RAD-AID INTERNATIONAL

RAD-AID's mission is to increase and improve radiology resources in under-resourced regions of the world

2024 ANNUAL REPORT

WWW.RAD-AID.ORG

The Need for RAD-AID

Babies and mothers need **ultrasound** for safe delivery.

Cancer patients need **CT/MRI** for staging and treatment.

Trauma and infection victims need **x-ray, ultrasound, and CT** to address injuries and outbreaks.

Heart and stroke patients need **CT, angiography, and ultrasound** for diagnosis and treatment.

OVER HALF THE WORLD LACKS RADIOLOGY

(Source: World Health Organization)

A Nonprofit Public Service

RAD-AID.org

Radiology serving the world

Countries

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LETTER FROM CHIEF OFFICERS

Dear RAD-AID Friends and Supporters,

Most of the world has little or no access to radiology and medical imaging. The vital medical images for screening, monitoring, and treating disease are absent, scarce, or inadequate for billions of people worldwide. We started RAD-AID 16 years ago to meet that need, and we are pleased to bring you this 2024 annual report illustrating our ideals, progress, and goals.

What began as a few of us creating our mission in 2008, has now grown to a robust international community of over 18,000 volunteers, partners and supporters working in over 115 hospitals in more than 40 countries. Our interdisciplinary and collaborative team-based culture achieves capacity-building global health programs for diagnostic radiology, interventional radiology, ultrasound, nursing, medical physics, CT/MRI, breast imaging, radiation oncology, radiography, nuclear medicine, informatics, AI, and more. By bringing together medical imaging professionals having complementary expertise, we create the very best teams for public service and global health outreach.

This 2024 Annual Report is an illustration of our vision and work. We are immensely grateful to our partners, volunteers, and supporters for being a part of our growing community of charitable public service. You are the engines that make this work possible. For those not yet involved in RAD-AID, we hope this report shows you our work, mission, and principles, and we invite you to join us in our vision for health equity.

The adventure of global health radiology outreach is that RAD-AID brings new ideas and capabilities to low-resource regions of the world by exploring and overcoming challenges. We are passionate in our pursuit to make the world better each day. The core principles of our work are perseverance and humility, as we know that service work is not easy, requiring patience, focus, and gradual team-building. We must adapt to changing conditions and challenges every day, while finding the unique opportunities and hard-to-find insights for driving new solutions and innovations. This means listening to one another as colleagues and friends; treating each partner, patient, and project with the utmost value; and kindly learning from each moment and circumstance.

Some examples over the past several years: RAD-AID has expanded ultrasound equipment and education to more than 10 countries. We instituted breast and cervical outreach services in eleven underserved regions of the United States. RAD-AID started a vast network of global exchange, training and observerships so that trainees from low- and middle-income countries could receive formal education from high-resource academic hospitals. Our informatics program widened its Artificial Intelligence footprint to 20 countries for advancing the safe and effective use of AI in low-resource regions, in addition to our support and donation of PACS, cloud, and network infrastructure for hospitals in need. The RAD-AID Nursing team innovated and established navigation programs to reach marginalized populations on three continents. The RAD-AID Medical Physics program instituted quality-assurance and safety programs in Africa and South America. RAD-AID Radiation Oncology continues to grow our bridges between diagnostic imaging and cancer treatment through support for therapists, imagers, oncologists, and dosimetrists. Our innovative models for on-site and remote interventional radiology in Nigeria, Guyana, Indonesia, Nepal and Kenya are continuing to grow. The RAD-AID Learning Center is now interwoven into our on-site support activities so that remote and on-premise radiology and radiation oncology education grows more sustainable and comprehensive.

In the pages that follow, we hope you will read the progress and vision of our regional and operational leaders to create a stronger organization for global health. Although our reach has grown to over 325 million people, we have much more work to do in reaching the billions of people with little or no radiology, medical imaging and radiation oncology. We are excited to persevere and advance the edge of global health. We aim to keep going to make each day better for communities throughout the world.

Sincerely,

Daniel J. Mollura, MD
President and CEO

Lauren Fuller Kulinski, MHA, RT(R)(MR), MRSO
Treasurer and CFO

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Mona Hatoum, Program Manager, RAD-AID Middle East
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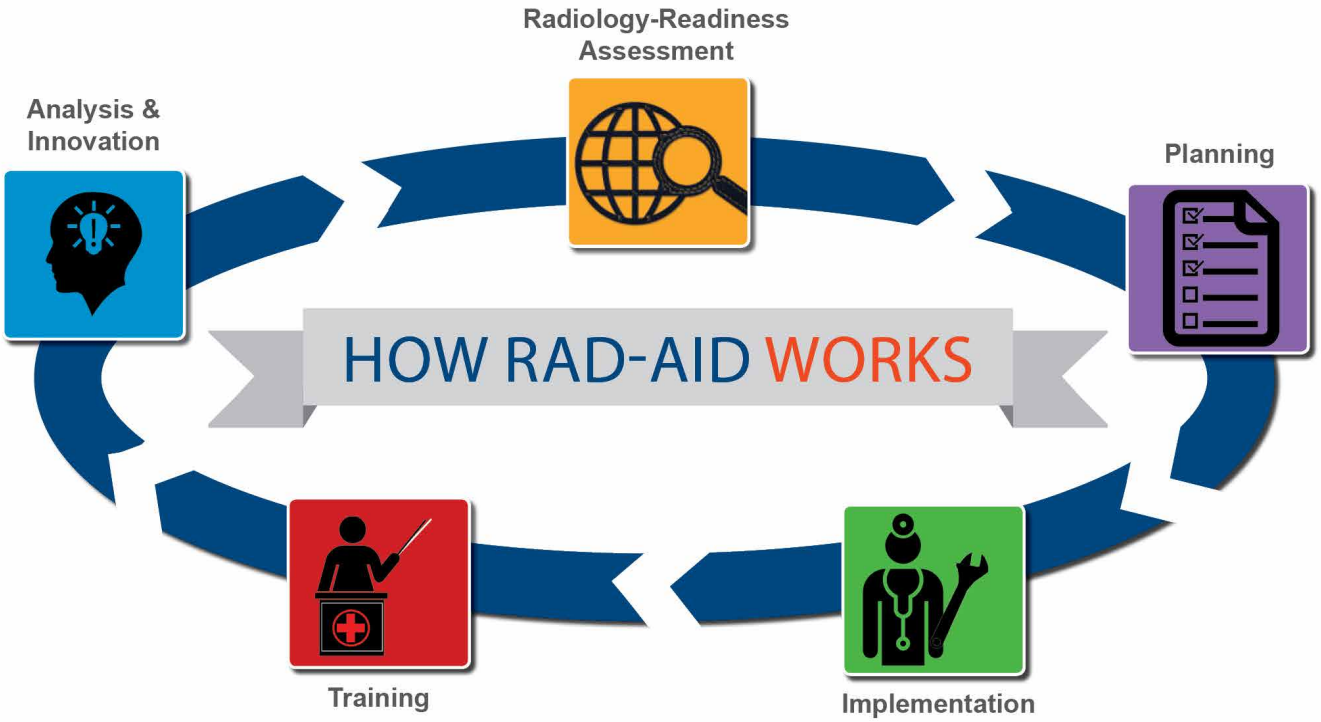
HOW RAD-AID WORKS



RAD-AID uses a simple method for analyzing, planning and implementing projects. The first step is Radiology Readiness, which is RAD-AID's trademarked data collection and analysis tool, so that we can optimize every radiology project for the specific needs, infrastructure constraints, and health care system attributes of a region, community or facility. The Radiology-Readiness step measures existing resources at a facility, analyzes the clinical goals of that facility, and offers a targeted solution to fill vital gaps to connect existing resources with those goals.

Once we conduct the Radiology-Readiness Assessment, we plan the project based on the data. Third, we implement the project based on the plan, such as installing hardware, configuring workstations, delivering education, writing research, or designing a new technology, which are accomplished through RAD-AID's multidisciplinary team structure. Fourth, training is a central part of everything we do, and we hold on-site and remote educational sessions so that RAD-AID can train in-country partners to use and maintain the implemented program. More importantly, our teams also receive training and education from our in-country partners so that we can learn from them about clinical and cultural factors that will influence the success of our collaborative program.

Lastly, we work with our in-country partners to analyze the results of the program, to find what worked and what did not work. In this way, we identify new challenges to solve and find new resources to strengthen the program. Then, we return to step one and repeat our Radiology Readiness assessment so that we can see how our project had a positive impact and what gaps need to be addressed. This circular iteration of data, analysis, planning, self-correction and new data collection keeps RAD-AID moving forward.

With the success of the Radiology Readiness Assessment, RAD-AID has developed subspecialty assessments, such as Breast Imaging, Informatics and AI, Interventional Radiology, Nursing, Radiation Oncology, Nuclear Medicine, Quality and Safety, Tele-Ultrasound, and Midwifery and Women's Point of Care Ultrasound, so that our teams collect fundamental data to the design and implementation of initiatives and programs. We also translated Radiology Readiness into five languages with more languages on the way, to widen cultural applications and facilitate partnership-development.

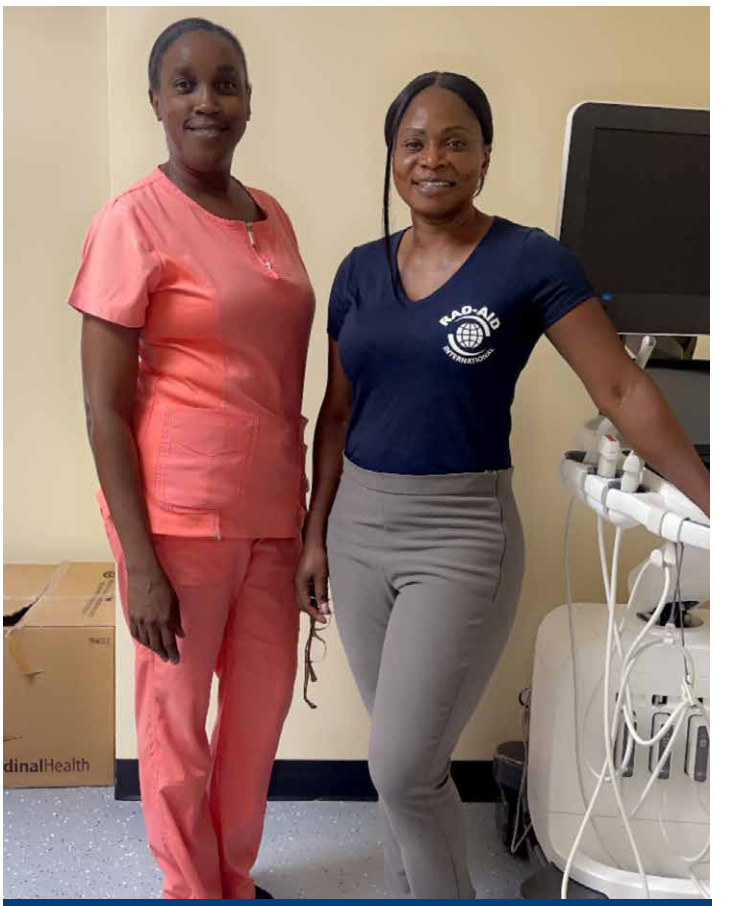
This approach to 'How RAD-AID Works' is flexible because it adapts to local cultural and clinical conditions so that each program is uniquely suited to the country and specific health goals, while scalable as a clear step-by-step process for improving health around the world.

RAD-AID CENTRAL AND SOUTH AMERICA, & CARIBBEAN

Grenada

RAD-AID is building radiology capacity in Grenada through projects that include general and obstetric/midwifery ultrasound, radiation safety, clinical radiology training, and nursing. In 2023-24, RAD-AID continued its partnership with Grenada's Ministry of Health to address growing radiology needs throughout the country. In 2024, RAD-AID implemented an ultrasound curriculum for midwives and skilled birth attendants for improving maternal health outcomes (photo below). Over the next years, RAD-AID is collaborating with Philips Foundation to provide hand-held ultrasound and tele-ultrasound (real-time sonographic image-sharing and communications) for nurse midwives and skilled birth attendants to advance maternal-infant health.

RAD-AID Grenada, POCUS Obstetrical Ultrasound Education, May 2023



RAD-AID Grenada, Ultrasound Equipment Implementation, September 2024

Guatemala

RAD-AID Guatemala has partnerships with Instituto de Cancerología (INCAN) and Hospital Roosevelt in Guatemala City. RAD-AID supports cancer imaging and PACS at INCAN. RAD-AID has plans underway to provide educational support across many modalities for the Guatemalan radiology residents at Hospital Roosevelt.

RAD-AID Guatemala Team at INCAN (led by Mallinckrodt RAD-AID Chapter), September 2016

RAD-AID Guyana, April 2024

Guyana

The RAD-AID Guyana Program began in 2013 in partnership with the World Health Organization's Pan American Health Organization (WHO/PAHO). In 2016, RAD-AID donated 2 CT scanners to Guyana at Bartica and New Amsterdam Hospitals, with support from Philips Foundation. Due to the lack of in-country pathways for training radiologists, RAD-AID started Guyana's first-ever radiology residency at Georgetown Public Hospital in 2017, which now graduates approximately 3-5 radiologists per year. In 2022, RAD-AID began working with its Canadian chapter organizations to sponsor fellowship training for the Guyana residency graduates, such as in neuroradiology, IR, pediatric radiology, and breast imaging. Through an innovative PACS-based tele-education system (RAD-AID Friendship Cloud, details on page 30), RAD-AID provides remote clinical teaching and support for Guyana's technologists, residents, attendings, nurses and IT professionals. RAD-AID Informatics has implemented AI for breast imaging, ultrasound, report-dictation, and radiography in Guyana, and our team is working with the Guyana Ministry of Health to interconnect more hospitals in urban and rural Guyana for advanced inter-institutional PACS. RAD-AID Nursing supports patient navigation in women's health in Guyana, along with IV contrast training and patient safety for CT. In collaboration with Philips Foundation, RAD-AID implemented a tele-ultrasound program in Guyana which includes providing real-time virtual education support and clinical hands-on, on-site support to residents conducting ultrasound exams.

RAD-AID Guyana, Ultrasound-Guided Biopsy Training, Guyana, April 2024

Multidisciplinary Team of RAD-AID Outreach Volunteers with Partners, Guyana, December 2023

RAD-AID Haiti in Port-au-Prince, May 2017

Haiti

RAD-AID has worked in Haiti since the earthquake of 2010 to build radiology capabilities in Port-au-Prince, Gonaives, Caracol and other locations. For over a decade, RAD-AID has provided educational support for the radiology residency at University Hospital of Haiti. RAD-AID has opportunities for radiologists, technologists, physicists, nurses, IT professionals and public health specialists to support ongoing efforts. .

Jamaica

RAD-AID Jamaica launched operations in 2016 to support radiology development at Kingston Public Hospital, University of the West Indies and Cornwall Regional Hospital. The RAD-AID Jamaica team is working on clinical education for in-country radiology professionals, trainees, students and staff.

RAD-AID Jamaica, November 2018

Nicaragua

The RAD-AID Nicaragua program has brought vital radiology support and training to rural and urban regions of the country, including general ultrasound, women's health, and pediatrics. RAD-AID donated and implemented a Picture Archiving and Communication Systems (PACS) for digital imaging and storage at four Nicaraguan hospitals in Managua with support from IBM Watson Health Imaging, impacting care for 3 million people annually. RAD-AID has supported Nicaraguan radiologists and frontline health workers at Amos Health and Hope in the Nejapa community.

RAD-AID Nicaragua, Supporting Ultrasound in Collaboration with Amos Health and Hope for Nicaragua, 2018

RAD-AID's mission is to increase and improve radiology and medical imaging in low-resource settings and medically underserved regions of the world.

RAD-AID Peru Outreach Volunteers in Limatambo, June 2024

Peru

RAD-AID Peru launched in 2019 to link women's health resources in rural regions of Cusco near the Andes Mountains with tertiary care services in Lima through partnerships with CerviCusco and Instituto Nacional de Enfermedades Neoplasicas (INEN). RAD-AID provides educational training and imaging resources, such as mammography and ultrasound, with community-based outreach for strengthening referral networks across Peru between primary and specialty care. RAD-AID collaborated with Koios Medical for donating decision-support breast ultrasound artificial intelligence technology, to help CerviCusco's front-line health workers to detect, and refer breast cancer patients.

In 2024, RAD-AID sent a team of radiation oncology experts to a joint educational event hosted by INEN and C/CAN (City Cancer challenge). The volunteer educators provided lectures and educational sessions, while working on readiness assessments and goals.

RAD-AID Peru, Outreach Volunteer Providing Ultrasound Support at Health Camp in Limatambo (left) and in Cusco (right), June 2024

RAD-AID Radiation Oncology, Team of Multidisciplinary Radiation Oncology Professionals at joint INEN – C/Can Event, March 2024

RAD-AID NORTH AMERICA

USA

RAD-AID has rapidly expanded programs in the United States for medically underserved communities. As examples, RAD-AID is supporting mobile and community-based outreach programs in Alabama, Georgia, Washington DC, Seattle, California, NY, Chicago, Pennsylvania, Texas, Arizona, and Colorado. These efforts create, expand, and strengthen breast and cervical outreach, capacity-building, and patient-navigation in eleven regions across the US, with support from Hologic's Project Health Equity initiative, and achieved over 100,000 patient interventions from 2020-2024.

RAD-AID USA Women's Health Access Initiative at Work With Community Partners in Alabama During a Mobile Community Health Clinic, 2024

RAD-AID has collaborated in 2024 with Health Wagon and Smiddy Clinic in Appalachian rural regions of the US to deliver ultrasound and radiography services in free comprehensive health fairs, along with PACS interconnectivity for these rural community health centers.

In 2023-24, RAD-AID implemented a tele-ultrasound program at Bellin College in Wisconsin and at UC Davis in California. Hand-held ultrasound devices were donated to Bellin College in support of their Sonography and Physiotherapy programs. Both programs will utilize the equipment for educational purposes and to provide care to the local population during annual clinics. Hand-held ultrasound devices were donated to UC Davis to support women's health imaging.

RAD-AID USA Women's Health Access Initiative Outreach Event with Denver Health Women's Mobile Clinic, 2023

RAD-AID Appalachia Volunteers Supporting Radiography Services for Underserved Communities, July 2023

RAD-AID at the Annual CAMRT Conference in Gatineau, June 2023

Canada

RAD-AID has a longstanding partnership with the Canadian Hub for Applied and Social Research (CHASR) at the University of Saskatchewan, to develop geographic information systems (GIS) tools and interactive maps for measuring our global impact and track radiology healthcare disparities. RAD-AID has partnerships with Sonography Canada and the Canadian Association of Medical Radiation Technologists (CAMRT) to jointly increase medical outreach initiatives within and outside of Canada. In 2024, RAD-AID and the Canadian Association of Midwives (CAM) implemented a tele-ultrasound program to increase access to POCUS for midwives in rural locations and for midwives serving medically underserved populations. RAD-AID worked with Dalhousie University and McMaster University to provide 4 fellowships in 2023-24 for graduates of RAD-AID's radiology residency program in Guyana to strengthen Guyana's in-country specialized imaging in pediatrics, IR, and neuroradiology. RAD-AID worked with University of Ottawa faculty in 2024 to strengthen Radiology-Readiness Assessments in South America and Africa. In 2024, RAD-AID presented at the Canada Health Infoway to work with Canadian IT professionals on medical imaging outreach.

RAD-AID AFRICA

Botswana

RAD-AID launched the RAD-AID Botswana Program in 2020 with radiology education outreach at University of Botswana, Princess Marina Hospital, and Sir Ketumile Masire Teaching Hospital (SKMTH). In 2022, RAD-AID signed a collaboration agreement with Botswana's Ministry of Health to advance radiology education, residency, medical physics, PACS, and informatics through the formation of a joint strategic healthcare committee. In 2023-24, RAD-AID signed an agreement to work with the Botswana UPenn Partnership, a collaboration among the Government of Botswana, University of Pennsylvania, and University of Botswana for health care capacity building. RAD-AID donated medical imaging physics equipment (supported by Mirion) for quality control and assurance testing at SKMTH.

RAD-AID Botswana, Chest Radiography Interpretation, January 2022

Cabo Verde

The RAD-AID Cabo Verde program began in 2013. As a nation of 10 islands with 500,000 people off the coast of West Africa, there are significant gaps in communication and referral networks across the islands, along with little or no local infrastructure and personnel to take care of Cape Verdean patients. In 2023-24, RAD-AID teams conducted on-site assessments and teaching initiatives for breast imaging, informatics (PACS), ultrasound and radiography. In 2023, RAD-AID signed an agreement to collaborate with Cabo Verdean American Medical Society (CVAMS), and a 2024 MOU with Hospital Dr. Baptista de Sousa (HBS) in Mindelo, Sao Vicente. 2024 projects include radiologic technologist training programs to address urgent scarcity of personnel.

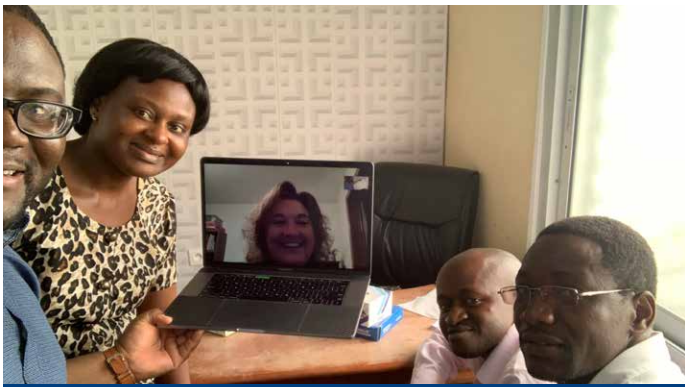
RAD-AID Cabo Verde, Ultrasound Biopsy Training, April 2024

RAD-AID Cabo Verde Outreach Team Supporting Breast Imaging, April 2024

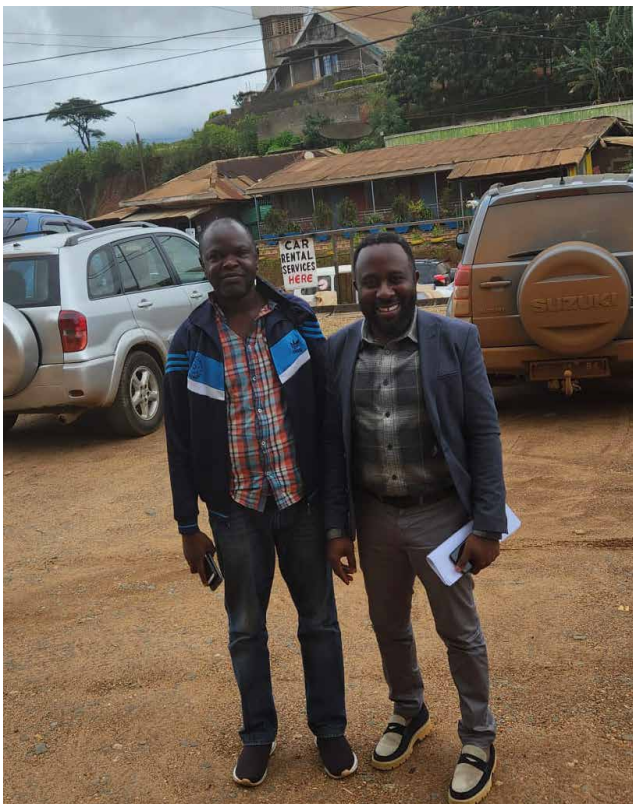
RAD-AID Cabo Verde, Ultrasound-Guided Breast Biopsy Training and Support, April 2024

Cameroon

In 2016, RAD-AID developed partnerships in Cameroon with a focus on strengthening technologist education in Yaoundé. In 2018, with support from Siemens Healthineers (Belgium Division), RAD-AID extended its outreach to the Douala region and translated the Radiology Readiness Assessment into French. In 2023-2024, RAD-AID Cameroon worked in-country at strengthening partnerships with local hospitals following the global COVID-19 pandemic. In 2024, RAD-AID hosted an educational webinar to support University of Alabama's initiatives in Cameroon.



RAD-AID Cameroon, Hybrid Ultrasound Education with On-Site Volunteer Educator and Remote Volunteer Educator, Cameroon, November 2019



RAD-AID Cameroon, Volunteer with Partner, Cameroon, July 2023

Ethiopia

RAD-AID Ethiopia launched in 2015 for supporting MRI, CT, ultrasound, radiography, and mammography capabilities at St Paul's Hospital and Black Lion Hospital in Addis Ababa. RAD-AID implemented PACS at Black Lion Hospital in early 2018, supported by MedWeb, along with new cloud-based archiving, server upgrades, and image-retrieval architectures being implemented in 2024. In 2023-24, RAD-AID supported advanced POCUS and diagnostic ultrasound education at Black Lion Hospital, in collaboration with the RAD-AID CHOP Chapter.

RAD-AID Ethiopia and RAD-AID CHOP Chapter, Pediatric Imaging Educational Seminar, March 2024

RAD-AID Ghana Working with Ghana Association of Radiologists to Launch Ghana's First Breast Imaging Fellowship Program, May 2023

RAD-AID Ghana, Ultrasound Training Session, May 2024

RAD-AID Ghana, Radiology Outreach Team with Partners, December 2023

Ghana

The RAD-AID Ghana program has been running strong since 2012 and now includes partnerships with Korle Bu Teaching Hospital (KBTH), 37 Military Teaching Hospital, and Komfo Anokye Teaching Hospital (KATH). KBTH has been a robust hub for RAD-AID's PACS donation and implementation program, beginning with our first PACS installation at KBTH in 2103, followed by a Radiology Information System (RIS) installation in 2018, and PACS upgrade plus EMR integration in 2020-2021. In 2024-2025, RAD-AID is upgrading PACS at KBTH and implementing the first-ever PACS at 37 Military with support from Medweb. This informatics collaboration in Ghana is complementary to comprehensive radiology education support, including breast imaging, ultrasound, CT, MRI, nuclear medicine and interventional radiology.

In 2023-24, RAD-AID continued its partnership with the Ghana Association of Radiologists for Ghana's first breast radiology fellowship, to support in-country capacity for breast screening and diagnostics.

Ghana is also a site for the RAD-AID Tele-Ultrasound Program (supported by Philips Foundation) for enabling hand-held ultrasound, image-sharing and communications in teaching and consultations across institutions. Multimodality Technologist education in Ghana from RAD-AID was also supported by Siemens Healthineers (MESA division) for mammography, CT, MRI and nuclear medicine. RAD-AID is implementing Artificial Intelligence initiatives in Ghana to bridge clinical radiology education and informatics platforms in collaboration with Google.

Kenya

RAD-AID Kenya started in 2013 to support diagnostic imaging, such as breast imaging capacity. In 2020, RAD-AID helped start the first interventional radiology fellowship at the University of Nairobi, which now graduates 2 IR fellows per year. RAD-AID Interventional Radiology collaborates with the Kenya Association of Radiologists to run training programs and an annual IR symposium to feature educational initiatives, clinical topics and research. RAD-AID partnered with Mentice to provide an IR training simulator to strengthen IR residency education and training. The University of Nairobi is a partner site in the RAD-AID Tele-Ultrasound outreach initiative covering diagnostic, maternal-infant health, midwifery, and interventional and is a RAD-AID Informatics partner with PACS donation/installation being implemented in 2024.

The RAD-AID Radiation Oncology program is advancing safety, dosimetry, and oncologic treatment planning in Kenya. In 2023-24, in partnership with ASRT, AAMD, and Varian (a Siemens Healthineers Company), RAD-AID delivered structured didactic and clinical hands-on education to support the radiation therapy workforce in Kenya.

The RAD-AID Nuclear Medicine program is advancing nuclear medicine capabilities in Kenya via partnerships with Aga Khan University Hospital and Kenyatta University Teaching, Research and Referral Hospital (KUTRRH) in Nairobi. RAD-AID Nuclear Medicine's collaborations in Kenya include technologist training for imaging protocols, image-quality and patient-safety, along with physician training for image interpretation, radiotracer supply-chains, radiation safety, and quality control measures. This program is supported by SNMMI via the RAD-AID Hyman Ghesani Scholarship to instruct nuclear medicine residents, radiologists and physicians, along with grants from Siemens Healthineers (MESA division), ASRT, CAMRT, and SoR for technologist training.

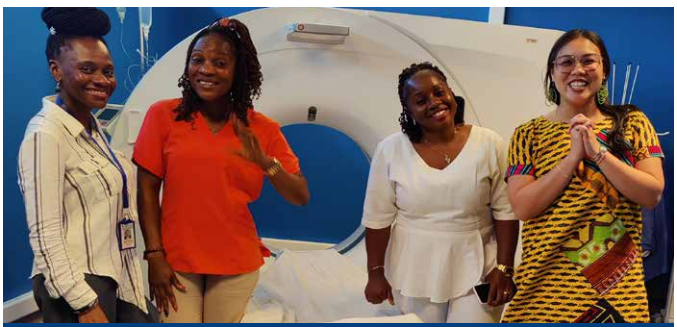
RAD-AID Kenya, Interventional Radiology Training with High-Fidelity Simulator (supported by Mentice) at the University of Nairobi with the RAD-AID UCLA Chapter, April 2024

RAD-AID Midwifery and Women's Health POCUS, Tele-Ultrasound Training in Obstetrics, March 2024

RAD-AID Nuclear Medicine, Nuclear Medicine Training for Technologists, Residents, Radiologists, and Nuclear Medicine Physicians at Kenyatta University Teaching, Research, and Referral Hospital, January 2024

Liberia

The RAD-AID Liberia program supports radiology development and education at JFK Memorial Hospital, Redemption Hospital, ELWA, Phoebe, and JFD-Tappita Hospital. Through a 2017-2019 partnership with Mount Sinai Medical Center (NY) and the World Bank, RAD-AID sent consecutive rotating teams to Monrovia to provide education to physicians and technologists, including radiography, CT, interventional radiology procedures, ultrasound and a diagnostic radiology rotation for family medicine residents. In 2023-24, RAD-AID Liberia provided regular virtual and on-site teaching and case-discussions with family medicine residents, as well as hands-on training to technologists in CT and radiography, and obstetric ultrasound to nurses and midwives in Liberia.



RAD-AID Liberia, CT Education, January 2024

RAD-AID Liberia, CT and Ultrasound Volunteer Educators with Partners in Liberia, January 2024

RAD-AID Malawi, Teaching Ultrasound at KCH on New Hand-Held Device in Lilongwe, February 2024

RAD-AID Malawi, MRI Training at LION in Lilongwe, February 2024

Malawi

The RAD-AID Malawi program was launched by the RAD-AID University of Carolina (UNC) Chapter in 2012. Our 12 years of commitment and experience in Malawi is making important strides for increasing access to medical imaging. RAD-AID is partnered with Kamuzu Central Hospital (KCH) and Lilongwe Institute of Orthopedics and Neurosurgery (LION) in Lilongwe, and Queen Elizabeth Central Hospital (QECH) in Blantyre. In 2023-24, RAD-AID continued to implement a virtual and on-site ultrasound training curriculum at KCH, supported radiology residency training at QECH, and partnered with LION for technologist training. In 2024, RAD-AID has been planning and designing IT infrastructure for donating PACS at KCH and QECH. With support from Siemens Healthineers (MESA division), RAD-AID Malawi is supporting MRI technologist training at LION, which hosts the country's first MRI system. Malawi is also a site for the RAD-AID Tele-Ultrasound Program (supported by Philips Foundation) for enabling hand-held ultrasound, image-sharing and communications in teaching and consultations across institutions. Finally, our program is providing scholarships for physicians and technologists to train in African educational centers (with the provision of returning to Malawi to give more training to local professionals/students).

Morocco

The RAD-AID Morocco program began in 2016, with outreach projects including mobile radiology in collaboration with Moroccan Association for the Protection of Health, as well as PACS, medical physics, safety and image quality, and clinical radiology education at Ibn Sina Hospital in Rabat. RAD-AID's strategy in Morocco combines education at tertiary academic centers and rural community outreach. In 2023-24, RAD-AID Morocco continued to deliver remote didactic and case-based sessions in support of Moroccan radiology resident education.

RAD-AID Morocco, Radiology Residency Supplemental Education Award Ceremony, May 2023

Nigeria

RAD-AID's program in Nigeria began in 2016 and continues to achieve wider education of radiologists, technologists, sonographers, therapists, nurses, IT specialists and medical physicists. Our longest standing partner in Nigeria is University College Hospital (UCH) in Ibadan, where RAD-AID supports a diagnostic radiology residency and a new interventional radiology fellowship In 2019, RAD-AID donated and implemented PACS with support from Intelerad and Google Cloud,, and then we integrated AI into the robust architecture (with support from Qure AI) for chest radiography.. In 2023-2024, RAD-AID established a breast imaging partnership at Lagos State University Teaching Hospital (LASUTH) and at Obafemi Awolowo University Hospital (OAU) in Ile-Ife. To foster stronger cancer-control initiatives in Nigeria and the wider African continent, RAD-AID partnered with the African Research Group for Oncology (ARGO), which includes a network of over 30 Nigerian and US-based cancer-care institutions. RAD-AID's Radiation Oncology Program led on-site teaching workshops at Lagos University Teaching Hospital (LUTH) Cancer Treatment Centre in Lagos and at the University of Nigeria Teaching Hospital (UNTH) in Enugu for radiation therapists, nurses and oncologists in 2023, in collaboration with ASRT and Varian (a Siemens Healthineers Company).

RAD-AID Nigeria, Interventional Radiology Training, Ibadan, January 2024

RAD-AID Nigeria, Breast Imaging Case Review, March 2024

Rwanda

RAD-AID launched a program in Rwanda in 2020 to support radiology development with education, pediatrics, breast imaging, and informatics support. In 2024, RAD-AID is developing a collaboration with Partners In Health/Inshuti Mu Buzima (PIH/IMB) for helping Butaro District Hospital in Rwanda with PACS and radiology.

South Africa

RAD-AID's program in South Africa launched in 2016 in conducting Radiology-Readiness Assessments at multiple health institutions in Western Cape, including urban and rural settings. In 2017-2018, RAD-AID initiated Geographic Information Systems (GIS) research for advanced mapping of South African health care disparities in parallel with infrastructure features (roads, airports, railroads, etc.,) in the Limpopo region. In 2021, RAD-AID initiated ultrasound donations to multiple institutions in South Africa for breast imaging (supported by Hologic). Scholarship activities and collaborations continue to thrive between RAD-AID and Stellenbosch University in Cape Town, as an educational hub for sub-Saharan Africa so that radiology professionals in other countries on the continent can access vital training resources.

RAD-AID has numerous programs throughout the world. We welcome you to participate!

Tanzania

RAD-AID Tanzania began in 2015 and currently provides educational support to radiologists, sonographers, nurses, and technologists in Arusha (NSK Hospitals), Moshi (Kilimanjaro Christian Medical Centre - KCMC), Dar es Salaam (Aga Khan Hospital and Ocean Road Cancer Institute- ORCI), and in Stonetown, Zanzibar (Mnazi Mmoja Referral Hospital-MMH). In 2023-24, RAD-AID delivered virtual and onsite educational opportunities to radiologists, radiology residents, and technologists (supported by Siemens MESA division, ASRT, CAMRT, and SoR) at KCMC, ORCI, and MMH. RAD-AID implemented an ultrasound training certificate program at KCMC, leveraging the donation of equipment with tele-ultrasound capabilities (supported by Philips Foundation) for providing real-time virtual education support and on-site clinical hands-on support to learners in the certificate program. A first cohort of sonographers graduated from the program in March, 2024. Along with KCMC, MMH is also part of the RAD-AID Tele-Ultrasound Program (supported by Philips Foundation) for enabling hand-held ultrasound and image-sharing.

Uganda

In 2022, RAD-AID (with support from MissioInvest) provided radiology infrastructure support, expertise, and education at Kitovu St-Joseph's Hospital. A RAD-AID team consisting of a radiologist, medical imaging physicist, and technologist traveled on-site to assess the hospital's readiness to implement CT, radiography, and ultrasound equipment. Members of the University of Virginia RAD-AID chapter, active at other sites in Uganda, are contributing to the development of Uganda as a RAD-AID site. In 2024-2025, RAD-AID supports the University of Utah RAD-AID Chapter for further educational assistance in Uganda and fellowship-development initiatives for subspecialty training.

RAD-AID Uganda, Case Discussion and Teaching Session at St. Joseph's Kitovu Hospital in Masaka, Uganda, May 2022.

KCMC Residents and Radiologists Receiving Applications Training on Newly Donated Ultrasound Equipment From RAD-AID Tele-Ultrasound Program (Supported by Philips Foundation), January 2024

RAD-AID Tanzania, MRI Technologist Volunteer Educator at KCMC, October 2023

RAD-AID Uganda, Radiography Positioning Techniques, Uganda, May 2022

RAD-AID MIDDLE EAST

Jordan

RAD-AID has been working in Jordan since 2018 assisting Syrian refugees. The impact of COVID, war and distressed economic conditions have been highly devastating to the health and well-being of millions of increasing refugees. RAD-AID is partnered with the Syrian American Medical Society (SAMS) to help the Za'atari refugee camp, with a clinical focus on ultrasound image interpretation. In 2023-24, RAD-AID sent its first team with SAMS since the pandemic to restore radiology educational collaborations and service delivery to patients in need. While on-site, the team equally provided educational sessions for the nearby University, to medical students and family physician residents.

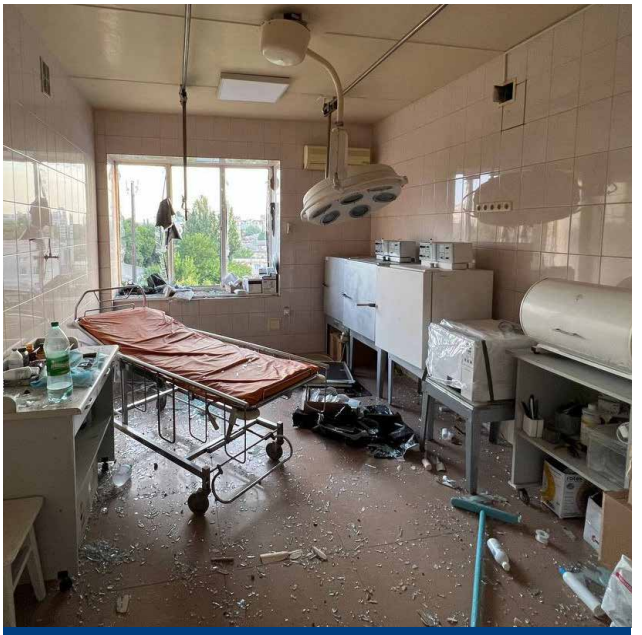
RAD-AID Middle East, Ultrasound Volunteer Providing Ultrasound Services at Za'atari Refugee Camp, Jordan, January 2024

RAD-AID Middle East, Volunteer Educators with Partners from SAMS at the Za'atari Refugee Camp, Jordan, January 2024

RAD-AID EUROPE

Approximately 10% of RAD-AID's volunteers and supporters are from European health institutions. As of 2021, RAD-AID has outreach programs in Albania and Ukraine (photos below), in addition to institutional partners in Spain (picture below), United Kingdom (such as Society of Radiographers), Belgium, France and Germany. RAD-AID has two representatives in Geneva, serving as RAD-AID Liaisons to Intergovernmental Agencies. They support the World Health Organization headquarters in our WHO official relations capacity for assisting global health policy initiatives. RAD-AID signed a Practical Arrangements agreement with International Atomic Energy Agency (based in Vienna, Austria) in 2024 for assisting IAEA's radiology and radiation oncology global programs.

RAD-AID Ukraine, Hospital Impacted by the War, 2022



RAD-AID Ukraine, Hospital Impacted by the War, 2022

Ukraine

RAD-AID has a program in Ukraine since 2018 and initiated new partnershipa with Kyiv City Clinical Hospital #6 (KCCH6) in 2022 and Kyiv Clinical Hospital #18 in 2024 to help respond to the war-devastation. In collaboration with local hospital leadership, a Radiology-Readiness and PACS-Readiness Assessments were conducted for this hospital in 2022. The hospital gave a virtual presentation at the 2022 and at the 2023 RAD-AID Conferences to give unique insights into the constraints and challenges to radiology imposed by the wartime conditions. With support from vRad's First Read Initiative, RAD-AID gave financial and operational support for the repair of a CT scanner at KCCH6, which successfully restored clinical imaging services in summer of 2023. In 2024, RAD-AID signed an agreement to support PACS and IT at KCCH18, with support from Medweb, with plans to implement PACS, and possibly AI, for the hospital in 2025.

RAD-AID ASIA

RAD-AID Bangladesh, Outreach Volunteer with Partners, January 2020

Bangladesh

RAD-AID Bangladesh launched in 2019 in partnership with M Abdur Rahim Medical College Hospital in Dinajpur. Through the COVID-19 pandemic, RAD-AID jointly led educational webinars with the Bangladesh Society of Radiology and Imaging (BSRI) covering a broad range of clinical imaging topics. Current activities are realigning stakeholders and analyzing Radiology-Readiness Assessment data for planning future initiatives.

Bhutan

The RAD-AID Bhutan program began in 2014 in collaboration with faculty from George Washington University Medical Center and the World Health Organization. Bhutan has only one CT scanner serving a population of 750,000 scattered by large distances of mountainous terrain. RAD-AID sponsored Radiology-Readiness Assessments in Bhutan in 2015 and 2016, showing large gaps in imaging technology and substantial needs for CT, ultrasound and radiography education.

China

RAD-AID's program in China sustained radiology and radiation oncology capacity-building efforts in Yinchuan from 2010-2018. Our program successfully achieved its collaborative milestones, and has now transitioned to the Chinese partner institutions for self-management and sustainability. We thank our partner hospitals in Yinchuan for collaborating with RAD-AID for over eight years to advance radiology and radiation oncology for the medically underserved in China.

India

RAD-AID has worked in India since 2010 with the establishment of Asha Jyoti ("Ray of Hope" in local Punjabi language), a mobile women's health clinic delivering screening, care and education for osteoporosis, breast, and cervical cancer in the Chandigarh region of Northern India. The program achieved novel impact for patient-navigation and referral, and delivered care for over 20,000 women. In 2023-24, RAD-AID partnered with NIMS University Rajasthan in Jaipur to launch Asha Jyoti 2, a new mobile women's imaging and health clinic to provide screening, care, and education for breast and cervical cancer as well as tuberculosis screening/ treatment. Asha Jyoti 2 aims to launch operations in 2025, with designs and operational plans underway over the next twelve months.

RAD-AID India Partner, Presentation of Asha Jyoti 2 to Healthcare Leadership, December 2023

Indonesia

Indonesia has approximately 1,500 radiologists for a population of 270 million people, across a country of over 17,500 islands, of which 6000 are inhabited. The RAD-AID Indonesia program supports specialized radiology/fellowship traivning in Jakarta at Rumah Sakit Cipto Mangunkusumo (RSCM) and its affiliated Faculty of Medicine Universitas Indonesia (FKUI) and Rumah Sakit Hasan Sadikin Bandung and its affiliated Faculty of Medicine Universitas Padjajaran in Bandung. RAD-AID instituted breast imaging, interventional radiology, neuroradiology, abdominal, and pediatric imaging education. Through RAD-AID's Association of Program Directors in Radiology (APDR), our outreach efforts included pro bono distribution of RadExam® for helping residents' knowledge assessment and establishing educational goals. In partnership with the American College of Radiology (ACR), RAD-AID supported breast imaging education through distribution of the ACR's BIRADS® Atlas in 2021-2022.

In 2023-24, the RAD-AID UCLA Chapter sent an interventional radiology team to collaborate with partners at RSCM, while teams of technologists and sonographers traveled to both sites in Jakarta and Bandung to provide radiography, CT, MRI, and ultrasound support.

With support from Siemens Healthineers (ASEAN division), RAD-AID Nuclear Medicine team (including a physician, technologists, and students) traveled to RSCM in Jakarta for nuclear medicine capacity-building. Indonesia is also a site for the RAD-AID Tele-Ultrasound Program (supported by Philips Foundation) for enabling hand-held ultrasound, image-sharing and communications in teaching and consultations across institutions.

RAD-AID Indonesia, Ultrasound Training, May 2024

RAD-AID Indonesia, Outreach Volunteers with Partners, May 2024

Kazakhstan

RAD-AID launched a program in Kazakhstan in 2016 at Kazakh Institute of Oncology & Radiology (KazIOR) in Almaty, Kazakhstan. RAD-AID's efforts in Kazakhstan are focusing on transitioning from post-Soviet training models for radiology residents, and increasing educational resources for CT, MRI, and x-ray radiography. Ongoing efforts include educational support for PET/CT imaging in Kazakhstan to advance resources for oncologic diagnostics and treatment-management.

Laos

The RAD-AID Laos program began in 2015 when Lao Friends Hospital for Children (LFHC) had just opened and the hospital's leadership requested RAD-AID's assistance to develop medical imaging for the new pediatric facility. In May of that year, RAD-AID sent rotating ultrasound and radiographer teams to help start LFHC's first-ever operational radiology department. In 2016, RAD-AID donated and implemented PACS at LFHC, with support from Intelerad. For these contributions, RAD-AID won the Healing Asia Award from LFHC's NY-based foundation, Friends Without a Border in April 2017. In 2018, RAD-AID expanded PACS at LFHC, and initiated new CT support for LFHC and the adjacent government hospital, Luang Provincial Hospital (LPPH). In 2023-2024 RAD-AID donated two new digital radiology units to LFHC, delivered CT-support for LPPH, and contributed ultrasound-equipment donations for on-site and remote tele-ultrasound education (supported by Philips Foundation) via RAD-AID's Tele-ultrasound program.

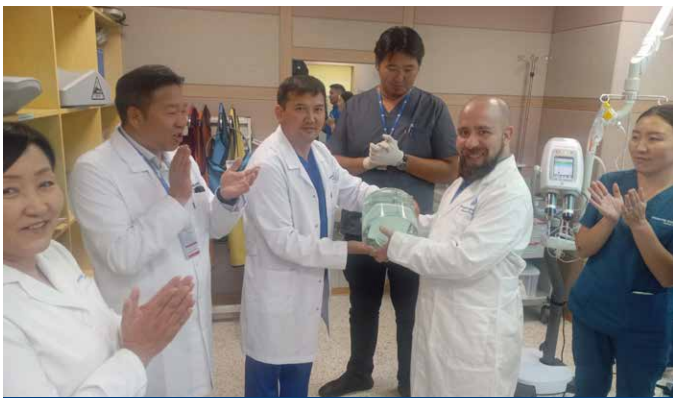
RAD-AID Laos, Ultrasound Training at LFHC, January 2024

RAD-AID Laos, Volunteer Educators with Partners, April 2024

Mongolia

In 2020, RAD-AID Mongolia was launched in collaboration with Intermed Hospital in Ulaanbaatar, Mongolia. In 2023-24, RAD-AID Mongolia has supported virtual and on-site education to radiologists, radiology residents, and technologists. RAD-AID deployed a medical physicist to Intermed in 2023 for radiology phantom donation and quality-control procedure teaching.

RAD-AID Mongolia Sent a Team of Multidisciplinary Professionals to Support Partner Facilities, Ulaanbaatar, August 2024



RAD-AID Medical Physics Program donation of MRI phantom to Intermed Hospital, Mongolia, July/Aug 2023

Nepal

After several disaster-response initiatives from our outreach teams in 2015-2016, RAD-AID donated and implemented PACS at three institutions in 2016 with concurrent radiology education. RAD-AID launched a partnership with Hospital and Rehabilitation Centre for Disabled Children (HRDC) in Nepal in 2018 to advance Nepal's pediatric radiology, ultrasound and musculoskeletal imaging, in addition to presenting the RAD-AID Nepal Program at the United Nations Civil Society Conference in 2019. In 2022, RAD-AID donated and implemented PACS (supported by Intelerad),) at Tribhuvan University Teaching Hospital (TUTH), along with AI-enabled chest imaging (supported by Qure.AI) in 2023. We continue multidisciplinary educational outreach (project-based work and contributions from the RAD-AID University of Colorado Chapter), in pediatric imaging, interventional radiology, ultrasound, radiologic nursing, and breast imaging In 2023-24, RAD-AID launched tele-ultrasound capacity-building for handheld and cart-based ultrasound devices in point of care and diagnostic ultrasound services (supported by Philips Foundation).

RAD-AID Nepal, Radiologists and Residents from RAD-AID University of Colorado Chapter at HRDC, Nepal, October 2023

RAD-AID Nepal, Mammography Technologist Education and Training, October 2023

Vietnam

RAD-AID Vietnam launched in 2017 with support from the RAD-AID Mayo-Jacksonville Chapter. Our partner hospitals in Vietnam include Da Nang General Hospital and Hue University Hospital, in support of interventional radiology projects. In 2023-2024, RAD-AID Vietnam conducted Radiology Readiness and Breast Imaging Readiness Assessments in collaboration with University Medical Center (UMC) in Ho Chi Minh City, with plans to support breast imaging at UMC.In 2024, RAD-AID visited Cho Ray Hospital in Ho Chi Minh City to assess Nuclear Medicine capacity-building strategies, with the hopes of launching a partnership in support of nuclear medicine for oncology care in Vietnam's capital.

RAD-AID Vietnam, Nuclear Medicine Department Assessment, May 2024

RAD-AID Vietnam, Breast Imaging Lecture Series, May 2024

RAD-AID Vietnam, Breast Imaging Lecture Series – Participant Engagement, May 2024

Pakistan

The RAD-AID Pakistan program launched in 2021 by establishing a partnership with Indus Hospital in Karachi for multimodality education of technologists, radiology residents, and radiologists. In 2023, a radiologist/technologist RAD-AID team (photo below) traveled to Karachi to help residency training curriculum development, subspecialty breast imaging, PACS/informatics, and to cultivate workflow pathways for early image-based breast cancer detection. Plans for 2024-25 are prioritizing PACS planning (with support from Medweb) and radiology education at Indus Hospital, along with new Radiology-Readiness assessments being performed at potential new partners.

RAD-AID Pakistan, Mammography Training at Indus Hospital in Karachi, June 2023

RAD-AID SOUTH PACIFIC

RAD-AID launched the South Pacific program in 2020 to address health disparities and lack of radiology resources among islands, communities, and nations in this region of the world. The RAD-AID Radiology Readiness Assessment was conducted amongst facilities in Rarotonga (Cook Islands), Vanuatu, and Tonga. In 2023-24, outreach trips to Rarotonga, Vanuatu, and Tonga provided ultrasound support. Additional projects will include CT and mammography training in Tonga and Vanuatu.

RAD-AID South Pacific Volunteer Teaching POCUS in Vanuatu, May 2023

RAD-AID South Pacific, Volunteer Ultrasound Educators with Partners, February 2024

EDUCATION, RESEARCH, ASSESSMENTS, AND PUBLICATIONS

RAD-AID Tanzania, MRI Education in Joint CT/MRI Seminar at MNH, March 2024

At the cornerstone of global health outreach is knowledge. We must learn as much as we can about global health before we can enact solutions. RAD-AID has several key interlocking, synergistic and complementary programs and resources in place to continuously produce new knowledge and information, and provide forms of education that form a well-rounded approach:

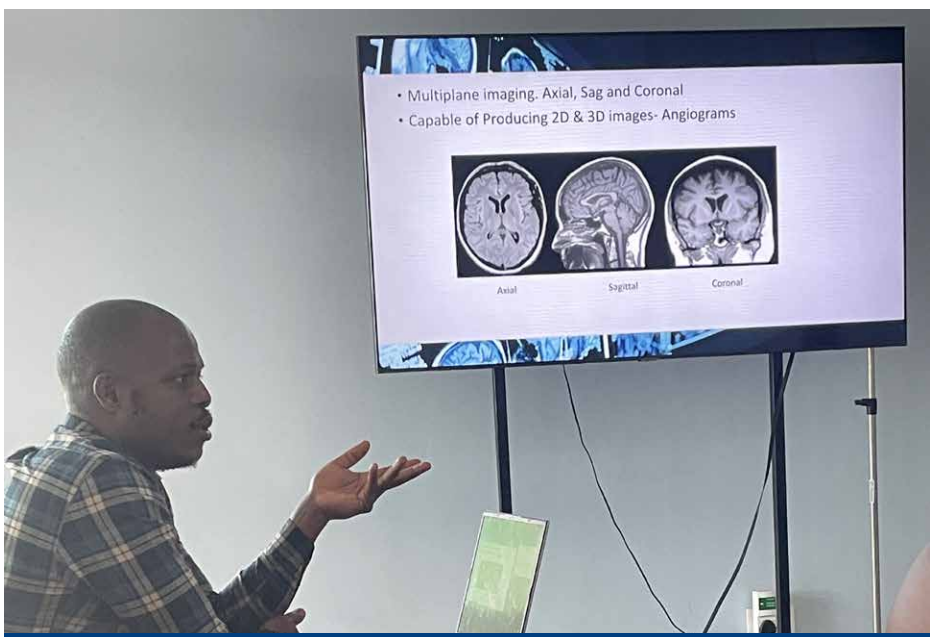
- **On Site** in-country RAD-AID teams performing hands-on training to local personnel.
- **Online learning via the RAD-AID Learning Center** and learning management system to provide pro bono internet based didactic educational content.
- **RAD-AID Country Reports** are country-based reports and documents about the radiology and radiation oncology resources of LMICs. Volunteer authors and contributors help make these vital online publications in RAD-AID Country Report Library possible.
- **RAD-AID textbook, "Radiology in Global Health,"** second edition, which was published in 2018, outlines RAD-AID methods for radiology capacity-building for helping medical imaging in low-resource contexts, while addressing public health, epidemiology, clinical and infrastructural areas of need when addressing healthcare disparities. A 3rd edition now in development with the publisher with an expected release in 2 years.
- **Certificate of Proficiency in Global Health Radiology and Radiation Oncology** is a successful program launched by RAD-AID in 2015, providing semester-based courses that include readings, discussions and project mentorship.
- **Medical Student Global Health Radiology Education** program at RAD-AID offers a self-paced online course so that medical students may receive comprehensive radiology global health training to earn the RAD-AID Global Health Radiology Medical Student Training Certificate, and then complete fieldwork in our teams to become a RAD-AID Global Health Radiology Medical Student Scholar.
- **Certificate in Global Healthcare Leadership** launched in 2023 to provide opportunities for radiology professionals to develop their leadership skills and to receive peer-to-peer collaboration with personalized dialog on organizational leadership topics for career development applicable to global health and low-resource contexts.

Geographic Information Systems (GIS) : RAD-AID has a team devoted to using Geographic Information Systems (GIS) methods for tracking and assessing regional data layers superimposed on public health databases and maps so that RAD-AID targets locations in need and measures our population-based impact. RAD-AID has a collaboration with the Canadian Hub for Social and Applied Research (CHASR) for technical and clinical expertise for providing best-practice GIS research in our program-planning.

RAD-AID Chapters Network now consisting of more than 95 Canadian and US-based academic radiology institutions, receives project support, funding, and educational webinars from RAD-AID in support of radiology residents, faculty, students, and technologists to boost global health projects in underserved and international settings.

Artificial Intelligence Education: RAD-AID developed the Teach-Try-Use model for helping sites to learn and deploy AI safely: (1) *Teach* sites how to supervise and validate AI outputs, (2) *Try* different architectures and infrastructure for managing AI workflows, and (3) *Use* AI in a gradual roll out to optimize patient safety and data-privacy.

RAD-AID Ghana, RAD-AID Volunteer and Educator with Conference Attendees at the International Conference for MRI (ISMRM – Africa Chapter), Ghana, September 2023



RAD-AID Malawi, MRI Technologist Training and Education, LION, June 2024

ANNUAL RAD-AID CONFERENCE ON INTERNATIONAL RADIOLOGY AND GLOBAL HEALTH: 16 YEARS

RAD-AID Conference on International Radiology and Health Equity, at George Washington University in the Jack Morton Auditorium, Washington, D.C., November 2023

Although there are numerous conferences on medical imaging and radiology for radiology professionals held throughout the year, there was never one dedicated forum for global health, outreach and international radiology development. To answer this need, the RAD-AID Conference was started in 2009 and has been held every year since. Our conference presents projects, strategies, methods and opportunities for international charitable service in medically underserved communities around the world. In 2024, RAD-AID will host the 16th annual RAD-AID Conference as a hybrid event (both virtual and in-person) at George Washington University in Washington DC. The Conference is routinely scheduled for the first Saturday in November and coincides with the International Day of Radiology (IdoR) in early November.

RAD-AID Conference, Poster Presentations from Global Health Radiology Community, November 2023

RAD-AID Conference, Audience Participation for Discussing Global Health Radiology, November 2023

RAD-AID's management team consists of three key components to bring the best talent, experience and expertise to the development of RAD-AID programs: Operational, Regional and In-Country Leaders.

OPERATIONAL PROGRAMS

To support RAD-AID's regional teams (organized by geographic location), RAD-AID has operational teams focusing on key areas of expertise for capacity-building. For a full listing of our operational teams, please see our web site. We feature some of our operational teams here.

Nursing

RAD-AID Nursing leads key initiatives for radiology capacity-building, such as: IV contrast administration training, primary care referral network development, patient-navigation, public health education, interventional radiology nursing, patient safety, Basic Life Support (BLS) instruction, oncologic nursing, and breast health community-based outreach. RAD-AID selects and mentors nursing teams to join and support other regional and operational teams at RAD-AID to implement multidisciplinary initiatives.

RAD-AID Nursing, RAD-AID Nurse Volunteer teaching radiology procedures, Kenya, 2022

RAD-AID Nursing, Nurse Training and Patient Navigation for Breast Health, Guyana, 2022

RAD-AID Interventional Radiology Using a High-Fidelity Simulator to Teach Radiology Residents (supported by Mentice), Guyana 2023

Interventional Radiology

RAD-AID IR has carried out global outreach projects in Kenya, Nigeria, Guyana, Vietnam, and Indonesia. Our IR program helped form the first IR fellowship in Kenya at the University of Nairobi, which now graduates 2 IR fellows per year. In Guyana, RAD-AID gave a scholarship and mentorship to the first Guyanese fellowship-trained IR attending and is providing other scholarships for Guyana's residents to receive specialized IR training. RAD-AID IR collaborates with Mentice to provide simulator-based training, in which RAD-AID has placed simulators in Guyana and Kenya so far, with one unit that rotates with our travel teams. We are partnered with the Society of Interventional Radiology (SIR) so that SIR members (trainees and fellows) can receive funding support to join RAD-AID teams in our outreach projects.

Ultrasound

RAD-AID Ultrasound supports training of ultrasound-users (physicians, sonographers, and point-of-care health providers) on cart-based, laptops, and hand-held ultrasound units. Our ultrasound educational outreach includes point-of-care, diagnostic, interventional, maternal-infant care, and image-guided biopsy sonographic imaging. Some examples include support for midwifery ultrasound to triage obstetric emergencies, residency curricula in Guyana, a certificate program in Tanzania, and breast imaging for risk-stratifying women for triage and referral to biopsy in rural and low-resource regions. RAD-AID Ultrasound has a 5+yearlongitudinal program in place to implement tele-ultrasound (with support from Philips Foundation) which enables real-time image-sharing during an ultrasound exam, with interactive screen-tools for teaching, knowledge-assessments, and case-based consultation. RAD-AID is collaborating with Sonography Canada, Inteleos, Australasian Society for Ultrasound in Medicine (ASUM) and the World Federation for Ultrasound in Medicine and Biology (WFUMB).

RAD-AID Malawi, Ultrasound-guided Biopsy Training, 2023

RAD-AID Midwifery and Women's Health POCUS, Obstetric Ultrasound Training in Grenada, 2023

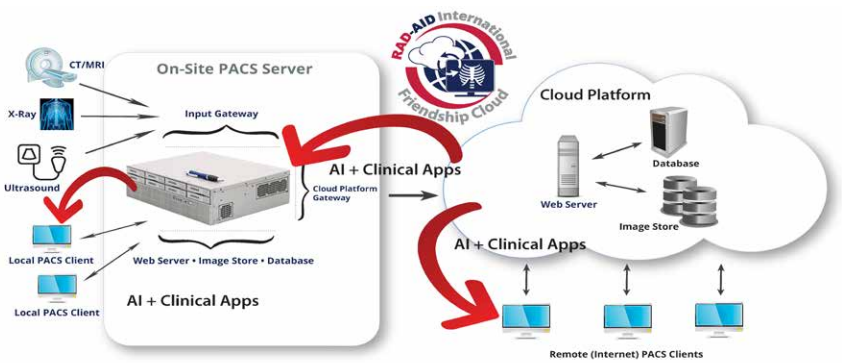
Informatics

RAD-AID Informatics helps low-resource hospitals to assess, adopt, implement and manage the information technologies necessary for effective medical imaging. Our team has donated and supported PACS in LMICs and low-resource regions of the US since 2013, with support from Medweb, Intelerad, and Merge. Our PACS architecture uses a flexible vendor-neutral architecture called the RAD-AID Friendship Cloud (diagram) enabling PACS and AI software donations into hybrid on-site and cloud backup systems. For some countries that do not permit use of international cloud, our platform can be flexibly adapted to on-premise storage only or local in-country hosted cloud. RAD-AID hosts workshops and mentorship for in-country PACS administrators. RAD-AID Informatics also teaches and supports IT network professionals to help with data-flows, switches, routers, and other connectivity technologies necessary for PACS, EMR and other health software. RAD-AID is partnered with Society for Imaging Informatics in Medicine (SIIM) since 2017 in creating the SIIM RAD-AID Global Ambassadors Program enabling SIIM members to volunteer in RAD-AID Informatics projects worldwide.

RAD-AID Informatics also facilitates the donation and use of AI, with current collaborations that include Google Health AI, Qure.AI, Densitas, Koios Medical, iCAD, and MD.ai as a few examples. RAD-AID developed the Teach-Try-Use model for teaching methods for hospitals to assess/manage AI, while providing essential infrastructure for trying AI workflows, and using AI in gradual, safe and effective roll outs.

RAD-AID Informatics also donates and supports hardware installations such as workstations, servers, and monitors for radiology reading-rooms. We manage a global donation program with Barco and other donors for delivering high-resolution monitors to hospitals in LMICs, and then we teach quality-assurance methods for ensuring that monitors and workstations are functional for clinical applications.

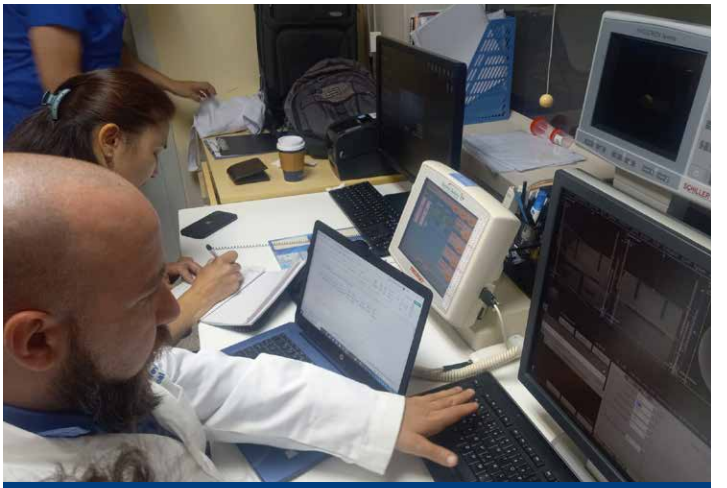
RAD-AID Informatics Team Donated PACS and Monitors to Korle Bu Teaching Hospital in Ghana for Neuroimaging in KBTH Operating Rooms in 2022



RAD-AID Friendship Cloud

Medical Physics

RAD-AID Medical Physics includes Imaging Physics and Radiation Oncology Physics for supporting low-resource hospitals worldwide on radiation-safety, image-quality, and equipment-management. Our medical physics program outreach includes nuclear medicine, mammography, radiography, angiography/fluoroscopy, CT, ultrasound, MRI, and radiation therapy. RAD-AID Medical Physics teams integrate with our clinical teams to support new equipment installations and implement routine quality assurance procedures for safety and optimized patient care. RAD-AID gives scholarships and mentorship for medical physicists in LMICs, and scholarships for LMIC physicists to learn in high-resource facilities. With support from Mirion, RAD-AID is donating and using physics equipment in outreach teams, such as radiation dosimetry and phantoms for quality control and safety.



RAD-AID Medical Physics Volunteer Providing QA Education in MRI, Intermed Hospital, Mongolia, August 2023.

RAD-AID Ghana, Ultrasound-Guided Breast Biopsy Training, June 2023

Breast Imaging

RAD-AID Breast Imaging Program has over 500 physicians and breast imaging technologists helping RAD-AID programs in over 20 countries. Our Breast Imaging Program supports low-resource institutions to assess breast imaging workflows, institute educational pathways, manage mammography equipment, organize mobile mammography programs in underserved areas, and provide patient-navigation (with RAD-AID Nursing). Nearly all LMICs do not have national breast cancer screening programs, and RAD-AID is helping countries to institute pathways that prioritize early detection with the aim of helping to achieve broader screening that makes earlier life-saving diagnosis possible. For example, we helped launch the first breast imaging fellowship in Ghana in 2023 and PACS-based mammography training in Guyana. RAD-AID has partnered with Society of Breast Imaging (SBI) so that SBI members can join RAD-AID outreach teams. We signed a new partnership agreement with African Research Group for Oncology, which emphasizes breast imaging for cancer control and has extensive hospital partners in Nigeria, other regions of Africa, and US-based academic centers.

RAD-AID's management team consists of three key components to bring the best talent, experience and expertise to the development of RAD-AID programs: Operational, Regional and In-Country Leaders.

RAD-AID Radiation Oncology, Providing Didactic and Clinical Hands-On Education in Peru, May 2024

Technologists

Nearly two-thirds of RAD-AID is composed of radiologic technologists on RAD-AID teams. Technologists are a key driver of RAD-AID outreach efforts to help manage patients during their imaging exams, procedures and treatments. RAD-AID has partnerships with the Society of Radiographers (UK), American Society of Radiologic Technologists (USA), and Canadian Association of Medical Radiation Technologists (Canada), enabling their members to be integral contributors to RAD-AID outreach teams. Technologists in RAD-AID help teach imaging procedures across all modalities, and teach workflow techniques, PACS-utilization, safety, image-quality, adverse-reaction management, and more.

Mammography Technologist Educator in Nepal, September 2024

Radiation Oncology

RAD-AID Radiation Oncology supports training of dosimetrists, radiation therapists and radiation oncologists for the treatment of cancers in LMICs. RAD-AID Radiation Oncology has teams rotating in Nigeria and Kenya, with other sites in the pipeline. Through partnerships with American Association of Medical Dosimetry (AAMD), ASRT, and CAMRT, RAD-AID implements comprehensive programs to teach treatment planning, therapeutic methods, and safety to low-resource radiation oncology departments. We have received support from radiation oncology vendors, such as Varian (a Siemens Healthineers company) to optimize radiation therapy and medical dosimetry education. RAD-AID Radiation Oncology has worked with RAD-AID Informatics to implement AI for software-based decision support on radiation oncology treatment planning at LMIC radiation therapy centers.

RAD-AID Mongolia, Peer-to-peer Radiography Education at Intermed, Mongolia, July 2023

Nuclear Medicine Technologist Educator in Indonesia, August 2024

Technologist and Sonography Educators in Indonesia, August 2024

Nuclear Medicine

RAD-AID supports nuclear medicine and molecular imaging at low-resource institutions for image-interpretation, image-quality, radiotracer access/management, and safety. RAD-AID Nuclear Medicine sites include Kenya, Ghana, Tanzania, and Indonesia, with more in the pipeline. RAD-AID collaborates with the Society of Nuclear Medicine and Molecular Imaging (SNMMI), in funding SNMMI members (physicians, residents, fellows) through the Hyman Ghesani scholarship to teach and support nuclear medicine at low-resource hospitals in LMICs. Siemens Healthineers (MESA and ASEAN divisions), ASRT, CAMRT, and SoR provide funding support to nuclear medicine technologists in RAD-AID for advancing peer-to-peer molecular imaging education.

RAD-AID Nuclear Medicine Volunteers (middle) at Kenyatta University Teaching Referral and Research Hospital (KUTRRH) in July, 2024

RAD-AID Learning Center

The RAD-AID Learning Center (RLC) provides a library of pro-bono educational materials to staff and personnel of low-resource hospitals that are RAD-AID sites and partners. Educational institutions and authors have generously donated content to RLC (and collaboratively created content with RLC leadership), such as ASRT, ACR, and APDR, so that these resources are made available to LMICs under a secure and password-protected learning management system. The content is carefully curated for quality and for integration with RAD-AID on-site teams that use these materials to supplement hands-on teaching and demonstrations. RLC hosts content in multiple formats across all imaging modalities, radiation oncology, and radiology professional specializations.

RAD-AID Nuclear Medicine Volunteer Teaching Hands-On Skills, Indonesia, August 2024

Mobile Health

RAD-AID Mobile Health brings radiology to those in need via transport vehicles for overcoming geographic, infrastructural, and sociocultural barriers. In 2012, RAD-AID launched Asha Jyoti for cancer screening to marginalized women in India. In 2016, RAD-AID announced a novel partnership with Straightline Aviation to build the first medical airship with deployable container-based clinics, designed to reach remote areas that lack transportation infrastructure. In mid-2017, RAD-AID deployed assistance teams to The Health Wagon in Appalachia, Virginia, for rural underserved in the United States. In 2019, RAD-AID donated a mobile mammography vehicle to Breast Care for Washington, to launch a partnership bringing breast cancer screening and diagnostics to the medically underserved communities of Washington DC. In 2019, we also supported mobile programs in Morocco and Ukraine. In 2020, in partnership with Hologic's Project Health Equality Initiative, RAD-AID added support for patient navigation and multiple mobile mammography vehicles for RAD-AID USA - Women's Health Program, including Denver, Seattle, Georgia, California, and Alabama. From 2021-2024, RAD-AID's Women's Health program expanded to offer innovative and life-saving services to even more sites across the US, while in 2023-24, work has been underway to build and implement Asha Jyoti 2, a mobile health van in India for TB, breast and cervical cancer screening.

RAD-AID is about the holistic picture of radiology. Not just the equipment but also the people and all of the other resources that go into making it effective.

RAD-AID CHAPTERS NETWORK

The RAD-AID Chapters Network launched in 2012 and gives US and Canadian academic medical centers the ability to form local RAD-AID chapters for mentorship, project support, and funding. Each chapter is a grassroots mentorship community so that staff, faculty, residents, and students can gain experience in global health and contribute to charitable activities. Each month, RAD-AID hosts an interactive webinar for chapters to learn and discuss projects. Chapter projects may be local to their community within the US and Canada, as well as link to RAD-AID global programs. Chapter members are eligible for direct funding from RAD-AID to develop new outreach sites and/or participate in existing programs. Chapter member projects can be remote, such as tele-teaching and webinars, or on-site projects such as direct education and capacity building (equipment, software, clinical support, etc.). The RAD-AID Chapters Network is a vibrant community of over 100 institutions in the US and Canada. Learn more about RAD-AID Chapters online to apply, establish, grow or renew your chapter.

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Radiology serving the world
US/Canada Chapters

RAD-AID Chapters Network Map (updated July 2024)

RAD-AID Chapters Network Brings Together Multidisciplinary Professionals from Academic Institutions to Conduct Global Health Radiology Projects

We welcome you to become part of RAD-AID as a growing global organization of advocates for medical technology in low-resource regions.

PARTNERSHIPS

RAD-AID Establishes Important Partnerships to Build Radiology Capacity in Medically Underserved Communities, Such as Launching Mobile Mammography with Breast Care for Washington (BCW), Washington DC, June 2019

RAD-AID is a thriving community of over 55 partnerships and collaborations, and we are grateful for their support. Here is an alphabetical list of our partners, and we hope you will join us:

African Research Group for Oncology (ARGO)
Amazon Web Services
Ambra Health (an Intelerad company)
American Association of Medical Dosimetrists (AAMD)
American College of Radiology (ACR)
Association for Radiologic and Imaging Nursing (ARIN)
American Society of Radiologic Technologists (ASRT)
Applied Radiology
Barco
Bayer
Black Women's Health Imperative
Breast Course for Nurses (BCN)
Breast Care for Washington
Brother's Brother Foundation
Butterfly
Canadian Association of Medical Radiation Technologists (CAMRT)
Center for Accelerated Real Time Analytics (CARTA)
CerviCusco
Canadian Hub for Applied and Social Research (CHASR)
CGI
City Cancer Challenge Foundation (C/Can)
Clinton Global Initiative
Community of Hope
CureMetrix
Densitas
East Africa Medical Foundation
Envision Physician Services
Friends Without a Border
GlobeSmart (Aperion Global)
Google Cloud
Google Foundation
Hexarad
HI-IQ
HIMMS
Hologic, Inc.
Inteleos
Koios Medical
MD.ai
Medweb, Inc.
Mentice, Inc.
MissioInvest
Mirion
IBM Watson Health Imaging (Merge)
Nuance
Nurses with Global Impact
Philips
Philips Foundation
Project Hope
PURE
Qure.ai
Radiology Partners (RP)
Siemens Healthineers
Society of Breast Imaging (SBI)
Society for Imaging Informatics in Medicine (SIIM)
Society of Interventional Radiology (SIR)
Society of Nuclear Medicine and Molecular Imaging (SNMMI)
Society of Radiographers (United Kingdom)
Sonography Canada
Straightline Aviation
TeraRecon
Therapixel
TribalCO
Virtual Radiologic (vRad, a Radiology Partners company)
World Federation of Pediatric Imaging (WFPI)
World Federation for Ultrasound in Medicine and Biology (WFUMB)
World Health Organization (official relations status since 2015)

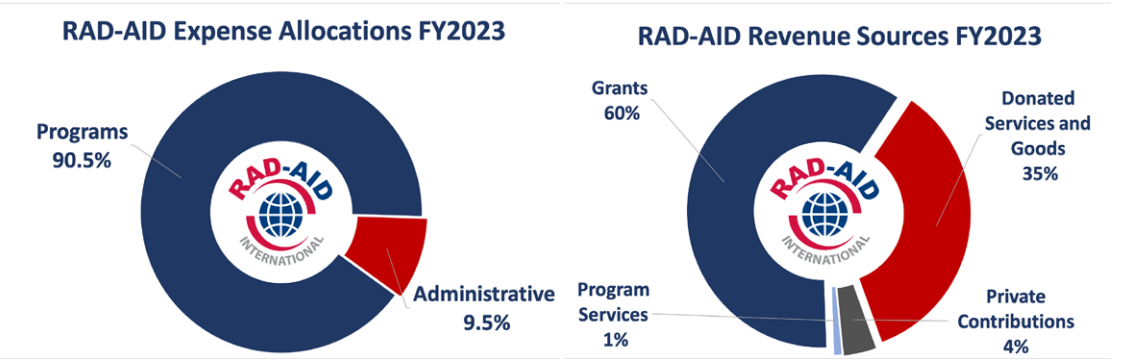
FINANCIALS

RAD-AID remains committed to best financial practices. In 2024, RAD-AID received the Platinum Seal of Transparency from Candid and maintains a perfect Four-Star rating by Charity Navigator.
Over the last 8 years, RAD-AID has maintained operational efficiencies, with 90% of expenses directed to programs in 26 countries, and 10% towards general administrative. Detailed 990 filings are always available on our website at https://rad-aid.org/about-us/financials/ .
In 2023, RAD-AID volunteers donated over 24,000 hours of pro bono work towards radiology education and capacity building, valued at $1.4 million of in-kind support. Since our inception, RAD-AID has contributed over $22 million in donated personnel-time, grants, and equipment to underserved regions around the world. Every dollar of your donated money, minute of your donated time, and ounce of your donated equipment is very valuable to RAD-AID and directly correlates to our accomplishment of our mission. We thank you for your support and contributions!

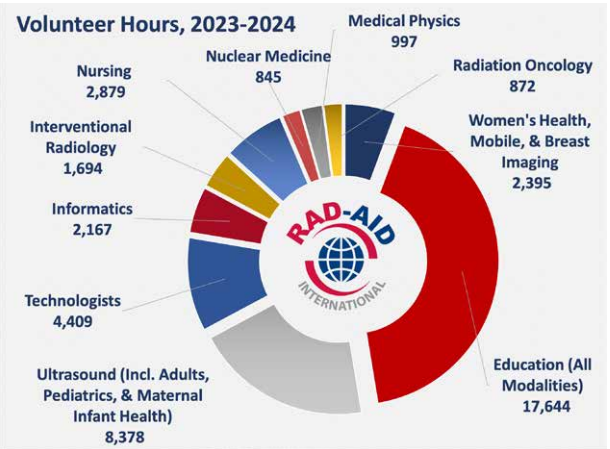
Charity Navigator ✦ FOUR-STAR ✦

Platinum Transparency 2024 Candid.

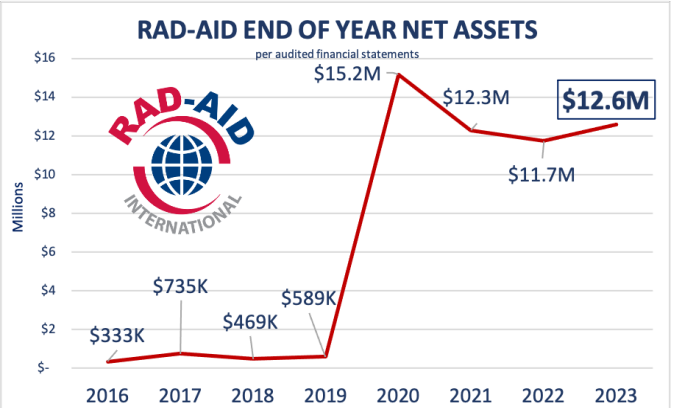
RAD-AID has received a Platinum Seal of Transparency from Candid every year since 2021, Gold Seal of Transparency from 2017-2020, and maintains a perfect Four-Star rating from Charity Navigator.



RAD-AID Revenues and Expenses, FY2023



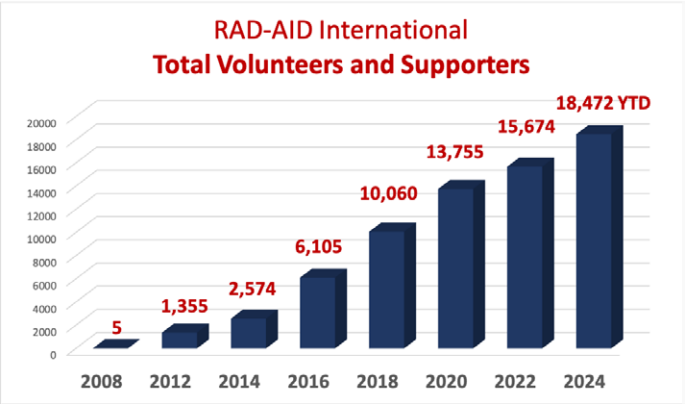
RAD-AID Volunteer Hours in 2023-2024



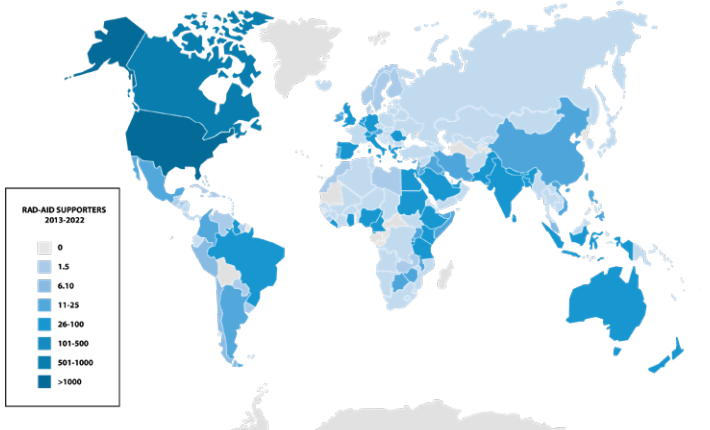
In 2020, RAD-AID received a large grant for Women's Health. Decreased net assets 2020-2022 aligned with expectations due to disbursement of grant funds to local partners in accordance with RAD-AID program parameters for on-site radiology capacity-building

RAD-AID International Financial Statements			FY 2023		
REVENUES			**ASSETS**		
Grants	$	2,435,564	Current Assets	$	14,432,624
Donated Professional Services & Goods	$	1,420,995	Fixed Assets: Equipment	$	35,653
Private Contributions	$	168,873	Intangible Assets	$	68,080
Program Services	$	26,789			
Investment	$	(3,399)			
TOTAL REVENUE	**$**	**4,048,822**	**TOTAL ASSETS**	**$**	**14,536,357**
EXPENSES			**LIABILITIES AND NET ASSETS**		
Programs					
Women's Health, Mobile, & Breast Imaging	$	772,696	Current Liabilities	$	766,860
Education *(All Modalities)*	$	659,612	Noncurrent Liabilities	$	1,189,705
Ultrasound *(Incl. Adults, Pediatrics, & Maternal Infant Health)*	$	631,606			
Technologists	$	253,061	Total Liabilities	$	1,956,565
Informatics	$	200,334			
Interventional Radiology	$	145,579			
Nursing	$	63,835	**NET ASSETS**		
Nuclear Medicine	$	46,270	Without Donor Restrictions	$	614,460
Medical Physics	$	44,665	With Donor Restrictions	$	11,965,332
Disaster Response	$	43,420			
Radiation Oncology	$	36,394	Total Net Assets	$	12,579,792
Supporting Administrative Services	$	307,119			
TOTAL EXPENSES	**$**	**3,204,591**	**TOTAL LIABILITIES AND NET ASSETS**	**$**	**14,536,357**

RAD-AID Audited Financial Statements for FY2023



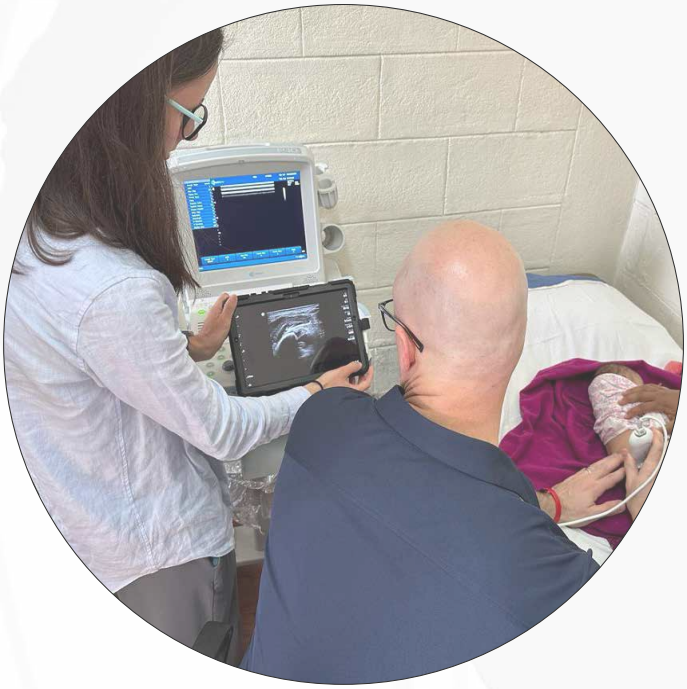
RAD-AID Volunteers and Supporters 2008-2024

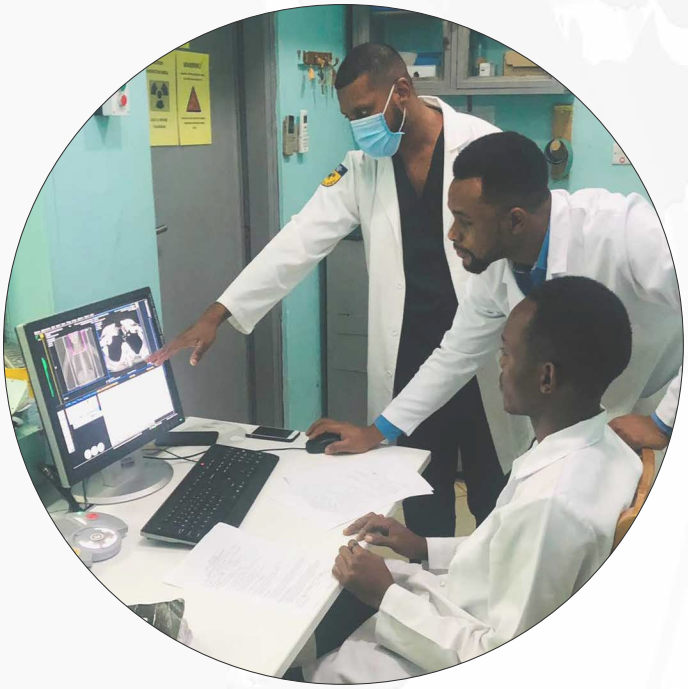


RAD-AID Volunteers and Supporters are from 164 Countries (2022 data)

CONCLUSION AND THANK YOU!

We hope this annual report from RAD-AID has been informative as an overview of our progress and efforts to bring radiology and healthcare to the billions of people in need around the world.
We are inspired by the contributions from our volunteers and supporters. RAD-AID began in 2008 with a handful of supporters in 2024 and has grown to over 18,000 volunteers from 164 countries helping more than 100 health facilities. Radiology is fundamental for nearly all aspects of healthcare, including surgical planning, trauma, cancer care, obstetric prenatal services, respiratory infection response, and cardiovascular management to name a few. Without radiology, health care systems across the world suffer numerous gaps that crack the chains of effective health care delivery. RAD-AID answers this call to meet those needs and serve the world.





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