GLOBAL SURGERY AMSTERDAM

Advancing Surgical Care through Education

ANNUAL ACTIVITY REPORT 2024



01 Foreword

During my first internship in Africa on a crowded surgical ward in Malawi, I realized that it is usually a lack of training - not high-tech equipment - that keeps patients from the care they need. More than two decades later, that insight still drives the mission of ***Global Surgery Amsterdam*** *(GSA): empowering healthcare workers by equipping them with skills and knowledge to help improve* ***essential surgical care.*** *The BASIC principles apply everywhere in the world to make surgery* ***safe, effective and affordable for all.***

This ***Annual Activity Report 2024*** *is built on the same belief. The numbers inside these pages tell an important part of the story, but those numbers only come alive when we connect. When we share stories with other healthcare workers, like our colleagues in Haydom Lutheran Hospital in Tanzania or Masanga Hospital in Sierra Leone.*

Messages that we receive in the GSA WhatsApp groups provide good examples of it:

> *The burn nurse using papaya for the first time to clean burn wounds, the anesthesia provider who inspires the team to use the 'surgical safety checklist', and the doctor who sends a proud picture of him teaching his colleagues on how to apply an external fixator a few weeks after attending the Basics of Teacher Training Course.*

To every ***partner, volunteer, donor and colleague*** *who chooses to invest in human potential:* ***a big thank you****. May this brief report spark ideas, questions and, above all, action.* ***Only together we can make a real change towards universal access to safe surgical care.***

Dr. Matthijs Botman, MD PhD
General Director, Global Surgery Amsterdam



02 Who We Are

Our Focus Areas:

Capacity Building

We provide on-the-job and off-the-job **training** for local **healthcare workers** in different settings **worldwide**.

Educational Resources

We develop easily accessible **digital education resources** that can be **used** by healthcare workers **globally.**

Research

We perform research to **assess the local need** and to **evaluate the impact** of activities and training. When performing surgery with the local team, we **analyze and evaluate surgical outcomes** including complication rates and adjust our programs accordingly.

Advocacy

We collaborate with governments and organizations **to elevate the significance of global surgery** within the broader framework of global health priorities.

Why Access to Surgical Care is Important

5 billion

People lack access to safe, affordable surgical and anesthesia care when needed

1/3

Of the global burden of disease is due to surgical conditions, a leading cause of death and disability worldwide

90%

Of the global burden of surgical disease occurs in low & middle-income countries (LMICs)

MISSION

Improve access to essential surgical care around the world by pursuing research, education and training, and the development of technology

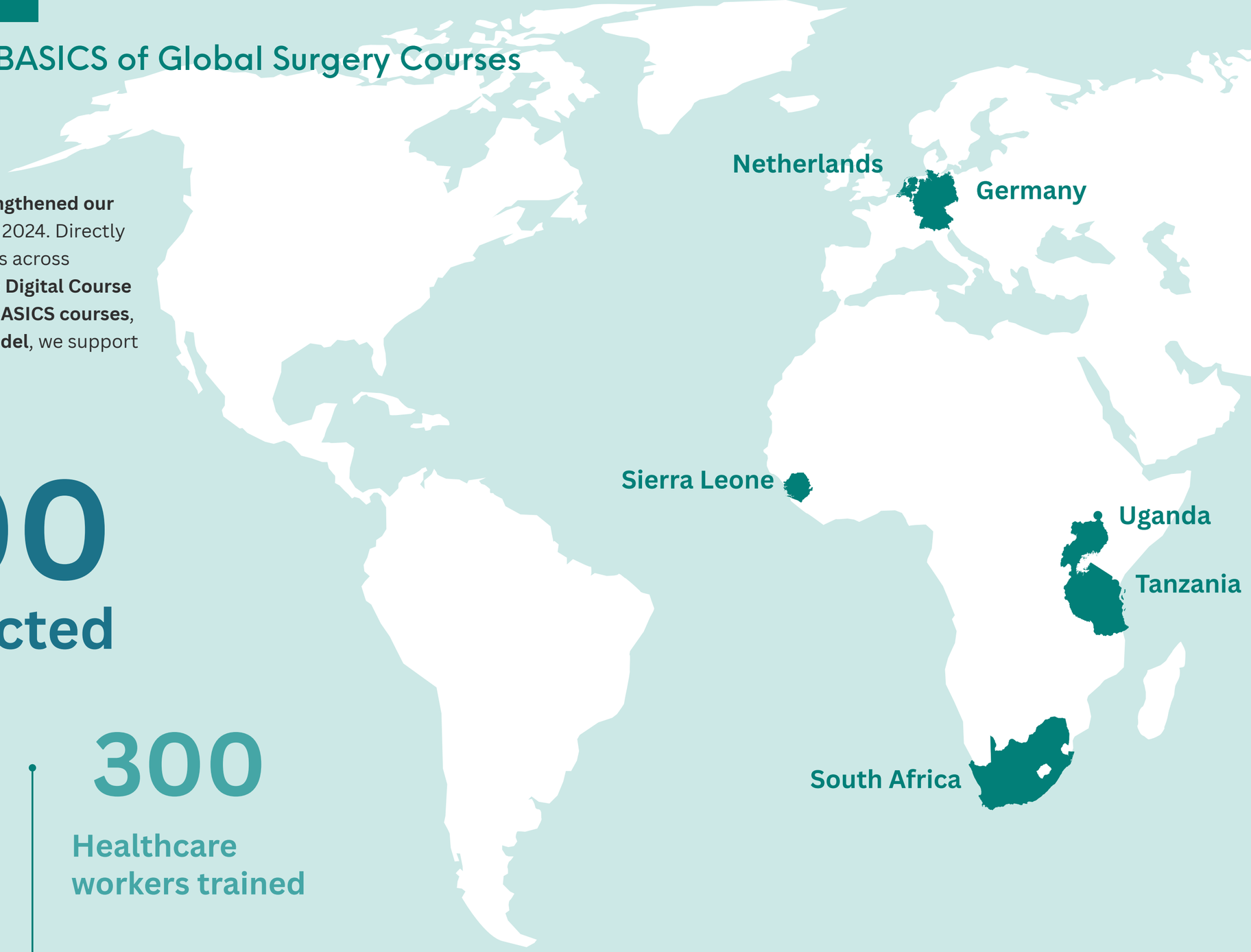
VISION

A world where Universal Access to essential surgical care is safe, affordable, and available to all people, on demand, regardless of their personal circumstance



03 The Footprint of the BASICS of Global Surgery Courses

In collaboration with our partners, we **strengthened our surgical education and training strategy** in 2024. Directly engaging over 300 healthcare professionals across multiple continents. Through an innovative **Digital Course Platform**, standardized, **context-adapted BASICS courses**, and a newly launched **Train-the-Trainer model**, we support long-term, **locally-led change.**
courses.basicsofglobalsurgery.org



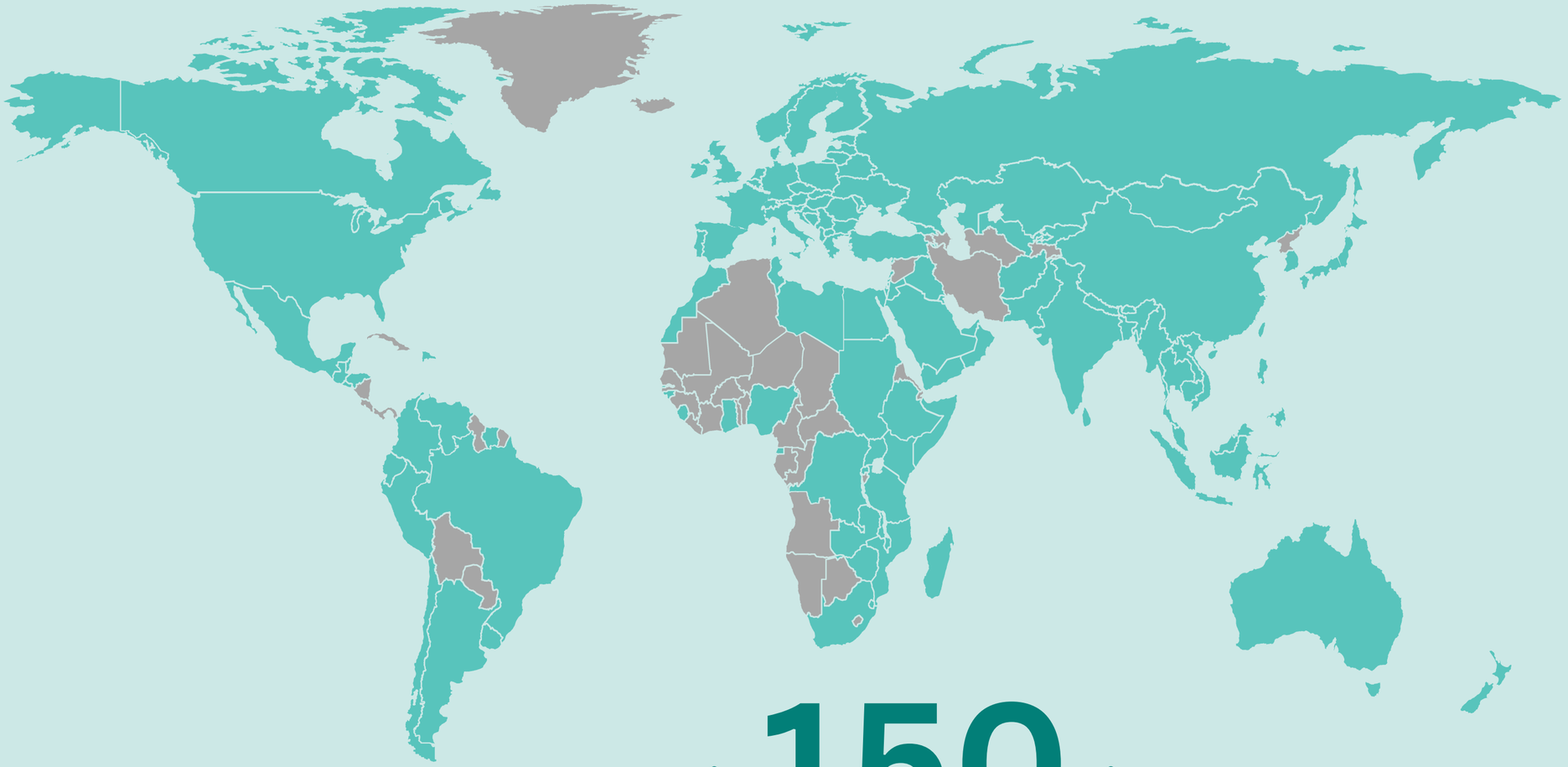
34.000
Patients Impacted

6
Countries

16
BASICS courses

300
Healthcare workers trained

04 Worldwide Reach of the Digital Education Platform



Countries where the platform is accessed

Countries with no recorded platform access yet

150
Countries

100
Views per day

Apart from the **Digital Course Platform**, we develop **easily accessible educational materials** for essential surgical conditions. One example is the **Basics of Burn Care Platform**, which has become **a go-to resource** for improving burn care - wherever you are in the world. basicsofburncare.org

Accessed from over **150 countries**, this platform received over **100 visits per day** in 2024. Each user often shares the knowledge with colleagues and applies it at the bedside, **extending the platform's impact** far beyond our courses and **reaching thousands of patients.**

In short, the **Digital Education Platform** transforms our teaching into a **continuous, borderless resource** that grows with demand.

Interesting Fact:
The Basics of Burn Care Platform is most visited from the USA.

Delivering Impact Where It's Needed Most

We design and deliver **standardized** but **context-adapted surgical education** to train healthcare workers in different settings

The BASICS Courses

Basics of Burn Care (BoBC)

Treating burns and preventing complications

Basics of Open Fractures (BoOF)

Managing open fractures and preventing disability

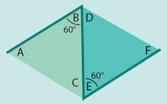
Basics of Anesthesia (BoA)

Delivering safe and effective anesthesia care and preventing complications

Basics of Teacher Training (BoTT)

Equipping trainers to scale surgical education

Back to Basics Local Flaps (BtB)



Restoring complex wounds with safe, reliable flap techniques

Train-the-Trainer model and **Digital Education Platform**

Through our **Train-the-Trainer model** and **Digital Education Platform**, we support long-term and **sustainable capacity building** in different settings.

06 Basics of Burn Care

The **Basics of Burn Care (BoBC)** project aims to improve healthcare for all patients with burn injuries around the world.

7-12 million people each year need burn care.
Burn injuries globally result in over **19 million years of healthy life lost -** either through early death or lasting disability.

Scan here to learn more about the Basics of Burn Care project

Digital Education Platform

To maximize the reach and sustainability of our training efforts, we developed the Basics of Burn Care website - a free, open-access digital platform that provides essential knowledge on acute burn care and management of contractures. While in-person training remains critical, it became clear that lasting impact requires continuous and widespread access to educational materials. The platform ensures that healthcare workers - regardless of location or resources - can learn the fundamental principles of burn care at their own pace, reinforcing clinical skills and enabling knowledge sharing across institutions. **basicsofburncare.org**

Courses Delivered:

In 2024, **six Basics of Burn Care (BoBC) courses** were delivered in strong collaboration with our partners - in Haydom (Tanzania), Kampala (Uganda), Butterworth (South Africa), Amsterdam (the Netherlands) and two courses in Masanga (Sierra Leone). We provide a standardized, high-quality course format that is adapted to the local context, so that it meets the needs of healthcare workers on the ground. Each training was led by a mix of international faculty and local experts, ensuring that the content is both practical and relevant for the setting in which it is taught.

Healthcare Workers Trained:

Approximately **125 healthcare professionals** participated in BoBC courses this year.

Patient Reach:

The total estimated patient reach of the 2024 BoBC cohort is approximately **10,500 burn patients.** In addition to the direct care provided by trained participants, the ripple effect of the program is substantial. By sharing knowledge and skills with colleagues, participants help strengthen clinical practices across their institutions, further amplifying the impact of each training.

07 Basics of Open Fractures

The Basics of Open Fractures (BoOF) project aims to **share the collective global knowledge** about open fractures to everyone in order **to reduce mortality and disability.**

Injuries cause **more deaths than HIV, TB and malaria combined. Open fractures** are frequently caused by road traffic injuries and listed as **one of the essential surgical conditions worldwide.**

Digital Education Platform

We have been working to help improve open fracture care in resource-limited settings by providing training for healthcare workers. But we realized that to make a bigger impact we needed to make essential information widely and continuously available. That's why we created the **Basics of Open Fractures platform** to be able **to teach everyone the basic principles of the treatment of open fractures.** basicsofopenfractures.org

Courses Delivered:

In 2024, **six BoOF courses** were conducted **across five locations:** Kampala (Uganda), Masanga (Sierra Leone), Shirati (Tanzania), Sengerema (Tanzania), Essen (Germany) and Amsterdam (Netherlands). Some of these courses were organized directly by our team, while others were delivered by partners we support.

Healthcare Workers Trained:

Approximately **125 healthcare professionals** participated in BoOF courses this year.

Patient Reach:

The total annual reach of the 2024 cohort is approximately **8,500 patients.**
Beyond direct care, the ripple effect of this training is significant: participants are empowered to disseminate knowledge to colleagues, amplifying impact and improving institutional practices.

08 Basics of Anesthesia

No Safe Surgery without Safe Anesthesia

The Basics of Anesthesia (BoA) project aims to **strengthen anesthesia care** by equipping healthcare providers with practical knowledge and skills to deliver safe anesthesia.

The Hidden Crisis: The Global Anesthesia Gap **- One anesthetist per 100,000 people** in some **low-resource settings** compared to **20+ in high-resource countries.**

In **LMICs**, anesthesia **deaths can reach 1,000 times the rate in high-income countries,** driving avoidable maternal, surgical, and trauma fatalities.

Courses Delivered:

In 2024, two BoA courses were conducted in Haydom (Tanzania).

Healthcare Workers Trained:

25 healthcare professionals participated in BoA trainings this year, from over 12 hospitals across five regions in Tanzania. **courses.basicsofglobalsurgery.org/topics/anesthesia/**

Patient Reach:

The total annual reach of the 2024 cohort is approximately **15,000 surgical patients** across the region. This estimate doesn't account for additional indirect impact through knowledge-sharing at BoA participants' home institutions.

Participant Reflections

"I finished school in 1990, and I am happy to join this training - it's the first skill training I've had since graduation. We need sharp eyes, smart minds, and quick hands. Without anesthesia, there is no safe surgery."

- Paulina, nurse anesthetist

"I have known Danson since 2010, when he was a skilled scrub nurse in Haydom. Years later, he was trained as an anesthesia nurse and has since carried the responsibility of providing anesthesia for a hospital serving over 5 million people. But after his initial training five years ago, Danson received no further education—until now."

- Matthijs Botman
(Plastic Surgeon and Mentor)
on participant Danson Sadero

09 Basics of Teacher Training

The Basics of Teacher Training (BoTT) project aims to **build sustainable**, **local capacity** by equipping healthcare professionals with the skills to teach others in their own context. Rather than relying on external trainers, the **BoTT** program **empowers frontline workers to become educators themselves** - ensuring that knowledge is continuously shared, adapted, and **reinforced within the health system.**

Launched in 2024, the **BoTT** course supports a **scalable model** for **burn and open fracture care education.** Participants are trained not **only in clinical content**, but also in **essential teaching strategies** - enabling them to deliver high-quality, context-relevant training to their peers and **expand the reach of surgical education in a sustainable way.**



Healthcare Workers Trained:

A total of **11 healthcare professionals** participated in the first Basics of Teacher Training (BoTT) course. The cohort included a general surgeon, a plastic surgeon, an anesthetist, a nurse anesthetist, and five surgical registrars **from five different hospitals across Tanzania,** as well as an anesthetist and a plastic surgeon **from two institutions in the Netherlands**. Bringing together participants from both low- and high-resource settings enriched the learning environment and fostered a meaningful exchange of perspectives.

This **diversity reflects our commitment to bilateral knowledge exchange**, where teaching is not unidirectional but rooted in shared learning, mutual respect, and the co-creation of solutions that work across contexts. courses.basicsofglobalsurgery.org/topics/teacher-training/

Long-Term Impact:

Over the next five years, the goal is to build a a network of local trainers who can continue teaching others across Tanzania. On average, we plan to train **six new trainers per year for burn care and six for open fracture care, reaching 60 local trainers in tota**l. Together they will run **40 regional courses**, train around **800 frontline clinicians,** and ultimately enhance care for **an estimated 80 000 patients.** By investing in local teaching capacity, we aim to make **surgical education more sustainable and rooted in the local healthcare system**.

Interesting Fact:
One of the favourite topics of this course is the power of storytelling.

10 Basics of Local Flaps

The Basics of Local Flap (BoLF) project aims to equip surgical providers with **essential skills in flap design** and planning, enabling effective closure of complex wounds with **better outcomes and fewer complications.**

The **Back to Basics Local Flaps (BtB)** course teaches the **universal principles of local-flap surgery.** Participants learn step-by-step flap design and planning, enabling them to close complex wounds while preserving donor-site function and aesthetics.

Why it matters: every year **millions of patients sustain complex wounds** caused by injuries, diabetes or resection of tumors **that require soft tissue reconstruction with local flaps.**



Course Delivered:

In 2024, one BtB course was held in Amsterdam. Currently delivered solely in the Netherlands, the course's strong demand and positive feedback position it as the template for future expansion to other countries. courses.basicsofglobalsurgery.org/topics/local-flaps/

Healthcare Workers Trained:

Approximately **25 healthcare professionals** participated in the BtB course this year.

Patient Reach:

Dutch surgical audits show that junior plastic surgeons perform 2-3 local-flap closures a month. As a result, each course is estimated to improve care for more than **600 patients annually.**

11 Research

At **Global Surgery Amsterdam**, research plays a vital role in shaping and evaluating our programs. By identifying local needs and analyzing outcomes, we ensure our trainings are grounded in real-world context. Research also drives quality improvement, informs policy, and measures long-term impact.

In **2024**, GSA team members **contributed to several peer-reviewed studies.** Our research projects, developed in strong collaboration with local partners, reflect our commitment to capacity building through both clinical and academic collaboration.

Examples include studies on **surgical education** in Sierra Leone, research into **burn care** and **the Basics of Burn Care course**, as well as a newly initiated project exploring the **impact of the Basics of Teacher Training**. Each of these efforts underscores our integrated approach to clinical training and academic inquiry.

We highlight two publications from 2024:

- Burn Injuries and Acute Burn Management in Rural Bangladesh
- Children with Burn Contractures in Northern Bangladesh

These studies underscore how local insight, combined with rigorous data collection, can help shape context-specific, sustainable solutions in burn care.







12 International Congress Participation

In 2024, GSA actively engaged with the global surgical education community through three congresses:

European Global Surgery Congress – Essen, Germany (October 2024):

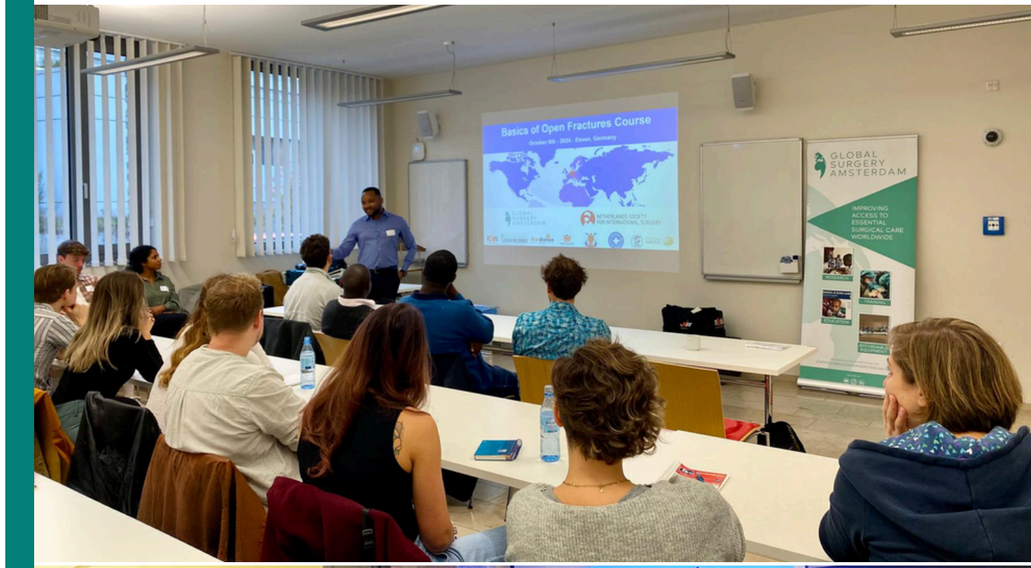
GSA introduced and promoted the Basics of Open Fracture (BoOF) course, gaining visibility and fostering connections within the European surgical training field.

Traumaplatform Congress – Tuscany, Italy (October 2024):

GSA spotlighted its Basics of Burn Care and Basics of Open Fracture projects, boosting visibility and forging new surgical-training partnerships.

ISBI Congress – Birmingham, UK (August 2024):

At the International Society for Burn Injuries (ISBI) Congress, GSA presented the Basics of Burn Care (BoBC) project and reinforced collaborations with partners committed to advancing burn care globally.







13 Global Health Teaching Across Dutch Universities

In 2024, GSA strengthened global health education at Dutch universities by integrating global surgery content into several global health programmes.

Programme snapshots

- **Global Surgery, Obstetrics & Gynaecology Summer School (UMC Utrecht):** one-week interactive course on global surgery and maternal care, combining expert lectures and case discussions.
- **Minor Global Health (VU Amsterdam):** interdisciplinary track on health equity and systems.
- **Elective Global Health (UvA Amsterdam):** modular course exploring global disease burden and solutions.
- **Minor Global Health (Leiden University):** foundation in international public health challenges and policy.
- **LMIC Rotation Preparation (VU Amsterdam):** pre-departure training for students heading to low-resource settings for a clinical or scientific internship.
- **Minor Global Health (Radboud University Nijmegen):** systems-thinking approach with case-based learning.
- **VCMS Guest Sessions:** lectures and workshops on global surgery for surgery-oriented students.



14 Partners

Corporate Partners

solventum

Humecas
Skin Transplantation Technology

Unifix Care

Pro-Motion MEDICAL

MLX

THE ONLINE SCIENTIST

FIXUS
Excellence in External Fixation

Programmatic & Academic Partners

nederlandse brandwonden stichting

Stichting INTERPLAST HOLLAND

CapaCare

DOKTERS VAN DE WERELD

Haydom Lutheran Hospital
ELCT Mbulu Diocese

ISBI

NETHERLANDS SOCIETY FOR INTERNATIONAL SURGERY

DUTCH GLOBAL HEALTH ALLIANCE

G4 alliance
surgical, obstetric, trauma & anaesthesia care

Amsterdam UMC
University Medical Centers

ASC

SATA
Society of Anesthesiologists of Tanzania

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MASANGA HOSPITAL

STICHTING MEDIC

Our mission thrives on the shared expertise, resources, and passion of our partners.
Together we expand access to safe surgery worldwide.

15 Stay in Touch

Get Involved

There are many ways to contribute to our mission.
Please visit our website or reach out to us by email if you have any question.

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