

## **Institutional Assessment**

# **Canadian Network for International Surgery (CNIS)**

**March 15, 2008**

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## TABLE OF CONTENTS

Acknowledgements .....	4
Executive Summary .....	5
List of Acronyms .....	7
1.0 CNIS Profile and Assessment Context .....	8
1.1 History, Vision and Mission .....	8
1.2 Expectations of CIDA Assessment .....	8
2.0 Mandate and Responsibility of Assessment Team .....	9
2.1 General Objectives .....	9
2.2 Specific Objectives .....	9
2.3 Assessment Methodology .....	9
3.0 Strength and Sustainability of CNIS as an Organization .....	10
3.1 Corporate Governance Structure .....	10
3.2 Core Programs .....	11
3.3 CNIS Funding Base .....	17
4.0 CNIS Partnerships .....	19
4.1 North-South Partnerships .....	19
4.2 South-South Partnerships .....	20
4.3 North-North Partnerships .....	20
4.4 Coherence of Interests Between CNIS Partners .....	20
5.0 Relevance of CNIS Programming .....	21
5.1 Support of WHO Priorities .....	21
5.2 Support of CIDA Priorities .....	21
5.3 Support of African Government Priorities .....	23
6.0 Transition and Succession .....	24
6.1 Decentralization of Administration and Management .....	24
6.2 Expansion of Programs .....	25
7.0 Institutional and Programmatic Risk .....	26
7.1 Sustainability of funding .....	26
7.2 Human Resource capacity .....	26
7.3 Clarify of Vision .....	27
7.4 Program Focus .....	27
8.0 Summary .....	29
9.0 Recommendations .....	32
9.1 Promoting Financial Sustainability .....	32
9.2 Maintaining Program Focus .....	33
References and Endnotes .....	56

## **ANNEXES**

- Annex 1: Assessment Matrix (p.34)
- Annex 2: Interview Protocol CNIS Headquarters and Canadian Partners (p.41)
- Annex 3: Interview Protocol CNIS African Partners (p.44)
- Annex 4: Persons Interviewed (p. 46)
- Annex 5: CNIS Organizational Chart (p.50)
- Annex 6: Injury Prevention and Safety Promotion Training offered by CNIS ICCU in Uganda (p.51)
- Annex 7: Case Study: Peace-Building Research, Training and Programming war-affected Gulu, northern Uganda (p.53)
- Annex 8: List of select CNIS peer-reviewed publications (p.55)
- Annex 9: Select CNIS Canadian Partners and African Counterpart Institutions (p56)

## **FIGURES:**

- Figure 1: CNIS surrogate model for ESS workshops (p.11)
- Figure 2: Grand Opening of ESS Laboratory, Gondar, Ethiopia (p.12)
- Figure 3: ESS technical training manual (p.15)
- Figure 4: CNIS 'unlucky 13' (p.16)

## **TABLES:**

- Table 1: CNIS Funding Sources 2007 (p.17)

## **ACKNOWLEDGEMENTS**

We would like to thank Dr. Ronald Lett for his time and patience in answering our inquiries, both at CNIS headquarter and during field visits. We would also like to thank Ms. Elizabeth Schaefer for her administrative assistance and her rapid responses to additional requests for information. In addition, we would like to express our appreciation to Ms. Lilly Kidane for her support and logistic assistance in the field. In particular, we extend our gratitude to CNIS' partners in Africa for generously sharing insights and views on CNIS programs in the field.

Mr. Richard Gold  
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## EXECUTIVE SUMMARY

1. A two-person team<sup>1</sup> undertook an organizational assessment of CNIS during the period November 2007 to February 2008. The assessment involved on-site interviews in Canada at CNIS headquarters from November 7 to 9 and a field trip to CNIS operations in Africa, i.e. Ethiopia, Tanzania and Uganda from January 6<sup>th</sup> to 22<sup>nd</sup>. Canada based interviews with CNIS partners continued for the remainder of January and early February.
2. This assessment was being carried out at a critical transition period for CNIS involving a devolution of program responsibilities to the field, while, at the same time senior staff movements were taking place in Canada. Accordingly, the team not only focused its attention on the capacity of CNIS to undertake an ambitious and growing program, but also on how the transitional changes would impact on future capacity.
3. In determining CNIS "capacity" the Assessment Team took special note of such criteria as CNIS' corporate structure and systems, the strength of both Canadian and African partner relationships, the viability of proposed succession and transition measures, sustainability criteria including financial and human resource risks and, in general, the performance of CNIS as measured against sound management practices.
4. The Assessment Team confirmed that CNIS headquarters was run on a very cost effective basis employing a team of dedicated and professional staff including a considerable amount of volunteer contributions. The governance structure and management reporting systems were performing well and recent Board appointments broadened the scope of its expertise and links to the Canadian community.
5. During the field investigations, the team confirmed CIDA's observation that CNIS had a "good record of short-term project interventions" and that they had successfully "sustained strong links with a variety of reputable local institutional partners" The team further noted that the CNIS-created African partners were now showing signs of maturing and becoming sustainable independent institutions in their own right, attracting funding from outside sources, achieving separate legal status and having their work recognized by both international organizations such as the WHO and by their own governments.
6. The Assessment Team noted that the success in particular of the two main programs: the Essential Surgical Skills (ESS) training and the Injury Control Centre (ICC) programs had received high praise not only from national governments but also the international community. Interviews were conducted with the full range of stakeholders in the field from Dean's of Medical Schools, Directors of Surgery, Students and CNIS decentralized staff. It was confirmed that the replication of these successful programs was welcomed and satisfied a pressing need.
7. As with the staff in CNIS headquarters, African counterpart medical professionals involved in the ESS and ICC were very committed and through the use of innovative technology, including the creation of inexpensive surgical training models and frequent training of trainers programs, were able to successfully expand surgical capacity in a cost effective manner. The team was able to establish a link between successful program outcomes and the impact this had on CNIS capacity, the more obvious one being that these programs were now attracting the interest of other donors and national governments.

8. A key determinant of CNIS capacity is the effectiveness of the “Network” and the willingness of the various partners to become involved and share the burden of a rapidly expanding African program. The team saw considerable evidence of a collective “Canadian “ effort as members of the network became associated with specific African medical schools and accordingly provided budgetary support and/or payment in kind (annex 9) A functioning CNIS program support unit has now successfully been established in the field providing further support to existing and planned CNIS programs in Africa.
9. The current transition of CNIS involving the devolution of programming responsibilities to the field, the pending senior management changes in Canada and it’s testing of it’s strategic programming status were all proceeding smoothly and would strengthen the capacity of CNIS to take on an expanded program. This observation is based on the highly professional and strong reputation of the individuals involved in the senior staff movements and their own personal suitability to the new assignments that they were carrying out or were about to assume. The commitment of these individuals, combined with the increasingly sustainable nature of the African partner organizations, auger well for a successful transition and succession and the team considers risks associated with these movements to be minimal.
10. The Assessment Team has made some recommendations that, in their view, would assist CNIS to achieve a more solid footing financially and would assist in providing more focus to it’s programming in the field. While CNIS has demonstrated that it can be a very financially resilient organization, it is the view of the team that given the pace of program development, CNIS would benefit from a more secure financial base and several recommendations on the issue are made in section 9.1.
11. CNIS and it’s African partners, particularly on the injury control related work, have undertaken a wide-ranging and highly successful amount of research and policy formulation work. This has been of such high quality that it has now been adopted by at least one national government both as policy and as part of a national curriculum. While not wanting to dampen enthusiasm for these well respected efforts, the team has a concern that with the limitless opportunities afforded in this important area that some focus should be applied as to what CNIS and it’s partners are best able to do and what might usefully be given to other committed development organizations. Some recommendations and comments on this are made in section 9.2
12. In summary, the team is confident, given the existence of a strong and committed Canadian and African network, energized by the core CNIS corporate team, and combined with what we feel are appropriate and considered transition plans, that CNIS capacity is strong and will become stronger at the completion of the transition process.

## List of Acronyms

ACCESS	African Canadian Committee for Essential Surgical Skills
ASEA	Association of Surgeons of East Africa
CIDA	Canadian International Development Agency
CIHR	Canadian Institute for Health Research
CNIS	Canadian Network for International Surgery
COSECSA	College of Surgeon of East Central and Southern Africa
ESS	Essential Surgical Skills
GIEESC	Global Initiative for Emergency and Essential Surgical Care
ICC-T	Injury control Centre - Tanzania
ICC-U	Injury Control Centre – Uganda
IDRC	International Development Research Centre
IP	Injury Prevention and Safety Program
IPIFA	Injury Prevention Initiative for Africa
IT	Information Technology
PSU	Program Support Unit
RCT	Randomized Control Trial
SI	Injury, Safety, Surgical and Obstetrical Information Program
SS	Surgical and Obstetrical Skills Program
UK-NIS	United Kingdom Network for Surgery
US-NIS	United States Network for Surgery
VIP	Violence and Injury Prevention
WHO	World Health Organization

## **1.0 CNIS PROFILE AND ASSESSMENT CONTEXT**

### **1.1 History, Vision and Mission**

The Canadian Network for International Surgery (CNIS) is a non-profit charitable organization. Its Vision is to “*empower low income countries to create an environment where the risk from injuries is minimal and all people receive adequate surgical care*”. This Vision is premised on the World Health Organization (WHO) estimate that 5.9 million people die from injury related causes each year globally. Most injuries are preventable and caused by context-specific environmental factors, such as political violence and traffic accidents. According to the WHO, there is a global lack of interventions designed to address the injuries and violence.<sup>2</sup> CNIS is the only Canadian organization, and one of the few organizations internationally, whose Vision is focused exclusively on the reduction of injury and injury-promoting environments.

CNIS distinguishes itself from other international medical NGOs by focusing on capacity building. As opposed to providing short-term medical relief of injuries, CNIS trains African partners in essential surgical skills and in injury control and safety promotion. CNIS’ Mission is to: “Improve maternal health, increase safety, and promote local capacity through: Surgical & Obstetrical Skills training and transfer; Injury Prevention & Safety Promotion initiatives and infrastructure; and Surgical Information systems and technology in low income countries.”

CNIS has been in operation for 12 years. Its activities were first initiated in Ethiopia, and have since expanded to five additional African countries, including Uganda (where it has been for 11 years), Mozambique and Malawi (for 8 years) and Tanzania (for 3 years). CNIS is also in the process of establishing new programs in Mali and Rwanda.

CNIS has received funding support from CIDA’s Special Program Branch since 1997. It is currently implementing a 3-year program (January 1, 2007 to December 31, 2009).<sup>3</sup> CNIS also receives financial and in-kind support through its extensive Canadian network including the Canadian Association of General Surgeons and 8 Canadian University Departments of Surgery.<sup>4</sup> CNIS’ network extends into Africa with extensive involvement in the execution of its program with the Africa Canadian Committee for Essential Surgical Skill (ACCESS) and the Association of Surgeons of East Africa (ASEA).

### **1.2 Expectations of CIDA Assessment**

The purpose of this Institutional Assessment was to determine the capacity of CNIS to successfully implement the 3-year program as set out in the current CIDA agreement. This Assessment focused on CNIS’ enabling environment, its functional capacity, and the strength of its partnerships. The Assessment examined plans for succession, including financial and staffing implications and whether CNIS has adequately made provisions in its management structure and procedures to accommodate these plans.

This Assessment sought to determine CNIS’ capacity to execute the 3-year program, to identify potential areas that may require additional strengthening in this process and to make recommendations on how current practices could be improved upon in order to achieve desired outcomes. In particular, this Assessment addressed CNIS’ succession planning, and assessed the level of risk associated with CIDA’s continued commitment to this program.

## **2.0 MANDATE & RESPONSIBILITIES OF ASSESSMENT TEAM**

### **2.1 General Objectives**

The main objective of this Institutional Assessment was to evaluate the capacity of CNIS to manage the current contract from CIDA

### **2.2 Specific Objectives**

Specific Objectives of this Institutional Assessment included:

- To assess CNIS capacity and its management structure and systems, including the ability to formulate program policy, execute projects and perform monitoring and evaluation functions;
- To examine the effectiveness and reliability of supporting administrative functions, including accounting and reporting systems, IT development, financial management systems and human resource management and planning;
- To determine the strength and effectiveness of CNIS' partnership networks in Canada and Africa;
- To provide an assessment of the execution of the core training and education programs as well as the public engagement activities in Canada;
- To provide an assessment of succession and transition measures being taken in the context of present and proposed management structures, financial framework and consistency with sound management practices; and
- To identify any significant program risks associated with current plans and determine the availability of anticipated human and financial resources.

### **2.3 Assessment Methodology**

The Assessment Team developed an Evaluation Matrix (Annex 1) to guide the evaluators towards areas of key focus, indicators of change and sources of information. The Team conducted interviews with CNIS staff, volunteers, Board Members and partners in Canada and Africa. It also reviewed all CNIS institutional and program documentation. Two Interview Protocols were developed, including one for CNIS headquarters staff, members of Board of Directors and partners (Annex 2) and another for Africa-based partners (Annex 3). The Assessment Team interviewed a total of 13 CNIS members and partners in Canada, and 36 in Africa (Annex 4). In Africa, the Team visited CNIS projects in Addis Ababa and Gondar, Ethiopia; Dar Es Salam, Tanzania; Kampala and Mbarara, Uganda.

### **3.0 STRENGTH AND SUSTAINABILITY OF CNIS AS AN ORGANIZATION**

#### **3.1 Corporate Governance Structure**

CNIS' voluntary Board of Directors comprises of 9 individuals. Previously the Board of Directors consisted almost exclusively of surgeons. Recognizing the need for diverse expertise to oversee and guide CNIS program operations, the Board of Directors purposely recruited individuals with inter-disciplinary backgrounds and a variety of skill sets. In addition to surgeons from different specialties, CNIS Board of Directors now contains a chartered accountant, marketing consultant and pharmacist.

Individuals can become a member of the CNIS Board of Directors through an application process. If selected, a prospective candidate must sit on a Board Committee for 6 months before becoming a member. This system allows the Board candidate and current members to determine whether s/he is a 'good fit' for the organization.

The Board of Directors has five Committees, each of which has established roles and responsibilities:

- Executive Committee discusses personnel issues, contracts and agreements with third parties;
- Finance Committee manages CNIS financial operations;
- Program Committee advises CNIS development programs overseas and in Canada;
- Public Engagement & Fundraising Committee coordinates public events to increase CNIS visibility in Canada;
- Surgical Information Committee provides information and material support to CNIS Essential Surgical Skills and Safety Promotion and Public Engagement Programs.

CNIS Administration is centralized at the Headquarters Office in Vancouver. The office has several part-time staff, including a Manager, a Surgical Associate, a Bookkeeper, a Web Project Coordinator, a Newsletter Editor and an Administrative Assistant. Office activities are further supported by hundreds of volunteer hours from students and community members.

CNIS has recently decentralized some of its administrative and management duties by establishing a Program Support Unit (PSU) in Addis Ababa, Ethiopia. Dr. Ronald Lett, the current President also maintains his role as the International Director. He has recently moved to the Ethiopian capital, and has hired a full-time Administrative Assistant, Lilly Kidane.

CNIS' corporate structure is described in visual form through its Organizational Chart (See Annex 5)



Figure 2: Grand opening of CNIS ESS Laboratory Gondar, Ethiopia



CNIS is the only organization in sub-Saharan Africa focused on the standardization and improvement of surgical care. In response to growing requests from Departments of Surgery throughout Eastern Africa, CNIS is rapidly expanding its ESS course curricula, its laboratory infrastructure, and its student base. It is in the process of developing additional advanced curricula, focusing on neuro-surgery, amputation and paediatric burns. It plans to build 15 ESS Laboratories throughout Africa within the coming 3 years. It further plans to expand student admittance into the ESS workshops, by increasing access to other university departments, such as Departments of Internal Medicine and Paediatrics, and to additional types of health care professionals (e.g. nurses).

CNIS has an evaluation mechanism in place to measure participants' technical performance during and after the ESS workshops<sup>5</sup>. Interviews with ESS workshop instructors and participants confirmed that the courses are tremendous confidence builders. Many participants enter the course with little or no surgery experience. However, by the time they have completed one workshop, they will have simulated surgical procedures on a 'dummy' and on animal parts hundreds of times, and will have gained experience on humans in supervised operating rooms.

#### **Case study of ESS workshop participant**

Ms Hiwot was in her first year of residency when she applied for CNIS' ESS workshop. As an obstetrician, she had never assisted or independently conducted a C-Section operation, and felt very nervous. During the intensive 2-week workshop she practised extensively on simulated models. She assisted three live C-section deliveries and independently conducted an additional three. Less than one year after taking the ESS course, Ms. Hiwot has conducted hundreds of C-section operations and feels confident in her surgical abilities.

As part of the Surgical and Obstetrical Skills Program, CNIS also provides teacher training courses. This teacher training component has a dual impact. First, it acts as continuing education for medical staff, who may have either never received training in surgical skills or may be using outdated techniques. Second, it creates a base of surgical educators who can teach ESS courses to undergraduate and graduate students. CNIS also provides a training of trainers of trainers course, which creates a base of senior surgery teaching staff. CNIS has 5 senior Canadian and African trainers of course instructors, who have collectively trained over 150 university/hospital teaching staff throughout East Africa.

### 3.2.2 The Injury Prevention and Safety Promotion Program (IP)

Surgeons are often on the front-line of injury care, as they are called upon to treat and care for victims of violence, trauma or accidents. CNIS has taken a pro-active, public health approach to managing injury. It aims to not only increase medical capacity to treat and manage victims of injury, but also to prevent injury from happening in the first place.

In 1996, CNIS initiated sub-Saharan Africa's first Injury Control Centre in Kampala, Uganda (ICC-U). Administratively, the ICC-U runs as a separate NGO. Its Vision is to "*reduce the national and international burden of injury, and to become the leading agency in injury prevention and safety promotion in Africa*". The ICC-U is currently the only Centre of its kind in the world, and is the locus of the world's most comprehensive injury-related research and programming activities. Recognizing the quality and value of ICC-U's work, WHO-Geneva has made the organization an official WHO Collaborating Centre. The WHO relies heavily on ICC-U's research data and surveillance methods for the development of its own global policies on injury control and safety promotion, and encourages all Ministry of Health staff involved in WHO's programs to partake in ICC-U's accredited training programs.

Based on the ICC-U model, CNIS has recently established a second regional Injury Control Centre in Tanzania (ICC-T). ICC-T has been established as separate NGO, with its own administration, Board of Directors and corporate legal status. This autonomy from CNIS allows ICC-T to enter into separate agreements and partnerships with other organizations as a means of diversifying its funding sources. By facilitating the creation of independent African organizations, CNIS' promotes ownership and principles of sustainability right from the outset. ICC-U has already expanded its partnerships with other international organizations (e.g. Karolinska Institute), and with their increased skills base have engaged National Governments in their programs. <sup>6</sup>

ICC-U conducts injury surveillance and epidemiological research; coordinates injury prevention and safety promotion training in hospitals, schools and communities; conducts advocacy about select injury topics; and manages injury prevention programs. ICC-U Injury Prevention and Safety Promotion Program consists of four major activities, often carried out as consecutive steps:

#### *Step 1: Conduct Baseline and Targeted Epidemiological Research*

CNIS and ICC-U have taken a two-pronged approach to understanding national and international burden of injury. First, they are taking a leading role in standardizing national and international systems for recording injury-related data in hospital and health centre registries. One of the major challenges to understanding the national and international burden of injury is that Ministries of Health do not disaggregate mortality, morbidity and disability data by type and severity of injury. In Uganda, for example, the Ministry of Health records all injury-related deaths as caused by 'accidents', and doesn't specify whether these 'accidents' were caused by gun-shot, drowning, burning, traffic accidents, etc. CNIS and ICC-U have developed a Trauma Registry Form that prompts health care professionals to systematically collect information about patient demography, severity of injury, specific cause and clinical outcome. The Form was first developed in 1998 and most recently updated in 2007. It is currently being used in Uganda's national hospital and 4 regional referral hospitals.

Second, CNIS and ICC-U have led baseline community surveys to identify the prevalence of specific injuries per District. Previous CNIS and ICC-U studies have found that traffic accidents are the most common cause of death nationally; gun-shot wounds are greatest cause of death in Gulu; and drowning the most common cause of death in the Lake Victoria region.

### *Step 2: Development of Injury Control Training Programs*

Based on surveillance data from hospital registries and community-based studies, CNIS and ICC-U identify 'priority injuries' that require targeted injury control and safety promotion interventions. The organizations have collaboratively developed training programs targeted to governmental, non-governmental and community stakeholders (See Annex 6). CNIS and ICC-U have developed a Traffic Safety Planning course to reduce traffic accidents; a Peace-Building course to reduce gun violence among youth; and a Paediatric Burn course to prevent fire-related accidents among children. The organizations have also developed more general courses, such as a First Aid workshops and Safety Promotion course, that have a variety of uses at home and in the workplace. Recognizing the need for improved coordination among health care professionals in the emergency room, CNIS and ICC-U have developed a Trauma Team Training course. They also provide an accredited Injury Epidemiology Research course to graduate students, policy makers and health professionals, which teach participants to conduct and interpret epidemiological research.

Being the only organization with knowledge and expertise in injury control and safety prevention, CNIS and ICC-U have also coordinated public engagement activities focused on less life-threatening causes of injury, such as sports, snake and animal bites and falls from trees. In efforts to address gender-specific causes of injury, CNIS and ICC-U plan to initiate training and public engagement events about domestic violence, female genital mutilation, and vesical vaginal fistula.

### *Step 3: Testing, Development and Evaluation of Injury Prevention*

Once a training course has been developed, CNIS and ICC-U test the effectiveness of the curriculum using scientific research methods. In the case of the Peace-building Training, the organizations conducted a rigorous Randomized Control Trial (RCT) to measure the impact of the training on student attitudes towards violence. A study of road traffic accidents tested the impact of placing speed bumps in front of a primary school to prevent mortality among child pedestrians. Another study of road traffic accidents evaluated the effect of pedestrian overpasses on injury.

### *Step 4: Broad-based Community Program Intervention*

The testing of these interventions (i.e. peace-building, speed-bumps, pedestrian overpasses) have, in some instances, influenced national programming and policy on injury prevention. The Ministry of Education has, for example, adopted CNIS and ICC-U's recommendations for traffic safety for school children. Perhaps the most salient example of the impact of ICC-U generated research on Government policy is the case of the Peace Building education curriculum, which has been adopted by Uganda's Ministry of Education as a mandatory course for primary school students, and has already reached over 300,000 students (See Annex 7 for details). This course has also been adopted by the WHO and will be promoted in other areas affected by conflict.

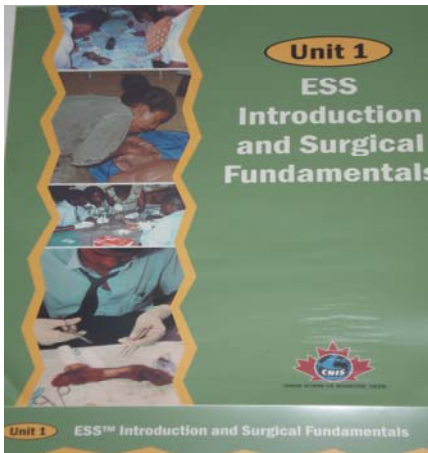
### 3.2.3 The Injury, Safety, Surgical and Obstetrical Information Program (SI)

CNIS has developed a vast amount of information to support its Surgical and Obstetrical and Injury Prevention and Safety Promotion Programs, ranging from technical surgical manuals and peer-reviewed publications to Website resources.

#### *Technical training manuals*

Together with its African and Canadian partners, CNIS has developed several technical training manuals for its ESS workshops (Fig 3). The quality of these manuals is demonstrated by the fact that CNIS has been approached by several organizations who want to use the curriculum for their own training of medical personnel, including the WHO and University of Toronto. CNIS also extensively publishes in peer-reviewed scientific journals. (See Annex 8) This represents a concerted effort to ensuring excellence in clinical work and research. It also engages CNIS' target medical and research audiences, including surgeons, physicians, obstetricians and epidemiologists.

*Figure 3: ESS technical training manual*



#### *Website management*

CNIS maximizes the use of its website to disseminate injury, safety surgical and obstetrical information to public and medical audiences. It has established one of the first Injury Databases focused injury in Africa, which uploads an average of 120 peer-reviewed and grey literature sources per month. CNIS is also developing online surgery Wiki site, which allows registered users to contribute and update technical surgical information.

#### *Library project*

CNIS aims to strengthen African medical professionals' access to online medical libraries. It has gained pass-word access for its African partners to the online medical libraries of the Universities of British Columbia, McGill and Toronto. CNIS also facilitates the procurement and distribution of new and used surgical text books from Canada to African libraries. In 2005, CNIS sent a container of CND \$300,000 worth of surgical text books to Ethiopia, distributing them to 6 Departments of Surgery throughout the country.

### 3.2.4 The Public Engagement Program

A recent survey of University of Toronto surgery students found that 40% are aware of CNIS. CNIS engages the Canadian and African public through a variety of ways:

#### *Workshops for Canadian surgeons*

CNIS provides Canadian surgeons the opportunity to teach ESS courses in Africa, and has developed training courses specifically for this. CNIS offers two one-day workshops in Canada, including: 1) Place of surgery in international development, and 2) Surviving and succeeding surgery in Africa. These workshops have been given to a number of universities throughout Canada, and attract students as well as Heads of Departments. They assist not only in building the capacity of Canadian surgeons to assist development activities in Africa, but also facilitate the recruitment of new members and donors. Four courses will be offered at CNIS headquarters in 2008.

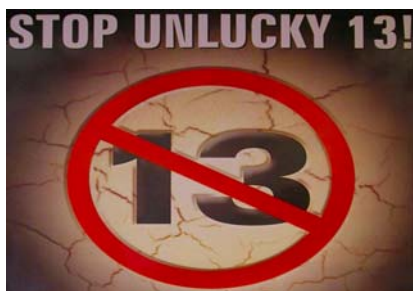
#### *Canadian and African surgical meetings*

CNIS coordinates, and encourages its partners to attend, surgery-related scientific meetings in Canada and Africa. Canadian meetings, such as the Bethune Round Table, focus on topics related to surgical development in Africa, and involve CNIS members, students and staff from Departments of Surgery, and other interested stakeholders. In Africa, CNIS facilitates the participation of rural African surgeons at national academic meetings. This enables these surgeons to share and acquire surgical information at an academic medical forum, and to learn about recent technical developments.

#### *Marketing CNIS brand and activities*

Based on WHO data, the CNIS has recently 'branded' its corporate identity by highlighting that 13% of people in sub-Saharan Africa die from injury each year, and 1 in every 13 women will die a maternal death. CNIS stresses the need to prevent the 'unlucky 13' through injury control and safety promotion measures (Figure 4).

*Figure 4: CNIS 'unlucky 13'*



CNIS also engages Canadian audiences by publishing a monthly newsletter; coordinating weekly Swahili language classes; holding annual African handicraft markets and volunteer appreciation events; and coordinating large public talks, such as that hosted by Romeo Dallaire in 2006. CNIS has recently decided to approach Stephanie Nolan, foreign correspondent for the Globe and Mail, to see if she would be willing to write an article about the injury pandemic in Africa.

### 3.3 CNIS Funding Base

#### 3.3.1 Sources of Funding

CIDA has a Contribution Agreement with CNIS to support a program for Maternal Health, Surgical Access and Safety Promotion in Africa.<sup>7</sup> CIDA has committed a total of CND \$3.15 M over 5 years, which accounts for two thirds of CNIS' total program expenses. Under the Agreement, CNIS is legally obliged to contribute the remaining one third of program costs. However, in practice, it strives to match CIDA funding in a 1:1 ratio.

CNIS obtains its matching funds from a diversified funding base. This includes CNIS membership fees, donations from family foundations, funds from partnership agreements with Canadian universities and hospitals, and fundraising activities. CNIS is exploring funding opportunities within the corporate sector and has, for example, been in touch with Johnson & Johnson about possible in-kind donations of surgical equipment. As demonstrated by CNIS' statement of revenues for fiscal year 2007 (12 months as of June 2007), the organization almost reached its goal of matching CIDA funds in a 1:1 ratio. CIDA's contributions for 2007 totalled \$379,063, while CNIS' total revenue for the year reached \$328,076 (Table 1).

*Table 1: CNIS Funding Sources 2007*

<b>Funding Source</b>	<b>Contribution</b>
Wild Rose Foundation	\$ 5,454
Donner Foundation	\$ 19,000
Harbinger Foundation	\$ 74,519
McGill University	\$ 5,500
Office of International Surgery	\$ 14,545
Canadian Association of General Surgeons	\$ 8,285
Donations – general	\$ 188,173
Donations – Alberta	\$ 8,603
Miscellaneous	\$ 3,997
<b>TOTAL</b>	<b>\$ 328,076</b>

### 3.3.2 Fundraising Initiatives

CNIS' Board of Directors has a Finance and Fundraising Committee that is responsible for coordinating annual fundraising initiatives. The Committee calls upon all members of the Board of Directors to individually contribute to raising funds for CNIS. While there is not an official fundraising strategic document to guide activities, CNIS' dedicated Board members have successfully drawn in funds via institutional partnerships and public engagement events. Board members have also provided personal monetary donations. This approach to raising funds has allowed CNIS to consistently raise enough to meet its CIDA match.

CNIS recently experienced some financial stress, when CIDA funding was temporarily suspended for a 6 month period. During this time, CNIS was obliged to spend its contingency fund of approximately CND \$32.5 thousand in order to sustain program activities in Africa. While this experience put a major dent into CNIS' funding base, it also illustrated its institutional resilience. During this time, CNIS' Canadian partners, such as McGill University, offered CNIS additional funds to tide-over program operations. This supplementary donation demonstrated the commitment of CNIS' partners.

In recent years, CNIS has incorporated cost-recovery mechanisms into its field programs in order to raise funds for its CIDA match. For example, surgeons interested in volunteering with CNIS in Africa must first take an accredited "trainer of trainers" course, costing CND \$700. CNIS also requires surgeons going overseas to contribute one third of their expenses for accommodation and airfare. CNIS is beginning to develop cost-recovery strategies for its ESS Laboratories in Africa. These include, establishing space rental and workshop fees for selected users. CNIS also encourages its African partners to diversify their funding bases. To this end, CNIS has coordinated grant-writing workshops for its partners and put them in contact with other donor agencies based in North America. This has yielded positive results in several cases including with the University of California in San Francisco which is now funding CNIS initiated activities in Tanzania.

In an effort to diversity its funding base, CNIS has been seeking new avenues within the Canadian corporate sector. One new initiative involves approaching Canadian mining companies working in Africa. This idea came up from the recognition that mining companies can benefit from having an improved humanitarian corporate image. Miners themselves can also benefit from an affiliation with CNIS since they are often direct victims of injury. CNIS hopes that a partnership of this sort may help CNIS to gain long-term, sustainable funding. CNIS is also working towards establishing corporate partnerships with pharmaceutical companies, in hopes of obtaining monetary or in kind donations. To this end, it has recruited a pharmacist onto the Board of Directors.

## **4.0 CNIS PARTNERSHIPS**

### **4.1 North-South Partnerships**

CNIS' Board of Directors has been instrumental in recruiting Canadian institutional partners. Several members of the CNIS Board of Directors also hold faculty positions at universities and/or hospitals throughout Canada. Their participation on the CNIS Board has given the organization automatic informal institutional links that have manifested in institutional monetary contributions, personnel, and in-kind contributions. The nature of CNIS' Canadian partnerships varies between institutions. That is, some may contribute to CNIS monetarily while other contribute by offering personnel to train ESS workshops in Africa, volunteer time, equipment, or by publishing peer-reviewed manuscripts.

Canadian CNIS partner institutions are generally linked up with an African counterpart institution (See Annex 9). With CNIS as an interlocutor, Canadian university and hospital partners engage in a long-term research and training partnerships. Gradually, CNIS aims to formalize all its Canadian institutional partnership by developing Memorandums of Understandings that require Canadian partners to financially contribute to CNIS. CNIS currently has MOUs with the University of California in San Francisco, the Canadian Association of General Surgeons and the University of Toronto.

CNIS has also established the Africa Canada Committee for Essential Surgical Skills (ACCESS). ACCESS is an advisory committee to CNIS, comprised of representatives from Departments of Surgery in each of CNIS' partner universities/hospitals and the Chair of the African ACCESS network. ACCESS members meet annually to review ESS curriculum and associated activities. They work in collaboration with members of the College of Surgeons of East Central and Southern Africa (COSECSA) to expand ESS workshops the region.

### **4.2 South-South Partnerships**

In addition to fostering contacts with Departments of Surgery and Obstetrics at various African universities and hospitals, CNIS has facilitated South-South collaborations between African institutions. CNIS' most salient example of this is the establishment of the intra-Africa partnership, Injury Prevention Initiative for Africa (IPIFA).

IPIFA is an NGO with a separate legal entity that was initiated as a collaborative venture between the CNIS and the WHO's Injury Control Centre in Uganda. The purpose of IPIFA is to increase the knowledge and capacity of epidemiologists working in injury prevention throughout the African continent. It has approximately 17 members, each of whom come from different countries and institutions. IPIFA provides a forum for injury control specialists to share best practices and network. Members of IPIFA also teach university courses throughout Africa on injury epidemiology. The current head of IPIFA who is concurrently Director of the ICC-U will soon be attending an international forum in Mexico on Injury Prevention March 2008. At this time IPIFA will set up an information booth to bring greater awareness to it's purpose and capabilities presenting a possibility of attracting additional donor support.

CNIS also fosters South-South partnerships within its programs. It has facilitated a south-south exchange between its Injury Control Centres, by sending ICC-Tanzania staff to ICC-Uganda to learn about their programs, strategic planning and other operational

issues. As part of its expansion of ESS workshops to other countries, CNIS has sent senior “trainer of trainers” from Ethiopia to train instructors on new ESS sites in countries such as Rwanda.

### **4.3 North-North Partnerships**

CNIS plans to spearhead the expansion of Networks for International Surgery internationally by supporting the initiation of the United Kingdom Network for Surgery (UK-NIS), a United States Network for Surgery (US-NIS), and a Global Network for Surgery. CNIS intends to play a coordinating and standardization role. It would, for example, licence UK-NIS and US-NIS to give ESS student workshops and ‘training of trainers’, and sell them CNIS workshop curricula.

### **4.4 Coherence of Interests Between CNIS and its Partners**

CNIS’ African partners in Ethiopia, Uganda and Tanzania all agree on one major point: CNIS’ approach of training African partners and fostering African networks is effective and a welcome change from most medical assistance programs. Ideas for program activities, including topics for ESS workshops and ICC activities, are born from African partners, and facilitated by CNIS funding. There is little evidence of any ‘top-down’ approach in CNIS’ programs, as African partners have genuinely appropriated program infrastructure and activities. In the case of the ESS Laboratories, for example, Deans of Faculties of Medicine and Heads of Surgery Departments in Uganda and Ethiopia proudly expressed full ownership of ESS infrastructure and workshops. Meanwhile, Injury Control Centres established by CNIS are separate NGOs with full ownership over strategic program directions.

CNIS and its African partners appeared to share a common vision for the future. Both recognize that there is a desperate need for improved surgical knowledge and capacity in African hospitals and health care centres. The Assessment Team witnessed several occasions where the CNIS International Director, Dr. Lett, was requested by Deans of Medicine or Heads of Department to expand ESS courses. In Ethiopia, CNIS’ African partners are particularly excited about the prospect of making the ESS Laboratory a Regional Centre for Excellence for surgical training of health professionals in all of East Africa, and even possibly all of sub-Saharan Africa.

CNIS and its African partners also agreed on a common vision of making the ICC-Uganda Africa’s leading expert on injury control and safety prevention for Africa. Both organizations have identified injury control and safety promotion as critical, unaddressed areas of focus in Africa. The wheels are already in motion for this vision, as ICC-Uganda has teamed up with the WHO to forward surveillance, research and publishing on injury-related topics.

## **5.0 RELEVANCE OF CNIS PROGRAMMING**

### **5.1 Support of World Health Organization Priorities**

According to the WHO, 13% of all deaths in sub-Saharan Africa is due to injury. Africa has the highest rates of conflict-related deaths globally at 32.0 per 100 000.<sup>8</sup> An estimated 1.2 million people are killed, and 20 to 50 million are injured, in road traffic crashes annually<sup>9</sup>. Fire-related burns (injuries due to exposure to smoke, fire and flames) accounted for 12.2% of all mortality in Africa.<sup>10</sup> Meanwhile, drowning causes an estimated 90 thousand deaths per year in the continent.<sup>11</sup> CNIS' Vision and Mission are directly in line with WHO's Violence and Injury Prevention (VIP) Program and its Global Initiative for Emergency and Essential Surgical Care (GIEESC).

The extent to which CNIS' activities are directly in line with WHO priorities is demonstrated not only by WHO's formal collaboration with the ICC-Uganda, but by its hiring of CNIS and ICC-Uganda trained staff, and its appropriation of research information and publications.

### **5.2 Support of CIDA Priorities**

#### **5.2.1 Basic human needs - health**

CNIS programs in African focus on developing health-related networks, building up health systems and developing human resources in the health sector. These priorities are consistent and supportive of both the United Nations Millennium Development and CIDA health goals. The Assessment Team noted that CNIS has fostered an extensive network among its African partners. CNIS African partners regularly share training facilities, exchange information, and update each other on locally-initiated technological advances (e.g. surgical models). CNIS has placed a major focus on women, children and youth in its Africa-based programs. CNIS' ESS and ICC programs have particularly focused on maternal health (see section 5.2.4 below). In addition, they have prioritized children and youth with programs such as injury prevention pertaining to traffic safety (targeting primary school children) and fire safety (targeting young children in the household). One of CNIS' most salient contributions to basic health and safety of youth has been the development of a peace-building curriculum, which has since been adopted nationally by the government (See Annex 7).

#### **5.2.2 Gender**

CNIS has a large maternal health component. CNIS recognizes the importance of gender equality issues as they pertain to surgery, injury prevention and safety promotion. Lack of access to essential surgical skills for safe pregnancy is the single most important contributing factor to maternal deaths in Africa. One in every 13 women dies a maternal death in Africa; for every maternal death, 30 women are incapacitated by chronic problems such as fistula, urinary and fecal incontinency, anaemia chronic pelvic inflammatory disease and infertility. Approximately half of the 600,000 pregnancy-related deaths recorded worldwide occur in Africa.

CNIS' ESS workshops are designed to directly improve maternal morbidity and mortality in Africa. Pregnant women will benefit from increased knowledge and capacity of surgeons in obstetrical care, by receiving safe and effective care during labour and

delivery. Notably, CNIS' advanced surgical training in C-section deliveries will save the lives of mothers as well as newborns. CNIS' training of female surgeons to become ESS trainers, trainer or trainers contributes to gender equality in the workforce.

Within the context of ICC-Uganda, CNIS promotes gender equality by supporting research and programs related to injury prevention associated with domestic violence, female genital mutilation and surgical reparation of fistula.

### 5.2.3 Good governance

CNIS contributes to good governance by strengthening the financial accounting skills of its African partner institutions. Recognizing the need for improved financial management among Departments of Surgery, CNIS coordinated a health administration course in Addis Ababa in December 2005. This workshop aimed to train surgeons and Heads of Departments to develop improved systems for recording financial information, and for cost-recovery planning. The Assessment Team found evidence of this training at the Department of Surgery in Addis Ababa, where partners had developed cost-recovery strategies to promote the sustainability of the ESS Laboratory.

In Canada, CNIS has strengthened its own corporate governance by formalizing committees within its Board of Directors. It is contemplating the development of a governance manual that can be used at CNIS Headquarters in Vancouver to clarify the roles and responsibilities of CNIS staff and Board members. It has also over the past years successfully broadened the membership of the board, making it more broad based by moving it from a surgical focused membership to one that also includes other medical disciplines as well as senior administrative, pharmaceutical and business community members.

### 5.2.4 Poverty reduction

Unlike many medical NGOs, CNIS is not focusing on relief or clinical service projects with short-term outputs, rather it promotes sustainable, long-term outcomes. This approach is at the heart of poverty-reduction strategies. It is also particularly necessary in the field of surgery, as there have been concerns about the quality of care given by 'fly in and fly out' surgeons' who do not provide adequate post-surgery follow-up. CNIS' capacity building initiatives within the ESS workshops, and ICC activities, reduce poverty by fostering long term improvements in the quality and cost-effectiveness of health care systems, and in the basic health of populations.

### 5.2.5 Environment

CNIS supports CIDA's priorities for environmental conservation, by teaching students about the fundamentals of safe equipment disposal in the ESS course. Participants learn about biological hazards associated with equipment disposal (e.g. HIV/AIDS and Hepatitis).

### 5.3 Support of African Government Priorities

A review of African government websites revealed a common trend in health sector priorities. These included a focus on building human resource capacity and reduction of maternal mortality. CNIS' program activities in Ethiopia and Uganda are directly in line with these health sector priorities.

In Ethiopia, CNIS' programmatic focus on building capacity aligns very well with the priorities stated in the Government's Ministry of Health policy statement on health; "Health Policy of the Transitional Government of Ethiopia". This long-term policy approach underscores the need for the development of human resources required to build a sustainable health sector. Consistent with CNIS' program objectives, the Ministry of Health specifically mentioned the importance of "training trainers" and of providing continuing education to existing health care professionals. The Ministry of Health has also listed the "minimization of maternal mortality rate during pregnancy and delivery" as its primary strategic objective".<sup>12</sup> CNIS' obstetrical training is also directly supportive of this Ethiopian Ministry of Health goal.

Meanwhile, in Uganda, the Ministry of Health has listed the prevention of trauma and accidents as one of the top eight major priorities. CNIS' Injury Control Center, which is linked to the national Mulago Hospital, is directly supportive of this Ministry of Health priority. The Government of Uganda also emphasizes the need to expand knowledge and capacity of health care workers in the country, specifically those working in the area of reproductive health.<sup>13</sup> CNIS' ESS workshops, and especially its advanced workshop focused on safe C-section operations, contributes to Ministry of Health programmatic goals in this area.

CNIS programming is also supportive of the Government of Tanzania's long term health program which focuses on upgrading the skills of health professionals with a particular emphasis on maternal health. CNIS' health program is also making attempts to better manage the health care system by improving performance monitoring and evaluation. This is a key component of the ICC-T program which is on the leading edge of developing a methodology for determining the effectiveness of surgical training programs.

## **6.0 TRANSITION AND SUCCESSION**

### **6.1 Decentralization of Administration and Management**

Over recent years, CIDA has increasingly emphasized the importance of decentralizing program administration and management to strengthen sustainability and relevance of activities. In October 2007, the Government of Canada announced a plan to increase focus of foreign aid on primary health care and basic education, and to decentralize employees away from CIDA headquarters. CNIS' current programmatic and management structures are directly in line with these governmental priorities.

The current President/International Director of the CNIS, Dr. Ronald Lett, has been in place since the formation of the organization. In an aim to decentralize CNIS administration and management, Dr. Lett has recently moved to Addis Ababa, Ethiopia. A distinguished member of the Board of Directors, Mr. Phillip Hassen, has been groomed to take over Dr. Lett's Presidency and is currently taking on more responsibilities in this area. The intention is then to have Mr. Hassen lead CNIS visibility and operations in Canada, and for Dr. Lett to develop programs in Africa. Responsibility for program management has also been decentralized, with CNIS Board Members and Canadian partners delegating responsibility for coordinating ESS training, trauma team training, and curricula for C-section and hernia repair courses. CNIS' decentralization of program administration and management has two major advantages:

Firstly, it appears to maximize the use of the Directors' respective expertise. Mr. Hassen is a distinguished and experienced Health Administrator who has held very senior positions in Canada, including Deputy Minister of Health for Ontario; Chief Executive Officer for the Vancouver Coastal Health Authority; and now CEO of the Canadian Patient Safety Institute. Given his management experience within the Canadian Ministry of Health and health care system, he may be able to foster new institutional and funding networks for CNIS in Canada. Furthermore, his Presidency may enable CNIS to tap into a larger or different corporate (i.e. pharmaceutical) and governmental networks. Meanwhile, Dr. Lett has over 30 years of experience working in Africa. He has a thorough understanding of African cultural, governmental and health care systems. He has also developed a large network of African partners, ranging from individual surgeons to large institutions such as universities, hospitals and governmental departments.

Second, decentralization will facilitate CNIS' plans to expand operations in Africa. By having Dr. Lett in the field, CNIS will be able to effectively strengthen networks with existing or new African partners. This is particularly in line with CNIS' plan to make Addis Ababa University a regional Centre for Excellence for training medical students and graduates in basic and advanced surgery. Dr. Lett's presence will also allow him to collaborate with African partners on a variety of projects, including the development of new ESS workshop curricula and surrogate models. Moreover, it will allow CNIS to groom future Program Directors in the region. Dr. Lett envisages eventually having several Program Directors in the region who would spearhead CNIS activities and be responsible for their direction. Dr. Lett has identified four key individuals in Uganda and Tanzania that have leadership qualities, and have demonstrated commitment to CNIS. Specifically, two regional leaders are being groomed to lead ESS development and training, and an additional two will lead ICC activities and IPIFA. The Assessment Team met with all four identified leaders and can confirm both their active engagement and commitment with the CNIS program.

## **6.2 Expansion of Programs**

CNIS programs appear to be expanding at a rapid pace. In the context of its Surgical and Obstetrical Skills Program, CNIS plans to build a total of 15 ESS Laboratories within three years. It is developing ESS curricula on a variety of topics (e.g. paediatric burn management, neuro-surgery), as well as accompanying simulation 'models'. CNIS is planning to significantly expand the number of students and trainers accessing the ESS workshops. In the Injury Control and Safety Promotion Program, CNIS is supporting ICC-Uganda's efforts to conduct novel research on domestic violence and other gender-related topics. It intends to expand successful injury prevention training programs, such as the peace-building initiative, to other fragile states (e.g. Zimbabwe). Meanwhile, it intends to replicate ICC-Uganda's diverse research and training activities in Tanzania.

CNIS has made a concerted effort to ensure program succession to its African partners, by establishing ICC-Uganda and ICC-Tanzania as independent corporate institutions right from the outset. This strategy has allowed the Injury Control Centres to engage in their own partnerships with other institutions, contributing to their financial sustainability. ICC-Uganda has already used this independence to acquire diverse funding sources from institutions such as Rotary International, the Karolinska Institute, the WHO, and Safe Kids International. In addition as noted in the previous section African leaders are being groomed to take the leadership of the ESS and ICC flagship programs.

## **7.0 INSTITUTIONAL AND PROGRAMMATIC RISK**

In the face of its growing expansion, CNIS confronts several institutional and programmatic risks related to sustainability of funding, human resource capacity, clarity of vision, and program focus.

### **7.1 Sustainability of Funding**

CNIS' strategy for raising program funds appears to be reactive, rather than pro-active. The organization has managed to consistently acquire enough annual funding to satisfy CIDA's Contribution Agreement. However, CNIS does not have a stated strategic fundraising strategy, with clearly established goals and milestones. Based on CNIS' most recent quarterly financial statements, it appears that the momentum of CNIS' programs at times exceeds its available financial resources. Furthermore, the recent depletion of CNIS' contingency fund leaves it in a more vulnerable position offering little buffer between the demands placed by the significant program momentum and the less certain inflow of funds.

CNIS is attempting to diversify its funding base. This is evident by its expanding network of Canadian institutional partners, and by its efforts to coordinate large public engagement events, such as that hosted by Romeo Dallaire at the University of Toronto in 2006. The former represents a concerted effort towards achieving long-term sustainable funding. CNIS' public engagement activities do not appear to be targeted to a specific donor audience (i.e. primary school and university students). Unless carefully targeted towards a more affluent audience, CNIS' public engagement efforts may not yield the required financial results.

### **7.2 Human Resource Capacity**

CNIS' has a remarkably strong volunteer base, both in Canada and in Africa. It would appear, however, that the level of volunteerism may have reached its limit. Lack of human resource capacity was continually mentioned as a source of programmatic strain, both in Canada and in Africa.

In Canada, Dr. Lett currently holds the organization's two most senior management positions, President and International Director. While the intention is for Dr. Lett to work solely as the International Director and to have Dr. Phil Hassen take over CNIS' Presidency, this has not been possible due to funding constraints. Meanwhile, CNIS' Board of Directors contributes an enormous amount of time and energy on a volunteer basis, at the same time as managing their respective full-time senior positions.

In Africa, the expansion of ESS workshops for students is restricted by the number of surgical staff capable of teaching the course. In Mulago Hospital, for example, ESS workshops are on hold until a sufficient body of trainers has been trained. Moreover, those individuals who are trained and available to teach the ESS course often do so on a volunteer or honorarium basis. The amount of time they are able to dedicate to the expansion of ESS programs (e.g. formulation of ESS course curricula, strengthening inter-departmental relationships, writing grants and seeking diversified funding) is limited.

### 7.3 Clarity of Vision

CNIS' Vision is to: *“Empower low income countries to create an environment where the risk from injuries is minimal and all people receive adequate surgical care”*

Upon initial reflection, the Assessment Team was unable to fully grasp the meaning of CNIS' Vision. It was only once the Team completed its comprehensive field trip that it better appreciated what CNIS means by “an environment where the risk from injuries is minimal”. In the field, the Team learned about CNIS' public health approach to injuries. Namely, that it strives not only to improve the treatment of injuries (ie. through improved surgical response), but also seeks to prevent them from happening in the first place. Accordingly, CNIS' Vision seems to capture the essence of, and focus on, two flagship programs, the Essential Surgical Skills (ESS) and the Injury Control Centre (ICC).

Organizations that have worked directly with CNIS in the field, such as the WHO and Government Ministries of Health and Education, recognize the purpose and value of CNIS' work. Members within CNIS' respective African partner organizations had a clear understanding of CNIS' Vision, since it related directly to their ESS or ICC work.

Given that the CNIS Vision is steeped in a public health understanding of the causes and responses to injury, it is unclear to how the Canadian general public and new potential donors (unrelated to medical or surgical work) might respond to CNIS' Vision. As it stands now, CNIS' Vision requires some 'explaining' before newcomers can fully grasp its meaning.

From a marketing perspective, a condensed and simple message is often easier to remember. A Vision that is simple and succinct can give new audiences an immediate insight into an organization, without the need for additional intellectualization.

### 7.4 Program Focus

One of the strengths of CNIS' programs is that they complement and mutually support each other. The ESS workshops enable health care providers to adequately treat and care for victims of injury. Meanwhile, the Injury Control Centres aim to promote safety, so as to reduce the number of injuries seen by surgeons. CNIS' Information Program provides vital literature for the management of surgical skills training and injury prevention. Its Public Engagement activities foster the expansion of partnerships and funding bases to sustain these programs.

However, within the context of CNIS' anticipated program expansion, it may appear that CNIS is overly diversified in its activities. For example, within CNIS' Injury Prevention and Safety Promotion Program, questions remain about the extent to which CNIS should be involved in the prevention of sports injuries, snake/animal bites, falls from tree-climbing, drowning and even domestic violence. Albeit important causes of injury, one could argue that these types of injury are not sufficiently prevalent or have no link to surgery, to justify a call on limited program resources. Some of CNIS' injury control and safety promotion programs do however have an obvious link to CNIS' surgical expertise, or to an obvious need. CNIS' Trauma Training course and programs geared towards female genital mutilation and the prevention of fistula utilize CNIS' surgical knowledge

and capacity. Meanwhile, its efforts related to the prevention of violence and traffic accident respond to a more significant cause of injury.

Senior management at the ICC-U explained that achieving the 'Three Es of Injury Prevention' (i.e. education, enforcement and engineering) requires a diversity of program strategies and human resources. CNIS appears to be supporting both education and engineering. The educational component of ICC-U's activities is consistent with CNIS' expertise in training and curriculum development. CNIS' involvement in assessing the cost-effectiveness of over-head pedestrian passes, speed bumps in front of schools and fire-barriers within domestic homes is less easily justifiable. Similarly, CNIS' involvement in a program linking a school in Vancouver to one in Gulu for the purpose of peace-building may excessively draw on CNIS time and energy.

The appropriateness of program activities also arises within CNIS' Public Engagement Program. One of CNIS' goals within its Public Engagement program is to lobby the Government of Canada to change tax laws for citizens donating to international NGOs. Given CNIS' limited human resources in Canada, questions arise as to whether this is really an appropriate use of CNIS energy, and whether other organizations – in particular umbrella organizations representing NGOs - wouldn't be more ideally suited to take on this activity.

## 8.0 SUMMARY

The findings from our Institutional Assessment of CNIS can be summarized as follows:

### **Strength and Sustainability of CNIS as an Organization**

- CNIS appears to be providing CIDA with impressive value for money. It leverages program resources at every opportunity to maximize output. Firstly, its training courses in targeted African countries have a multiplying effect. They create a base of students that are qualified in essential surgical skills; a human resource base to expand teaching of the essential surgical skills; and also a human resource base to train “trainers of trainers” in essential surgical skills. Second, CNIS uses its program funding to develop new organizations (e.g. Injury Control Centres, IPIFA, ACCESS) and to foster new partnerships (e.g. with other departments, universities, hospitals in Africa and Canada). Thirdly, CNIS uses its program funding to link its African partners with other potential donors, and strengthens their capacity to seek additional funding from other sources.
- CNIS’ ESS workshops have attracted an enormous amount of attention from African universities/hospitals, Ministries of Health and international organizations such as the WHO. CNIS’ ESS workshop curriculum represents a concerted effort to standardize surgical skills training in Africa, thereby facilitating course replication. The popularity and strength of the ESS workshops is demonstrated by the fact that African Departments of Surgery have readily adopted the course into their accredited programs; that CNIS has been approached by universities/hospitals to develop new courses (e.g. obstetric); and by the fact that WHO insists on hiring only CNIS-certified health care professionals for their surgery related programs (e.g. in Tanzania). Furthermore, the ESS Laboratories represent the first initiatives in Africa to ensure international ‘best practices’ for surgical training.
- ICC-Uganda is the only organization in sub-Saharan Africa conducting epidemiological research, training, and programs on injury control and safety promotion. The quality and relevance of this work is demonstrated by WHO’s use and publication of ICC-Uganda’s research. The research programs led by the ICC-Uganda have also led to the creation of an African-based Injury Prevention Network (IPIFA), which has now established itself as a credible international NGO in its own right. However, ICC-Uganda has adopted a wide definition of injury prevention and safety control, which allows them to explore virtually any topic involving injury, ranging from armed conflict to children falling out trees. The result is that limited human and financial resources are potentially stretched quite thin.
- As part of its Injury, Safety, Surgical and Obstetrical Information Program, CNIS is creating a novel online database of injury control and safety promotion information. This database is the only one of its kind in Africa, and will be an invaluable resource to stakeholders, including the WHO.
- CNIS’ Public Engagement Program also functions as a fundraising tool, as it simultaneously educates the Canadian public about international surgery related issues and facilitates the recruitment of new members and donors. CNIS’ attempts at fundraising through public engagement activities have been met with moderate success (e.g. African market, Romeo Delaire talk).

- The Assessment Team was impressed by the breadth and reach of CNIS' programs. However, it was unable to locate concrete and consistently maintained performance indicators regarding program outputs. For example, no data were available detailing the number of students and trainers trained in the ESS workshop, aggregated by location, course-type, year, sex.
- Funding for CNIS programs is largely dependent on CIDA. Matching funds are acquired on a case-by-case basis, and have been facilitated by a dedicated Board of Directors. The organization has not elaborated an official fundraising strategy with stated annual goals.

### **CNIS Partnerships**

- CNIS is exactly that – a Network of partnerships. CNIS has served as a powerful catalyst for creating partnerships worldwide, and has proven to have the ability to keep partnerships active and relevant. CNIS and its Canadian and African partners share a common vision with regards to injury control and safety promotion in surgical care. This is reflected by mutual goals to have the ESS-Laboratory in Addis Ababa, and the ICC-Uganda become regional headquarters of excellence for all of East Africa.
- CNIS has been strategic in its networking for Canadian partners, by recruiting members of the Board of Directors who simultaneously have faculty positions at Canadian universities and hospitals. This has given CNIS a broad reach in the Canadian medical academic community, and still has the potential to grow.
- CNIS has succeeded in bringing prominent Southern partners together. Most notably, it created a 14-nation pan-African network of injury prevention medical professionals (i.e. IPIFA). This network is now internationally recognized and engaged in an active program of injury prevention and information exchange.
- CNIS intends to expand its Network of International Surgeons by establishing counterpart Networks in the United States and United Kingdom. This initiative reflects CNIS' commitment to maximizing its global impact.

### **Relevance of CNIS Programming**

- CNIS' programmatic foci on capacity building of essential surgical skills, injury control and safety promotion are directly in line with WHO goals for its Global Initiative on Emergency and Essential Surgical Care, and Violence and Injury Prevention. CNIS' programs are thus internationally relevant. Furthermore, they are respected as contributing to cutting edge practices in these respective areas.
- CNIS programmatic activities are directly in line with Ministry of Health priorities of the Governments of Uganda, Ethiopia and Tanzania. Specifically, CNIS' activities directly support African governmental priorities in the areas of human resource capacity building and reduction of maternal mortality.

- CNIS' programs meet CIDA's priorities for capacity building for poverty alleviation, gender equity, good governance and environment. While surgical training, injury control and safety promotion may not be recognized as top priorities within CIDA, these areas have a significant impact on the health and education of beneficiary populations.

### **Transition and Succession**

- CNIS' decentralization of program administration and management is consistent with CIDA's goals for improving efficiency, sustainability and relevance of programs.
- Recent movements in CNIS senior management personnel appear ideally suited to CNIS' programmatic and strategic needs. That is, having a President with extensive health administration expertise will strengthen CNIS' corporate management and Canadian profile. Meanwhile, having an International Director in Africa with 30 years of African experience and having extensive African contacts will strengthen CNIS' plans to expand field operations.
- CNIS programs are expanding rapidly, both in programmatic content and in terms of target countries. CNIS has demonstrated a commitment to succession planning by encouraging the independence of its African partners – this is most notable in the case of the Injury Control Centres, which have been able to acquire funds from diverse sources. Four African participants in CNIS programs have been identified to take on a leadership role in the ESS and ICC related programs and are currently being groomed for that purpose.

### **Programmatic Risk**

- CNIS' strategy for raising program funds appears to be reactive, rather than proactive. The organization's dedicated Board of Directors has enabled it to consistently meet its matching CIDA contribution. However, CNIS' recent depletion of its contingency fund places it in a vulnerable position. Its public engagement activities do not appear to be targeted to a specific donor audience.
- Part of CNIS' current institutional and programmatic strength is its committed base of volunteers. However, CNIS' human resource capacity in Canada and Africa appears to be stretched to the maximum, and may impede the organizations' ability to effectively expand its programs. Remuneration of some form appears to be a constraining factor in the expansion and continuing success of African participants.
- CNIS' Vision captures the essence of its two main programs, the ESS and ICC. It is encased in a public health understanding that reducing injuries requires both a curative and preventive approach. The Vision is well understood within CNIS and its partner institutions. Questions remain about how non-medical and surgical audiences would react to CNIS' Vision.
- One of the strengths of CNIS' programs is that they complement and mutually support each other. However, in the context of CNIS' anticipated program expansion, CNIS may be overly diversifying its activities. Some questions remain about the appropriateness of certain program activities in light of human resource and financial constraints.

## 9.0 RECOMMENDATIONS

### 9.1 Promoting Financial Sustainability

In order to proactively contribute to its financial sustainability, CNIS should develop a well-researched Fundraising Strategy Document that highlights time-specific goals. Within this document, CNIS could consider:

- 1) *Expanding its Canadian partnerships to all Canadian universities with faculties of medicine.*

CNIS has established Memorandums of Understanding with 2 of its Canadian partners, in exchange for international research opportunities and access to CNIS' network of African partners. There is a large opportunity for CNIS to formalize the rest of its partnerships with a financially-binding MoU, and to expand its partnerships to all Canadian universities with schools of medicine.

- 2) *Marketing its services in surgical training, injury prevention and safety promotion research to multilateral institutions.*

Given CNIS' high quality of work and international recognition, it is well positioned to become an executing agency for organizations such as the WHO, World Bank and other agencies with overlapping interests. Certain aspects of CNIS' programs are particularly amenable to being marketed, such as: the ESS course curriculum for students and trainer of trainers; community-based and hospital-based surveys for injury surveillance; epidemiological monitoring and health outcomes research related to injury; injury prevention and safety promotion guidelines; and the injury control database. CNIS may want to consider promoting its strong international expertise and programs to Canadian-based organization, such as the Canadian Association of General Surgeons, that may have interest in engaging internationally. As part of this process, CNIS may want to consider obtaining legal advice regarding the protection of its intellectual property. This is important to prevent 'poaching', and to predict potential revenue.

- 3) *Expanding efforts to acquire grants from research-related agencies.*

One of CNIS' unique strengths as a development NGO is its combined efforts to build capacity and conduct/publish epidemiological research. CNIS' extensive network of academic (i.e. departmental) linkages in Canada and Africa would be looked upon very favourably by grant-giving agencies, such as the Canadian Institute for Health Research (CIHR), and potential partner research institutes such as the International Development Research Centre (IDRC) and the North-South Institute.

- 4) *Continue exploring funding or in-kind opportunities within the Canadian corporate sector.*

CNIS' plans to approach Canadian mining and pharmaceutical companies are promising. While the corporate sector can often be difficult to 'tap into', with persistence and by targeting many different corporate institutions, CNIS may find great success. CNIS would benefit from creating an official 'corporate information package', which might include a collection of CNIS documents, posters, power point presentations, and pre-established options for in-kind and monetary contributions. This would allow CNIS to efficiently target many corporate institutions, and expand their opportunities for corporate donations.

- 5) *Targeting a well-researched donor base.*

CNIS knows that 40% of surgery students at the University of Toronto are aware of CNIS. With its capacity in community-based and hospital surveillance, CNIS may want to consider conducting a simple baseline survey to determine awareness about CNIS in other medical communities (i.e. inter-disciplinary medical professionals outside academia), and use this as a basis for setting annual membership targets. A targeted approach towards acquiring new donors might involve obtaining a list of contact details for all general practitioners, nurses, surgeons, etc., in Canada and sending out discipline-specific CNIS information sheets. For example, plastic surgeons could be sent a postcard listing facts and figures about paediatric burns, and explaining CNIS' work in this area.

## **9.2 Maintaining Institutional and Program Focus**

As CNIS expands its programs in Canada and Africa, CNIS should maintain programmatic focus by means of:

- 1) *Using Canadian public engagement activities as a means of acquiring new donors.*

CNIS currently conducts several 'feel good' activities, such as an Annual African Fair, Swahili language lessons, and the peace-building school partnership between Vancouver and Gulu. The coordination and administration of these activities utilize scarce human resources. These activities contribute little to CNIS' financial base. Even the large Romeo Delaire talks, given to students and staff at the University of Toronto, only allowed CNIS to break even. CNIS' public engagement activities should be more focused on either affluent audiences, or professionals that can directly contribute to program activities in Africa (i.e. surgeons, epidemiologists). CNIS may want to consider replacing its current minor public engagement activities, with a high-profile, high-ticket Gala Event, which would include governmental dignitaries, well-known public speakers and famous Canadian musicians. An event of this nature may also assist CNIS to acquire a benefactor.

- 2) *Supporting a maximum of two or three subject areas within injury prevention and safety promotion.*

CNIS should select, based on its country-level epidemiological surveillance, whether to focus on violence, traffic accidents, accidental falls or burns. Less severe or frequent causes of injury, such as sports, could be farmed out to other international donors, limiting CNIS activity to surveillance and program identification for other organizations more specialized in these fields.

- 3) *Systematically collecting and reporting outputs, aggregated by program, country and sex.*

CNIS should consider recruiting the assistance of a volunteer to amalgamate program outputs from all countries, aggregated by country, program type and gender. If presented in a clear table format, this disaggregated data could be uploaded on the CNIS' website, providing existing and potential new stakeholders with the full picture of CNIS' programmatic successes.

- 4) *Reviewing its Vision statement*

CNIS may want to consider reviewing its current Vision statement. It could consider making its Vision more simple and succinct, so that it can be easily understood by a wide range of audiences.

## Annex 1

### Assessment Matrix

#### 1.0 Strength and Sustainability of CNIS as an Organization

<b>Key Issues / Questions</b>	<b>Indicators</b>	<b>Methods / Sources</b>
<b>1.1</b> Clarity of Vision	<ul style="list-style-type: none"><li>- Shared understanding by staff and stakeholders</li></ul>	<ul style="list-style-type: none"><li>- Conduct interviews with international and national staff, partners, beneficiaries</li><li>- Review policy documents</li></ul>
<b>1.2</b> How effective is CNIS Managed?	<ul style="list-style-type: none"><li>- Clear and effective policies, strategies</li><li>- Efficient and well designed management information and human resource systems</li><li>- Motivated staff</li></ul>	<ul style="list-style-type: none"><li>- Review Strategic Plan (2007-2012)</li><li>- Review management reports</li></ul>
<b>1.3</b> How adequate and reliable is the funding?	<ul style="list-style-type: none"><li>- Steady flow of funds</li><li>- Positive net income</li><li>- Multiple sources of funding</li></ul>	<ul style="list-style-type: none"><li>- Review operating statement</li><li>- Review annual and quarterly reports</li></ul>
<b>1.4</b> Effective governance structure	<ul style="list-style-type: none"><li>- Broad-based and experienced Board of Directors</li><li>- Supportive board committees</li><li>- Participatory management style</li></ul>	<ul style="list-style-type: none"><li>- Interview members from Board of Directors</li><li>- Review corporate documents and minutes from meetings</li></ul>

## 2.0 CNIS Partnerships and Public Engagement

Key Issues / Questions	Indicators	Methods / Sources
<b>2.1</b> Extent and composition of partnership	<ul style="list-style-type: none"> <li>- Broad-based and relevant to CNIS mandate</li> </ul>	<ul style="list-style-type: none"> <li>- Interviews with CNIS international and national staff, partners</li> <li>- Review CNIS documentation, including Strategic Plan (2007-2012)</li> </ul>
<b>2.2</b> Coherence and mutual interests	<ul style="list-style-type: none"> <li>- Programs and visions supportive, synergistic</li> </ul>	<ul style="list-style-type: none"> <li>- Review partnership agreements</li> <li>- Review joint project reports</li> </ul>
<b>2.3</b> What are the funding implications?	<ul style="list-style-type: none"> <li>- Partners confident to provide funding on continuous basis</li> </ul>	<ul style="list-style-type: none"> <li>- Review partnership agreements</li> <li>- Review financial statements</li> </ul>
<b>2.4</b> What success in direct appeals, engagement with public?	<ul style="list-style-type: none"> <li>- A proactive and imaginative public engagement program</li> </ul>	<ul style="list-style-type: none"> <li>- Review public relations strategy</li> <li>- Review posters and other public media materials</li> <li>- Review financial records</li> </ul>

### 3.0 Relevance of CNIS Programming

Key Issues / Questions	Indicators	Methods / Sources
<b>3.1</b> CNIS programs support thematic priorities of CIDA, Partners?	- Content of programs reflect development priorities: gender, environment, poverty alleviation, etc.	- Review CNIS documentation, including Strategic Plan (2007-2012)
<b>3.2</b> Programs build local capacity?	- Country partnership training and institutional building	- Field trip observations - Project design documents - Program monitoring and evaluation reports
<b>3.3</b> Prognosis for project Sustainability?	- Beneficiaries adequately trained - Operating and maintenance costs likely to be covered	- Field trip observations - Program monitoring and evaluation reports
<b>3.4</b> Project success rate?	- Outputs and outcomes achieved from previous and current activities	- Field trip observations - Project design documents - Program monitoring and evaluation reports

#### 4.0 Transition and Succession

<b>Key Issues / Questions</b>	<b>Indicators</b>	<b>Methods / Sources</b>
<b>4.1</b> Success in transition from project to program status?	<ul style="list-style-type: none"> <li>- Program policy framework in place</li> <li>- Coherence in project selection and design</li> </ul>	<ul style="list-style-type: none"> <li>- Review CNIS documentation, including Strategic Plan (2007-2012)</li> <li>- Interviews with CNIS international and national staff, partners</li> </ul>
<b>4.2</b> Institutional adjustments?	<ul style="list-style-type: none"> <li>- Personnel changes made</li> <li>- Field strength increased</li> <li>- Systems ready to accommodate adjustments in delegations</li> <li>- Reporting</li> </ul>	<ul style="list-style-type: none"> <li>- Interviews with CNIS headquarter staff</li> <li>- Review strategy session documents</li> </ul>
<b>4.3</b> Strength of beneficiary institutions	<ul style="list-style-type: none"> <li>- Beneficiary institutions capable of obtaining alternative funding</li> <li>- Staff trained</li> <li>- Infrastructure in place</li> <li>- Recurrent costs accounted for</li> </ul>	<ul style="list-style-type: none"> <li>- Field trip observations</li> <li>- Project design documents</li> <li>- Program monitoring and evaluation reports</li> </ul>
<b>4.4</b> International partners?	<ul style="list-style-type: none"> <li>- Plans in place to broaden base of support to other similarly mandated international partners</li> </ul>	<ul style="list-style-type: none"> <li>- Interviews with CNIS staff at headquarters and in field, with CIDA reps, other donors</li> </ul>

5.0 Programmatic Risk

<b>Key Issues / Questions</b>	<b>Indicators</b>	<b>Methods / Sources</b>
<b>5.1</b> What is most vulnerable aspect of succession plans?	<ul style="list-style-type: none"> <li>- Higher than expected costs</li> <li>- Decentralized management</li> <li>- Structure causes institutional disfunction</li> </ul>	<ul style="list-style-type: none"> <li>- Interviews at CNIS headquarters and field</li> <li>- Literature review of similar exercises</li> </ul>
<b>5.2</b> How can risk be Minimized?	<ul style="list-style-type: none"> <li>- look at phased approach</li> <li>- Lessons CIDA and other NGO succession and decentralization experiences</li> </ul>	<ul style="list-style-type: none"> <li>- Review reports of similar exercises</li> <li>- Interviews staff from decentralized NGOs</li> </ul>

## Annex 2

### Interview Protocol CNIS Headquarters and Canadian Partners

#### 1.0 Strength and Sustainability of CNIS

Describe CNIS' vision and mission statement and the process through which they were agreed upon

Can you elaborate on CNIS' values and culture governing the mission and program development?

Can you provide a description of CNIS' corporate governance structure?

Can you provide a description of the information and financial management systems from receipt of funds, disbursement, accounting and reporting. A copy of the relevant documents would also be appreciated.

Provide information on the source and reliability of funding from various contributors, (CIDA, Partners, the Public)

Provide an overview of staffing levels with reference to the number of professionals and support staff in Canada and in Africa

What monitoring and evaluation systems do you have in place that measure project and eventually program success (RBM, LFA) ?

#### 1.0 CNIS Partnerships and Public Engagement

Describe the process through which the CNIS Canadian Network was established and which institutions, stakeholders are most active and contributory

Can you elaborate on the nature of these partnerships and the agreements under which they enter into shared activities with CNIS

In your view, do your values and mission align reasonably well with your existing partners? Is CNIS attracting new partners? Are partners involved in a participatory fashion in policy making or establishing the strategic framework?

Describe your public relations and appeals program directed at the public at large. Has it been successful, plans for future direct appeals?

How successful has CNIS been in establishing relationships with African based partners?

#### 2.0 Relevance of Programming

Do you have a process in place governing program decision-making? To what extent are Canadian and African stakeholders involved in the process?

What steps have been taken to promote/establish gender equality in your programming (e.g. engaging women practitioners, staffing in Canada and in Africa, focus of programming – e.g. obstetrics, addressing issue of female genital mutilation, involving women in policy and strategic decision making)

Impact CNIS activities has on poverty reduction – efforts at the grass roots level, selection of patients, surgical outreach to village level

Describe the contribution CNIS' programs make to improving health conditions in project areas, to pandemic control (with a focus on accident prevention), and to basic health education.

Describe CNIS' approach and relevance of other thematic priorities; capacity building in beneficiary countries, environment, governance

### **3.0 Transition and Succession**

Can you highlight what you consider to be the major challenges in succession planning?

Elaborate on the transition that CNIS has made and is making from project to program status. Additional resources required, strengthening of planning capabilities, shift from project to strategic planning

Provide an overall assessment of the strength of your African partners and the challenges involved in decentralizing the management of CNIS' programs to Africa

What are the essential requirements in terms of financing, partnership agreements including with other international NGOs and commitments from Canadian stakeholders for a successful transition to Africa?

What is the reaction of Canadian stakeholders to the proposed succession planning?

What changes in CNIS' organizational structure and procedures have been, will be, made to accommodate succession plans? (delegations, reporting, hiring/appointing new expertise)

Describe the method and extent of counterpart training and the mainstreaming of African partners in anticipation of succession?

Does CNIS have an exit strategy pertaining to African partners?

Are CNIS' African partners receiving support from other sources?

Given the noted weaknesses identified in the SWOT analysis, is it realistic at this time to consider expansion, decentralization and replication as "opportunities"?

Apart from decentralizing the International Director, are there plans to decentralize the Canada based staff?

#### **4.0 Risk**

Can you provide an overall assessment of funding requirements beyond the current strategic plan period that would successfully carry out succession plans and enable self-sufficiency for African partners?

Likely source of additional funding beyond proposed CIDA contribution

Can CNIS expect additional volunteer resources and support from Canadian partners?

How can a cohesive program be maintained, monitored and managed should CNIS expand into other countries (Mali, Rwanda) and at the same time expand it's operations into other sectors (e.g. basic health)

Will there be technology and equipment constraints should the current program be expanded into new areas?

What are the most vulnerable aspects of the succession plan? How can these risks be minimized?

## **Annex 3**

### **Interview Protocol CNIS African Partners**

#### **1.0 Strength and Sustainability of African Partners**

Are you receiving support from donors other than CNIS?

Can you estimate your re-current annual expenditures?

Are you receiving any support from your Government?

What is your current staffing level?

What are your annual financial requirements?

Can you give a description of your work and demand for your services?

Provide an assessment of the value and effectiveness of CNIS' training and institutional capacity building programs.

#### **2.0 Partnership Arrangements**

Do you have agreements with other international NGO's, Bilateral or Multilateral partners? Can you describe the arrangements in these partnerships and the term?

Are you comfortable with the values and mission of CNIS and how does that accord with local priorities?

Have you received support through the programs of African based organizations, NEPAD, SADC, COMESA?

What is your assessment of the quality and relevance of the training you have received through CNIS programs?

#### **3.0 Programming Coherence with Priority Themes**

Are you aware of CNIS/CIDA thematic priorities and if so do they accord with local priorities?

Can you describe how these priorities are integrated into your project selection and in the execution of programs?

Specifically, can you describe how your operations address such areas as gender, environment, poverty alleviation?

Can you describe your governance and management structures?

Are programs developed using participatory approaches in project design?

#### **4.0 Transition and Succession**

What is your understanding of CNIS plans for succession?

In your view, are they realistic? What plans do you have in order to achieve greater decision making capacity and project execution capabilities?

Do you believe that your organization can be self-sustaining by the end of the CNIS strategic plan period?

What are the major challenges leading up to the attainment of self-sufficiency?

Do you now have the capacity to approach other funding sources? Is it realistic to expect that your Government may fund your services as part of their national health programs?

#### **5.0 Risk**

In the context of your understanding of CNIS' succession plans, what do you consider to be the most vulnerable aspects in achieving a self-sustaining status?

Can you provide an estimate of your future funding requirements and how these might be addressed ?

## Annex 4

### Persons Interviewed

#### CNIS Headquarters Office and Board of Directors: Vancouver, Canada

Name	Title
Akagi, Linda Dr.	Pharmacist Programme Committee CNIS-Board of Directors Canadian partner affiliation: British Columbia Centre for Excellence in HIV/AIDS
Braun, Lorne Mr.	Reports Consultant CNIS-Headquarters Office
Canning, Tomas Mr.	Bookkeeper CNIS-Headquarters Office
Casinader, John Mr.	Web Project Coordinator CNIS-Headquarters Office
Christilaw, Jan Dr.	CNIS-Board of Directors Canadian partner affiliation: Women and Children's Hospital
Hassen, Philippe Mr.	Vice President CNIS-Board of Directors
Lett, Ronald Dr.	President/International Director CNIS-Board of Directors Canadian partner affiliation: University of British Columbia
Moroz, Paul Dr.	Chair Public Engagement Committee CNIS-Board of Directors Canadian partner affiliation: Children's Hospital of Eastern Ontario
Schaefer, Elizabeth Ms.	Manager CNIS-Headquarters Office
Taylor, Robert Dr.	Surgical Associate CNIS-Headquarters Office
Wallis, Douglas Mr.	Chair Finance Committee CNIS- Board of Directors

### CNIS African Partners: Addis Ababa and Gondar, Ethiopia

Name	Title
Abso, Muhidin Dr.	Instructor, Surgical Skills Lab Course Addis Ababa University (AAU) Black Lion Hospital
Derbew, Miliard Dr.	Dean, Faculty of Medicine Addis Ababa University (AAU) Black Lion Hospital
Hiwot Ms.	Participant Essential Surgical Skills workshop Addis Ababa University (AAU) Black Lion Hospital
John Jackson Mr.	Counsellor Canadian Embassy to Ethiopia
Kidane, Lilly Ms.	Administrative Assistant, Program Support Unit CNIS-Ethiopia Addis Ababa University (AAU) Black Lion Hospital
Kotisso, Berhanu Dr.	Director Department of Surgery Addis Ababa University (AAU) Black Lion Hospital
Taye, Mulat Dr.	Director Essential Surgical Skills Laboratory Addis Ababa University (AAU) Black Lion Hospital
Mesele, Gashew Dr.	Medical Director Gondar College of Medical Sciences Gondar Referral Hospital
Admassu, Mengash Dr.	Vice President for Business and Development Gondar College of Medical Sciences Gondar Referral Hospital
Kebede, Dr.	President Gondar College of Medical Sciences Gondar Referral Hospital
Focus group discussion (6 individuals)	6 Essential Surgical Skills workshop participants Department of Surgery Gondar College of Medical Sciences Gondar Referral Hospital

## CNIS African Partners: Kampala, Mbarara, and Gulu, Uganda

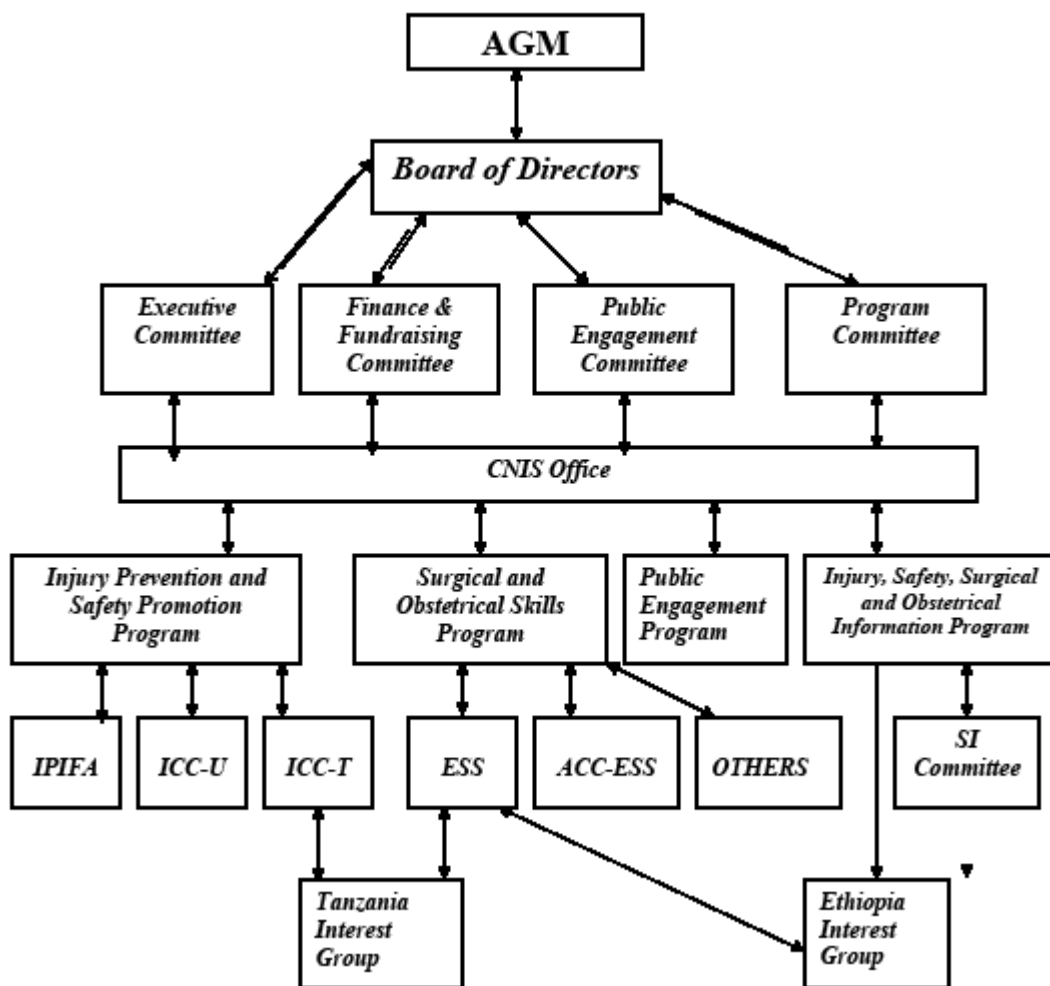
Name	Title
Kyamanywa, Patrick Dr.	Director, Essential Surgical Skills Laboratory Co-Chair, ACCESS University of Science and Technology Mbarara Regional Hospital
Kaggwa, Sam Dr.	Head, Department of Surgery Makerere University Mulago Hospital
Biryabarema, Christine Dr.	Head, Department of Obstetrics Makerere University Mulago Hospital
Nansamba, Catherine Dr.	Research Associate ICC-Uganda Staff
Mutto, Milton Mr.	Executive Director ICC-Uganda Staff
Nambooze, Harriet Ms.	Accounts Assistant ICC-Uganda Staff
Nsiju, Jerome Mr.	Administrator ICC-Uganda Staff
Nakitto, Mable Ms.	Community Programs Officer ICC-Uganda Staff
Marunga, Iryne Ms.	IPIFA Focal Officer ICC-Uganda Staff
Katusiime, Violet Ms.	Office Assistant ICC-Uganda Staff
Muganzi, Samuel Mr.	Assistant Systems Administrator ICC-Uganda Staff

### CNIS African Partners: Dar Es Salaam, Tanzania

<b>Name</b>	<b>Title</b>
Muthali, Dr..	Muhimbili Orthopaedic Institute Surgeon ICC-Tanzania
Boniface, Respicious Dr.	Muhimbili Orthopaedic Institute Interim Director ICC-Tanzania
Othman, Dr.	Director, Essential Surgical Skills Muhimbili Orthopaedic Institute Interim Director
Julieth, Dr.	Director, Essential Surgical Skills Muhimbili Orthopaedic Institute Surgeon
Membhati, Dr.	Director, Essential Surgical Skills Muhimbili Orthopaedic Institute Surgeon
Musero, Dr.	Executive Director, Muhimbili Orthopaedic Institute

Annex 5

CNIS Organizational Chart



## Annex 6

### Injury Prevention and Safety Promotion Training offered by CNIS and ICCU in Uganda

#### Trauma Team Training (TTT)

A CNIS assessment of trauma care in emergency wards of hospitals found that there was lack of coordination among health care workers assisting trauma patients, which was affecting the quality, efficiency and effectiveness of care. CNIS and ICCU developed a guidelines document entitled, Trauma Team Training Manual: Instructor's Manual<sup>14</sup>. Trauma Team Training (TTT), which aims to train health care workers to collaborate in the emergency manage and care for trauma patients. Trauma teams generally consist of Team Leader (physician), anaesthesiologist, nurse, nursing assistant, clinical officer, and orthopaedic technician. A pre and post-evaluation study was conducted to assess the effectiveness of TTT. Findings from this study were published in the *Journal of Trauma*, confirming that the TTT resulted in increased patient survival and cost-effective resource utilization. CNIS and ICCU coordinate the delivery of the TTT with Heads of hospital and Emergency Wards. Since 2003, approximately 500 health care inter-disciplinary health care professionals have received the TTT, in 11 regional referral hospitals, the National referral hospital, and 10 district hospitals, and 5 health centre. CNIS is also in the process of developing an advanced TTT course for health care professionals focused on the clinical management of paediatric burns.

#### First Aid Training

CNIS has found that there are several types of profession in Uganda that regularly come across injuries, both major and minor, in their work. These include police officers, especially those working in traffic control; prison officers; primary school teachers; traffic wardens; and community leaders and members. CNIS and ICCU use the St. John's Ambulance First Aid curriculum (which is a Ugandan 'translation' international Red Cross and WHO guidelines) to train professionals. Many of these participants initiated contact with the CNIS and ICCU, after learning about the First Aid Training. These include Uganda Federal and District Prisons, and Uganda Federal and District Police. The First Aid Training program began in year 2000. CNIS and ICCU have evaluated the effectiveness of the First Aid Training among primary school teachers.

#### Traffic Safety Planning Training

CNIS and ICCU surveillance data from 5 regional hospitals in Uganda have found that traffic accidents account for between 45 and 50% of injury burden annually in Uganda. Violence accounts for 25-30% in Uganda. These findings are consistent even in conflict areas, such as northern Uganda. In response to this data, CNIS, ICCU and WHO developed a Traffic Safety Planning Course geared towards people who are working in traffic injury prevention such as, government policy makers, members of national road safety councils, road engineers, traffic policemen, emergency health care works, and advocacy NGOs. This Course was adapted from a similar one that was developed with WHO-support in India. The course has been given once since 2002, and included 45 participants. This has resulted in increased collaboration between ICCU and government

officials. Some indirect outcomes of the course include infrastructural modifications in road designs to regulate vehicle flow and pedestrian passage (e.g. removal of some pedestrian overpasses, roundabouts).

### Safety Promotion Training

CNIS, ICCU and Karolinska Institute developed a course curriculum on Safety Promotion targeted to people doing safety related work such as, members of the Ministry of Health who are responsible for health in schools; members of the Ministry of Labour who are responsible for occupational and industrial safety at the workplace; and members of the corporate institutions. The Safety Promotion Course teach participants how to assess hazards in their environment (e.g. conflict, fire, infrastructure, etc.); how to develop preventive strategies (i.e primary, secondary and tertiary prevention); and how to mobilize communities to improve safety in the environment. This course was piloted in 2006, and included 45 participants. CNIS, ICCU and Karolinska Institute look forward to further refining this course based on evaluation feedback from participants.

## Annex 7

### **Case Study: Peace-Building Research, Training and Programming in war-affected Gulu, northern Uganda**

Northern Uganda has been in a state of humanitarian emergency for over 20 years, in what has been called one of Africa's longest standing armed conflicts with the least international attention. The conflict has caused the displacement of an estimated 1.6 million people, including 935,000 children, in the Acholi Region<sup>15</sup>. In 1998, there was a major surge of landmine injuries in Lachor Hospital in Gulu, northern Uganda. Several international and national relief organizations responded by providing medical relief and care. However, no official surveys had been conducted to determine the extent and cause of violence related injuries in the region. Recognizing this gap in evidence, CNIS and ICCU took it upon themselves to conduct a series of baseline epidemiological surveys to determine the prevalence of landmine and other injury-related burden in the conflict-affected Gulu District.

#### Step 1: Epidemiological research

CNIS and ICCU's research found that 14% of local residents had experienced injury due to violence during the study year, resulting in a death rate that was 8.35 times higher than neighbouring (non-conflict) Districts. Gun related violence was identified as the leading cause of death in Gulu District, and incidence of gun-related violence was found to be most prevalence at schools<sup>16</sup>. These research findings were particularly striking from a public health perspective. They emphasized the need for not only responsive remedial medical action, but also violence prevention activities targeted to children. Children were already disproportionately affected by violence in District, as many had been abducted by the Lord's Resistance Army (LRA). The release of these findings coincided by other studies that found an estimated 25,000-66,000 children had been kidnapped by the LRA to become child soldiers and slaves, and between 30,000-40,000 children commuted nightly to escape abduction<sup>17</sup>.

#### Step 2: Peace-building Training

Based on these epidemiological study results, CNIS and ICCU, as well as several governmental and non-governmental organizations took it upon themselves to initiate peace-building activities in northern Uganda. In 2002, CNIS and ICCU coordinated a team of inter-disciplinary conflict resolution and education experts to develop a Peace-Building Training curriculum that could be taught in primary schools. Based on a review of international evidence and best-practices on peace-building and conflict resolution, the CNIS and ICCU inter-disciplinary team created a unique teaching curriculum that taught young students the value of non-violence. Once complete in 2003, the Peace-Building Training curriculum was piloted in 6 primary schools throughout Gulu.

#### Step 3: Testing and Evaluation of Training Effectiveness

CNIS and ICCU designed a high quality epidemiological study to determine the effectiveness of its Peace-building Training curriculum. Using the most scientifically rigorous form of study design, a randomized control trial (RCT), the organizations sought to assess what impact the Peace-building curriculum was having on children's attitudes

towards conflict. The rationale for the study was that negative attitudes towards violence and conflict would be associated with non-violent reactive behaviour to provocation. The randomized control trial found that ICCU and CNIS' Peace-Building Training resulted in statistically significantly improvement in student attitudes towards conflict and violence.

#### Step 4: Implementation of community-based programs

In 2005, the Ugandan Ministry of Education conducted a rigorous review of existing peace education materials and methodologies, including those developed by World Vision and various local NGOs. Following this review, the Ministry of Health approached CNIS and ICCU with the aim of adopting their Peace-Building Training curriculum for national use. The Ministry of Education has since taken full responsibility for the widespread implementation of Peace-Building Training throughout Ugandan communities. The training is now being given in over **1,500 schools** in the conflict-affected Acholi, Lango and Teso Region. The Ministry of Education has trained over **8,500 primary school teachers** to teach this Peace-Building Training to children, and made it **mandatory for all primary schools**. The Ministry of Education conservatively estimates that **300,000 students** in grades 1 through 7 have received the Peace-Building Course in northern Uganda since 2005.

## Annex 8

### List of selected CNIS peer reviewed publications

- Lett RR**, Kobusingye OC, Ekawaru P; Burden of injury during the Complex political emergency in northern Uganda. Canadian Journal of Surgery 2006 49(1) 51-57
- Nansamba C, Aeron-Thomas A, **Lett R**; Emergency Capacity at Health Facilities in Kampala Uganda, East and Central African Journal of Surgery 2005 10 (1):32-36
- Lett Ronald**, Kobusingye Olive, Asingwire Narthius, Ssengooba Freddie; Trauma Team Training Course: Evaluation of Ugandan Implementation African J Safety Promotion 2004 2(1):78-82.
- Hollaar G, Namuyoga M. Fulal J. **Lett R.**; Structured Hernia Training - A pilot project, East and Central African Journal of Surgery 2004 9 (1): 12-17
- Lett R. R** . International Surgery: Definition, Principles and Canadian Practice. Canadian Journal of Surgery (Review Article, 54 references) Canadian Journal of Surgery 2003 46:365-372
- Macleod JBA, Kobusingye O, **Lett R**, Frost C Kirya X, Shulman C; A comparison of the Kampala Trauma Score (KTS) with the Revised Trauma Score (RTS) and Injury Severity Score (ISS) in a Uganda Trauma Registry: is equal performance achieved with few resources? Euro J Trauma 2003 29:392-8
- Mutto M, Kobusingye OC, **Lett R**; The effect of an overpass on pedestrian injuries in Nakawa trading center Kampala Uganda, African Health Sciences 2002; 2 (3):89-94
- Lett RR** . Kobusingye OC, Sethi D; A unified model for injury control: Haddon's Matrix and the Public Health Approach combined, Injury Control and Safety Promotion 2002, Vol 9, No. 3 (September), pp 199-205.
- Kobusingye OC, Guwatudde D, Owor G, **Lett RR**; Citywide trauma experience in Kampala Uganda: a call for intervention, Inj Prev. 2002 June; 8(2) 244133-6.
- Kobusingye O, Guwatudde D, **Lett R.** ;Injury patterns in rural and urban Uganda. Injury Prevention. 2001 Mar;7(1):46-50.
- Kakande I, **Lett RR** Obote WW, Namuyoga; Surgical Skills Course in Uganda. East and E Cen. Afr Journal of Surgery 2001 Sept 6 (1):53-55
- Kobusingye O, **Lett R**; Hospital Based Trauma Registries in Uganda J Trauma 2000;48:498-502
- Andrews CN, Kobusingye OC **Lett RR**; road traffic accidents in Kampala E Afr Med J 1998;76 (4) 189-94
- Lett RR**, Hanley, JA and Smith JS; The comparison of injury severity instrument performance using likelihood ratio and ROC curve Analyses. J. Trauma January 1995

## Annex 9

### Select CNIS Canadian Partners and African Counterpart Institutions

<b>CNIS Canadian Partners</b>	<b>African Counterpart Institutions</b>
Mc Gill University	Dar Salam, Tanzania Department of Surgery Muhabili Medical College
University of Ottawa	Moshi, Tanzania Dept of Surgery Kilimanjaro Christian Medical College (KCMC)
University of Sherbrooke	Bamako, Mali Dept of Surgery University of Bamako
Vancouver Women and Children's Hospital	Addis Ababa, Ethiopia Dept of Obstetrics Addis Ababa University (AAU)  Kampala, Uganda Dept of Obstetrics Makerere University
University of Toronto	Addis Ababa, Ethiopia Dept of Surgery Addis Ababa University (AAU)

## Reference and Endnotes

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- <sup>1</sup> Comprising Richard Gold and Aranka Anema of Duska-Anema Development Associates Inc.
- <sup>2</sup> World Health Organization (WHO). Injuries and Violence Prevention. 2007. Available at: [http://www.wpro.who.int/health\\_topics/injuries\\_and\\_violence\\_prevention/](http://www.wpro.who.int/health_topics/injuries_and_violence_prevention/). Accessed on: Jan 16, 2007.
- <sup>3</sup> CIDA cash contribution: \$ 2 million, CNIS cash contribution \$666,666. In addition CNIS has received 4 contracts from CIDA Multilateral Programs Branch relating to Peace and Security Work in Northern Uganda
- <sup>4</sup> University of Calgary, McGill University, University of Montreal, University of Ottawa, University of Sherbrooke, University of Toronto and University of British Columbia
- <sup>5</sup> Wanzel KR, Ward M, Reznick RK. Current Problems in Surgery. Teaching the Surgical Craft: From Selection to Certification. 2002; 39 (6): 638
- <sup>6</sup> In particular the team noted the involvement of WHO in both the Ugandan and Tanzanian programs as well as the Medical Faculties of foreign universities and humanitarian organizations such as Child-Safe International.
- <sup>7</sup> Canadian International Development Agency (CIDA) Contribution Agreement. Project Number: S-63919.
- <sup>8</sup> World Health Organization (WHO). Collective Violence. 2002. Available at: [http://www.who.int/violence\\_injury\\_prevention/violence/world\\_report/factsheets/en/collectiveviolfacts.pdf](http://www.who.int/violence_injury_prevention/violence/world_report/factsheets/en/collectiveviolfacts.pdf). Accessed on: Jan 17, 2008.
- <sup>9</sup> Peden M, Scurfield R, Sleet D, et al (Eds). World report on road traffic injury prevention. Geneva: World Health Organization, 2004
- <sup>10</sup> World Health Organization (WHO). Facts About Injuries: Burns. 2004. Available at: [http://www.who.int/violence\\_injury\\_prevention/publications/other\\_injury/en/burns\\_factsheet.pdf](http://www.who.int/violence_injury_prevention/publications/other_injury/en/burns_factsheet.pdf). Accessed on: Jan 17, 2008
- <sup>11</sup> World Health Organization (WHO). Facts About Injuries: Drowning. 2003. Available at: [http://www.who.int/violence\\_injury\\_prevention/publications/other\\_injury/en/drowning\\_factsheet.pdf](http://www.who.int/violence_injury_prevention/publications/other_injury/en/drowning_factsheet.pdf). Accessed on: Jan 17, 2008.
- <sup>12</sup> Government of Ethiopia. Ministry of Health. Vision, Mission and Strategic Direction. Available at: [http://www.moh.gov.et/index.php?option=com\\_content&task=view&id=15&Itemid=56](http://www.moh.gov.et/index.php?option=com_content&task=view&id=15&Itemid=56). Accessed on: Feb 5, 2008
- <sup>13</sup> Republic of Uganda. Ministry of Health. Health Policy 2001/2002. Available at: <http://www.health.go.ug/policies.htm#Executive%20Summary>. Accessed on: Feb 04, 2008.
- <sup>14</sup> Lett R and Kobusingye O. Trauma Team Training Manual: Instructor's Manual. Second Ed. 2005. CNIS and ICCU Publication.
- <sup>15</sup> United Nations Children's Fund (UNICEF). Humanitarian Action: Uganda Donor Update. May 16, 2006.
- <sup>16</sup> Lett RR, Kobusingye C and Ekwaru P Burden of injury during the complex political emergency in northern Uganda. Can J Surg. 2006; 49(1): 51-57.
- <sup>17</sup> Human Rights Watch (HRW). Abducted and Abused: Renewed conflict in northern Uganda. Vol.15, No. 12 (A).