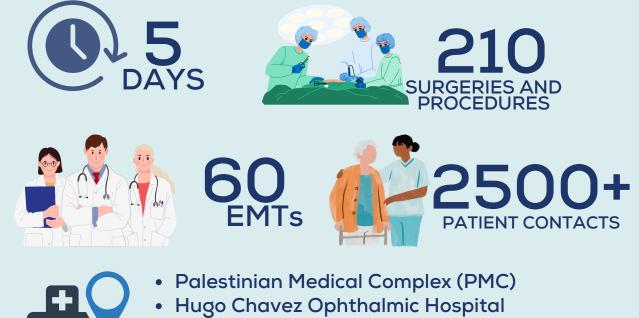


## **CHALLENGES AND INNOVATION**

During its fifth mission to Gaza, FAJR Scientific tackled significant challenges across various medical specialties, despite restricted access limiting team size. Key surgeons like Dr. Tawfik performed 224 surgeries, primarily at Al Aqsa and European Gaza hospitals, underscoring the mission's deep impact. Dr. Tahir played a crucial role, performing 305 surgeries and counting. Dr. Tahir continues to provide essential care tirelessly, offering hope and relief to the people in Gaza.



## FAJR WEST BANK ANNUAL MISSION AUGUST 2-7, 2024



- Kamal Adwan Hospital
- Salfet and Am'ari Refugee Camps Street Clinic

### **CHALLENGES AND INNOVATION**

During the FAJR West Bank mission, the team navigated security restrictions and resource constraints. Despite these challenges, they significantly advanced local medical care, introducing the FAJR Severity Index (FSI) for better procedural management and resource allocation. The mission also enhanced local healthcare through advanced surgical techniques and impactful training in complex surgeries.

### **STRATEGIC SIGNIFICANCE**

The FAJR mission is strategically significant as it addresses healthcare disparities in conflict zones through targeted medical interventions and the deployment of specialized teams. By providing critical care and building local capacity, FAJR fosters sustainable health improvements, ensuring long-term benefits and resilience within local healthcare systems. FAJR Scientific's missions in the West Bank are dedicated to improving healthcare access and quality through targeted medical interventions.

#### **ORTHOPEDIC SURGERY**

FAJR conducted 30 orthopedic surgeries, addressing severe deformities with complex hip and knee replacements, enhancing local surgical capacity under challenging conditions.

#### MAXILLOFACIAL AND PLASTIC SURGERY

20 advanced surgeries, including the region's first 14-hour free flap surgery, significantly raised local medical standards in maxillofacial and plastic care.

## KEY MEDICAL INTERVENTIONS

### NEUROSURGERY

12 critical brain and spinal surgeries were performed, introducing high-level neurosurgical care to address severe injuries in a resourcelimited setting.

### **OB/GYN SURGERY**

The team performed 10 specialized laparoscopic surgeries, providing essential women's health services despite limited resources.

### **OPHTHALMOLOGY**

49 cataract surgeries improved vision for patients facing common but challenging eye conditions, greatly enhancing their quality of life



## FAJR SCIENTIFIC ON THE GROUND IN LEBANON OCTOBER 6 - ONGOING, 2024



## **CHALLENGES AND INNOVATION**

In Lebanon, FAJR Scientific's mission has navigated complex challenges, innovating under difficult conditions to deliver vital healthcare. Operating amid restricted resources and logistical constraints, the team has successfully implemented advanced surgical and emergency medical procedures. By partnering closely with local medical staff, FAJR has not only enhanced immediate care but also facilitated long-term improvements in medical practice and infrastructure.

### **STRATEGIC SIGNIFICANCE**

The strategic significance of FAJR Scientific's mission in Lebanon lies in its targeted approach to healthcare delivery in crisis zones. By focusing on areas with acute medical needs and limited resources, FAJR effectively addresses gaps in healthcare availability and quality. The mission's efforts to collaborate with local hospitals and enhance their capacities through training and resource sharing amplify the long-term benefits of its interventions.

## TRAINING AND SKILL DEVELOPMENT IN LEBANON

FAJR Scientific has prioritized skill development, with Dr. Muzzammil Nusrath leading workshops on advanced wound closure and reconstructive techniques to enhance local medical expertise. provided He also remote consultations to extend care for complex cases. Dr. Sheikhali analyzed Lebanon's healthcare financing to improve access for vulnerable populations, while Dr. conducted training Subeh on handling mass casualty incidents, equipping local teams for emergency response. These initiatives ensure sustainable improvements in healthcare delivery emergency and preparedness.



### PATIENT SUPPORT AND MORALE INITIATIVES

FAJR Scientific brings comfort to young patients by providing toys, books, and treats, creating a compassionate, supportive environment for recovery.





## DONATION UTILIZATION AND ALLOCATION OVERVIEW

### **DIRECT OPERATING COSTS:**

\$3,000,000

MEDICAL EQUIPMENT AND ORTHOPEDIC IMPLANTS

\$5,000,000

MEDICAL SUPPLIES AND DISPOSABLES

\$270,000

**OPERATING COSTS** 

### **INDIRECT COSTS:**

\$4,500,000

VOLUNTEER DONATED TIME

### TOTAL EXPENDITURE:



COMBINED DIRECT AND INDIRECT COSTS

### **FAJR SCIENTIFIC RESEARCH HIGHLIGHTS**

#### SCHOLARLY CONTRIBUTIONS



FAJR Scientific is not only committed to providing direct medical care but also to contributing to global medical knowledge and policy development through participating in research, peer-reviewed publications, and presentations at conferences. Below is a summary of FAJR's scholarly contributions related to its Gaza missions.



#### SELECTED PEER-REVIEWED PUBLICATIONS:

| 1 | Pearls and Pitfalls of an Orthopaedic Mission Trip - Pearl, A.,<br>Saleh, K., et al. Journal of the American Academy of<br>Orthopaedic Surgeons, 2024, 32(3): 108–113.              |
|---|---|
| 2 | Rebuilding the health sector in Gaza: Alternative Humanitarian<br>Voices - Blanchet, K., Najem, M., et al. Conflict and Health,<br>2024, 18(1): 42.                                 |
| 3 | Transforming Global Orthopaedic Missions Through Adversity<br>- Hasan, A. I., Wajahath, M., et al. Journal of Bone and Joint<br>Surgery. American Volume, 2024, 106(14): 1338–1349. |
| 4 | Combating Infections Under Siege: Healthcare Challenges<br>Amidst the Israeli Military Assault on Gaza - Irfan B., Lulu I., et<br>al. World Medical & Health Policy, 2024.          |
|   | Will There Be a Future for Newborns in Gaza? - Irfan B., Abu  |

# +35 DIFFERENT AUTHORS

Shammala A., et al. The Lancet, 2024.

#### HAVE CONTRIBUTED TO TOP-TIER MEDICAL AND HUMANITARIAN JOURNALS

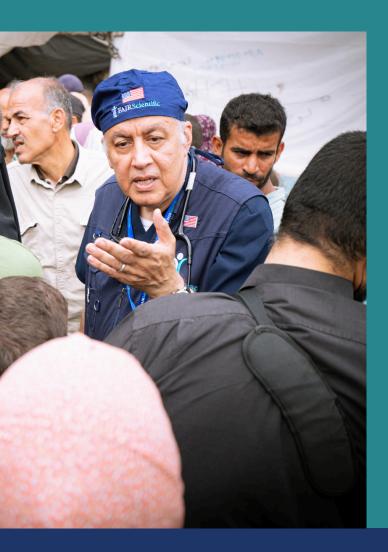
"FAJR Scientific's work underscores a commitment to advancing global medical knowledge and shaping healthcare policies in conflict-affected regions."

### **FAJR HUMANITARIAN INITIATIVES**

## FAJR FREE PHARMACY PROGRAM

- 600 Lantus and Novorapid insulin pens
- Our program has delivered more than 1,000 medications across various specialties, targeting areas with the greatest shortages and needs.





## FAJR GAZA STREET CLINIC PROGRAM

The Gaza Street Clinic, a unique initiative by FAJR, addresses the critical healthcare crisis in Gaza. In our latest mission, we provided essential medical care to **500+ patients** since january 2023 in the streets of Gaza and across the corridors of the hospital.

## **MEDICAL SUPPLIES TO HOSPITALS IN GAZA**

FAJR has raised funds for 15 containers of medical supplies for Gaza, but restrictions have limited deliveries to one truck with 13 pallets so far. Another truck with trauma supplies awaits clearance at Rafah Crossing.

Additionally, our doctors have transported over 250 suitcases filled with vital medical and surgical supplies to the European Gaza Hospital.

## FAJR WATER DISTRIBUTION PROJECT

The water program by FAJR involves the delivery of 18,000 liters of purified water weekly to Al-Mawasi area west of Khan Younis. Our commitment is ongoing, with plans to renew every two months, ensuring support for as long as there are those in need.



## **FAJR HUMANITARIAN INITIATIVES:**

## FAJR FOOD ASSISTANCE PROGRAM

At FAJR, we are committed to reducing hunger by providing nutritious meals:

- 1,500 chicken and rice meals
- 500 vegetable baskets

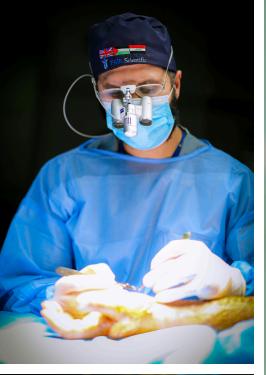






FAJR SCIENTIFIC ("FAJR") IS A U.S.-BASED NON-PROFIT MEDICAL ORGANIZATION DEDICATED TO SAVING LIVES IRRESPECTIVE OF ETHNIC OR RELIGIOUS BACKGROUNDS, FREE FROM RELIGIOUS, DENOMINATIONAL, OR POLITICAL AFFILIATIONS. WE ENVISION A WORLD WHERE TOP-NOTCH SURGICAL EXPERTISE IS A RIGHT, NOT A PRIVILEGE, AND AIM TO BRIDGE THE GAP BETWEEN MEDICAL ADVANCEMENTS AND THOSE IN NEED. OUR MISSION IS TO PROVIDE UNPARALLELED SURGICAL CARE TO VULNERABLE AND UNDERSERVED POPULATIONS AROUND THE WORLD.

#### FAJR.org















### **FOLLOW US:**



/FAJRSCIENTIFICUS



/FAJRSCIENTIFICUSA



/FAJRSCIENTIFICUSA



/@FAJR.SCIENTIFIC



INFO@FAJR.ORG **GENERAL INQUIRIES** 



MEDIA.RELATIONS@FAJR.ORG MEDIA & NEWS NETWORKS

