



VISION

A world class research and translation centre in global health working towards a world in which all people can enjoy a healthy life



MISSION

To improve global health and promote health equity, through excellence in research, translation and application of knowledge



VALUES

1. Excellence
2. Commitment to global public health
3. Independence
4. Respect for diversity
5. Highest ethical standard
6. Creativity in a friendly work environment
7. Fairness, accountability and transparency
8. We work because work can be fun, fulfilling and exciting

OUR DIFFERENTIAL VALUE

To respond in an interdisciplinary and integrated manner to health problems that transcend geographical, social or political boundaries, focusing on communicable and non-communicable diseases and the impact of climate and environment on health, with special emphasis on the health of the most vulnerable.

CONTEXT

EXTERNAL CHALLENGES

- Global impact of environmental degradation and the climate crises on health
- Adjusting power balances for equitable partnerships
- Worldwide setbacks in health and education of women and girls
- Inequity in combatting infectious diseases and antimicrobial resistance
- Growing incidence in non-communicable diseases and ageing populations
- Migration, refugees and expanding urbanisation

EXTERNAL OPPORTUNITIES

- SDGs, Planetary health framework
- Growing adoption of science-based decision and policy making
- Global commitments to bridging science with citizens and society

INTERNAL CHALLENGES

- Balancing sustainability and growth
- Adapting to an evolving institutional culture
- Generational renewal of faculty

INTERNAL STRENGTHS

- Science strongly aligned with current and future global health challenges
- Favorable environment in our local, national and international institutional context
- Presence in multidisciplinary global networks in research, education and translation

SCIENCE

Climate, Air Pollution, Nature and Urban Health

AIM To strengthen the evidence base on the health effects of climate change and urban exposures, and to assess the health co-benefits of climate action.

FOCUS on exposures such as noise, air pollution, temperature and green spaces on outcomes such as premature mortality, cardiovascular and respiratory health and cognitive function, and on computational modelling of global climate variation, tipping points, climate-sensitive infections and their impact on health.

ULTIMATE GOAL is to support healthy living, and to predict and mitigate the health impacts of climate change.

METHODS geographic information systems, satellite data, smartphone technology and participatory citizen science for exposure assessment, health impact assessment, computational modelling, and forecasting.

Maternal, Child and Reproductive Health

AIM To develop and validate clinical and community interventions for the most prevalent health problems of women and children living in low- and middle-income countries [LMICs], and support evidence-based policy-making.

FOCUS on barriers to quality obstetric and child care, on the leading causes of maternal and child mortality, namely HIV/AIDS, malaria, respiratory and diarrheal diseases, and on maternal immunisation,

ULTIMATE GOAL of reducing maternal and infant mortality and improving the health of women and children living in LMICs.

METHODS encompassing clinical trials, epidemiology, social sciences and implementation research in infection control strategies. We embed capacity building and dissemination at all levels of research.

Environment and Health over the Lifecourse

AIM To expand knowledge on the causes and mechanisms of non-communicable diseases [NCDs]

FOCUS on environmental, radiation, occupational, lifestyle, infectious, and genetic risk factors throughout the lifecourse, from prenatal to late adult life. Key outcomes include respiratory health, neurodevelopment, cardiovascular and cancer.

ULTIMATE GOAL is to prevent and control NCDs, in line with the SDGs.

METHODS build on networks of longitudinal population-based cohorts and case-control studies as powerful platforms for aetiological research, incorporating innovative approaches such as the exposome, omics biomarkers, imaging, and data science.

Global Viral and Bacterial Infections

AIM To improve the understanding of the physiopathology of and immunity to viral and bacterial infections in vulnerable populations, and to develop tools for screening, diagnosis, treatment and clinical management.

FOCUS on tuberculosis, antimicrobial resistant bacteria, HIV, viral hepatitis, neglected or emerging viral infections, infections of global reach such as influenza and cytomegalovirus, and syndromic approaches to infant febrile illnesses, diarrheal diseases, and respiratory infections.

ULTIMATE GOAL is to reduce the disease burden of viral and bacterial infections that affect vulnerable populations and/or are of global concern.

METHODS molecular biology and immunology, clinical epidemiology, mathematical modelling and implementation and operational research.

Malaria and Neglected Parasitic Disease

AIM To support evidence-based policy-making at all levels for the reduction of malaria and other parasitic diseases in high-burden areas, and to advance our current scientific understanding of the pathogenesis of major parasitic diseases affecting humans and their host-vector interactions.

FOCUS on malaria, Chagas and neglected tropical parasitic diseases such as soil-transmitted helminths and leishmania.

ULTIMATE GOAL is to progress towards disease elimination wherever feasible.

METHODS epidemiology, intervention trials with drugs, vaccines and diagnostic tools and basic molecular biology and immunology.

TRANSLATION

Creating and maximising the impact of ISGlobal's research

- Advance doctoral/postdoctoral capabilities through innovative models of training, supervision, mentoring and support.
- Expand breadth and reach of online international trainings.
- Pursue an open innovation approach: training, growth and impact.
- Grow our preparedness, response, recovery and resilience activities.
- Stimulate and nurture our longstanding collaborations in LMICs & alliances with translation organisations.
- Expand communication, open science and citizen science approaches throughout our portfolio of activities.
- Enhance the societal impact of our research by leveraging our initiative model: an instrument for translating research findings into solutions within our flagship areas: Antimicrobial Resistance, Chagas, Malaria Elimination, Maternal Health and Urban Health.
- Identify strategies to achieve social impact.

INTEGRATIVE AND INTERDISCIPLINARY APPROACH

Connecting infections, non-communicable diseases, and the environment for impact

1. **To investigate** host-pathogen interactions at the single-cell level coupled to multi-omics, multidimensional and deep immune profiling to understand key biological processes underlying infectious diseases [IDs]
2. **To elucidate** the multidimensional causal pathways of NCDs through holistic exposome studies
3. **To develop** novel early warning systems, predictive models, and field-deployable
4. **To quantify** the health implications of climate
5. **To enhance** approaches to connect research and innovation to society and generate impact.